Waimakariri District Council's Integrated, Community-Based Recovery Framework

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Glossary of Terms and Acronyms

Adaptive capacity – the ability of a system to adapt. Believed to contribute to 'resilience'.

Asset-based recovery – An approach based on the belief that 'one cannot develop communities from the top down or from the outside in' but requires building from the inside out, with residents investing in themselves, ideas, assets and resources

BaU - Business as Usual

Case Management - 'Case management' refers to a coordinated approach to service provision, ideally through one or just a few points of contact. It has been defined as 'a collaborative process of assessment, planning, facilitation and advocacy for options and services to meet an individual's holistic needs through communication and available resources to promote quality cost-effective outcomes' (http://www.cmsa.org.au/definition.html). It stands in contrast to an approach where the individual identifies and chooses different service providers, for different issues, with little overall integration or coordination. This can lead to gaps in service provision and duplication of effort.

CCC - Christchurch City Council

CDEM - Civil Defence and Emergency management

CERC - Canterbury Earthquake Recovery Commission

CERA - Canterbury Earthquake Recovery Authority

DBH - Department of Building and Housing

ENC – Enterprise North Canterbury

EOC - Emergency Operations Centre

EQC - Earthquake Commission

ERC - Earthquake Recovery Committee, comprising Waimakariri District Council's elected Councillors and Kaiapoi Community Board Chair.

HNZ – Housing New Zealand

LAPP - Local Authority Protection Programme

LGA - Local Government Act

LAPP - Local Authority Protection Programme

Lateral spread - cracks that open in the ground as a result slippage caused by earthquakes.

Liquefaction - the process by which saturated, unconsolidated sediment acts more like a liquid. Cantabrians generally use liquefaction as a noun referring to the 'sand volcanoes' that erupt after severe ground shaking.

MCDEM – Ministry of Civil Defence and Emergency Management

MSD – Ministry of Social Development

Phronesis – Practical wisdom

PMO - Project Management Offices for undertaking rebuild work

RAC - Recovery Assistance Centre, located in the council's Community Centre in Sewell Street Kaiapoi, and later became 'the Hub'.

Red Zone – Refers to geographic areas

Resilience – Often seen in a positive light, resilience can be defined as a system's ability to 'bounce back', 'cope' with new conditions, or 'thrive'.

Response phase – pertains the immediate aftermath of disaster before functionality has been restored. Followed by 'recovery', 'reduction' (of vulnerability to future risk), and 'readiness'.

Retreat – residential movement away from the affected Red Zones

SDC - Selwyn District Council

SOP – Standard Operating Procedure

TLAs - Territorial Local Authorities (TLAs)

Unit rates – a cost per unit, such as the cost per metre of installed sewerage of a pre-determined capacity/quality.

VBRRA - Victorian Bushfire Reconstruction and Recovery and Authority

WESS – Waimakariri Earthquake Support Service

WINZ - Work and Income New Zealand

WNC – Wellbeing North Canterbury

Executive Summary

At 4.36am on the 4th September, 2010, the Canterbury region of New Zealand was rocked by a 7.1 magnitude earthquake. The result was extensive damage to Kaiapoi, Pines Beach and Kairaki in the Waimakariri District, and certain parts of nearby Christchurch. A quarter of Kaiapoi businesses were immediately affected, and there was widespread damage to local infrastructure: 5, 000 people lost water and sewer services. Almost 1, 200 homes - a third of all housing stock in Kaiapoi and most homes in Pines Beach and Kairaki - were severely damaged and 1, 048 were eventually 'red-zoned'.

This report focuses on the Waimakariri District Council's approach to earthquake recovery which was developed as an *Integrated, Community-based Recovery Framework*. This approach has been held up as exemplary in a number of fora and has received a great deal of interest and support both nationally and internationally. It has evolved as a result of the September earthquake and the thousands of aftershocks that have followed, along with the regulatory changes that have impacted on building safety and land availability since, but it builds on a set of pre-existing competencies and a well-established organisational culture that focusses on:

- Working with communities and each other;
- Keeping people informed;
- Doing better everyday;
- Taking responsibility;
- Acting with integrity, honesty and trust.¹

The report identifies, and speaks to, three themes or tensions drawn from either the disaster/emergency management literature or actual cases of recovery practice observed here in Canterbury over the last 2 years. These themes are the:

- 1. unique position of local government to undertake integrated or 'holistic' recovery work with community at the centre, versus the lack of clarity around both community and local government's role in disaster recovery;
- 2. general consensus that good local government-community relationships are crucial to recovery processes, versus the lack of practical advice on how best to engage, and engage with, communities post-disaster; and
- 3. balancing Business as Usual (BaU) with recovery issues.

Some key findings around these three themes are summarised here and detailed further below.

¹ These points are taken from the Waimakariri District Council's mission statement.

1. The unique position of local government to undertake integrated or 'holistic' recovery work with community at the centre, versus the lack of clarity around both community and local government's role in disaster recovery;

There are a number of factors that make local government (Territorial Local Authorities or TLAs) an important and unique 'recovery agent' including:

- Residents' expectations;
- TLA's working knowledge of the area, including land and infrastructure information, maps, and so on;
- Pre-existing relationships with communities, contractors, government agencies and NGOs;
- Resources or 'social infrastructure', including community halls, reserves, and so on;
- Their elected mandate and decision-making authority;
- Access to discretionary funding;
- Legislative responsibilities which, until recently, were consistent and complementary across both the Civil Defence and Emergency Management Act (2002) and the Local Government Act (2002, Amendment in process, 2012/2013); and
- Their pre-existing 'integrative' framework of needs assessment and service delivery that is able to be modified as required, rather than be developed 'on the fly'.

The pre-existing integrative framework seeks to reconcile, broadly, social, economic and environmental (including infrastructure) services, and Recovery Manager Simon Markham was keen to make the point that 'recovery' is not just about repairing infrastructure. Indeed, it is often the 'more difficult to assess, fund and action' social and economic elements of recovery that become the greater challenge and may cause the more enduring issues. It is therefore important not to rely on a pre-existing 'process-driven' framework that may be easy to justify and account for, but which does not actually promote recovery. Thus, any pre-existing framework may need to accommodate a new programme of specific works with 'stretchy' timeframes to ensure particular, meaningful goals are being achieved.

Because the Waimakariri District Council's scope of activities was reasonably broad pre-earthquake, their pre-existing integrative structure worked well, but it did have to be augmented and modified to a considerable extent post-quake. These modifications were possible because the council has:

- Strong, but distributed leadership. Both Mayor David Ayers and CEO Jim Palmer demonstrated strong leadership; however, decision-making authority is distributed throughout the organisation. This 'flat' rather than strictly hierarchical structure enabled very rapid progress to be made.
- Good **alignment** and communication between the community, the elected members and the bureaucracy.
- Good 'adaptive capacity', meaning the organisation was able to restructure and add/drop capacity and capability as needs dictated. This was facilitated

by the medium size of the council (approx. 235 FTEs) which meant they could balance economies of scale whilst minimising the costs of administering that scale (such as time delays, paperwork). Their medium size, and the decision (pre-quake) to out-source certain services/functions, also meant they had an extended 'architecture of engagement' with agencies, consultants and contractors, many of whom willingly added capacity/capability post-quake.

Some specific modifications that were made to the pre-existing organisational structure in order to integrate the various issues arising in the post-quake environment included (but were not limited to) the establishment of the Earthquake Recovery Committee (ERC) comprising all Councillors and the Kaiapoi Community Board Chair; the establishment of the Recovery Assistance Centre (RAC)/the Hub in Sewell Street, Kaiapoi; new funding streams; new steering groups for co-ordinating internally and externally; innovative means of 'engaging' and 'engaging with' the community; and the appointments of a) a Recovery Manager (who actively represents Waimakariri's interests outside the district and engages with the Canterbury Earthquake Recovery Authority (CERA) for example), b) Infrastructure Recovery Manager and c) Social Recovery Manager (with these last two co-locating in adjoining offices at the Hub) and d) a dedicated Earthquake Communications Coordinator. These adaptations allowed the organisation to rapidly and effectively help the local community through integrating and cross-validating a wealth of information, and undertaking a co-ordinated/targeted range of recovery (and BaU) programmes.

2. Good local government-community relationships are crucial to recovery processes, versus the lack of practical advice on how best to engage, and engage with, communities post-disaster.

The second theme or tension identified in this report concerns best practice around community 'involvement' after disaster. The Waimakariri District Council's strategy has been to 'remain centred on the affected community, even when there are other pressures' and they have undertaken a range of practises, programmes and activities that involve the public. The notion of 'involvement' deserves greater nuance, and this report draws on an important distinction between 'engaging' and 'engaging with' communities. 'Engaging' communities speaks to the delegation of tasks, roles and responsibilities to various communities, with support where necessary. This approach has been adopted by the Waimakariri District Council and has involved the Social Recovery Manager (and others) co-ordinating, facilitating and enabling different community-based recovery programmes, rather than actually delivering them. The development of, and on-going support for, the Waimakariri Earthquake Support Coordination Service (WESS) post-September, and the establishment of the Welfare Centre in Rangiora post-February are good examples. This approach empowers communities and this, in turn, is said to promote recovery.

'Engaging with' communities is about two-way, honest communication using sometimes unorthodox means. From public meetings to kitchen table chats, from newspaper advertisements to hand-delivered newsletters, Waimakariri District

Council has tailored message to medium very well. They have aimed to be mindful of residents' concerns and answer the hundreds of questions that arise in the post-disaster situation in a frank and timely way.

3. Balancing Business as Usual with recovery issues.

The earthquake immediately and severely impacted Kaiapoi, Pines Beach and Kairaki and Business and Usual (BaU) was suspended with the declaration of a State of Emergency at 10.03 am 4th September. For two weeks, 'there was no BaU', and all resources were directed towards the affected areas. However, other parts of the district were largely unscathed and despite the on-going issues in Kaiapoi, Pines Beach and Kairaki, the normal course of business eventually had to be resumed. Blending recovery and BaU has been challenging.

Simon Markham, Waimakariri District Council's Recovery Manager, has identified a number of different 'contexts for recovery' ranging from small, localised disasters, through to severe, regional catastrophes, arguing that each of these contexts demands a different approach from TLAs. Though initially the Waimakariri District suspended BaU to concentrate on the immediate response, during the recovery phase they adopted a 'hybrid' BaU/recovery model where staff members generally perform dual roles rather than 'recovery only'. To accommodate the extra workload, savings in time and resources have had to come from new processes (such as the move to 'unit rates', soft copy on consents, and parallel rather than sequential processing of consents), new steering groups to facilitate and integrate BaU/recovery, out-sourcing of certain tasks, some organisational restructuring, and targeted funding for short-term appointments.

Key Questions Arising from this Report

The report raises some important questions. The first question concerns the broader legislative environment that connects TLA's response and recovery roles (e.g. the Civil Defence and Emergency Management Act, 2002) and 'peacetime' core local government purpose (i.e. the Local Government Amendment Act, 2012) which is now rather narrowly defined. Specifically, to what extent does the amendment promote or discourage the competencies and capabilities that are required for response and recovery that have been demonstrated by the Waimakariri District Council during and after disaster.

The second question concerns the extent to which the "Waimakariri Way" can be scaled up to larger metropolitan areas or transferred to other recovery contexts. There was a high level of consensus among those interviewed that although the actual steps taken would be different, 'the attitude can be up-sized'. This 'attitude' is evident in the following quotation from a council senior manager who related this story:

Traditionally TLAs do not step across the home-owner's boundary and any infrastructure issues between the house and the front boundary is the home-owner's problem. But post-earthquake it would have been impossible to just call a plumber to get the issue fixed. So we [Waimakariri District Council] made a decision fairly early on to liaise with EQC and coordinate repairs across the boundary because there's no point us fixing our side of the sewer and people still not being able to use [the toilet] because the pipe between the house and the boundary is broken.

This quotation shows an organisation working with communities and taking responsibility as outlined in their mission statement, and at the same time demonstrating leadership, cost effectiveness and common sense.

This report details a particular account of one TLA's recovery, and although there are many 'takeaways for practise', it should not be used in a purely prescriptive way. That said, it does raise a final question about the ways in which other TLAs might prepare, during peacetime, for an extended disaster sequence like the one experienced here. Some suggestions detailed further in this report include cultivating good, functional outreach programmes with consultants, contractors and community groups; supporting civil defence at the highest level; pre-appointing Recovery and Social Recovery Managers, and making sure the latter has some community development expertise; keeping up-to-date lists of maps, assets and hazards; keeping debt under control; and fostering some consensus between the public, the elected members and the bureaucracy over TLA's core business without eliminating healthy debate.

A Roadmap of this Report

This report is divided into five further sections:

Section A provides an introduction to the Waimakariri District, the council, a brief literature review and some methodological considerations.

Section B comprises a chronological account of the response and recovery programmes and activities taken by the Waimakariri District Council from September 2010 to September 2012.

Section C details 'the Framework' in terms of key lessons and learnings. These are arranged around three themes:

- The unique position of local government to undertake integrated or 'holistic' recovery work, versus the lack of clarity around local government's role in disaster recovery;
- The general consensus that good local government-community relationships are crucial to recovery processes, versus the lack of practical advice on how best to engage, and engage with, communities post-disaster; and

• Balancing Business as Usual with recovery issues.

Section D outlines 'what mattered' as the Framework unfolded and provides further details on the Waimakariri District Council's:

- Strong, focussed but distributed leadership;
- Alignment between the CEO Jim Palmer, senior management, Mayor David Ayers and elected members (including Community Boards), and local communities;
- High levels of social capital;
- Adaptive capacity;
- Being pro-active and cost-effective;
- Triangulation of evidence;
- Putting people before pipes.

Section E discusses some implications of, and questions raised by, the Integrated, Community-based Framework, particularly around the possibility of 'up-scaling' their approach to larger, metropolitan areas; the role of local government during recovery; the nature of community engagement; the proposed changes to the Local Government Act (2002); the size of council; and suggestions for other TLAs.

Section A: Introduction

At 4.36am on the 4th September, 2010, the Canterbury region of New Zealand was rocked by a 7.1 magnitude earthquake which came to be known as the Darfield quake, named after the small settlement near the epicentre. The initial earthquake (and the on-going 13, 000 aftershocks) caused liquefaction and lateral spread² of up to 3.5 metres in parts of the region, but the worst damage occurred in the Waimakariri District (in Kaiapoi, Pines Beach and Kairaki) and the Eastern suburbs of Christchurch City. While there were no fatalities in the September quake, these communities were immediately and severely impacted.

This report focuses on the Waimakariri District Council's *Integrated, Community-based Recovery Framework* which evolved as a result of the Darfield earthquake, the aftershocks and the regulatory changes that have impacted on building safety and land availability since. The District, lying north of the Waimakariri River and the city of Christchurch, has traditionally been described as agricultural but it has an increasing number of lifestyle blocks and small-holdings devoted to horticulture. Other changes are also taking place: The district's small townships are increasing rapidly in size, and Waimakariri District now has a population of about 50, 000 people located in the two main towns – Rangiora and Kaiapoi – and other smaller settlements such as Woodend, Pegasus, and Oxford. These form a commuter corridor of expanding towns, with many residents travelling to work in Christchurch each day.

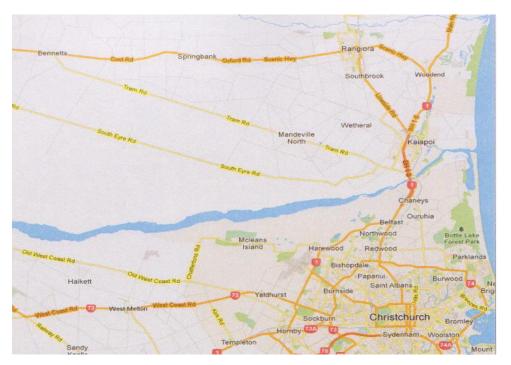


Figure 1: Map of the Waimakariri District (North of the Waimakariri River and Christchurch city)

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² 'Liquefaction' actually refers to the process by which saturated, unconsolidated sediment acts more like a liquid but Cantabrians generally use liquefaction as a noun referring to the 'sand volcanoes' that erupt after severe ground shaking. Cantabrians use the term 'lateral spread' to describe cracks that open in the ground as a result of the earthquakes.

Much of the land to the east of Rangiora, and particular parts of Kaiapoi, is low-lying former swampland and this – along with Kaiapoi's riverside location - explains some of the immediate effects of the Darfield earthquake which included:

Social/Community:

- Almost 1200 homes a third of all housing stock in Kaiapoi and many homes in Pines Beach and Kairaki - were severely damaged and 1, 048 were eventually 'red-zoned';
- On-going aftershocks causing widespread fear, anxiety and uncertainty;
- Major disruptions to everyday life, including temporary school closures and loss of basic community facilities, services and activities. For some, the extended disruption has led to social isolation and on-going trauma.
- Long-term closure of some major recreation facilities including the library, aquatic centre, community halls, the movie theatre, bars and cafes.

Economic/Business:

- The main street of Kaiapoi was cordoned off with 25 per cent of local businesses affected. Post-quake, 17 businesses relocated (11 permanently) and 17 ceased trading (5 permanently, 7 unknown)³;
- Several major businesses and many smaller enterprises closed with flow on effects for employees and the viability of goods and service provision within Kaiapoi.
- Though not 'immediately affected' Rangiora's High Street has been more slowly disrupted through the closure of earthquake-prone (and therefore dangerous) buildings.

Engineering/Infrastructure damage to:

- 16km of roads;
- 16 bridge approaches and 2 footbridges;
- 12 km of water mains;
- 10km storm water mains to repair/replace;
- 3 water supply pump stations;
- 18km gravity sewers;
- 15 sewer pump stations (4 unserviceable);
- 5, 000 people without water and sewer.

Whilst in *absolute* terms the 4th Sept 2010 'Darfield quake' caused less damage to Kaiapoi than the later February 22nd 2011 did to Christchurch, *proportionally* speaking Kaiapoi, Pines Beach and Kairaki (and later, the Rangiora town centre) were hit just as hard. Comparisons are, however, less important than the observation that the damage caused by the Darfield quake could easily have

³ ENC report (www.northcanterbury.co.nz).

overwhelmed a council that was less prepared. It did not, and this is testament to Waimakariri District Council's culture, capability, capacity and relationships with the wider community.

Although these last two years have been enormously challenging for the Waimakariri District Council staff, elected members and local communities, the council has demonstrated remarkable resilience overall. Resilience is generally defined as a system's ability to absorb, withstand or recover from a disturbance while maintaining core functionality and identity. Based on such definitions it is easy to construct resilience – and recovery – as the restoration of essential services, with a particular focus on hard infrastructure. In attempting a more holistic approach, however, it has become common to include other recovery indicators around retail and commercial activity (and 'business confidence') and situate these alongside migratory patterns, housing trends, reports of domestic violence, suicide, alcohol abuse, crime rates or, more positively, participation in recreation activities, etc.

