

Recovery Strategy for Greater Christchurch

Mahere Haumanutanga o Waitaha



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Greater Christchurch**
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Canterbury Earthquake Recovery Authority
Christchurch, New Zealand

Contact

Canterbury Earthquake Recovery Authority
Private Bag 4999, Christchurch 8140
info@cera.govt.nz
0800 7464 2372 toll-free
www.cera.govt.nz

Ministerial Foreword

He Kōrero Whakataki

The recovery of greater Christchurch from the Canterbury earthquakes provides both challenges and opportunities of a scale and complexity unprecedented in our history. Meeting the challenges and realising the opportunities is the Government's number one priority.

It is no small task ahead of us and it is critical to New Zealand's future wellbeing that we succeed. Success means making the most of the opportunities resulting from the terrible events that have happened.

I am heartened that Cantabrians are already doing this. The way people have responded and the enormous efforts already made mean that as time has passed since 22 February 2011, the recovery is making solid progress.

The Recovery Strategy set out in these pages will guide not just the Government, but also individuals, groups, clubs, communities, politicians, councils, iwi, charities, businesses, the public and private sector, and government agencies that have a role in recovery. Success will be measured by how we work together and maximise the opportunities to restore, renew and revitalise greater Christchurch.

The impacts of the earthquakes are well documented. The economic cost is likely to exceed \$20 billion. The social costs – the lives lost, injuries suffered, grief, stress, disruption, lost heritage and lost opportunities – are beyond measure. It is important to remember and learn from these losses.

Already progress is clear. Around greater Christchurch workers are fixing roads, and sewer, water and wastewater mains. The city has normal reticulated water supplies. There are hundreds of workers in the CBD red zone every day repairing and demolishing what is necessary to make the central city safe.

CERA continues to work hard to provide property owners in greater Christchurch certainty about the future of their properties. More than 180,000 home owners have been confirmed in the residential green zone. More than 6,000 home owners have been zoned red and can progress Crown offers to buy their properties and re-establish their lives.

Economic indicators show economic activity in Canterbury is building. Recent successive growth statistics for Canterbury are clear evidence of recovery. They will continue to improve as reconstruction gains momentum.

Recovery will be a long journey with hard work ahead. Future generations of Cantabrians and New Zealanders will reap the rewards of the decisions we make now. We must work together as quickly and as positively as we can, putting people and greater Christchurch first.

Together we will make greater Christchurch even greater.



A handwritten signature in blue ink that reads "Gerry Brownlee". The signature is written in a cursive, flowing style.

Hon Gerry Brownlee
Minister for Canterbury Earthquake Recovery

Message from the Chief Executive

Nā te Pou Whakahaere

The Canterbury earthquakes have forever changed our lives, our city, our province and our country. The challenges and opportunities we now face together in restoring greater Christchurch are the biggest in our history.

We must meet the challenges together, seize opportunities and move forward quickly. We do this not just for ourselves, but for those who have been before us and those who will live here long after us.

It is not just people that are important, but also their ideas. The earthquakes have challenged conventional thinking, changed the way many of us work and transformed our daily lives. We must retain and build on the good that has come from these changes. The comments made on the draft strategy have already strengthened our work.

This strategy is a key milestone in the recovery and rebuilding of greater Christchurch. The recovery programmes that flow from this strategy – covering leadership and integration, economic, social, cultural, built environment and natural environment – set out the way forward. Ultimately they will ensure a strongly performing Canterbury plays its vital part in New Zealand's future success.

The pace of recovery is important. We must balance the need to make good decisions quickly against the need to take this unique opportunity to get things right. We need to create certainty as quickly as we can, to allow people, communities and businesses to make their own decisions and move on.

Together, we have a job to get on with. The hard work will continue, and hard decisions will need to be made. I will work hard to lead and help coordinate the ongoing recovery effort.

We will focus not just on business recovery, but on restoring local communities and making sure the right things are in place for rebuilding effectively and in a timely manner. We are working closely with our strategic partners – the Christchurch City Council, Environment Canterbury, the Waimakariri District Council, the Selwyn District Council and Te Rūnanga Ngāi Tahu – acknowledging our Treaty of Waitangi obligations. We are engaging with the private and business sectors, with people and with local communities and are keeping them informed.