Viewed in this way, resilience generally (and recovery more specifically) spans a wide range of functions, services and provisions, and it is for this reason TLAs are charged with particular responsibilities under the Civil Defence and Emergency Management Act (CDEM Act, 2002). These legislated responsibilities include:

- uniting with regional neighbours and emergency services to form a Civil Defence and Emergency Management Group (see Figure 2);
- developing a coordinated CDEM Group plan for how the Group manages its hazards;
- planning and providing for CDEM in the district;
- ensuring the ability to function to the fullest possible extent during and after an emergency.

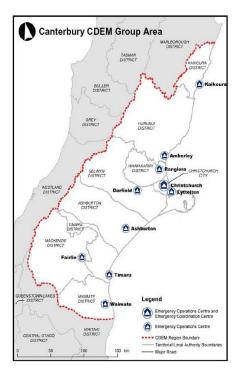


Figure 2: Canterbury CDEM Group Area

Though both the legislative responsibilities of various stakeholders and the Canterbury Group Plan are fairly well-documented,⁴ the actual practice of response and recovery has varied considerably across the region. In particular, the Canterbury CDEM Group, and the relationships between the Group and the three City/District Councils affected by the earthquakes, has been the subject of considerable investigation, and resulted in the publication of the *Review of the CDEM Response to the February 22*nd *Earthquake*.⁵ The review's focus is primarily on the CDEM Group/Christchurch City Council relationship, and if the Waimakariri District Council is mentioned, the context is usually positive.⁶ The association between the Waimakariri District Council and the Group during the response phase has been described as 'generally very good'. This has been attributed, in part, to the council's CEO - Jim Palmer's – involvement in, and support of, civil defence and emergency management programmes pre-disaster.

Whilst disaster *preparedness* and *response* obligations are presented in some detail, a council's responsibilities with respect to *recovery* in the CDEM Act are less prescriptive. Recovery is defined as 'The coordinated efforts and processes to effect the immediate, medium and long term holistic regeneration of a community following a disaster' and is said to encompass:

- Minimising the escalation of the consequences of the disaster;
- Regeneration of the social, emotional, economic and physical well-being of individuals and communities;
- Taking opportunities to adapt to meet the social, economic, natural and built environments future needs; and
- Reducing future exposure to hazards and their associated risks.

The Ministry of Civil Defence and Emergency Management's *Focus on Recovery A Holistic Framework for Recovery in New Zealand* (2005) augments the CDEM Act to provide general guidelines around recovery functions and responsibilities. More specifically, these include:

• The assessment of the needs of a community affected by the events;

http://www.cdemcanterbury.govt.nz/cdem-group-plan-downloads.html

 $http://www.civildefence.govt.nz/memwebsite.nsf/Files/ReviewOfTheCDEMResponseToThe22FebChc heQ/$file/ReviewOfTheCDEMResponseTo22FebChchEarthquake_Final%20Report_4%20July%202012. pdf$

⁴ The Canterbury Group's plan, adopted in 2005, is available on

⁵ Review of the CDEM Response to the February 22nd Earthquake

⁶ As one example, the review mentions (2012, p. 130) the Waimakariri District Council's revised registration form that was used in the Welfare Centres, and subsequently adopted as a template for all of New Zealand. Another example is the Waimakariri District Council's hand-delivered newsletters that went out to affected residents on the 4th September (Appendix 1). The Review concludes that the Waimakariri District Council "by all accounts performed very well in both major earthquakes" and recommends that "A Group would incorporate the skills and resources of such TLAs into the response" (2012, p. 192).

⁷ http://www.civildefence.govt.nz/memwebsite.nsf/wpg_url/for-the-cdem-sector-recovery-index?opendocument)

- The co-ordination of resources made available to the community;
- Actions relating to community rehabilitation and restoration; and
- New measures to reduce hazards and risks.

However, it is also noted that there must still be considerable flexibility in the approach, so that 'recovery actions can be suited to local needs and can change as best practice develops' (ibid, 2005, p. 3).

MCDEM's holistic recovery framework (ibid, 2005, p. 6) puts the community at the centre of the recovery process emphasising that:

Recovery extends beyond just restoring physical assets or providing welfare services ...to recognise that both communities and individuals have a wide and variable range of recovery needs and that recovery is only successful where all are addressed in a coordinated way. Recovery... may extend for years and possibly decades. Organisations involved in recovery will need to recognise the commitment required to resource (both human and material) and the provision of business as usual services during medium and long term recovery.

A holistic and integrated framework is needed to consider the multi-faceted aspects of recovery which, when combined, support the foundations of community sustainability. The framework encompasses the community and four environments: social, economic, natural and built environment.⁸

In addition to coordinating hard and 'soft' infrastructure repair, and adequately resourcing/integrating recovery with business as usual for an extended period, the document highlights the need for adequate community 'involvement' through consultation and/or participation. This is seen as essential even though there will be tensions between appropriate forms of engagement and a perceived need for rapid progress.

Much of this document is consistent with international scholarship seeking to identify the factors that contribute to, and promote, recovery and/or resilience in broad socio-political systems. The interface between the recovery agency — in this case the Waimakariri District Council — and 'the community' have been identified as being highly influential (Coghlan, 2004; Coles and Buckle, 2004; Cuthill and Fien, 2005; Etye, 2004; Louisiana Recovery Authority, 2007; Murphy, 2007; Sullivan,

However, the current National government's Local Government Amendment Bill currently (as of Nov 2012) before the House replaces this with "to meet the current and future needs of communities for good-quality local infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses".

⁸ There was good alignment between this framework (developed by the last Labour government) and the Local Government Act (2002) which stated the purpose of local government is to:

[•] enable democratic local decision-making and action by, and on behalf of, communities; and

[•] promote the social, economic, environmental, and cultural well-being of communities, in the present and for the future.

2003; Vallance, 2011; VBRRA, 2011; Waugh and Streib, 2006; Wilson, 2009; Zautra, Hall and Murray, 2009). In summarising much of this work, Hawkins and Maurer (2010) found that within group ties (bonding capital) was vital in terms of the immediate response but that connections between groups (bridging) and between groups and the recovery authority (linking capital) were important for resilience, longer-term recovery and neighbourhood revitalization.

Whilst this helps establish the general terrain of enquiry, there is less information from disaster scholarship about recovery best practice and, unfortunately, many of the better-documented case studies exemplify what not to do or highlight problems implementing best practice. Davidson, Johnson, Lizarralde, Dikmen & Sliwinski (2007, p.100), for example, compared four case studies exhibiting different types of 'active' community/state interface (or 'participation'), from supplying the labour force at one extreme to taking an active role in decision-making and project management at the other. They found that having the opportunity to make meaningful choices led to more positive results but they also noted that 'despite often-good intentions, this level of participation is rarely obtained and the [community's] capabilities...are often significantly wasted' (2007, p. 100). Along with Lawther (2009), who argued that this arises from demands for visible results which place time pressures on recovery authorities, Davidson et al. attribute this failure to the nature of the relationship between the community and formal recovery authorities. They note barriers to effective participation include a lack of trust; government's reluctance to share power and lose control of the process; and recovery agencies using community 'sweat' as a proxy for engagement.

MCDEM's (2005) holistic recovery framework also recognises the type of community involvement should vary depending on the nature of the task, the type of disaster and its effects on the community, but suggests some of the most effective means of consultation in disaster recovery situations include public meetings, community representation on committees, and the inclusion of representatives from community organisations in decision making processes. However, little guidance is provided around the delegation of decision-making authority to communities or how to facilitate more active forms of participation in recovery.

A common tool used to describe various community/state relationships and different forms of involvement is the IAP2's spectrum of participation. Like Arnstein's ladder and Pretty's typology, the spectrum recognises varying levels of public impact (Figure 3 below) and may provide a useful, if incomplete, guide to different types of engagement.

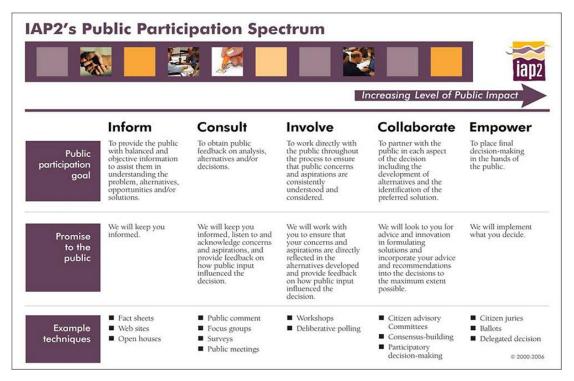


Figure 3: The IAP2 Spectrum of participation (www.IAP2.org)

In short, the CDEM Act (2002) supports the development of an integrated and community-based recovery framework, as did the Local Government Act (2002) that provided the broader legislative context through the earthquake sequence. There is, however, much room for variation in interpretation, and little specific guidance (based on recent, local examples) around what those responsibilities are, or how to achieve them in practice.

To summarise thus far, the current recovery context is informed by certain themes or tensions. These are the:

- 1. unique position of local government to undertake integrated or 'holistic' recovery work with community at the centre, versus the lack of clarity around both community and local government's role in disaster recovery;
- 2. general consensus that good local government-community relationships are crucial to recovery processes, versus the lack of practical advice on how best to engage, and engage with, communities post-disaster; and
- 3. balancing Business as Usual with recovery issues.

Methodological Issues

In August of 2012, Dr Suzanne Vallance from Lincoln University was commissioned by the council's Recovery Manager to undertake an independent analysis and overview of the Waimakariri District Council's 'recovery framework'. This report documents the council's on-going attempts to address post-earthquake issues and opportunities in a rapidly changing environment. It draws on an analysis of council documents (including Council Minutes and Agendas, communication strategies, reports), newspaper articles, website material and other secondary data sources. The report also draws on in-depth, qualitative interviews (conducted during Sept – Nov 2012) with 42 Waimakariri District Council employees (senior management and some frontline staff), elected members, and representatives from local NGOs, community groups, faith-based organisations and Residents' Associations. 9 These interviews usually took between 45 minutes and two hours, and were loosely structured. The format was usually one where the interviewee began with a chronological account of their role, and described key events, problems, initiatives, programmes and appointments. Most (but not all) of these interviews were recorded then transcribed, and analysed thematically.

This qualitative approach, and the methodological foundations of this research project, are consistent with Flyvbjerg, Landman and Schram's (2012) exhortation to consider not just 'which method' but particularly 'what matters'. This report therefore documents 'an account' of what was done, as well as in-depth analysis of some key elements and attidues underpinning the framework; that is, some key organisation aspects that 'really mattered' as the recovery process has unfolded.

⁹ Confidentiality issues mean the participants' details cannot be detailed any further.

Section B: A Chronological Overview of Actions Taken by the Waimakariri District Council

Pre-earthquake

- Jim Palmer (CEO) regularly attends civil defence training exercises and nominates relevant staff members to relevant civil defence and emergency management roles. Brennan Wiremu is employed as Civil Defence and Emergency Management Officer in July 2010 and prompts the CEO to appoint Simon Markham (Manager of Policy and Customer Service) as Recovery Manager 'should the need ever arise'; however, no training had been given. Similarly, a conversation had taken place identifying Sandra James (Community Team Leader) as a potential key player in the council's civil defence structure, but this conversation was in very early stages.
- Connections with outside consultants, contractors, government agencies, NGOs and community groups/faith-based organisations cultivated by senior management/team leaders and elected members.
- List of council assets including parks and buildings well-documented, mapped, and up to date.
- A lifelines hazard assessment undertaken in 2009 which identified risks, such as areas prone to liquefaction, and recommendations to mitigate those risks.
- Waimakariri District Council's debt is described as 'manageable'.

Earthquake and 'Response'

- Saturday 4th September, 4.36 am a 7.1 magnitude earthquake rocks the region. Some parts of the district Kaiapoi, Pines Beach and Kairaki suffer liquefaction and lateral spread of up to 3.5 metres.
- By 8 am, the Emergency Operations Centre (EOC) was up and running from council offices in Rangiora. At 10.03am the Mayor declares State of Local Emergency.
- Despite it being a Saturday, there is a mass deployment of council staff members volunteer to go to 'ground zero' in Kaiapoi. Some go to restore services, others to provide, and gather, information, to 'be present' and reassure residents.

- A key decision is made to base some council staff members, including Sandra James (Community Team Leader who was initially there undertaking logistics/catering for contractors and volunteers) and Gary Boot (Utilities Manager) with consultants and contractors in the council-owned Kaiapoi community hall (the 'blue building') on Sewell Street, Kaiapoi.
- Another key decision is made to feed the contractors and consultants in double shifts in the Kaiapoi community hall. These effectively become briefing sessions that greatly facilitate information flows.
- Both civil defence and 'lay' volunteers, contractors and consultants start pouring in, but there is no SOP on how to manage this extra resource. A decision is made to assign volunteers to teams headed by council employees which rapidly increased capacity without losing local knowledge.
- Another key decision is made to 'step over the boundary' and work with the Earthquake Commission (EQC) to restore services to the home, not just to the boundary as is required by law. It is seen as crucial that people be enabled to stay in their homes and, with the sewerage network obviously broken in places, 200 port-a-loos are ordered.
- Building inspectors who had been working with structural engineers in Kaiapoi's main street start working in residential areas. They use a similar 'placard system' of evaluating a commercial building's status as fit for purpose is applied to homes. This worked well in some respects but was also seen as an 'opportunity lost' in terms of gathering information about looming housing needs and issues.
- The Welfare Centre opens, run by CDEM volunteers. There is immediate tension between these volunteers who associate welfare with 'providing first aid, food, water and shelter' and local NGOs who provide 'peacetime' counselling and others social services (including a foodbank) using a 'case management' approach.¹⁰
- Monday 6th September, an Earthquake Recovery Management Team is established and meets with key agency representatives. Simon Markham assumes the role of Recovery Manager and begins engaging regional and central government representatives from EQC, MCDEM, MSD, DBH, HNZ,

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¹⁰ 'Case management' refers to a coordinated approach to service provision, ideally through one or just a few points of contact. It has been defined as 'a collaborative process of assessment, planning, facilitation and advocacy for options and services to meet an individual's holistic needs through communication and available resources to promote quality cost-effective outcomes' (http://www.cmsa.org.au/definition.html). It stands in contrast to an approach where the individual identifies and chooses different service providers, for different issues, with little overall integration or coordination. This can lead to gaps in service provision and duplication of effort.

WINZ, etc. Other members of staff begin meetings with the Local Authority Protection Programme and other insurance providers.

- At the Civic Offices in Rangiora, a meeting is called for Councillors, some staff members and other stakeholders from the Ministry of Civil Defence and Emergency Management (MCDEM); Ministry of Social Development (MSD); Wellbeing North Canterbury (WNC); Kaiapoi Community Support (KCS); Enterprise North Canterbury (ENC); Kaiapoi Promotion Association (KPA); and Kaiapoi I-site. They receive a briefing from the Civil Defence Controller Nick Harrison, and their roles and responsibilities become slightly clearer: Heather Warwick of Enterprise North Canterbury would head Economic Recovery; Tina Robinson (MSD) and Sandra James would jointly lead the Social Recovery Team and Waimakariri District Council would lead the Built and Environment Recovery Team. This meeting sends a strong signal that council will have to work with others from within the District and beyond to respond to, and recover from, these earthquakes.
- Sandra James (Waimakariri District Council's Community Team Leader) and Tina Robinson (MSD) call a community meeting to identify community needs and shape the recovery framework. This meeting was attended by more than 80 representatives from community groups, government agencies and NGOs. Sandra James' on-going involvement in the response and recovery is mooted, as is the need for a formal Waimakariri District Council 'Social Recovery Manager'.
- Councillors meet and approve the CEO's request for unbudgeted expenditure
 which is 'in the order of \$150-200, 000/ day' and rising, up to \$3 million.
 Based on a very rapid appraisal of council's infrastructure, building and
 recreation assets, a 'guesstimated' budget of likely damage/replacement cost
 and reimbursement of around \$120 million from the Local Authority
 Protection Programme Disaster Fund (LAPP) and Central government is
 presented.
- Council staff members who are not needed for the formal and fairly structured civil defence 'response phase' continue working in Kaiapoi and hand deliver over 2, 400 information updates to affected residents on a daily basis (see Appendix 1).
- Enterprise North Canterbury, the partially council-funded organisation facilitating economic development in the district, is deployed to Kaiapoi to assess business and employer/employee needs.
- Tuesday 7th, the Welfare Centre moves to the rugby club rooms and Sandra James formally takes on the role of Social Recovery Manager, based in Kaiapoi. She begins working with Tina Robinson from MSD on an approach that places people and communities at the forefront of the recovery.

- Thursday 16th September, utilities have been restored not just to the boundary but to people's homes, though some services are provided using temporary arrangements. The Welfare Centres close and the State of Emergency is lifted.
- The Earthquake Recovery Committee (ERC) establishes a panel of Councillors to interview applicants and oversee the distribution of grants of up to \$250 (as a general guideline) from the Waimakariri District Earthquake Relief Fund (\$25, 000) and Mainpower's donation of \$100, 000. The Mayoral Relief Fund retains its 'last resort' status.
- Orders in Council under the Canterbury Earthquake (Local Government Act, 2002) Order 2010 gives council the power to make significant decisions without undertaking usual consultative processes.
- In a Progress Report to council from Jim Palmer on 21st Sept it is noted 'the Recovery phase has commenced' with priorities identified as:
 - Ensuring the wellbeing of our community;
 - Restoring or replacing Council's damaged infrastructure and community facilities;
 - Providing leadership and planning for the restoration of the Kaiapoi town centre;
 - Processing building consents and other consents directly but as promptly as possible;
 - Establishing a Recovery Assistance Centre
- In the same report, the CEO points out that while 5, 000 to 10,000 people are severely affected, the other 40,000 residents in the District have nearly returned to Business as Usual. Balancing these different considerations requires additional resources to fill capability gaps and some restructuring of council staff. It is also apparent that the 'recovery' will take longer than a few weeks. Consequently, Rob Kerr is employed on contract as Infrastructure Recovery Manager to oversee earthquake damaged areas; an appointment is required to take on some of Simon Markham's role as Manager of Policy and Customer Service whilst he acts as Recovery Manager; and Sandra James' role as Community Team leader is filled by a further secondment from within the Team.

Recovery

October 2010

- Working with local NGOs, in early October, Sandra James helps coordinate a transition from a Welfare Centre to a longer running Recovery Assistance Centre (the RAC) to be located in the blue building on Sewell Street, Kaiapoi. Designed to be a 'one-stop shop', those working in the RAC adopt a 'case management approach' of integrated service delivery. To achieve this, the RAC houses Work and Income New Zealand, the IRD, business and whanau support, psycho-social and pastoral care teams, a tenancy service, and council's Building Unit and Community Team staff. Kaiapoi's well-known head librarian Mark O'Connell (displaced by the closure of the library due to structural damage) is appointed to welcome RAC visitors.
- Jan Stanaway, a consulting structural engineer who had undertaken the initial rapid assessment of council assets is seconded to Waimakariri and continues working with Craig Sargison in the Recreation and Community Services Department and the loss adjustor from Wellington. Together they walk around and assess whether council buildings had suffered 100%, 50%, 10% or no damage. This enabled Ms Stanaway and the loss adjustor to build a relationship and "establish some common ground" very early on. They were also able to speculate about possible solutions and opportunities to improve these assets. A key decision was to add a 'betterment' column to the 'replace and repair' spreadsheet which included ideas and broad cost estimates.
- Due to structural damage to their building, council's Kaiapoi Service Centre staff also relocates to the RAC.
- Local body elections are held and Mayor David Ayers is elected on a platform of pulling the District together to help the people of Kaiapoi, Pines Beach and Kairaki.
- A series of evening meetings under the rubric of New Foundations are held with business owners and residents of Kaiapoi to outline council's role and to invite discussion around 'issues and concerns, as well as possible solutions'. A media release dated 4th October stated 'The Council understands the need for leadership...and recognises that a revitalised Kaiapoi town centre will require a clear and coordinated approach'.
- A temporary 'book bus' service replaces the Kaiapoi library which had been closed due to earthquake damage. 'Temporary use' as a legitimate recovery strategy takes shape.
- A new formal management structure is developed that recognises on-going roles for Recovery, Social Recovery and Infrastructure Recovery Managers.

 Rob Kerr is employed by council as Infrastructure Recovery Manager and Tonkin and Taylor begin work on a land remediation programme. Then, "for efficiency and effectiveness reasons...and to minimise community disruption", the council proposes that they project manager the programme of land remediation for EQC/government. A Memorandum of Understanding with EQC and the Crown is negotiated.

November 2010

- The newly created Earthquake Recovery Committee comprising the Mayor, all Councillors, and the Kaiapoi Community Board Chair convenes.
- Council begins work on a public-private sector infrastructure and building 'Hub' to co-locate with the RAC to house Fletchers (PMOs for \$10-100K works) and other rebuild-related organisations.
- Infrastructure Recovery Manager Rob Kerr seeks approval from the Earthquake Recovery Committee for the *Procurement of Strategy for Earthquake Recovery*. The Strategy has the objectives of facilitating a quality, timely, speedy and efficient restoration of services to affected residents; coordination; and minimising the risk of disputes and risk to council. The Strategy also provides the opportunity for local and small contractors to play a significant part in the reconstruction process. A 'unit rates' approach is proposed to speed up the process, and enable greater control over the contracting process, whilst still maintaining a contestable price.
- Council provides some funding to Enterprise North Canterbury for a marketing and promotions campaign to 'kick-start' economic recovery in Kaiapoi.
- The Oxford Community Trust secures funding from MSD to provide social services 'triage' at the RAC. Those located at the RAC, including Sandra James, note 'serious distress' in the community and a growing awareness that there is a need for some kind of advocacy service, particularly around housing issues, insurance, tenancy and repairs. A Community Response Fund application is made to resource several temporary positions that would undertake advocacy around these issues, based on a case management approach.
- Jeanette Ward, a consulting traffic engineer with experience in consultation exercises and streetscape design, is seconded to council. Consequently, the New Foundations rebuild of the neighbourhoods and Kaiapoi Town Centre

gathers momentum. A series of 'street ideas' BBQs are held, and drop-in sessions for community input arranged.¹¹

• The first Hub portacoms arrive on council-owned Darnley Reserve adjacent to the RAC.

December 2010

- The council's New Foundations team launch a display of 'community-inspired concepts' for the Kaiapoi Town Centre at the Christmas carnival. In a media release dated 8th December, Trevor Ellis (Senior Planner) points out that 'the land damage repair work still has a long way to go, but this is a unique opportunity to stand back and review Kaiapoi, Pines Beach and Kairaki and the way it should be in future. It does give the community a chance to have a say in how to make positive changes for the future'.
- Public meetings are held at the Kaiapoi High School to engage with those who have been impacted to give them a chance to ask questions and get answers. These meetings were themed around insurance, EQC, council services, etc.
- The Mayor invites all Kaiapoi, Pines Beach and Kairaki senior citizens to morning/afternoon tea 'to have a cuppa' and enable council to 'listen to issues and concerns and answer as many questions as possible'.
- Following a survey of Kaiapoi employers, it is estimated that 10 20 per cent of businesses in Kaiapoi have closed or will soon close. Enterprise North Canterbury seeks \$950,000 from government for an assistance package for struggling businesses and receives about \$20,000 to fund 0.5 of a coordinator role.
- With council support in the form of helping with funding applications, providing meeting spaces and communications, payroll, and so on, the local Darnley Club (with Chris Greengrass as Manager) secures funding (initially from the Community Response Fund) to extend the services, and number, of the Waimakariri Earthquake Support Service Coordinators. This team, headed by Jude Archer, becomes an important dedicated advocacy and recovery service, assisting local residents affected by the earthquakes. Each of the 10 coordinators undertakes a case management approach for about 40 local residents, offering:
 - Help working out what needs to be done and making a plan;

11 The Waimakariri District Council's *Rebuilding Kaiapoi*: Engaging With Our Earthquake Affected Community was a winner at the 2012 New Zealand Engineering Excellence Awards and took top honours in the Excellence in Community Engagement section.

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- Providing information on grants and financial support;
- Connecting people with services including budget advice, relationship and general counselling, targeted support for the disabled and elderly, women's refuge, often through local providers like Kaiapoi Community Support, and local faith-based groups;
- Coordinating meetings between people and experts/contractors.

This case management approach works well but increasingly, residents begin presenting with complex issues around tenancy, insurance, and EQC. The nature of their work shifts from co-ordination of social services to advocacy.

 A Memorandum of Understanding with the Crown is drawn up for council to formally project manage land remediation to enable the rebuild of about 1, 200 homes in Kaiapoi, Kairaki and Pines Beach. Plans to expand what is now known as 'the Hub' in Sewell St, Kaiapoi even further are made so as to house additional rebuild-related council staff in portacoms adjacent to the RAC.

January 2011

- 'The Hub' located on Sewell Street in Kaiapoi opens. This means that in one small area of council-owned land, residents can find:
 - Waimakariri District Council's Social Recovery Manager;
 - Waimakariri District Council's Infrastructure Recovery Manager and his team of engineers/consultants and contractors who are designing and project managing the rebuild of infrastructure to support about 1, 200 homes using a geographic 'cluster approach';
 - Other Waimakariri District Council staff members from the Building Unit to manage consents and inspections;
 - The 15 Earthquake Support Co-ordinators (10 FTEs) who assisted between 400 and 600 cases at a time in the first year;
 - Fletchers (PMOs for \$10 -100K works)
- The New Foundations Team publishes a booklet, 108 key questions and answers about earthquake recovery which covers community issues, council services, support, housing and rebuilding, geotechnical and land, and EQC/insurance. Question 14 is 'Will our community survive this event what is the council doing to encourage people to stay'? The answer provided is 'Kaiapoi is a strong and passionate community, and the Council is confident that the collective strength of the people...will ensure that the community survives the earthquake and its aftermath...The Council sees its role as to lead and coordinate the work of rebuilding Kaiapoi and to keep you informed as soon as we know when something is going on. The Council will also be helping groups getup and running again, organising community events and encouraging people to feel good about their community'.

- A further 7 formal meetings with affected residents are held, with about 150 to 300 attendees each time. Council staff members meet regularly with Residents' Association representatives. Workshops are held to obtain feedback on the Town Centre plan.
- Council staff members devise a formal earthquake recovery public communication strategy, with the objective of encouraging a sense of community and delivering timely information to a) directly affected audiences, b) internal audiences, and c) District and beyond.
- The Events, Pastoral Care, and Volunteer Support teams are established with support from council. These teams, administered through Wellbeing North Canterbury with funding from MSD, work with council and form part of the extended community engagement network. The Pastoral Care Team, for example, comprises one paid (part-time) employee who co-ordinates volunteers for a weekly door-knock in different areas. They have a standard questionnaire which assesses whether the home is safe, warm, dry; if they are aware of the Waimakariri Earthquake Support Service; and whether they have any questions for the council.
- A temporary library is established in Kaiapoi just over from the Hub.

February 2011

- Councillors indicate a willingness to spend \$1 million over and above the insured value to improve the Kaiapoi library and Service Centre and budgeted for an additional 50 per cent of floor space to be added so as to accommodate the museum in one integrated facility. Conversations around 'betterment' begin.
- Council establishes a working group to liaise with community representatives to figure out the best way council can help them.
- As one example of how accessible council staff members are, on 4th February 2011, a media release providing an overview of council's progress to date concludes with an invitation to contact Jim Palmer, Chief Executive directly with further requests for information, and his telephone number and personal email address are provided.
- Public consultation on the amended Town Centre plan begins on the 19th
 February. This engagement process is designed to further refine the Plan before it is presented to Council for adoption.
- Sandra James (Social Recovery Manager) requests approval from Council of unbudgeted expenditure of \$25,000 to initiate an Earthquake Recovery Community Development Support Service from March 1st to 30th June 2011.
 She also requests that Council endorse her application to Department of

Internal Affairs for a further \$80,000 per annum to employ a Community Development Advisor for 3 years. Their work would focus on identifying the impact of the quakes on local service providers and the community they serve; assist communities in developing their own recovery initiatives; supporting both existing and emerging groups in building community resilience; and building strong partnerships between communities and support agencies. The community outcomes that are expected to come out of this include:

- Community needs for health and social services are met;
- Community facilities and services meet the changing needs of the community;
- People are able to get the information they need;
- There are opportunities for different age groups to participate in community and recreation activities;
- People are supported by a range of health services;
- Participation in community-based support services is encouraged.
- On February 22nd a major 6.3 magnitude earthquake hits that, according to Professor Yeats, Professor Emeritus of Geology at Oregon State University in Corvallis, USA, would have 'flattened' most world cities.¹² There were 185 fatalities (most of these in two building collapses in Christchurch's CBD), further liquefaction in the Eastern suburbs of Christchurch, and rockfalls in some hillside suburbs. The Christchurch CBD is described as 'munted' (Christchurch City Council Mayor Bob Parker).
- The Waimakariri District Council establishes a Welfare Centre at, and with support from, the Rangiora Baptist Church for 400 people (largely Christchurch residents) by 8pm the following night. They secured blankets, sheets, pillows and food through a call out on the website and other media, and the council's animal control facility was even used to accommodate people's pets. This centre runs for 2 weeks, accommodating and assisting several thousand displaced Christchurch residents.
- Although in a different district, the damage to Christchurch puts Waimakariri
 District Council's recovery plans on hold due to shortages in building
 inspectors, insurance loss adjustors, EQC staff and contractors who have
 been diverted to the city to re-establish infrastructure lifelines there. It is still
 the council's intention to resume the rebuilding of Kaiapoi housing as soon as

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¹² www.stuff.co.nz/national/christchurch-earthquake/4711189/Tuesday-quake-no-aftershock

possible; however, the rebuild plan, which was to be announced on the 22nd February, is delayed until the 22nd March.

 Council oversees the Waimakariri Earthquake Relief Fund to distribute donations and monies received from individuals, businesses and organisations. Council also arranges a Waimakariri Working Bee for 5th March to clean up new liquefaction in Kaiapoi, Pines Beach and Kairaki.

March 2011

- In a media release central Government confirms that the land remediation and rebuild programme should go ahead in Kaiapoi as planned.
- Consequently, council's Kaiapoi Community Meetings for those most affected by the September quake, and the council-managed rebuild, resume. Council have divided the affected neighbourhoods into clusters and Mayor David Ayers sends an invitation to 1, 200 affected home-owners in Zone C to attend one of 6 public meetings. The meetings are designed to brief residents on the roll-out of the programme, a schedule of work (so people know roughly when they are likely to have their home rebuilt), and likely implications of the major construction work. Representatives from EQC, Tonkin and Taylor, insurance companies and PMOs also attend, along with Mayor David Ayers, either Jim Palmer or Simon Markham (as alternating MC), either Gerard Cleary or Rob Kerr (engineering presentation), and an MSD representative to talk about temporary housing.
- Council's New Foundations published a list of Q and As around the remediation and rebuild process. Jim Palmer and David Ayers issue an invitation to a follow up meeting with those who will be first in line to have their homes and streets rebuilt. A communications schedule is also devised so that 'everyone understands the process'.
- Submissions on the Waimakariri District Council's Annual Plan are sought.
- Concerns are raised about temporary accommodation while homes are being rebuilt.
- Government announces the establishment of a new Government Department, the Canterbury Earthquake Recovery Authority (CERA) to replace the Canterbury Earthquake Recovery Commission (CERC). It is anticipated that 'working collaboratively with the Government will achieve the best outcome for our community" (David Ayers, Media Release, 29th March).

April 2011

- Council remains committed to land remediation and repair programme, New Foundations issue 137 key questions and answers about the repair, rebuild and land remediation process in Kaiapoi, Pines Beach and Kairaki.
- Waimakariri District Council agrees to allow the Department of Building and Housing to put 26¹³ temporary housing units on Kaiapoi Domain. Council also issues a call for expressions of interest from other landowners to make land available for further temporary housing.
- The Kaiapoi Town Centre Streetscape plans are drawn up and displayed at drop-in sessions from 17-21 April and on the New Foundations website. The Kaiapoi Town Centre Plan consultation period then draws to a close.

May 2011

- The Kaiapoi Town Centre plans are adopted by Council.
- Changes are made to the Building Code and the implications of liquefaction and lateral spread for building consents needs to be established.
- The 'silent earthquake' begins to come to Rangiora in the form of partial closure of the Rangiora library as it is deemed earthquake prone.

June 2011

- The Annual Plan 2011/12 is released and notes a \$28 million shortfall in the total cost of recovery which the Council will need to loan fund and recover through a rates increase of \$60 in 2011 and \$120 thereafter for 25 years. This will ensure that community facilities and infrastructure are repaired or replaced to the same or a higher standard.
- Start work 'cluster meetings' of geographic household groups are held with the first residents to be affected by the imminent rebuild.
- Kaiapoi Domain Village Open Home Weekend held (4th and 5th June) and temporary accommodation information sheet is put on the website.
- The council prepares a detailed, 400 page Infrastructure Rebuild Strategy outlining the proposed repair and renewal plan.
- 9th June, Earthquake Recovery Minister Gerry Brownlee requests deferral of works. Consequently, the rebuild and remediation works which were to start the following week come to a halt.

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¹³ The final number of temporary homes was 22.

- Council designs a communication strategy to inform residents of the Minister's deferral request and the reasons for it.
- 13th June: Another two earthquakes of 5.5 and 6 magnitude result in further liquefaction and there is further damage to infrastructure.
- 14th June, letters noting deferral of works are sent to affected residents. In these letters from David Ayers and Jim Palmer, it is explained that "further scientific analysis has shown there are more faults ... than previously thought and scientists now suggest that the September quake may be more like a one-in-100 year event. This means for a building with an expected life of 50 years, there is a 50 per cent probability that it will experience a quake like the one we had in September. That means any land remediation work and the design of building foundations need to be of a higher standard...It may be a number of weeks before we have this information".
- Council mobilises pastoral care teams into communities affected by this
 news, and starts work on the 'Your Future, Our Place' campaign. Council
 engages the Kaiapoi Baptist Church to host morning and afternoon teas, and
 community dinners, to bring people together and support each other. Over
 80 people attend the first dinner.
- As a further follow up, the Mayor issues an open letter to the people of Waimakariri and council opens an Earthquake Recovery Drop-in Centre at the Hub, reminding people of the Waimakariri Earthquake Support Services there.
- On 23rd of June Earthquake Recovery Minister Gerry Brownlee issues a media release outlining Kairaki has been zoned 'red'. Residents are told that they will have 9 months to consider their options, one of which is a Government offer to purchase their home and land. Another option is to negotiate a pay out from the home-owner's insurance company (if they have insurance). A third 'option' is to remain where they are which raises questions about council's obligations to deliver infrastructure and services and the compulsory acquisition of land by the Crown.

August 2011

 Order in Council designates buildings with less than 33 per cent of standard strength as 'dangerous'. In response, council approves \$30,000 to undertake rapid assessments of council assets and develops an Earthquake Prone Building policy. This will have far-reaching implications for building-owners in Rangiora and the policy is put up for submission on the council's website. • 18th August the Minister for Earthquake Recovery announces further Red Zone decisions. Council arranges a community meeting to be held that evening. The Red Zones cover:

approximately one quarter of properties (860) in Kaiapoi; about half of the properties (80) in Pines Beach; all properties in Kairaki; and 70 Kaiapoi properties remain orange

- The housing market 'suddenly goes mental' and there are reports of rental and house/land package 'price hikes' as a further 5, 000 households across the Canterbury region are red-zoned.
- A communications plan to liaise with affected residents and the wider community is developed.
- Council begins transitioning from 'Rebuild' to 'Retreat' and Robb Kerr's Infrastructure Recovery Manager contract is released to enable him to assist with CERA's remediation programme.
- Council begins to investigate subdivision potential around Kaiapoi. A quick analysis of subdivision, section/lot availability suggests a housing shortfall of about 900 homes (1, 200 Red Zoned, with only 250 lots available in 2011/12).
- Some council staff begin working with housing and real estate developers to speed up the development of greenfield subdivisions and brownfield sites around Kaiapoi. CERA and representatives from the three TLAs meet to discuss land supply and the allocation of land for new housing within each District. Four developments around Kaiapoi are identified for fast-tracking and negotiations begin with Silverstream.
- In parallel, council establishes an information hub with agencies invited to attend and meet face-to-face with residents.

September 2011

- Waimakariri District Council launches a series of community meetings with Red Zoned residents. The two main problems identified include a) the financial shortfall some owners will have if they take the Government's offer and b) a lack of 'affordable' housing options around Kaiapoi.
- Council issues 130 key questions and answers about red, green and orange zones in Kaiapoi, Pines Beach and Kairaki.
- Council issues an Accommodation Survey to gauge the intentions of residents in Orange/green (n=152) and red-zones in Kaiapoi, Pines Beach and Kairaki (n=392). This confirms that red-zoned residents believe they will have trouble finding housing within their price range if they want to stay in

Kaiapoi. Over a third indicated they would likely (or very likely) need temporary accommodation.

A Social Services Waimakariri mapping survey is conducted with 48 service providers so as to identify key current and future social needs in the district. Sandra James presents the results to the Earthquake Recovery Committee comprising Councillors and Kaiapoi Community Board Chair. Key trends for social service delivery agents include 'burnout' due to a) loss of staff and volunteers and b) increased workload due to rising case numbers, and c) increased complexity of cases. It is also noted that many mainstay funding sources have been diverted to earthquake recovery rather than business-asusual service providers. Risks to social service delivery were identified as lack of capacity and resource constraints, loss of strategic vision as services a stuck in 'response mode'. Key community trends included a rise in domestic violence of 30 per cent, behavioural problems in children, 'quake brain', stress and depression from loss of community facilities. Looming needs included affordable, warm, safe housing, financial hardship, family breakdown, isolation and grief. Key community risks were identified as in-out migration causing loss of community, which would be amplified by the lack of community facilities, increased mental health issues, and continued 'quake brain' which inhibits people's ability to think clearly.