Together we are committed to achieving the best possible result for the people of greater Christchurch now, and for the generations who will follow us.



A handwritten signature in blue ink that reads "Roger Sutton". The signature is fluid and cursive, matching the name of the person in the portrait above.

Roger Sutton
Chief Executive
Canterbury Earthquake Recovery Authority

Mihi Whakatūwhera

Nei te pōhakahaka a te tini
Tēnā a puna roimata, kua kōrekareka
Tēnā a kākau, kua pūkatokato
Tēnā a manawa, kua hōripi
Auē te mamae huri kino nei!

He aha rā te rokoā
Hei whakamaurutaka mō manawa?
He whakawhirinaki i te whakaaro
He rā anō ki tua me he raki ka paruhi.

Nā reira me pēhea tō tātou waka e tae ki uta
Kia pae te ihu waka ki tōna ihu whenua?
Kāore mā te tōtara wāhi e rua
Ekari ia mā te rāraka
He korowai kanorau mā te katoa
Mā tēnā ka pae te waka ki uta rā.

Nā reira ki a koutou katoa kei Ōtautahi
Kia rewaina te waka whakamāui e tōkihi whakamua
Hoe atu, hoe atu he haumanu
Nā reira kei ōku kiritata
Ki te hoe!

Here is the lament of the people
Those who have shed many tears
Those overcome with grief
Those of wounded heart
Alas the agony of loss!

What is the remedy
To abate the pain of my heart?
To trust in the knowledge
There is a brighter day tomorrow.

So how can we reach promised shores
And reach the heights of our aspirations?
Not through division
But through uniting
Weaving an unequalled cloak to shelter all
Through unity our waka shall reach the shores of our ambition.

So to you all, the people of greater Christchurch
Let us launch the waka of our recovery forward
Each paddle moving us closer to a reawakening
And so to you, neighbour
Our journey begins!