October 2011

- A proposal for a further 18 (of possible 35) temporary DBH housing units to be located on Wylie Park goes to the Earthquake Recovery Committee but a 4-4 division results and this item of business remains unresolved. Disagreement is expressed over council's role in providing the land, with some indicating 'government needs to consider relocating to private land', others stating 'it is council's responsibility to look after their residents'. Still others maintain there is a duty to look after all residents by providing adequate greenspace rather than focusing solely on displaced residents.
- Sargison (Manager Community and Recreation) Craig presents recommendations around seismic strengthening of council assets to the Earthquake Recovery Committee. He presents his Capital Programme to Council noting in the issues and options that 'The Council is faced with unique situation in that the community has lost much of its heritage and community facilities and at the same time is poised on the edge of a period of unprecedented growth. Unfortunately, this growth has not yet materialised in the pragmatic sense of growth of rateable properties which places Council in the difficult situation of on the one hand realising what is needed to support a growing community of approximately 60, 000 people, but having in the short term a diminishing rating base. To achieve a sense of community and deliver the expectations of a community...residents require a visionary perspective in the sense that whatever buildings we create should

have a life expectancy of at least 50 years. The sense of community is not just created by large numbers of people living together...but rather by the way people interrelate with each other. So to create community the Council has an obligation to future generations to create facilities which will deliver a connected functional community'. A number of key projects are then presented including the Kaiapoi Aquatic Centre, Rangiora Town Hall, the Kaiapoi Wharf, Kaiapoi Library and Museum and Kaiapoi War Memorial Building at an estimated spend of \$17, 648, 000. A longer list of smaller projects is then presented, along with seismic strengthening works.

November 2011

• Earthquake Recovery Minister uses his powers under Section 27 of the CER Act to enable a change to the Canterbury Regional Policy Statement, with farreaching implications for housing development. As a result, several residential subdivisions described as 'limping through the Environment Court before the earthquake' were given 'the green light'. Consequently, Waimakariri District Council planners and senior management trial a concurrent rather than sequential subdivision approval process, and work with the Silverstream developers to condense a year's work into a week to 'basically re-write the District Plan'. This frees up 550 house and land/sections for development; some of which are designed to accommodate smaller houses and units for elderly residents.

December 2011

- Mayor David Ayers sends a briefing paper to the Minister for Earthquake Recovery outlining key concerns. These include the need for an independent review around insurers' offers where repair work costs seem understated; facilitating re-location and re-use of 'good' red zoned homes; uncertainty over future ownership/use of the Red Zones; growth challenges around traffic management to the City; inability to secure affordable insurance cover; and concern over Government's decision not to extend the Red Zone offer to Council's pensioner housing.
- Waimakariri District Council, with ENC, CERA, and Maxim Projects, holds a 2 day Housing Options Expo.
- On December 23rd, another 6 magnitude earthquake rocks the region causing further damage to infrastructure and renewed anxiety for many residents.

¹⁴ 'Proposed change 1' was incorporated into the 1998 Canterbury Regional Policy Statement as Chapters 12A and 22. These address land use and urban growth management in Greater Christchurch

for the next 35 years and 'provides statutory backing for the Greater Christchurch Urban Development Strategy'. Details are available on http://ecan.govt.nz/our-responsibilities/regional-plans/rps/pages/proposed-change-no-1.aspx

¹⁵ District Plans must be consistent with Regional Plans.

January 2012

- Simon Markham presents a 'composite report' from across the council to summarise the earthquake recovery programme which now includes a Red Zone Transition Management Plan. It is noted that 414 Red Zoned households are still 'undecided' over the Government's offer; the 17 Waimakariri Earthquake Support Coordinators are still working with 771 households (with 184 closed cases); The Hub still coordinates appointment based access to a range of services around business support, community law, EQC, CERA, the Temporary Accommodation Service, insurance companies, Lumley's construction, and Westpac/ANZ/BNZ banks; the temporary village has 17 of 22 units occupied; Red Zone demolitions have begun; and a Green Zone rebuilding programme is needed with implications of the Red Zone decisions for the Town Centre Plan under consideration. Key programmes include: the Green Zone Rebuild Programme; the Community Facilities and Reserves Rebuild and Restoration Programme, the Kaiapoi Town Centre Plan and Business Support Programme; Kaiapoi Urban Form and Accelerated Development Programme; and Community Engagement, Support and Regeneration Programme.
- Jan Stanaway and Craig Sargison complete their evaluation of damage to council-owned buildings, along with the status of project works completed/needed.
- A review of earthquake prone buildings results in the on-going closure of buildings in the main street of Rangiora.

April 2012

 Council begins work on temporary business accommodation on the main street of Rangiora with the shops located on the lawn in front of the civic offices. These temporary buildings are for local business displaced by building closures and will ensure a steady stream of foot traffic through High Street. The Christchurch Earthquake Appeal Trust contributes funding of up to \$200,000 towards the temporary building accommodation with the rest (approximately \$300,000 after rentals) covered by Council.

May 2012

A new infrastructure recovery plan is developed with work falling into 3 categories: a) Minor repairs and straight forward work requiring little or no coordination, and not affect by Red Zone decisions, b) complex projects requiring coordination across stormwater, roading, water and sewer, not affected by Red Zone decisions and c) other projects of varying complexity that are affected by the Red Zone. These projects are prioritised according to

community benefit, ease of project delivery and optimal packaging of works. It is noted that the Infrastructure Recovery will have to work with the Communications Team on a consultation and information strategy.

June 2012

 A revised Kaiapoi streetscape plan is proposed which takes into account residential retreat from the red zones, and resultant residential and infrastructural development, including schools, to the west and north of the town centre.

August 2012

 Ken Stevenson recommends to the ERC that the Streetscape plans for Kaiapoi West and East (stage 1) and Pines Beach/Kairaki be released for consultation but that those for Kaiapoi South be held until more is known about the future use of the Red Zone.

October 2012

- Sandra James is seconded to Wellington City Council and Alison Bourn replaces her (until April 2013) as Social Recovery Manager.
- A proposal goes to the Earthquake Recovery Committee for a Housing Working Group chaired by Recovery Manager Simon Markham to be established. It is anticipated that this group will have a short life span until March 2013 to undertake some specific tasks, primarily around the evaluating social housing provision, Council's potential role in that, and facilitating transitions from social (rental) housing to 'assisted home ownership'. The motion is carried though Councillor Barnett votes against it on the basis that there will be a cost to council in resourcing the Group, and that the responsibility for social housing provision and housing solutions lies with central government, primarily the Department of Building and Housing, and CERA.
- The Housing Working Group's first report to the Earthquake Recovery Committee shows awareness that there is a lack of clarity over council's position on housing provision, specifically suggesting that Council reflects on its role as watching, seeking to influence solutions, or trying to 'solve' a number of related problems. Primarily, these include a shortfall between Red Zone payouts and the cost of available housing with low-equity seniors particularly disadvantaged and a lack of affordable rentals. A starting point of providing monitoring and advice, advocacy and coordination is suggested.

Section C: Lessons and Learnings - An Integrated, Community-Based Recovery Framework

Having provided a chronological account of actions taken by the Waimakariri District Council, this section outlines some lessons and learnings around three key issues:

- The unique positioning of local government to undertake integrated or 'holistic' recovery work, versus the lack of clarity around local government's role in disaster recovery;
- 2. The general consensus that good **council-community relationships** are crucial to recovery processes, versus the lack of practical advice on how best to engage, and engage with, communities post-disaster; and
- 3. The balancing of Business as Usual with recovery issues.

In order to illustrate the integrated and community-based recovery framework's resolution of these tensions, this section reports in more detail on three key areas of council operation. The first area concerns council's integrative mechanisms, structures and functions, including positions and appointments made, steering groups and committees that formed, research and communications strategies that were developed, and so on. The second area of operations addresses council—community relationships; this theme is further divided into 'communication', 'engaging' and 'engaging with' local communities. The third theme documents the on-going struggle to balance business-as-usual functions with recovery in the context of a wider, lengthy, and continually changing, recovery process.

An 'Integrated' Framework

In presenting the Waimakariri District Council's Recovery Framework as 'integrative', an initial evaluation has to take place around what it is, that is being integrated. This section therefore speaks to questions around the scope, breadth and depth of council activities and community needs that were seen as being in need of a coordinated approach.

While councils' roles during the 'response' phase of a disaster are covered by the CDEM Act (2002), at the time of writing (Nov, 2012), the responsibilities of local governments during 'recovery' are addressed, for the most part, under the business-as-usual Local Government Act (2002). At the time of writing, New Zealand legislatively charges territorial local authorities with:

 enabling democratic local decision-making and action by, and on behalf of, communities; and promoting the social, economic, environmental, and cultural well-being of communities, in the present and for the future.¹⁶

Some councils have a tradition of interpreting this in a very narrow sense focussing on the provision of the 'core business of roads, pipes and rubbish', whilst others include a range of economic and community development elements to their work. These variations in service provision are shaped by the mandate of elected Councillors and consultation with communities during the formation of councils' Long Term Council Community Plans. Council's selection of the CEO, who then employs other staff members, is also crucial in setting the tone of different TLAs as they provide advice to Council and give effect to their decisions.

Waimakariri District Council is positioned at the more 'inclusive' end of the spectrum and their services and functions extend beyond 'pipes, roads, and rubbish' to include provision of community and recreation facilities and some social (public) housing. As a medium-size council Waimakariri does not provide all its services using in-house resources. Instead, they have chosen to work with a range of external consultants and contractors to deliver or support both core and extended services. Through collaboration and engagement with others in the District (such as Enterprise North Canterbury and Wellbeing North Canterbury), Waimakariri District Council is involved in a diverse range of cultural, economic and social services. As a couple of examples, both Mayor David Ayers and CEO Jim Palmer are on the Board of Enterprise North Canterbury which undertakes business, employment, tourism and lifestyle development in the District. Another NGO who works with council -Wellbeing North Canterbury - provides Kaiapoi Community Support, Emergency food assistance, school holiday programmes, free legal advice, volunteer drivers, Otautahi Women's Refuge, Nurse Maud, Meals on Wheels, Strengthening Families, Community Youth Workers, a Truancy service, Youth Drug and Alcohol services, family counselling, Karanga Mai Early Learning and some special courses, like yoga.

This extended network meant that even pre-earthquake, council had an established 'architecture of engagement' (Simon Markham) that connected council to the wider community. Council also already had a number of formal integrative functions and structures already in place, across a range of sectors, industries and service providers. Importantly Waimakariri District Council also has a system of very good informal networks ('we're a friendly bunch') that facilitate communication across different units and promotes an integrated approach to service delivery. Described by an external consultant as 'well-functioning organisation' it was also pointed out that the number of people who 'make the calls' are a fairly small group who are well aligned in their thinking. This means that those external partners, including contractors and consultants, are able to deal directly with those decision-makers and engage with council at the 'right level'.

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¹⁶ The Local Government Amendment Bill currently (Nov 2012) before the House has replaced this section with "to meet the current and future needs of communities for good-quality local infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses."

Given New Zealand's governance history, the CDEM Act which charges local government with certain responsibilities during disaster response, and Waimakariri District Council's breadth of core and extended services (provided either in-house or through collaboration with others), it is not surprising that the community looked to council for leadership and co-ordination post-earthquake. However, the earthquakes have added a whole raft of additional issues and considerations, many of which have no established precedent — such as the provision of temporary accommodation — but that still need to be resolved quickly. This means that the 'peacetime' integrative structures and processes have had to be augmented with a host of others. The following examples give a sense of the new social, economic and engineering/geotechnical scope of activities that Waimakariri District Council has tried to co-ordinate following the earthquakes so as to provide an integrated recovery strategy.

The first example emerged during the response phase and concerned the distribution of large amounts of donations and funding that came in within a few days of the earthquake. Jeff Millwood, Financial Manager, explained that within a week council was caretaking over \$200,000 worth of donations and had Councillors approving applications for up to \$500 at a time. Yet, as he explained, Councillors actually have a great deal of experience in that area and were well-equipped to administer the distribution of funds. A more permanent panel was established subsequently to oversee the Waimakariri Earthquake Relief Fund which gives out discretionary amounts of about \$250, depending on the circumstances. Unlike the Red Cross grants, this fund localised and the application process is a little simpler.

The second, rather more convoluted and challenging, example concerns land supply and housing affordability. This lies at the other extreme of council matters in that it is more controversial (what is local government's role in housing provision) and complex given the issue spans TLAs, government departments (including CERA), and the private sector including real estate developers. That being the case, post-quake land supply and housing affordability issues demanded (several) new organisational structures and integrative mechanisms. Some examples included:

- A liaison group that met with geotechnical engineers to evaluate land stability;
- A new process around Project Information Memorandums (PIMs) that convey this information to the public
- Various committees and steering groups comprising representatives from neighbouring TLAs to, for example, provide consistency around the 'temporary accommodation' that people needed either immediately or while they rebuilt;
- The RAC, the Hub and the inter-departmental Hub Operations Group that met weekly;
- The Waimakariri Rebuild Co-ordination Group that met with ex-District rebuild partners;
- New Foundations;
- The Recovery Manager position;

• Other groups that evolved to facilitate land supply comprising representatives from CERA and other Urban Development Strategy partners, and real estate developers along with Waimakariri District Council's Simon Markham, Craig Thompson, and council planners.

To further illustrate the complex stories behind these examples, one senior planner described the many processes and factors that needed to be integrated around geotechnical assessments and land supply as including, first, the red zoning decisions and the geotechnical reports that were needed before any further development could go ahead. Next, assuming the geotechnical reports were positive, an enthusiastic developer had to be found. Then, land/developer availability had to be assessed against broader regional growth management which meant liaising with others (including SDC, CCC and CERA) outside the district. Finally, the usual process of subdivision development, which can take years under normal circumstances, had to be fast-tracked. Consequently, most of those chosen for fast-tracking were those already some way through the process of re-zoning but delayed by some issue. In total, this narrowed the selection from about 109 in the first instance to four, including Silverstream in Kaiapoi. In this particular case, the development ended up being quite different to the plan change that the council had just approved in that it went from 450 residential lots to 1115.

Following on from this, one of the more recent and again, controversial (vis-à-vis local government's role in social/public housing and housing generally), developments designed to integrate and coordinate housing availability is the Housing Working Group. Indeed, the Group's first report to the ERC shows awareness that there is a lack of clarity over council's position on housing provision and, therefore, the Group's purpose. Against this background of consensus that there is a 'housing problem', but dissent over whose problem it is, the Group has suggested a starting point of monitoring and advising, advocacy and coordination.

A third example of this council's recovery activities post-quake pertains to business and employment in the District. Though the focus was initially on Kaiapoi (where the main street was cordoned off for a week, with 25 per cent of local businesses affected, and the immediate closure of several major employers), the closure of earthquake prone buildings has more recently impacted on Rangiora's main street as well. The implications for council are summarised in the Waimakariri's Local Economic Development Strategy (2012) *Towards a Prosperous Economy*. The result of collaboration between the council and Enterprise North Canterbury (ENC), the executive summary states:

The Strategy recognises the private sector makes most of the key decisions affecting Waimakariri's economy. However, Council's regulatory, service provision, infrastructure and influencing functions means we have a crucial role to play in the District's economic future.

The priority actions outlined in the strategy centre on transport and communication; regulatory process and performance; business land management; and business retention and attraction.

With this kind of interest in economic development, working with ENC, council undertook or supported a range of business recovery initiatives. One of ENC's first priorities was to establish the commercial and trading damage to Kaiapoi and produce a Business Survival Toolkit. Later, their objectives were based around a) business recovery and b) promotion of Kaiapoi in partnership with the Kaiapoi Promotions Association to deliver, for example, the SHOP Kaiapoi campaign.

ENC, with council's support, applied for funding for a business recovery co-ordinator, Pete Vink. One of his first tasks was to undertake a survey, or capability assessment, of the various businesses in Kaiapoi so as to establish their needs, assess what support might be required, and work with that information to help businesses get back up and running. The role meant helping business and employers through training, bridging insurance applications, connecting with mentors, and so on. One of the larger projects was inspired by Peter Kenyon's visit to Kaiapoi, which was sponsored by the Kaiapoi Baptist Church. His 'asset-based recovery' model inspired the promotion of an automotive cluster market where business owners developed an awareness of each others' services and supplies, and collectively marketed these. The idea was "While you're getting your dents fixed, why don't you get a wheel alignment from ** next door as well?" Partially funded by MSD, one of the business recovery co-ordinator's other objectives was specifically to connect employers and employees; however, the general benefit from his work was around 'connecting, networking, coordinating and facilitating'.

Another, rather more controversial, business support initiative was the temporary business accommodation established on the lawn of the Civic Offices in Rangiora (Figure 4 below). This pop-up mall, based on Christchurch's Restart model, involved an outright cost to council of about \$300, 000 (after rental recovery, with an additional \$200, 000 from the Christchurch Earthquake Appeal Trust). The temporary buildings were set up for local business displaced by building closures with the hope of maintaining a steady stream of foot traffic through the High Street. The cost was deemed justified because the main street was in danger of losing its viability as a shopping destination and community focal point.



Figure 4: The Temporary Business Accommodation in Rangiora



Figure 5: Temporary library in Kaiapoi located near the Hub

A final example demonstrating the scope of activities council has tried to integrate over the past two years is, of course, infrastructure and other physical resources, including many facilities used by the community (see, for example, Figure 5 – the temporary Kaiapoi library). During the response phase, council had had great success at rapidly restoring services and many of those facilities through coordination and rapid feedback loops developed 'at the coal face' in Kaiapoi. Besides

co-location, two additional components contributing to this success were a) feeding the contractors in 2 shifts which brought everyone together for briefing sessions and b) assigning volunteers or ex-district workers to a team headed by a local which allowed council to 'rapidly add capacity without losing control over the process'. Their success during the response phase probably contributed to the decision to take to project manage the (then) infrastructure rebuild of Kaiapoi's damaged suburbs (later Red-Zoned) and town centre, and integrate this with the provision of other community facilities.

Having made the decision to take responsibility for the infrastructural rebuild project, Rob Kerr was hired as Infrastructure Recovery Manager who would work with Simon Markham as Recovery Manager. Rob Kerr also began working closely with Social Recovery Manager Sandra James, in Kaiapoi, at the Hub in the same portacom with a connecting door between them. Importantly, council also established a Hub Operations Group to meet weekly, comprising representatives of the main insurers, Fletchers, Social Support Co-ordinator team leader, some government agencies/departments, and relevant council staff including the Social Recovery Manager, Infrastructure Recovery Manager, Building Unit Manager, Earthquake Communications Advisor, Land Remediation Project Manager. This group met to strategise around the rebuild specifically. A Waimakariri Rebuild Coordination Group was also established, to meet fortnightly, with representatives from council (including the Community Facilities Manager), Insurance, EQC, Geotechnical consultants, Housing New Zealand, and Enterprise North Canterbury. This group met to integrate the rebuild with broader district and regional recovery issues. The decision to project manage the rebuild, the co-location at the Hub and the willingness to broker between different groups allowed a far more informed, responsive, co-ordinated and efficient approach.

These few examples across funding, land supply and housing, business and economic development, and infrastructure are an indicative rather than exhaustive list of council's recovery activities. Other areas of work that were either created or intensified as a result of the earthquakes included processing of geotechnical information, building consents, the community team's work around road safety, injury prevention, safer communities, structural assessments of privately-owned earthquake-prone buildings, planning and policy considerations, and so on, not to mention the extended hours involved in meeting representatives and agencies outside the District, including CERA, other TLAs, etc. So, while it is true that a preearthquake integrative 'architecture of engagement' existed, it has had to be significantly up-sized to include new responsibilities, issues, programmes and agencies.

This has been made possible by the several higher-level changes to the organisation structure. The first of these is the Earthquake Recovery Committee comprising the Mayor, all Councillors, and the Kaiapoi Community Board Chair. This committee meets monthly and decides on specific earthquake-related issues. While the minutes show good levels of consensus on many issues, as noted above, the temporary village location and support for temporary business accommodation in Rangiora

were quite controversial. Nonetheless, this Committee has generally been able to work together and reach consensus around important recovery decisions, like project managing the infrastructure rebuild of Kaiapoi. The functioning of this Committee is informed by close connections with the wider community, and Councillors are generally well-known – and accessible - to people in the District.

The second key integrative mechanism pertains to the council's recovery structure (Figure 6 below) which includes the role of Recovery Manager, currently Simon Markham, who reports to Jim Palmer, CEO. Other key roles that characterise the recovery structure are Manager Social Recovery (currently Sandra James) and Infrastructure Recovery Manager (previously Rob Kerr). While a number of these are reporting relationships, most are collaborative in nature. This 'paper' structure is reflected in the actual work environment with the Social and Infrastructure Recovery Managers sharing a port-a-com at the Hub in Kaiapoi.

Simon Markham describes the role of Recovery Manager as involving:

- a blend of planning and policy;
- operational management capability; and
- relationship management.

He liaises with the infrastructure planning and finance managers of council, works closely with Sandra James around social recovery, and maintains relationships with agencies, organisations and individuals beyond the District, including the CCC, CERC/CERA, insurers, UDS, PMOs, Ministers and Government Departments, the media, etc. Simon Markham expressed some reluctance to define his role too tightly, arguing that although there is an important skill set around the planning and policy/operational management experience/relationship management the job description needs some flexibility. The extended earthquake sequence has meant that the role has changed as the recovery unfolds and the nature of his work has had to evolve to address those changes. The risk around this approach is that it requires very high levels of trust, stability, maturity, goodwill and a common understanding of the organisation's core purpose. As a check and balance, a close working relationship with the CEO is required. The personal qualities of the Recovery Manager also need some elaboration; Simon was described by those who work with him as 'having big ideas', 'a good networker', 'very capable', 'incredibly smart', 'warm', 'energetic' and 'just fantastic to work with'.

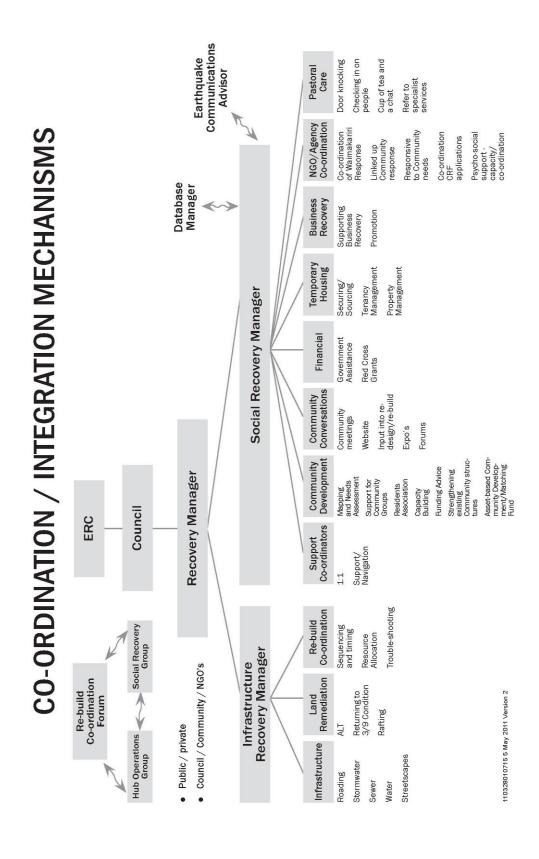


Figure 6: The different Waimakariri District Council's 'recovery' roles/relationships

To summarise, the earthquakes have placed additional demands on a council that already interpreted their legislative responsibilities quite broadly. Though this put certain expectations on council, their history of good relationships with consultants, contractors and communities, and broad experience base, also meant the organisation had a pre-existing extended, functional and integrative 'architecture of engagement' and was able to rise to the challenge.

'Engaging' and 'Engaging With': A Community-based Recovery Framework.

The recovery literature exhibits high levels of consensus around the value of engaging communities post-disaster, yet there are very few exemplars detailing 'best practice'. Indeed, much of the recovery literature either highlights 'what not to do' or advises on 'what to do, but not how to do it'. 'Peacetime' scholarship devoted to participation (Arnstein, 1969; Pretty, 1985; the IAP2) is of some limited utility. This suggests a continuum of engagement/participatory practices ranging from 'token' or 'passive' *informing* though consulting, involving and collaborating, to 'meaningful' or 'active' *empowering* (www.iap2.org). Though helpful, these tools assume a certain stability that is at complete odds with the post-disaster context which is characterised by more rapid and intense change. The post-disaster context therefore shapes state-citizen relations in ways more commonly associated with nascent democracies in less developed countries. This is because traditional lines of communication and 'formal' engagement processes may be suspended and need to be augmented with other means, and there is so much to do that recovery agencies, including local government, cannot actually achieve it alone.

This serves as preamble to a necessary distinction between:

- 'engaging' communities where non-governmental organisations and civil society groups assist in the delivery of services; and
- 'engaging with' communities through re-establishing/augmenting electoral mandate through consultation, collaboration and empowered forms of participation in decision-making processes.

This section documents some of the Waimakariri District Council's processes, strategies and programmes of both engaging, and engaging with their local communities.

Engaging the community

Pre-earthquake, Waimakariri District Council had a dedicated Community Team led by Sandra James. They also 'hosted' Social Services Waimakariri (providing workspace and payroll, but did not directly fund), and contributed financially to Wellbeing North Canterbury (WNC, www.wellbeingnc.org.nz) who, in turn, assists Kaiapoi Community Support. Through these different networks, over many years, council staff members (including Sandra James) had built good relationships with the wider community. Importantly, on the 4th September many of these were ready and willing to lend a hand.

A similar level of competence and ability were demonstrated in Christchurch, but in the *Review of the CDEM Response to the February 22nd Earthquake* the authors note problems with the CDEM structure which impeded recognition of different community groups' efforts post earthquake. In short, the report acknowledges that although 'welfare provision' is included, there is no recognised pathway for gathering or using community intelligence and services. The Review suggests 'A template should be developed in Christchurch for a simple structure to link community organisations to the official Response. It would involve training or exercising (perhaps annually), plans for resourcing and a strong arrangement for liaison with the EOC post-event' (McClean, et al., 2012, p. 180).

A clash between CDEM's standard operating procedures, and making the most of various non-CDEM communities' competencies, was also evident in Kaiapoi after the 4th September quake but it was dealt with rather differently. The Welfare Centre opened in the afternoon, and was initially located at the North Kaiapoi School. It hooked into the formal EOC in Rangiora through the standard CDEM structure but, as one interviewee noted there was a complete misunderstanding of what 'welfare needs' actually are. Though the CDEM welfare model encompasses provision of food, water and shelter, there is little guidance around psycho-social needs and wider community support for those with little experience, networks or contacts in this area. Much of the training around welfare was either confined to 'basic needs' or theoretical with the result that the CDEM model was operating independently of 'spontaneous' community-based efforts. Thus, in an unfortunate case, a truckload of donated food and drink was returned to sender because the CDEM Welfare Centre had adequate supplies. Meanwhile the local foodbank - an established local institution that people turned to 'spontaneously' - was vastly under-resourced, but unable to connect to, and work within, the CDEM structure.

That the CDEM response could make much better use of local communities' strengths, and council's connections with those communities, had been recognised before the quake. As Brennan Wiremu (Civil Defence and Emergency Management Advisor) explained, this was part of the reason he had advocated for the Community Team to have a formal nominated CDEM role, and had initiated discussion around that several weeks prior. The Community Team is ideally situated because although they do not necessarily perform or run social services, they have connections with social services, and a big part of their role is developing very close working relationships with the various agencies, organisations and community groups within - and beyond - the district. Though the provision of food, water and shelter cannot be neglected, Welfare Centres are the natural CDEM home for broader concerns around 'wellbeing', and the Community Team has the necessary skills to administer this.

Indeed, the Community Team leader - Sandra James - had, in fact, been sent to Kaiapoi; however, her formal role was 'logistics' which included catering for the

contractors at the Community Centre on Sewell Street. So, right in the thick of it, and already well-known to local community organisations, she began hearing about some of the problems the 'basic needs' approach, and lack of community engagement, was causing. Some NGOs, for example, were concerned that some of the 'counselling' provided by volunteers was causing harm. She was also hearing that people who were already well-known to community-based social services were taking advantage of welfare services and becoming unhealthily dependent.

According to one community group representative interviewed for this report, the Welfare Centre did indeed cater for those with genuine need, who were simply traumatised and/or poorly prepared for the event. There were, however, some Welfare Centre visitors who 'saw the Centre like some kind of lolly shop', whilst others 'should have been having their broader needs assessed using a comprehensive and co-ordinated case management approach but were sent off with a food parcel'. Tension began to grow between the CDEM volunteers who were trying to run the Welfare Centre according to CDEM best practice, and local NGOs who believed the CDEM approach was contributing to, or exacerbating, broader social problems.

When the decision was made to move the Welfare Centre from the school to the rugby club, Sandra James was able to assist with the move though, officially, it was still CDEM's responsibility and she was not yet formally appointed to the leadership role. She was, however, able to mediate some kind of uneasy truce between the CDEM volunteers and NGOs/CSOs but tensions remained. As she outlined, while the CDEM model deals well with food, first aid, shelter and meeting basic needs, this kind of event, where housing is severely impacted, causes a range of interconnected, complex and complicated problems. So, as one interviewee described it, "we found out that they were having landlord issues, like their landlord had ripped the red sticker off their house and said 'you're fine to stay in there', even though there was a big gaping hole in the wall. There were child custody issues, there were huge financial issues because they'd used extra resources. So we found that people who were already fragile were tipped right over the edge".

The identification of broader, interconnected problems led to the development of a case management system which a) ensured the right data were collected to adequately assess a range of people's needs and b) make sure people were connected to the support they needed from local community services, government agencies, and NGOs, including the Red Cross.

The transition from the CDEM model to the case management approach using their own data collection form was developed by Sandra James and others in the Social Recovery Team from MSD, and NGOs like the Oxford Community Trust whose core business is social support. It was this case management approach that was adopted when the CDEM-led Welfare Centre closed and re-opened as the Recovery Assistance Centre (RAC) in the council-owned Kaiapoi Community Centre on Sewell Street.

The RAC was a response to the obvious need to move from basic welfare provision to a more holistic form of recovery. But, although the council's Community Team were the obvious choice to run it, Sandra James still had some concerns about maintaining a distinction between *providing* services and *co-ordinating*, *facilitating* and enabling service delivery. In her view, there were many government agencies, NGOs and community groups with great expertise in delivering services, but that some strategic thinking was required around co-ordinating those services, and identifying/filling any gaps. This led to a round of conversations – facilitated by Sandra James - with others outside of council, such as government agencies like WINZ and Housing New Zealand, faith-based communities and NGOs, including Wellbeing North Canterbury, and others that deliver social services during peacetime.

Thus, the RAC came to host a range of government and community-based service providers, co-locating in the one building with council staff members who had set up a temporary council service centre. The latter were there processing, among other things, building consents for temporary repairs. With council services, NGOs and community-based social services, government departments (e.g. the IRD and HNZ) the benefits for residents of having a local one-stop shop quickly became apparent.

Some principles underlying the development of the RAC included working with local service providers as much as possible¹⁷ and, often, enabling rather than doing. As a member of a faith-based community group told me, 'Sandra would always be there, asking what we needed. She'd just quietly go away and get what you need, without fanfare'.



Figure 7: The RAC later became the Hub - A One Stop Shop

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¹⁷ Note a similar principle was embedded in the engineering procurement of works strategy which highlighted a role for smaller, local contractors.

A good example of this at a large scale pertains to the establishment of the Waimakariri Earthquake Support Service (WESS). A local, Jude Archer, was appointed to the RAC's advocacy desk and it became apparent over the next few weeks that there was going to be ongoing need in the community for social services, but also mediation and advocacy around tenancy and insurance. The RAC, however, was due to close before Christmas and this, it was believed, would leave a real gap. Their collective observation — supported by the recovery literature - was that it was becoming necessary to transition to a longer-running service, led not by council, but by a local group.

Though need for a more enduring, community-based service was apparent, it was not immediately obvious where the service should be based, nor who could/should, run it. There were questions about what 'local' meant in this instance. Though the damage was largely confined to Kaiapoi, Pines Beach and Kairaki, the council's civic offices were located in Rangiora, a 10 minute drive to the west. Convinced that 'we needed to be here with the community, accessible and available and visible', council decided to invest in, and support, a base to be located in Kaiapoi.

Another question was who would run the service, given the broad consensus within the council that it was time to hand over some of the recovery services and functions to the community. The Darnley Club, which provides care for the elderly, was managed by Chris Greengrass. She was well-known to the Kaiapoi community, 'had a whole lot community stalwarts on their Board' and 'deep roots into Kaiapoi itself'. Thus, it was seen as the perfect NGO to umbrella an advocacy and earthquake coordination service. With Sandra James' help on the funding application, and a commitment to help with payroll and 'whatever else we could', Chris Greengrass and Jude Archer applied to, and received funding from, (initially) the Earthquake Relief Fund for 10 positions across 17 people, for one year.

Another consideration was the type of person that would be required for such a role, and the difficulties involved in hiring for a one year contract. Another factor was balancing their qualities and qualifications, with the former seen as more important. Instead of relying on secondments from government agencies and departments, the Waimakariri Earthquake Support Service Co-ordinators were often asked to apply for the role based on their strong links to, and knowledge of, the community. The result is that rather than a service run by qualified social workers, Waimakariri has teachers, nurses, builders, and roading engineers, all of whom are highly attuned to broader community needs and, because they are locals, have a vested interest in achieving a good outcome for their clients. While this has its benefits, at times it has been a challenge to meet MSD's expectations around following certain processes in what is, essentially, a temporary government department operating in a complex, rapidly changing and often tense environment.

This Waimakariri District Council has supported the Service in important ways. They still operate out of the council-owned Hub and liaise regularly with the Sandra James and others. It's likely that this relationship has given communities and funders some

confidence in the service, and their connection ensures good information flows, trouble-spotting and trouble-shooting. Though formal weekly meetings, and numerous informal chats enabled by this co-location, looming issues and needs can be identified and responded to more rapidly than would otherwise be the case.

There are numerous other examples of Sandra James and other council staff members drawing upon knowledge of, and appreciation for, community assets and strengths but it is difficult to convey just how subtle some of this work has been. One example illustrating just how unconventional, but effective, some of their community 'engagement' has been is evident in this account from Tracy Pirie (Kaiapoi Baptist Church). She told me how the day before the Red Zoning decision was released:

They [the council] rang me the day before, and they worded it really carefully. They said 'look, there's going to be an announcement' and they asked me to organise gatherings, and to ask the Churches to organise gatherings for the next four weeks because they realised that there was going to be a need for people to gather...So, the first thing we did was to do an evening meal because communities are about families and we need to provide something for families. And we did a Thursday evening meal for a month and then I we found out that everybody wanted it to continue...And it's been going a while now and, you know, a few weeks we had Jim Palmer the Chief Executive, and Sandra and Clayton Cosgrove and Kate Wilkinson and three of the community board members come and serve dinner. And Sandra, for our first birthday, got the Mayor to come and Sandra came and Karen came, and they brought up birthday cake. And look it's really nice for our people to come to see that.

Whether it's counselling, advocacy, establishing a welfare or pastoral care service, where possible council engages, delegates to, or works with, local groups who deliver these services.

The question raised by Davidson et al. (2007) is whether or not this is a case of a recovery agency using community 'sweat' as a proxy for engagement. Based on these in-depth interviews with 8 representatives from different NGOs and faith-based community groups in Rangiora and Kaiapoi, the answer would have to be 'no'. Indeed, there is a strong sense that council, with Sandra James as Social Recovery Manager, located in Kaiapoi, struck a good balance between delegating to, enabling and supporting local services and groups. This approach recognised the value of these NGOs, CSOs and faith-based organisations, and enabled them to be instrumental in shaping their own recoveries. The opportunity to make a valued and meaningful contribution has been shown in the literature to be highly cathartic.

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¹⁸ Note a similar principle was embedded in the engineering procurement of works strategy which highlighted an important role for smaller, local contractors.

'Engaging with' the community

Given the plethora of decisions, developments, opportunities and challenges that arise in the wake of a disaster a Council is faced with two broad choices around community engagement: The first assumes that through established electoral and legislative processes, local government has the mandate to make decisions and act in the interests of the people (a top-down approach). The second makes similar assumptions around electoral and legislative process, but recognises people's needs and aspirations may change very rapidly after a disaster. 'Engaging with' the community acknowledges the need to augment the traditional electoral and legislative mandate local government already has with other means (a bottom-up approach). Waimakariri District Council has, over the last two years, undertaken a range of formal (e.g. submissions on the annual plan and LTCCPs) and less formal engagement processes and programmes with the people of Kaiapoi and beyond; this report focuses on three themes in particular with the first being their general communications strategy, the second the New Foundations programme, and the third the Rebuild of Kaiapoi.

Communications

On Saturday the 4th of September 2010, the earthquake's effects were distributed very differently across the district. Some, indeed many, people were largely unaffected. Others, however, were without power, telephone, water or sewerage, and some had to flee their homes almost immediately.

It became known over the course of the day that damage was largely confined to Kaiapoi, Pines Beach and Kairaki, and that there was a need to keep residents as informed as possible. Unfortunately, however, the council's Communications Manager was away on holiday. So, recognising the need to get information out to residents about the scope of the disaster, what was being done and where to go for help, the CEO Jim Palmer assembled all available staff members in the cafeteria for a briefing, and asked them to help distribute – by hand – the newsletter with useful information (Appendix 1). This was repeated twice a day for the next week, then three times a week for a period thereafter.

By Monday, the planning team was helping enforce the cordon at each end of the main street, but also, as one staff member described, 'helping members of the public, and so obviously being a very close and visible face down there [in Kaiapoi]'. She recounts the many questions residents were asking about the sticker system, the sewer, water, storm water, and where they could go. Because it was not always possible to answer their questions, the staff decided to take notebooks and note people's question, their name and cell phone number so that they could text them the answer because text messages were far easier and faster.

This process of communicating with the public continued, as did the strategy of committing to finding answers if they weren't immediately known. Some of these burning questions were conveyed to local Member of Parliament Clayton Cosgrove. He held a number of public meetings (attended by 400-1000 people) where those questions, and (some) answers, were conveyed to the community.