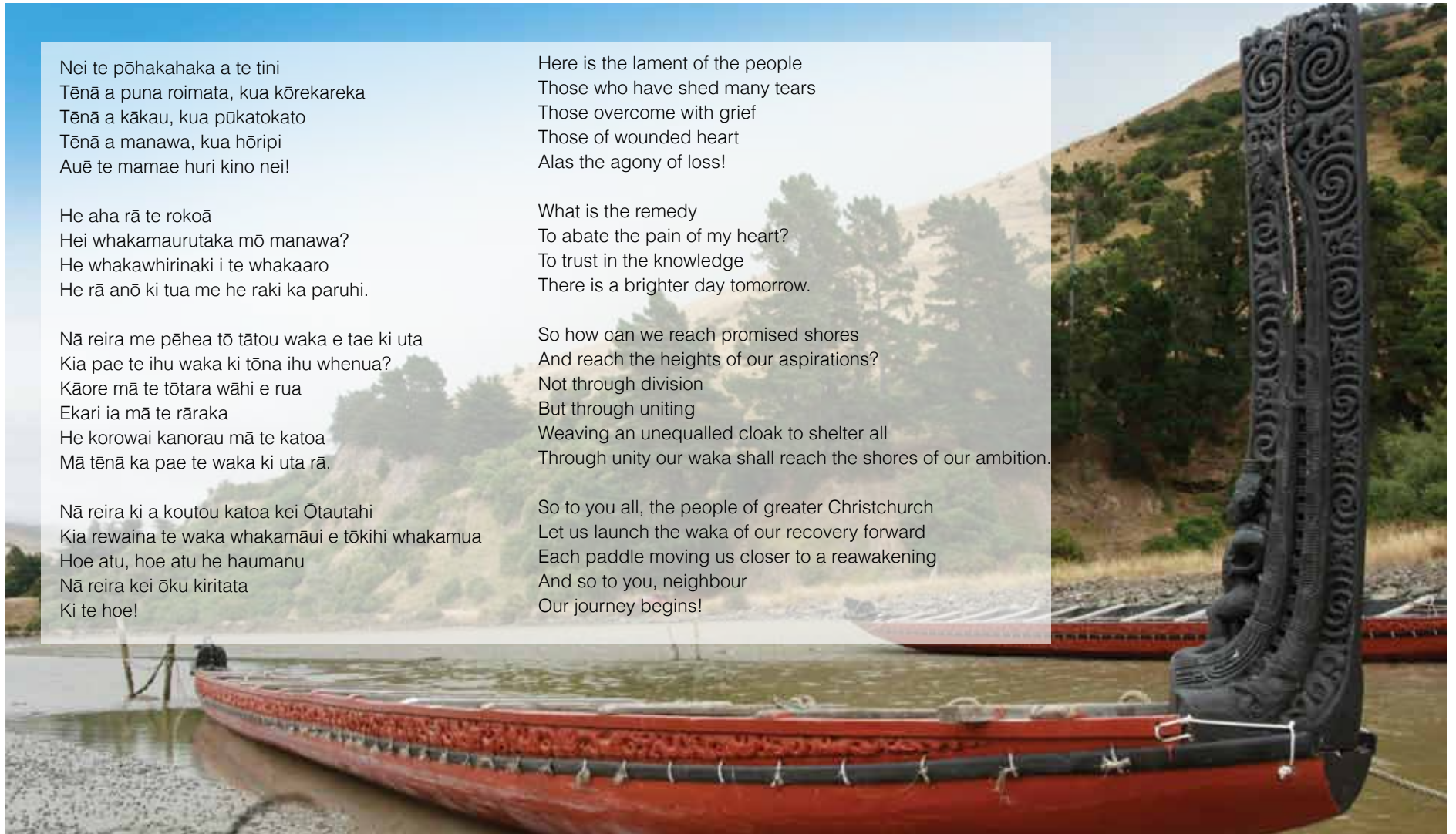


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What is the Recovery Strategy?

He aha te Mahere Haumanutanga?

1.1 Why have a Recovery Strategy?

Greater Christchurch has a population of just under 460,000 people, and it includes New Zealand's second largest city. It is the gateway to the South Island, and is its most significant centre of economic activity. The series of earthquakes that began in September 2010, especially the 22 February 2011 earthquake, caused significant death and injury, seriously damaged buildings, infrastructure and services, and continues to disrupt the lives of people in the greater Christchurch area.¹

Much of greater Christchurch functions effectively and safely and is open for business. The international airport and Lyttelton's sea port remain busy. Businesses have relocated, schools have shared facilities, and temporary housing has been constructed. Despite ongoing significant aftershocks, the city is now moving out of the immediate response phase, where the emphasis was on meeting people's basic needs, demolishing unsafe buildings and determining which areas are suitable for rebuilding. It is important to look to the future and coordinate the efforts of all the organisations and individuals helping greater Christchurch to rebuild and recover. Opportunities for investment, innovation and job creation need to be maximised, and the wellbeing of the community should be kept at the heart of the recovery.

Achieving recovery will be a joint effort between the public and private sectors, non-governmental organisations (NGOs) and the wider community. The Canterbury Earthquake Recovery Authority (CERA) is coordinating the rebuilding and recovery of greater

Christchurch through an efficient and effective programme of action involving local and central government; iwi; businesses; community groups and individuals; land owners and developers; house-builders; infrastructure providers; and the insurance and finance sectors. As part of this coordination and leadership role, CERA is required to develop a Recovery Strategy. This overarching, long-term Strategy will guide the reconstruction, rebuilding and recovery of greater Christchurch (see sections 11–15 of the Canterbury Earthquake Recovery (CER) Act).

1.2 Purpose of the Recovery Strategy

This Recovery Strategy is the key reference document that guides and coordinates the programmes of work, including Recovery Plans, under the CER Act.

The Strategy sets out a shared vision and the Government's overall approach to recovery. It:

- defines what "recovery" means for greater Christchurch;
- establishes principles to guide how CERA and other agencies will work together towards recovery;
- describes in broad terms the pace and phases of recovery;
- identifies work programmes, and which organisations will lead specific projects;
- identifies priorities for recovery efforts;



**He aha te mea nui o te ao?
He tangata, he tangata, he tangata!**

What is the most important thing in this world? It is people, it is people, it is people!

- sets up governance structures to oversee and coordinate the work programmes and links them to wider initiatives; and
- commits to measuring and reporting on progress towards recovery.

The Strategy aims to:

- provide overall direction to all those individuals and organisations who have a role in recovery activities;
- coordinate recovery activities by helping individuals and organisations to identify the interests they have in common and to understand they need to work together in their recovery activities;
- give the community confidence that recovery is well-planned and progressing; and
- take every opportunity to restore, renew and revitalise and enhance greater Christchurch.

¹For more information about the earthquake context, a map of greater Christchurch, the extent of the damage, and a discussion of lessons learned visit www.cera.govt.nz

The Recovery Strategy will help guide and coordinate decisions on rebuilding in the short term while more detailed recovery programmes and plans are being developed.

When the CER Act was passed in April 2011, it was thought that the Recovery Strategy might address:

1. the areas where rebuilding or other redevelopment may or may not occur, and the possible sequencing of rebuilding or other redevelopment;
2. the location of existing and future infrastructure and the possible sequencing of repairs, rebuilding, and reconstruction;
3. the kind of Recovery Plans that may need to be developed and the relationship between the plans; and
4. any additional matters to be addressed by Recovery Plans, and who should lead their development.

The Strategy has not been able to address all of these issues, partly because of ongoing seismic activity. It is also a huge and complex task to make decisions about land zoning and the location and timing of rebuilding. Similarly, it is not yet clear where Recovery Plans – which are statutory documents with the power to overwrite a range of planning instruments – will be the most appropriate and effective way to provide direction. The Recovery Strategy therefore focuses on identifying work programmes which will make it easier to see where Recovery Plans are needed.

1.3 Status and effect of the Recovery Strategy

The Strategy's approach to recovery will guide and coordinate the work of all central government agencies involved in recovery activities, and the strategic partners. The Strategy applies to greater Christchurch, which under the CER Act means the districts of the Christchurch City Council, the Selwyn District Council and the Waimakariri District Council. It also includes the coastal marine area next to these districts.

Under section 15 of the CER Act, the Recovery Strategy is also a statutory document that will be read together with, and forms part of, certain documents created under other Acts (that apply to any area in greater Christchurch).

The following documents and instruments, as they relate to greater Christchurch, must not be interpreted or applied in a way that is inconsistent with the Recovery Strategy (see sections 15 and 26 (2) of the CER Act available on the CERA website):

- regional policy statement, regional plans, and city and district plans (Resource Management Act);
- annual plans, long-term plans, and triennial agreements (Local Government Act);
- regional land transport strategies, regional land transport programmes and NZTA recommendations for Police activities under section 181 (Land Transport Management Act);

- regional public transport plans under section 9 (Public Transport Management Act); and
- general policies, conservation management strategies, conservation management plans and management plans (Conservation, Reserves and Wildlife Acts).

These documents come from Environment Canterbury, Christchurch City Council, Selwyn District Council, Waimakariri District Council, New Zealand Transport Agency (NZTA) and the Department of Conservation. If they are inconsistent with the Recovery Strategy in any way, the Recovery Strategy prevails.

Only sections 3 to 8 of this document are the statutory Recovery Strategy. The rest of the document provides additional information. It covers the context for the strategy, governance arrangements, financial and funding issues, and the programmes of work through which the Strategy will be implemented.

Earlier laws have already set down general expectations and obligations for public sector organisations. For example, legislation already covers the Treaty of Waitangi, sustainable management (in the Resource Management Act) and sustainable development (the Local Government Act). The Strategy deliberately does not repeat these existing provisions, or introduce new general obligations that are not directly related to the recovery.

Map of greater Christchurch



1.4 Components of recovery

The Strategy contains six components of recovery. These are:

- **leadership and integration**
research and information, communication, funding and finance, and the governance, coordination and project management of recovery activities
- **economic recovery**
investment, businesses, labour, and insurance liaison
- **social recovery**
education, health, and community support services
- **cultural recovery**
the arts, culture, heritage buildings and places, and sports and recreation
- **built environment**
land use, housing, buildings, transport, infrastructure
- **natural environment**
air quality, biodiversity, the coast, land, groundwater and surface water quality, and natural hazards

The components all link together so should be read as a whole. For successful recovery there must be leadership and integration across the five other components, with the community central to all.



Ka oi Rūaumoko, ara ake Waitaha

*Despite the heaving earth,
Canterbury will rise again.*

Section 4 of this Strategy sets out goals for each of the six components of recovery. Recovery programmes contain the detailed actions and methods for achieving those goals. They deal with the recovery of our houses, streets, neighbourhoods, communities, businesses, education, the arts, sports and recreation, heritage, the natural environment and other aspects of life in greater Christchurch. CERA is coordinating the development of the recovery programmes, as well as of their plans and activities. Sections 12–17 of this document summarise these programmes. For more information on the programmes and how to participate in their development, visit the CERA website.