Over the next few weeks, and once the initial rush was over, the process of communication became more streamlined. The Communications Manager also returned from overseas leave and started working on a formal engagement strategy around recovery that would recognise different communication needs. The key objectives of the strategy were:

- Relevant, timely, understandable, comprehensive information that is easily available to all audiences during earthquake recovery;
- Reinforce and encourage a sense of community;
- Provide signposts to practical help.

To achieve these objectives, the strategy identified different channels of communication for different purposes, including public meetings (with directly affected parties) to mail drops, newsletters, media releases, noticeboards, and advertising (for audiences beyond directly affected zones). Along with the 'how' and 'who', the strategy also addresses 'when' and 'where' questions.

Importantly, authorisation was given to employ a dedicated Earthquake Communications Co-ordinator, Kate Pierson who commenced work on the 21st February, 2011. As part of this strategy, the New Foundations website was launched, designed to be the council's virtual one-stop shop, with 'deep' linkage to rebuild-relevant content (www.newfoundations.org.nz). This appointment initiated a programme of communications activities over several channels that persists into 2013.

In the meantime, many 'informal' conversations were going on all the time. As Peter Jenkins, president of the newly-created Kaiapoi Residents' Association reported:

Jim Palmer would come to many of our meetings, and just sit in the back. And whatever you wanted he would, if he could provide it, he did. And he'd say 'ring me up if there's a problem, ring me up if there's a concern' and he could see those things that we needed fixed.

Similarly those located at the RAC in Kaiapoi were continuously sharing, and bringing in, all kinds of information. Through these channels, a need was identified for, on one hand, life to return to normal as quickly as possible and, on the other, some light hearted relief. Consequently, Sandra James worked with Wellbeing North Canterbury to apply for funding for a part-time Events Co-ordinator. Although 'events' might be seen as unusual way of 'engaging with' the community, others have noted how, post-disaster, communities often have to re-form and re-build before they can begin to participate in dialogue about the future (Vallance, 2011). Consequently, as Teresa Stevens (who took up the position) described it, the initial idea was that some community events should be held that were fun, affordable,

local, and that anybody could attend. Because they had lost their restaurants, the movie theatre, the skatepark, the pools, the library, their rowing club and so on, people weren't able to go out as much and this was compounding anxiety and stress in the community.

By late September a series of more formal meetings was deemed necessary. Gary Boot (Utilities Manager) gave a public presentation on sewer and storm water issues affecting about 200 homes on the 30th September. He explained the main problems, what council were going to do about it, and how long it would probably take.

Overall, the council's communication and engagement strategy has changed as circumstances dictate, but according to Sandra James, certain principles have stayed the same. These are:

- Social recovery and physical infrastructure progressing side by side and putting people and 'community wellbeing at the centre of the programme';
- Developing local responses to local need;
- Showing leadership and coordinating different tasks, including knowing who is responsible for what;
- Honest community conversations to deliver good news and bad news;
- Working with what's in the community;
- Building genuine partnerships;
- A readiness and willingness to engage with and communicate face-toface.

Evidence for this is that over the first 15 months of response and recovery, approximately 11, 000 attendances were recorded at community meetings in Kaiapoi, Pines Beach and Kairaki. Council staff at the meetings reported being unprepared for people's thirst for information, nor the community's appreciation of these direct 'town meetings' style of engagement.

To summarise, different arms of the council have communicated in different ways to ensure the medium and message match as closely as possible. 'Bad news' is delivered in conjunction with a pastoral care package, and complex/complicated information is conveyed in a number of different ways, usually including public meetings with extended Q and A sessions. Further, the council's presence in the community allows information to go back to the organisation in a timely way, and is often used to cross-validate other data sources.

New Foundations: Rebuilding Kaiapoi's Town Centre (KTC)

From September 2010 through February 2011 Canterbury continued to be rocked by an extended series of 'aftershocks'; however, the general understanding was that these would diminish in magnitude and frequency and the decision around rebuilding affected parts of Kaiapoi was never really questioned at this time. Under the rubric of New Foundations, Kaiapoi property owners and businesses were

invited to 'join in planning where to from here for the town centre' by attending one of two evening events in early October.

After an introduction from the Mayor, council staff members outlined how the quakes have impacted on the town centre plan that had already been underway, business accommodation options, the extent of damage to buildings and utilities. An 'open mic' session was then held with questions and (sometimes) answers, with break-out sessions focussing on what council could do to help. Less formal sessions (including those where elderly residents were invited to chat over a cup of tea with the Mayor) augmented the more formal workshops and presentations, and all the while, the Earthquake Support Co-ordinators were 'keeping their ears to the ground', liaising with community leaders and representatives, and meeting regularly with Sandra James at the Hub. Just before Christmas, the council's New Foundations team launched a display of 'community-inspired concepts' for the Kaiapoi Town Centre at the Christmas carnival.

On the back of these varied engagement processes with Kaiapoi residents and business owners, 8 key issues were identified around the Williams Street Bridge, the Bridge Tavern site, the Town Square, Raven Quay West, Williams Street, street improvements, the Western Precinct, and design guidelines. These issues formed the focus of the draft Kaiapoi Town Centre Plan where some solutions were proposed. This draft – using a blend of artist's impressions and photographs of the sites under discussion - was released for public consultation in February, 2011 (see Figure 8 below).¹⁹



Figure 8: An example taken from the 2011 (pre-Red Zone decision) KTC consultation document

¹⁹ Many of the Waimakariri District Council's consultation documents and plans (including the draft KTC) are available on http://www.waimakariri.govt.nz/your_council/lets-talk/closed-consultations.aspx

On the back of residents' comments, the Kaiapoi Town Centre Streetscape plans were drawn up and displayed at drop-in sessions from 17-21 April and on the New Foundations website for further comment. These plans were then approved by Council in May 2011.

New Foundations: Rebuilding Kaiapoi's Neighbourhoods

The most severely damaged areas had been identified and geotechnical engineers had devised a process of land remediation to stop lateral spread, augmented with a ground compaction procedure designed to stop liquefaction. Many of the homes on this land were damaged to the extent that it would be uneconomical to repair them, and would have to be rebuilt. It was on this basis that council – with Rob Kerr as Infrastructure Recovery Manager - undertook project management of the whole process so as to co-ordinate land remediation, infrastructure repair and replacement, and the rebuild of over 1, 000 houses. So, during October 2010, another series of meetings also began with affected residents from Kaiapoi, Pines Beach and Kairaki.²⁰

At about this time, Jeanette Ward was seconded to council based on her experience as traffic engineer and background in urban design and project management. She had worked before with Waimakariri's Roading Manager and he knew she could combine the technical elements of the job with good consultation processes. In January/February, working with Rob Kerr (Infrastructure Recovery Manager) and Sandra James (Social Recovery Manager), Jeanette Ward drew up some options that were 'formative, without being too firm', and these were presented at public meetings for community feedback. At these meetings, community members were invited to talk about 'what you think of your streets and what changes you would like to see as part of the redesign of the damaged streets...Council is seeking feedback ...to inform the detailed design work to be undertaken in the coming months'. Issues that had already been identified included the need to:

- Calm traffic and enhance street legibility;
- Discourage boy racers;
- Widen footpaths;
- Plant trees;

Distinguish cul-de-sacs from through roads;

- Include a pedestrian crossing at Williams Street;
- Improve the Williams Street intersection.

Residents were shown a series of slides (also available in pamphlet form) which gave residents an idea of how some of these concerns might be addressed through streetscaping (Figures 9 and 10 below).

²⁰ It is unclear whether this strategy was used at these meetings, but at some point, at public meetings, residents of each street were encouraged to sit together (by putting the street names at the end of rows of chairs). This helped residents of each street get to know each other and cross-reference and prioritise certain issues.



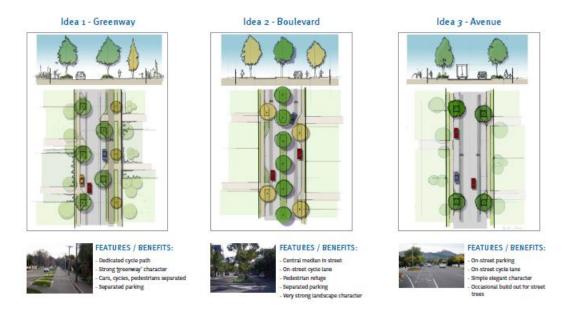


Figure 9: Streetscaping ideas from the New Foundations Rebuild Kaiapoi Plan

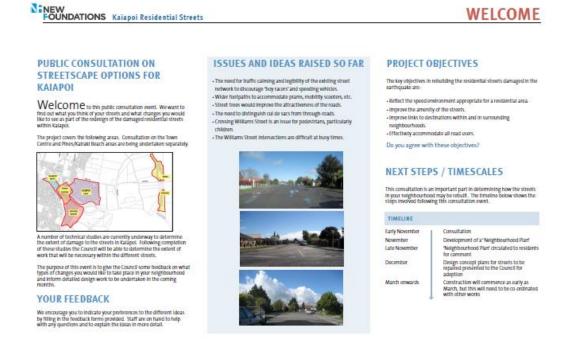


Figure 10: New Foundations Rebuild Kaiapoi Plan format

On the back of this, more detailed plans drawn up. These were then taken out for further consultation at public meetings and at 'drop in' sessions held in a portacom in Kaiapoi, with a bbq lunch provided. As Jeanette explained, this 'two-step process' is considered best practice because, if you do less consultation, you are not doing the community justice. While in cases, the TLA has done more, and undertaken workshops where people draw up their own plan, it is labour intensive and time consuming. The two-step process adopted in Kaiapoi 'enabled us to meet the timeframes of the rebuild in an inclusive way, without dragging it out forever'.

At the same time, residents whose homes were to be rebuilt were invited to a presentation explaining the land remediation process, including the perimeter works to prevent further lateral spread, EQC and their land damage liability issues, and land improvements outside the perimeter works. These issues were covered alongside other concerns residents had around temporary accommodation, noise and safety, and so on.

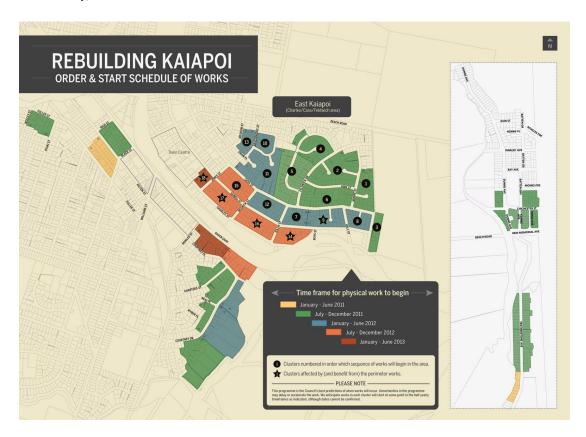


Figure 11: Rebuild sequence for residential areas

Most important for many residents were the indicative timeframes accompanying the works schedule. The logic behind the schedule was explained simply; remediation had to take place in such a way that we didn't 'paint ourselves into a corner' so the homes further back would have to be done first. It was this schedule that allowed people to start making decisions about the next two years, and for some, the news was good; they were first in the queue. For others the news was not

²¹ Both Mayor David Ayers and CEO Jim Palmer attended on the Saturday.

so good as the schedule meant their homes would not be rebuilt for 2 years.²² Yet, as one resident told Sandra James, 'I don't like it, but at least now I know, and I can get a plan'. On the back of meetings around this issue, and some residents' concerns about the process, New Foundations issued 137 key questions and answers about the repair, rebuild and land remediation process in Kaiapoi, Pines Beach and Kairaki.

Even the earthquake on the 22nd of February that devastated parts of Christchurch city initially caused only a small pause in council's commitment to the rebuild. Behind the scenes, however, serious insurance problems were just beginning. Initially, the problems raised were around apportionment of damage between the two earthquakes. As EQC was responsible for the first \$100, 000 of damage, if the quakes were considered two separate events, EQC would be responsible for \$200, 000. This suited the insurance companies, but not EQC. The debate between the two is on-going.

The second serious impediment to the rebuild programme going on behind the scenes was central government and the insurance industry's general calculations surrounding durability of works and the likelihood of experiencing another event of these magnitudes. Largely unaware of the potential deployed to significance of the analysis and geotechnical investigations going on, Waimakariri District Council carried on with the rebuild programme. In late May, tenders for works using unit rates had been secured. A final series of meetings was held with residents of the first of the rebuild clusters to sort out any last minute concerns around temporary housing and timelines. On June 10th, Simon Markham even gave a

briefing to CERA, Ministries and Business Leaders' Forum outlining the rebuild

programme and schedule of repairs.

Machinery was already being deployed to the first sites when another earthquake of magnitude 6.3 hit the region and on June 13th Minister for Earthquake Recovery Gerry Brownlee issued a media statement Red Zoning Kairaki. It was conveyed that scientific analysis had been conducted and further faults found. This meant that the September quake was more like a 1-in-100 year event. Consequently, for a building with an expected life of 50 years, there was a 50 per cent probability that it would experience another quake like the one in September. Thus, any land remediation work and the design of building foundations had to be of a higher standard and for some areas, including Kairaki, the cost of doing so was too high.

Council had very little warning of this announcement but 'engaging with' the community turned sharply from making sure the residents understood the rebuild process to facilitating a pastoral care programme, delivered mainly through the Earthquake Support Co-ordinators, local faith-based community groups, and the broader pastoral care team.

All in all, the Waimakariri District Council has undertaken a rather varied process of 'engaging with' different communities using a mix of fairly orthodox measures, and

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²² Working closely with Wellbeing North Canterbury, those getting 'bad news' also had a visit from the pastoral care team and some baking.

others less so. Mary Sparrow, Senior Policy Analyst at the council described the Policy Team as 'survey junkies' who are always looking to get feedback from the community and keep in touch. Yet, this 'formal' engagement complements a broader programme of connection with different communities that takes place at a different level. This story from Peter Jenkins (Kaiapoi Residents Association) is fairly typical:

There is a very good understanding on behalf of the majority of the community that the Council understood the community's needs and the community, that it was shared with the community so the community were engaged with in different ways... I can remember sitting down at the beach with Simon Markham, sitting down there under the trees, having a cup of coffee at Dave's place and going through preliminary draft plans of how they were going to remediate the community infrastructure and the sections, and feeding into that. It was real kitchen table stuff. And it was about Simon Markham, Jim Palmer, Rob Kerr and Sandra James and Jude Archer's team doing those things out in the community.

It is evident in stories from all the non-council NGO and faith-based community representatives interviewed for this report which, given they are in a position to be most critical, makes a convincing case that the council's varied and sometimes unorthodox process of 'engaging with' communities is an excellent model to follow in a post-disaster situation.

Business as Usual versus Recovery

The section details some of the considerations, processes, appointments and strategies the Waimakariri District Council have used to balance Business as Usual (BaU) with Recovery. In contrast with other TLAs that were either not affected to a significant extent, or whose leaders chose not to deviate from BaU, Waimakariri District Council essentially abandoned – or at least suspended – peacetime structures when the Mayor declared a State of Emergency at about 10.03 Saturday 4th September 2010. This declaration was reinforced with messages from the CEO about dealing with requests to step outside one's 'normal course of work with good grace'. It was certainly an unusual situation where, during the first few days, team leaders, team members and elected members were deployed to Kaiapoi to make sandwiches or walk the streets delivering pamphlets to bewildered residents.

A key departure from BaU was that Simon Markham who had so recently been nominally appointed Recovery Manager 'should the need arise' suddenly found himself centre of the organisation's recovery effort and leading the newly created Recovery Management Team (Figure 12 below).

Though this Recovery Management Team put some structure to the changing situation, within a week, council's peacetime functions began demanding attention. So, although the disaster recovery literature (e.g. MCDEM's Holistic Framework for Recovery, 2005) makes some neat distinctions between the natural, built, social and

economic environment, it was impossible to maintain these given the reality of overlapping and interconnected issues, such as building damage and closure causing economic and employment problems.

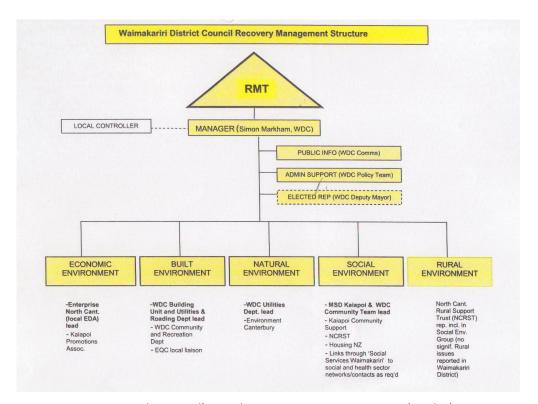


Figure 12: The council's initial recovery structure Sept 2010 (week 1)

Nor did the literature adequately account for the sudden lack of autonomy council had over the situation, arising from the need to engage with CDEM Group, other TLAs, insurance providers, LAPP, Loss Adjustors, secondments, EQC, emergency services). As Recovery Manager Simon Markham explained:

It became pretty clear early on that the event was of such a scale and geographic spread that, in the context of this council, we would not have the resources to duplicate or replicate BaU and create a dedicated recovery management operation because most of our teams in this organisation we can count on one hand. And there's a huge amount of organisation specific knowledge sitting in the heads of a few people. And that's a key dependency of a small to medium sized council. So we weren't able to say to somebody in the utilities team at a sufficiently senior level 'we can release you completely from your day job to do this recovery'.

Thus when BaU and Recovery came together, the overall picture started to look rather more confusing and by October 2010, council had already devised its third version of the organisation's operational and functional arrangements (Figure 13).

Increasingly, the council senior management team had to think about both capability and capacity, and how to resource the extra demands brought about by the earthquakes. These demands were felt across the organisation, from the injury prevention strategy 'which changed immediately to suicide prevention', and customer service who were trying to understand new geotechnical information on the PIMs, to the building unit which was dealing with an increased consents load. Another consideration was that the Civic Offices were in Rangiora whilst the damage was primarily in Kaiapoi, Pines Beach and Kairaki, 15 minutes drive away. Finally, it was thought at the time that the earthquake was a one-off event which meant a reluctance to permanently increase the staff.

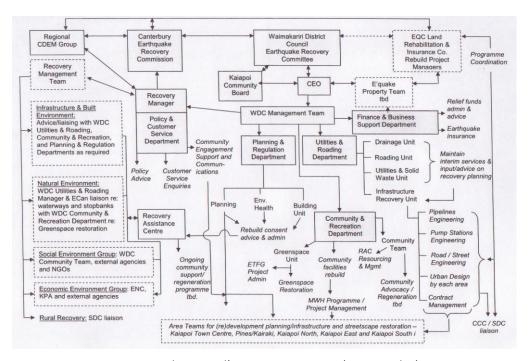


Figure 13: The council's recovery structure (V1.3, week 6)

These considerations led to secondments, a new focus on tendering processes using unit rates, targeted funding applications for short-term appointments undertaken in collaboration with selected NGOS (e.g. ENC or WNC), parallel rather than sequential consenting processes (which has been facilitated by the move to digital copy), and the use of remote agents for consents processing. Through these means, for example, the building unit has increased the number of consents for new dwellings this year by 47 per cent from 2011 which, in turn, saw an increase of 100 per cent on 2010.

Some organisational restructuring also had to take place. As just one basic example, the new focus on ground conditions with assessment lodged on the Project Information Memorandum (PIM) has led to a more careful scrutiny of the PIMs. Preearthquake this was undertaken by customer service staff whereas post-quake this work is done by two new technically qualified staff. Technical meetings are now held every two weeks with the discussion and findings minuted for future reference, to avoid variation in interpretation. An extra person has been hired to deal with

administration and another 3 to 4 are on—call to deal with overload and backlog. In a break with tradition, building inspectors are also now allowed to work overtime.

The various infrastructure units have also been restructured and, in some cases, upsized to streamline engineering capacity around the 'retreat' to new greenfield subdivisions, with a new steering group and reporting structure forming to coordinate that. While it would be ideal to add both capacity and capability, funding constraints make this impossible so, with some exceptions, the strategy has been 'to do more with less' in an effort to manage rates increases. The exceptions are the Hub in Kaiapoi, the addition of the Infrastructure Recovery Manager Robb Kerr during the rebuild phase, and the on-going roles of Recovery Manager, currently Simon Markham (who has also retained some of his Policy and Customer Service Manager duties), and Social Recovery Manager, Sandra James. Overall, in making decisions around resourcing, the balance between building (and losing) capacity and filling capability gaps is fundamental.

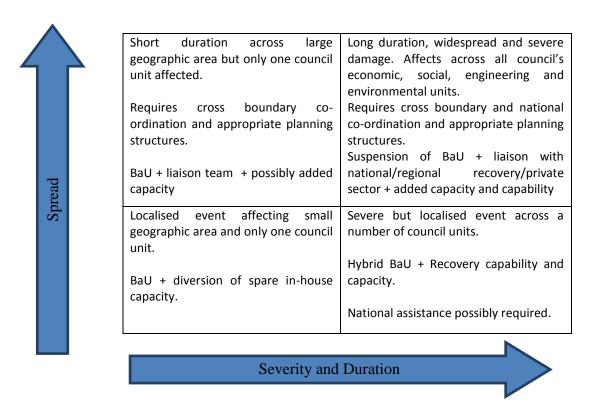


Figure 14: Simon Markham's (Recovery Manager) Contexts for Recovery (Modified by Author)

This has led Simon Markham to consider the different types of disasters that might occur and the most appropriate blend of BaU and Recovery functions councils might expect (Figure 14, see also Appendix 2).²³ An important point to note is that there are vastly different contexts for recovery, and this context – also taking into account capability, capacity and culture of council - must shape any response and recovery

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²³ Simon Markham has, in the interim, refined and developed these contexts for recovery and developed a checklist for pre-event recovery planning and management. A synopsis and the checklist in presented in Appendix 2.

strategy. Because only parts of the district have been affected, some BaU must take place. Yet, the extended and prolonged nature of the earthquake sequence means 'recovery' is still incomplete. Consequently, the Waimakariri District Council is working with what might be called a 'hybrid' model that takes this blend into account.

Two years on, there are a number of major challenges looming for both the council and district including the development of a withdrawal strategy for Kaiapoi and the closure of the Hub; dwindling funding streams both for earthquake recovery and business as usual social services which still report high demand; the 'silent earthquake' associated with the closure of earthquake-prone buildings which has severely affected Rangiora's main street; and fatigue. In the face of these challenges it is easy to forget to celebrate some of the things that went very well. This section started with three key themes:

- The unique positioning of local government to undertake integrated or 'holistic' recovery work, versus the lack of clarity around local government's role in disaster recovery;
- 2. The general consensus that good **council-community relationships** are crucial to recovery processes, versus the lack of practical advice on how best to engage, and engage with, communities post-disaster; and
- 3. The balancing of Business as Usual with recovery issues.

Waimakariri District Council has enjoyed some success across each of these, and this adds some support to the long-standing New Zealand tradition, and resultant, expectation that local government will show leadership before, during and after disasters. It is difficult to see any other agency possessing the local knowledge that helped make Waimakariri District Council's Integrated, Community-based Recovery Framework so successful. They've been innovative both around engaging and engaging with some very competent local communities at various stages of the process and have judged finely some important distinctions between doing, delegating, supporting and enabling. The council's size — not too big and not too small — has fostered good adaptive capacity and contributed to a responsive - and responsible - recovery framework.

Section D: What mattered for an integrated, community-based recovery

Strong, focussed but distributed leadership

When asked what helped make the Waimakariri District Council's Integrated Community-based Recovery Framework successful, most of those interviewed (both in and outside of council) at some point mentioned Jim Palmer, referring to the Council's CEO. There was general agreement that he had taken Civil Defence and Emergency Management seriously before the earthquakes, had assumed responsibility and showed initiative during the response phase, and had demonstrated excellent leadership since. His leadership style is not that of 'command and control' often demonstrated during and after disasters; it appears to be more enabling with interviewees indicating "he's present, but not in a controlling way" or "he's supportive". As one staff member put it:

[One of his] attributes is he's just a magnificent problem solver, given a complex problem, he'll ask all the right questions to understand what are the contributing factors before arriving at a list of potential options, course of action. And then weighing up the pros and cons of each of those to determine the best course of action, so just simple problem solving. But now having experienced the Waimakariri's performance through two huge earthquakes, a range of complex issues emerged out of those. And the way he dealt with those was as a forward leader, to be seen up the front doing what you ask your staff to do.

However, this style of leadership did not dis-empower the staff, so although no-one doubts who is ultimately Chief Executive, decision-making authority is distributed throughout the organisation. As one staff member noted:

I knew was walking into an organisation here at Waimakariri where leadership was being practiced and delivered at the lowest levels and it reflects on the performance of the organisation and the subordinate staff as well as managers that Jim has under him. I think the way they perform, and the way all the staff in this Council perform, is a direct reflection of his personal contribution to the organisation.

The effect of this is that for important decisions, everyone knows who to go to, and this policy is promoted by what appears to be a fairly open-door policy; however, less critical issues can be resolved very quickly at other levels. This has greatly facilitated the recovery process.

Alignment between the CEO Jim Palmer, senior management, Mayor David Ayers, other elected members (including Community Boards) and local communities

It could be argued that the Waimakariri District Council's Recovery Framework arises from an arrangement where the whole is more than the sum of its parts. So while consensus over Jim Palmer's leadership is high, so too is agreement that the recovery reflects relatively good alignment between the Mayor David Ayers and other elected members (including Community Boards), and local communities, the CEO, and senior management. There is broad agreement around the Council's core purpose which was articulated by many of those interviewed as involving the wellbeing of the community and meeting community needs, whilst being fiscally 'conservative'. So, with a couple of notable exceptions, there has been a relatively low level of conflict over Council's roles and responsibilities, and what they should be doing. Though not everyone is entirely satisfied with their performance, and there have been some vocal critics, the Council's approach has generally resonated very well with the expectations of the NGO and community group representatives interviewed for this research.

Social capital

It has been argued that bonding capital (within groups) helps people survive and respond to a disaster, but that good bridging (between groups) and linking (between groups and the state) capital is required for recovery. The Council and local communities have worked very well together with Council both engaging, and engaging with, local community groups and providers, consultants and contractors. Pre-earthquake Sandra James (former Community Team Leader, now Social Recovery Manager) had a good understanding of, and warm working relationships with, many local social service providers like the Oxford Community Trust, Kaiapoi Community Support and faith-based communities, and this enabled a very rapid integration of community and council recovery strategies. Where possible, Sandra James would identify and, if necessary, enable a local group to fulfil a particular role, thereby ensuring the community took an active part in the recovery.

Sitting alongside this 'engaging' of local groups to do recovery work is the process of 'engaging with' which speaks to different ways of augmenting the traditional electoral and legislative mandate local government already has. Given the plethora of decisions, developments, opportunities and challenges that arise in the wake of a disaster a Council is faced with two broad choices: The first assumes that through established electoral and legislative processes, local government has the mandate to make decisions and act in the interests of the people (a top-down approach). The second makes similar assumptions around electoral and legislative process, but recognises peoples' needs and aspirations may change (rather rapidly after a disaster) and initiate a range of other consultative (surveys, submissions) and more or less deliberative and inclusive processes as well (a bottom-up approach). The Waimakariri District Council has relied heavily on the latter, and has developed a wide range of both formal and informal ways of engaging with local people, groups

and businesses to help identify problems and issues, and develop workable solutions.

These processes of 'engaging' and 'engaging with' promote flows of social capital, information and resources, all of which have been referred to as 'the currencies of recovery'. These flows were facilitated by the principles of 'presence' and 'colocation' best illustrated by the building of the Hub – a one-stop recovery shop - on Sewell Street in Kaiapoi. The Hub is a highly visible example of a more subtle preearthquake process involving the development of – and investment in – relationships between Council and local communities.

Adaptive capacity

The Council has showed a willingness to develop new structures, positions, programmes to cope with change across and between different departments. Some of these are very formal – such as the creation of the Earthquake Recovery Committee comprising all Councillors and the Chair of the Kaiapoi Community Board, Robyn Wallace - whilst others reflect adaptive capacity more subtly. In addition to the formal declaration of a State of Local Emergency, an informal example of this was the rapid mobilisation of non-EOC Council staff volunteers on Saturday, the 4th of September to Kaiapoi's 'ground zero'. Despite it being a weekend many staff members, including managers from the policy and planning teams, were deployed to 'keep a strong presence in the streets with Council marked vehicles; staff in council marked vests/clothing; elected members occasionally touching base with the general public'. That day, council staff also participated in the door-knocking exercises that distributed and gathered information. Though useful in and of itself, this deployment indicated a far more significant shift and a very clear message to staff and residents alike: This not Business as Usual.

Given the protracted and constantly changing face of earthquake-related issues from the initial event that caused liquefaction and lateral spread in Kaiapoi, Pines Beach and Kairaki, to the consequences of engineering recommendations around the structural safety of buildings that has led to the closure of many shops in Rangiora – another challenge has been to develop a framework flexible enough to accommodate both recovery and Business as Usual. During the two years since the earthquake, the Waimakariri District Council has undergone a number of changes and involving new appointments, the creation dissolution units/departments and special committees, as well as the introduction of dedicated budget streams, steering groups, and infrastructure delivery programmes. A suite of new processes has also been introduced, ranging from the Hub-based 'case management' approach to the use of 'unit rates' to speed up the rebuild tender process, and the transition to soft copy for building consents. Other examples are noted below, but the underlying point is that the Council has been willing to experiment with, and modify, processes and structures if it facilitates a good outcome for the community. The underlying message appears to be 'outcome before process'; this is not usually a characteristic of bureaucracies.

This willingness and ability to change – adaptive capacity – has been facilitated by the size, culture and capability of the organisation. Waimakariri District Council (at about 235 FTE staff members) is not so small that it is stretched to capacity and struggling to fulfil its legislative obligations. Instead, the organisation is large enough that the benefits derived from economies of scale still outweigh the costs of administration that generally plague bureaucracies (such as the introduction of another layer of management, increasing reliance on processes rather than outcomes, convoluted and delayed decision-making, etc). The staff has sufficient depth and breadth to manage many important functions in house, but it is not so large that it is entirely self-contained. This means that it is still important for council to build good, working relationships with external partners (social services, consultants and contractors). Contractors and consultants are also able to negotiate with council at the appropriate level of management. The organisation therefore had a well-established 'architecture of engagement' with its peacetime partners, and was able add capacity and capability according to need in a rapidly changing environment without losing its core identity or culture.

Pro-active and cost-effective

As Olwig (2012, p. 112) has noted, 'adaptation is not only viewed as an environmentally induced response in order to "moderate harm"; it is also perceived as the active exploitation of new opportunities'. This active exploitation of opportunities is particularly important post-disaster when almost everything has to be re-evaluated; some have argued that this unlocking of potential helps combat the trauma of the event (Solnit, 2009). This casting around for the silver lining has been a notable feature of the Waimakariri District Council's recovery strategy from the very beginning, as this quotation from Rob Kerr, the Infrastructure Recovery Manager shows:

I remember Gerard and I were sitting on top of a culvert trying to work out what the hell had gone on with the culvert because the land had changed and water was different. And we were sitting on this culvert and it looked like it would be really stuffed. When we saw it you knew we'd end up replacing it. Anyway, I said look this is an opportunity to rebuild this town in a great way...We've got a significant percentage completely trashed and we're going to have to fix it up. It lacked some amenity before then, so this is an opportunity not only to make the infrastructure more resilient but, more importantly, to make the new streetscape and the landscape more attractive.

This pro-active, rather than reactive, approach was adopted on other occasions too but it is apparent that what counts as 'evidence' or 'justified action' is problematic when the goal is 'prevention rather than cure'. The further irony here is that if one successfully prevents an undesirable situation arising, the savings can never be calculated. An example of this was feeding the contractors during the response phase. The cost is easily counted, but the benefits in terms of facilitating midday briefings and information flow cannot actually be quantified. The coordination that

flowed from these briefings, and savings in contractors' time and energy that resulted, will never be known.

Another example concerns the provision of the temporary shopping mall in Rangiora's High Street. It involved a large, easily quantifiable net cost to Council (in the order of \$300K). Yet the loss of a viable town centre, loss of confidence in the recovery process and the agencies that manage it, and the generation of hidden social, environmental and economic costs associated with servicing a dispersed urban form are much harder to calculate. Nonetheless, there is a long list of examples, detailed below, suggesting the Waimakariri District Council's recovery framework does factor in some of these more difficult – more qualified – considerations, and reflects a reluctance to displace the costs of some decisions to future generations or other service providers. Being cost-effective depends on what costs are counted, when, and by whom.

Evidence and mandate

Both the response and recovery phases have demanded Council make decisions quickly, in often uncertain and rapidly changing environments. The modern 'rational' planning model involves defining a problem, establishing objective assessment criteria, developing all possible solutions, choosing the best of them, implementation then monitoring progress. It assumes there is enough time, information and resource available but, as Lindblom (1959, 1979²⁵) has most famously argued, this is never actually the case, even at the best of times. During the worst of times, such as disaster recovery, the limitations of time and information flow are even more pronounced, with more decisions needing to be made more rapidly; thus different forms of 'evidence' were needed. These include, for example, surveys, 'checking in' with people, 'triangulation' of data, co-location, appointing a dedicated earthquake 'coms' person, and emphasising the quality and reliability of the information source as well as the quantity of data.

In this vein, one item that was seen as something of an opportunity lost was the placarding system that was used to designate residential buildings status as fit for purpose. Given trained building inspectors undertook these assessments, more information than 'green', orange', 'red' could have been given to home owners, and more useful evidence could have been gathered to inform decisions around displacement, temporary housing needs and approximate number of temporary repairs/consents needed. It was suggested that a rapid, but slightly more detailed,

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²⁴ Such calculations have a dedicated branch of ethics - 'phronesis' - which is sometimes translated as 'practical wisdom' or 'prudence'. Originally applied to the ability of a ruler to judge finely the 'right' amount of tax to levy on his subjects, the idea has been resurrected by Bent Flyvbjerg, formerly Professor of Planning at Aalborg University, Denmark, currently Professor of Major Programme Management at Oxford University, and author of *Rationality and Power* (1998) and *Making Social Science Matter* (2001).

²⁵ But see also the 'communicative turn' and, for example, Healy, 1992; Allmendinger and Tewdwr-Jones, 2002.

system be developed based on tick boxes indicating roof/walls/foundation integrity and water/sewer/phone/electricity availability.

People before pipes

Jim Palmer has been reported as stating that "Our success will not be measured by the kilometres of pipe and road that we replace, but by how the people come through this". This focus, in part, justifies the title *Community-based* Recovery Framework but it also raises questions about what this means in practice. While more detailed accounts are provided in the body of this report, several examples that illustrate this "people first, engineering second" approach during the response phase were:

Presence and communication - especially the swift deployment (on 4th Sept 2010) of Council staff members to Kaiapoi, with food for contractors and information for residents.

Taking responsibility – by, for example, stepping across the boundary. Traditionally TLAs do not step across the home-owner's boundary and any infrastructure issues between the house and the front boundary is the owner's problem. But post-earthquake it would have been impossible to just call a plumber to get the issue fixed, so Waimakariri District Council made a decision fairly early on to liaise with EQC and coordinate repairs across the boundary because "there's no point us fixing our side of the sewer and people still not being able to use it because the pipe between the house and the boundary is broken."

Coordinating, supporting and enabling social service providers - at the Welfare Centre, the Recovery Assistance Centre and the Hub, through the provision of facilities, goods and services (e.g. rooms, vans, photocopying, payroll, funding applications, etc) and assisting with the development of a 'case management' rather than strictly 'welfare' approach.

Similar practices have been in evidence during the recovery phase as well with the establishment of the Kaiapoi Hub (which facilitates two-way communication and keeping an "ear to the ground"); taking responsibility by essentially project managing the Kaiapoi rebuild along with the New Foundations programme to help integrate recovery issues; facilitating Red Zone retreat by working with property developers through District Plan changes; allowing the use of Council land for temporary libraries, housing and shopping facilities; working where possible with local employers, NGOs and community groups who provide key social services, including pastoral care, case management, advocacy etc.

Section E: Recovery Best Practice – Questions and Implications

The Waimakariri District Council's Integrated Community-based Recovery Framework exhibits many of the qualities and characteristics referred to in international recovery best practice, particularly around engaging, and engaging with, local communities. The relationships between key council staff members and local community representatives are very strong and very positive, and there was real consensus from those interviewed outside council that Waimakariri had 'got it right'. As a local Residents' Association representative told me 'If somebody was going to go and write a model for recovery, there's a one-stop shop right there'. In a letter to Waimakariri District Council Mayor David Ayers (dated 14th June), Earthquake recovery Minister Gerry Brownlee commended their approach writing "You have been a great example of how to engage constructively with your community, and your leadership during these challenging times has also been a comfort to your residents".

This view has been endorsed by a number of international scholarship experts and an independent review conducted by the Future Canterbury Network (FCN). Following their evaluation of the Waimakariri District Council's performance, the Network's Chair reported that "the Waimakariri District Council and its staff have set a high standard for the other local government and central government bodies responsible for the recovery from the earthquakes to follow...It is a shining example of what can be done for a community struggling to cope with disaster" (FCN, 2011).

This raises questions about whether or not the Waimakariri District Council's Integrated Community-based Recovery Framework can be adopted and applied in other contexts. Some factors, including particular personalities such as Jim Palmer the CEO, Simon Markham the Recovery Manager, Sandra James the Social Recovery Manager, Robb Kerr the Infrastructure Recovery Manager, and Mayor David Ayers are not exactly replicable. Nor are the distinctive synergies that arise from the many others involved — Senior Management and other Council staff members, the Councillors, Jude Archer's team of Earthquake Support Co-ordinators, and some very capable and committed community leaders. Nonetheless the principles outlined above, including leadership, co-ordination, people before pipes, clear, two-way communication, engaging and engaging with locals, etc could be adopted elsewhere. If adopted, they would likely lead to other, equally distinctive, context-dependent synergies.

Another important question is whether the Waimakariri District Council's Integrated Community-based Recovery Framework can be up-scaled to larger organisations and metropolitan areas. Most of the interviewees who reflected on the issue of up-scaling thought it would be more difficult and different - but by no means impossible - particularly if the principles outlined above guided the process. As one interviewee argued "the attitude can be applied to any scale, and that's what's important".

Some of those interviewed had clearly given the practical matters associated with up-scaling a great deal of thought and recommended making sure recovery was dealt with at the 'human scale', as 'villages' of about 1, 000-1,500 households. Each village should be further divided into clusters that residents could relate to and identify with (Figure 15). The integrative role of a Hub providing a range of services, and the co-location (and willingness to interact and get to know each other's business) of Social Recovery and Infrastructure Recovery Managers was seen as crucial. The programmes from each village could then be brought together for procurement, temporary housing provision, engineering and design protocols, and contractor resource management. Sandra James was keen to point out that this overarching organisation would be there to serve the needs of each village, not to control their activities.

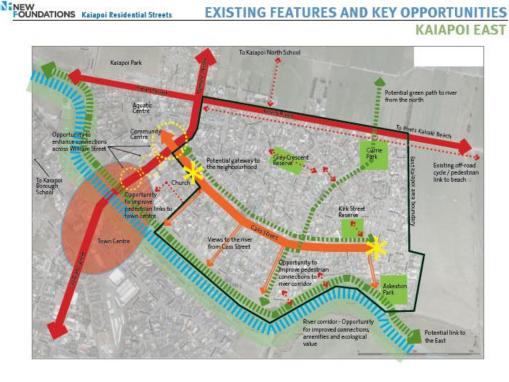


Figure 15: Human scale streetscapes - Kaiapoi East

Given the very positive contribution the Waimakariri District Council's Community-Based Recovery Framework makes to disaster scholarship, important questions must be asked about the roles and responsibilities of local government during response and recovery phases, and the legislative environment in which they operate. This report documents one council's breadth and depth of recovery work and provides good evidence that, although they may choose not to do so, local government is uniquely positioned to undertake a 'holistic', co-ordinated and integrated approach. This does not always mean 'doing' the work, as in 'delivering' social services for example, but rather showing leadership around delegating, coordinating, facilitating, enabling and mobilising community strengths and assets.

Having a good understanding of organisational and community assets helps enable the balancing of recovery and Business as Usual functions, and underpins Recovery Manager Simon Markham's 'Contexts for Recovery Management' matrix. It provides a guide against which TLAs might assess the extent to which recovery issues can be accommodated within existing council structures. An important point to note is the way relationships with external bodies would vary as one moves around the matrix. It highlights the way recovery can be a very long-term process, but one that can be facilitated by good relationships with consultants and contractors outside the organisation pre-disaster. The size of council – not too big, not too small also helped the organisation move around this matrix by adding/subtracting capacity and capability reasonably quickly. Described by Jim Palmer as 'a nimble glacier, if you can imagine such a thing' the organisation's core was strong enough to maintain functionality, but was not so big it could achieve all it had to using in-house resources. By nature of its size, it has had to reach out and form those relationships that worked so well post-disaster; indeed, this may be one reason why 'medium' size councils generally tend to perform well across a number of indicators. ²⁶

This raises further questions about the broader legislative context within which local government operates. It remains to be seen just how TLAs will respond to the Local Government Act amendment which removes two clauses from the legislation that were relevant to this case study. These are:

To enable democratic local decision-making and action by, and on behalf of, communities; and

To promote the social, economic, environmental, and cultural well-being of communities, in the present and for the future.

These will be replaced with:

To meet the current and future needs of communities for good-quality local infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses.

Though this approach might meet the 'peacetime' wishes of residents who have little appetite for rate increases, its utility in terms of disaster preparedness, response and recovery is much less certain.

This leads to a final question around the actions local authorities can take now to prepare, not just for response in the CDEM sense, but for recovery which is prolonged, expensive and traumatic. Some indications are provided here: cultivate good, functional relationships beyond the organisation; attend civil defence training exercises; pre-appoint a Recovery and Social Recovery Manager with a background in community development if possible; treat your consultants and contractors well; keep an up-to-date, well-mapped list of assets; undertake regular hazard assessments; and keep debt under control; and foster some consensus between the bureaucracy and elected members around the core purpose of the organisation without eliminating healthy debate over how to achieve that.

²⁶ See the BERL (2011) Regional Rankings, for example, http://www.berl.co.nz/economic-insights/economic-development/regions/buller-tops-berl-regional-rankings-in-2011/. Measured across employment growth, population growth and business units growth, Buller attained first place, and Waimakariri District Council was third. Of the top 10, 8 could be described as 'medium' size.

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Appendix 1: An example of a Waimakariri District Council 'response' update to residents



KAIAPOI & PINES KAIRAKI UPDATE AS AT 10 AM MONDAY 6 SEPTEMBER 2010 ISSUED BY WDC CIVIL DEFENCE CONTROLLER

Council Priorities

 Public Health and Safety, restoring Water, then Sewer, Building Checks then Drainage and Roading

Water - Kaiapoi

Up to 85% of Kaiapoi has water restored, but in some areas where water has gone back on
we are finding further breaks that require the Council to shut off the water again to fix those
breaks

Areas where major issues still exist, and where our priority is directed, are:

- Feldwick, Cass, Sewell and Charles Streets, Grey Crescent, Palmer Place and surrounding areas
- o Raven Quay, Fuller and Hilton Streets and CBD area
- Water has returned to the Courtney Drive area, but further leaks mean the supply is unreliable – these are being repaired.
- We have more than 15 gangs of contractors supported by Council staff working on the problem areas.
- Potable Water tanker is at North Kaiapoi School bring your water containers we have a limited amount of bottled water available
- Please conserve water and boil it prior to drinking

Water - Pines and Kairaki

- Pines Beach water has been restored, but further breaks make the supply unreliable we
 hope to have increased reliability by Monday afternoon
- Working towards Kairaki Beach we hope to have water on maybe Monday afternoon or Tuesday. Significant camp ground damage means, initially, we may connect to just one point for water to be collected from.
- Potable water is available at the Pines Beach Hall.
- · Please conserve water and boil it prior to drinking

Sewer - Kaiapoi

- About 50% of sewerage operating North Kaiapoi feeding to Beach Rd pump station is operational.
- Charles Street pump station has major damage and sewage is being spilled to Kaiapoi River
- Raven Quay pump station damaged but is being manually pumped by sucker trucks.
- Treat all surface water including Kaiapoi River, streams and water ponding on streets and properties as contaminated. All silt and sand should also be considered contaminated.
- Ok to flush toilets and have a short shower but make limited use please

Sewer - Pines and Kairaki

- No sewer pump stations are working and will take some time to return
- Temporary pumps and Sucker Trucks will pump from sewer mains where possible
- Treat all surface water including Kaiapoi River, streams and water ponding on streets and properties as contaminated. All silt and sand should also be considered contaminated.
- Ok to flush toilets and have a short shower but make limited use please

Building Safety

Council has help from other Councils and consultants to assess building damage

- In the worse affected areas Council officers will move door-to-door checking whether houses are safe and sanitary - officers will say your home is either OK to live in: is unsafe and something needs fixing to make it safe before entry/occupation is allowed (eg chimney must be removed); or the building is unsafe and should not be entered/inhabited
- Owners need to check with their insurance company and lodge a claim with the Earthquake Commission -they have their own assessors. You can call the Earthquake Commission on 0800 326243 or 0800 652333 and have your insurance company policy number to discuss making a claim. You can also get information on the web side get thru website www.getthru.govt.nz
- If you have no power, water and sewer connections on your property you may want to think of staying with friends or family.
- If you have to leave your house please turn off power, gas and water.

Kaiapoi Central Business District Area

- Cordoned off
- With a building expert advice, we will start allowing business owners back into the area to assess the damage and how they will recover - access to others/public will be prohibited.
- Countdown is operating, otherwise please stay away from CBD

Drains

- There are blockages in Courtney Stream water levels in these areas are rising. The Council is working on clearing these drains and allowing limited water to pass
- Many other open drains and road-side drainage sumps are blocked and will need to be cleared progressively, when resources allow.

- Roading

 Williams Street between Charles and Ohoka Road is closed and will be until at least Tuesday

 - Other roads are open please limit travel in Kaiapoi and Pines Kairaki to that which is essential. All others should staff away.

Welfare

• If you need welfare support in the first instance please go to North Kaiapoi School in Williams Street.

Updated Information is on Council's website -www.waimakariri.govt.nz

Or

Call Waimakariri District Council on 03 311-8900

Appendix 2: Pre-Event Recovery Planning and Management Checklist (Simon Markham, Recovery Manager, Waimakariri District Council)

Set out below is a schema based on the Waimakariri District Council's experience for considering the differing disaster contexts within both pre-event preparedness planning and post-event recovery management can be considered and developed. Key determinates are the potential / actual geographic spread — relative to administrative boundaries — and the relative severity and especially the duration — both of the disaster event/sequence and of the required recovery process.

Contexts for Recovery Mgmt.

ead

Relatively low intensity/short duration event, but wider geographic area affected. Requires cross boundary coordination /regional level resourcing. Larger/more dispersed number of homes/businesses affected. Enhanced recovery coordination and planning structures /processes required.

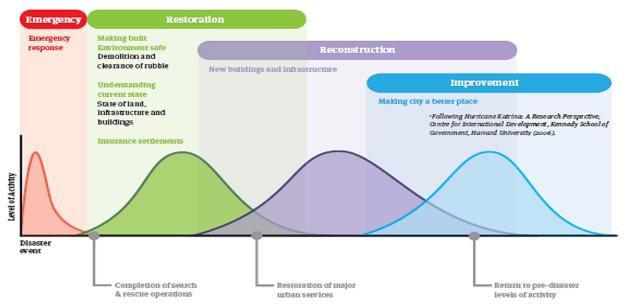
Localised event of short duration, within one Council area. Acute response, short recovery term/limited task. Frequent occurrence, e.g. severe winter snow storm, large flood events. Small no of homes/businesses affected. Short duration Recovery Management Team, quick revert to existing BAU structures/processes.

Large scale event(s). Widespread and severe damage. Fatalities, injuries, homelessness and business interruption. Local, regional, national coordination. Enhanced/customised recovery assistance, programmes. 2-10 years duration. Major recovery plans and programmes and major public/private leadership and integration required.

Severe to very severe localised event, e.g. earthquake with aftershocks protracting recovery. 10s to 100s of displaced households/businesses. Significant infrastructure damage. May be fatalities, likely injuries. Longer term recovery. Initial RMT + augmented BAU. Significant Regional and Private Sector co-ordination.

Severity and Duration

Applying this schema to pre-event planning and post event management needs also to consider the general sequence of phases in disaster management as set out below and observed in the Hurricane Katrina situation.



The Waimakariri experience has shown that while this general phasing holds good, the degree of phase 'overlap' is often much greater, especially in disaster sequences with different areas differentially affected through time; and that improvement strategies – unless thought about early and founded in/connected to pre-event ongoing risk reduction/resiliency/general enhancement planning – can be lost opportunities under the pressure to rebuild and normalize the situation as soon as possible.

Also this phasing is generally conceptualized and planned for in terms of physical damage and its recovery. Experience has shown that social, economic and environmental recovery phasing does not necessarily accord with nor accompany this general depiction.

Generally speaking, short duration, localised impact events within the scope of a single Controller/Emergency Operations Centre (EOC) are response dominated and require little dedicated recovery management per se or only activation of a limited recovery management programme. The relevant territorial local authority (TLA) can generally undertake this within their own resources, possibly with CDEM Group level specialist resourcing to supplement local control and operations. Response to recovery transition is relatively seamless.

Somewhat larger scale events/sequences over larger geographic areas bring into contention in the response phase coordination across EOCs and activation of Regional Group management structures. Recovery management remains highly context specific depending on the nature and spread of the damage. The issue of whether recovery management is to remain separate, as extensions of individual jurisdiction's EOCs, or to be integrated cross TLAs and/or merged with the Group needs to be addressed, preferably in pre-event preparedness planning rather than in the thick of the response phase as it is happening.

More severe/longer duration but still localised events means TLA EOC and Regional Group response and recovery structure coordination and potentially full scale integration issues arise and need to be addressed. If very severe then national intervention/resourcing and certainly monitoring will be in contention.

Large scale, severe events of long duration with major damage to be recovered from, such as the 2010-12 Canterbury Earthquake Sequence, have led to significant

adhoc interventions in legislation, to facilitate recovery and agencies to implement multifaceted recovery programmes, never before required or indeed conceptualized in the New Zealand setting. Pre-existing regional level recovery management arrangements were rapidly overwhelmed and superseded through this Sequence as an unprecedented national emergency. Despite this, all preexisting TLA disaster and ordinary management responsibilities have still been in play albeit subject to national directive in key aspects.

At the small - medium scale TLA level such as Waimakariri District with severe localised damage to contend with, alongside the massive scale of damage in Christchurch City, a challenge has been determining the nature and extent of local recovery management, underpinned by local leadership, but underpinning local responsiveness – versus the organisational requirements for accessing the necessary national and private sector resources to implement recovery. The District Council made a conscious decision to accept as much local responsibility and influence over recovery as it could and resourced and scaled up accordingly, albeit in an adhoc manner. An unanticipated consequence of this approach was the amount of interagency engagement and multi-party relationship management that would be required as a result. But it is suggested that all TLAs need to reflect on as a matter of broad approach how they will react to the situation should it arise 'on their watch'. Having a conversation with their community to understand their expectations would be a good start.

It is still a matter of debate as to whether the legislative and organisational interventions that have arisen as result of the Canterbury Sequence as a high impact/low probability disaster should remain adhoc, to be established on a case by case basis when the need arises in the future, or whether these should be in some way 'normalized' within the ongoing CDEM legislative and organisational framework. Until this is resolved, pre-event planning elsewhere by both TLA and Group CDEM agencies for this scale of disaster is problematic and rather speculative.

Again generally speaking, recovery management plans and structures need to be highly adaptive – that is, flexible according to the nature of the event and the damage to be recovered from and rapidly scalable in accordance with the demands of the situation. Founding a 'Recovery Plan' in a single structural response in accord with a single event scale/severity/duration scenario will not be sufficient preparedness. Pre-event depiction of plausible disaster/damage scenarios and thoroughly testing recovery management arrangements against them is necessary. While there is ongoing, albeit infrequent, testing among TLAS/Groups of response phase cross boundary co-ordination and collaboration, (e.g. in EOC response training), there is little in the way of this for recovery management at present. The following checklist signals some of the recovery management situations needing to be thought about and planned for.

Issue/Topic	Localised/Low Impact Event	Widespread/Severe Event
Social Recovery	Transition out of small scale	Possibly large scale/long term
	response phase welfare assistance	provision of temporary housing,
	to temporary housing,	planning for and securing
	work/income and psycho-social	delivery of permanent

	assistance and support as well as insurance advisory assistance for small numbers of displaced persons/households for days/weeks and in the case of insurance, months.	substitute housing; significant programmes of initially food, then income support and psycho-social assistance as well as insurance advisory assistance for large numbers of displaced persons and households for months and years.
		Structures and programmes to distribute philanthropic funds for months and years.
		Significant outreach programmes and community development support for disaster affected and consequentially affected new communities lasting years.
Communications and Community Engagement	Targeted affected and wider, largely unaffected community communications regarding the extent and nature of damage, places and sources of assistance, restoration and rebuilding plans, projects and programmes development, timeframes and progress.	Major upscale from localised/low impact event context with possibly very large scale targeted and mass communications involving multiple channels spanning months and years. Major investment required in communications resourcing and
	Targeted engagement at formative stages with identified group of affected households and businesses as input to recovery decision making.	information assistance. Possibly many processes and rounds of community engagement with communities at large and structures and processes for ongoing engagement with pre-existing and newly formed groups and organisations as result of the disaster.
		Ongoing significant Media interest, scrutiny and required management.
Community Facilities and 'Social Infrastructure' Recovery	Unavailable/damaged/destroyed community facility(ies) and localised sports and community group owned building(s) requiring temporary repair and rebuilding or replacement. May be some	Major losses to community facilities and social infrastructure. From dozens to possibly hundreds of community facilities, parks, reserves and sports grounds,

opportunity improvement. etc. damaged/destroyed. for Funding sources and strategies generally localised but may involve Major facility/reserve/grounds regional/central funding agency assessment and repair and support. replacement strategies required as well as significant interim use and accommodation planning. Testing and reconsideration of pre-event facility and reserves asset management plans, budgets and priorities. Significant opportunities for facility enhancements ('not going to just build back the way it was') and review of service levels through replacement approaches required. of the above entails significant consultation and engagement with affected groups, funders and the community. Possibly large to very large Economic Most likely damage is to farm and forestry properties and businesses business interruption spanning Recovery and may be damage/destruction to years. Major destruction of farm isolated/town commercial buildings properties and/or town and/or and businesses. Targeted support city business buildings and and connection to Government equipment and information assistance programmes for small assets. numbers of readily identified businesses. Weeks and months of **Immediate** large scale business interruption and possibly farm/forest/business support long term farm and town business programmes lasting impacts. months/years required. Significant temporary business accommodation may be required to avoid business failure. temporary Major and permanent relocation/alternative premises required to restore employment and business function causing significant challenges accommodation availability and land use planning in terms of town centre and business area

		land use planning.
		Cause for major accelerated review/development of town /suburban centre or central city centre plans and strategies designed to reestablish/regenerate business activity.
Land Retreat, Residential Rebuild and New Residential Development	No/small number of properties withdrawn from active use due to land damage/land stability risks arising from the event and the natural hazard it reflects. May involved Government/ TLA buyout programme.	Possibly large scale retreat investigations and decision-making processes entailing significant Central Government intervention. Major retreat planning and process management, requiring significant affected community engagement and support programmes.
		Significant EQC/private sector led housing repair and rebuild programme generating demand for information, advisory and advocacy support programmes
		Consequential upon retreat requirements for accelerated residential land development and housing to provide alternative long term living accommodation. Can have significant land use planning prerequisites and urban form implications.
Infrastructure Repair and Rebuild	Limited amount of network infrastructure damaged and requiring temporary and then permanent rebuild.	Large scale damage to network infrastructure leading to a significant programme of restoration and maintenance of interim services.
	Some opportunities for enhanced resiliency.	Major repair and replacement programmes across all forms of horizontal infrastructure requiring damage assessment, rebuild strategy development and funding planning, programme/project management and delivery

		procurement and operations.
		Significant opportunities for enhanced service levels and
		resiliency.
Environmental	Damage to localised natural areas	More widespread and longer
Recovery	and ecology affecting all forms of	lasting damage, possibly
	wildlife and habitats. Natural	irreversible. Significant across-
	recovery processes take time as	jurisdictional recovery
	does the extent and nature of	programmes and coordination
	interventions to assist recovery to	required, needing to be
	be determined.	integrated with ongoing
		environmental management
		programmes.