The components of recovery



1.5 Development of the Recovery Strategy

The Recovery Strategy was developed in consultation with the strategic partners: Te Rūnanga o Ngāi Tahu, the Christchurch City Council, Selwyn and Waimakariri District Councils and Environment Canterbury. Government agencies and the wider community were also consulted. Lessons and outcomes from strategic planning previously undertaken by local government agencies, central government initiatives and community and private sector actions have both informed and now complement the direction in this Recovery Strategy.

Hundreds of specific ideas, suggestions and feedback have helped create this document. In developing the draft Recovery Strategy, meetings with communities and stakeholders were held in June and July 2011. Then in September and October 2011 CERA invited people to respond in writing to the draft Strategy. Four hundred and sixty three written comments were received over seven weeks. CERA worked with government agencies and strategic partners to consider this feedback and make recommendations for changes.

Respondents showed general support for the vision and principles of the draft Recovery Strategy. The level of support for the different goals proposed in the draft Recovery Strategy varied. Some asked for strong leadership, better communication, more attention to the natural environment and opportunities to stay involved in the recovery. Other concerns related to insurance and the need to quickly attract investment. Many respondents prioritised community wellbeing and sport



and recreational opportunities. All comments have been summarised and analysed. They are now informing the direction and content of all the recovery programmes and plans being developed.

Guiding Principles

Ngā Mātāpono me te Mahi-ā-rōpū

This section outlines the principles that underpin this Recovery Strategy. These principles, along with normal public sector requirements and obligations, will provide guidance at a strategic level. CERA, its strategic partners and other government agencies will refer to them as they plan and implement recovery activities together. The principles are not designed for detailed decision-making; for example, they should not be used as a test for resource consent applications.

- **Work together**

Recovery is a collaborative effort. It is essential to have constructive relationships between the private sector, NGOs, local and central government agencies, and the wider community.

- **Take an integrated approach**

Links between different recovery initiatives will be identified so that together they achieve the greatest benefits.

- **Look to the future**

Development and recovery initiatives will be undertaken in a sustainable manner. They will meet the needs of future generations, taking into account climate change and the need to reduce risk from natural hazards. They will also ensure community safety and wellbeing now and in the future. If the process of repair reveals a way of enriching people's quality of life, that opportunity will be taken.

- **Promote efficiency**

Resources will be used wisely so that the recovery is timely and affordable, and delivers value for money.

- **Use the best available information.**

A wide range of information, including spatial information, will be collected and shared. This information will help decision-making, improve transparency, promote best practices and enable the public to participate in the recovery effectively.

- **Care about each other**

Recovery initiatives will take account of people's psychological, physical, spiritual and social needs. They will promote equitable outcomes and connected communities and recognise diversity.

- **Innovate**

Creative, cultural and resourceful solutions to recovery issues will be encouraged.

- **Aim for balanced decision-making**

Decisions will balance action and certainty with risk. They will consider the need for positive action, speedy responses and certainty; and the risk of short-term economic, environmental and social hardship and of compromising long-term objectives.

- **Keep it simple**

Communication must be clear and stick to the facts. It must give land owners, residents and businesses the information they need.



**Ka oi Rūaumoko,
ka piri a Waitaha.**

*Despite the heaving earth,
Cantabrians unite.*

What is Recovery?

He aha tēnei mea te Whakaara?

The CER Act defines recovery as including both restoration and enhancement. Recovery is inherently future focussed and there will be opportunities to “build back better” when repairing damage caused by the earthquakes.

Opportunities for enhancements should be considered, including where:

- they lead to increased resilience and/or functionality; or
- are cost-effective according to life-cycle analysis

provided that they do not come at the expense of the repair or replacement of essential infrastructure and services elsewhere.

For the purposes of this Strategy, “recovery” does not mean returning greater Christchurch to how it was on 3 September 2010.

Individuals and organisations are likely to view what recovery means in different ways. Their views will be shaped by how the earthquakes have affected them, how they view the social, cultural, economic and environmental impacts on the greater Christchurch area, and their hopes for the future.



Vision and Goals for the Recovery

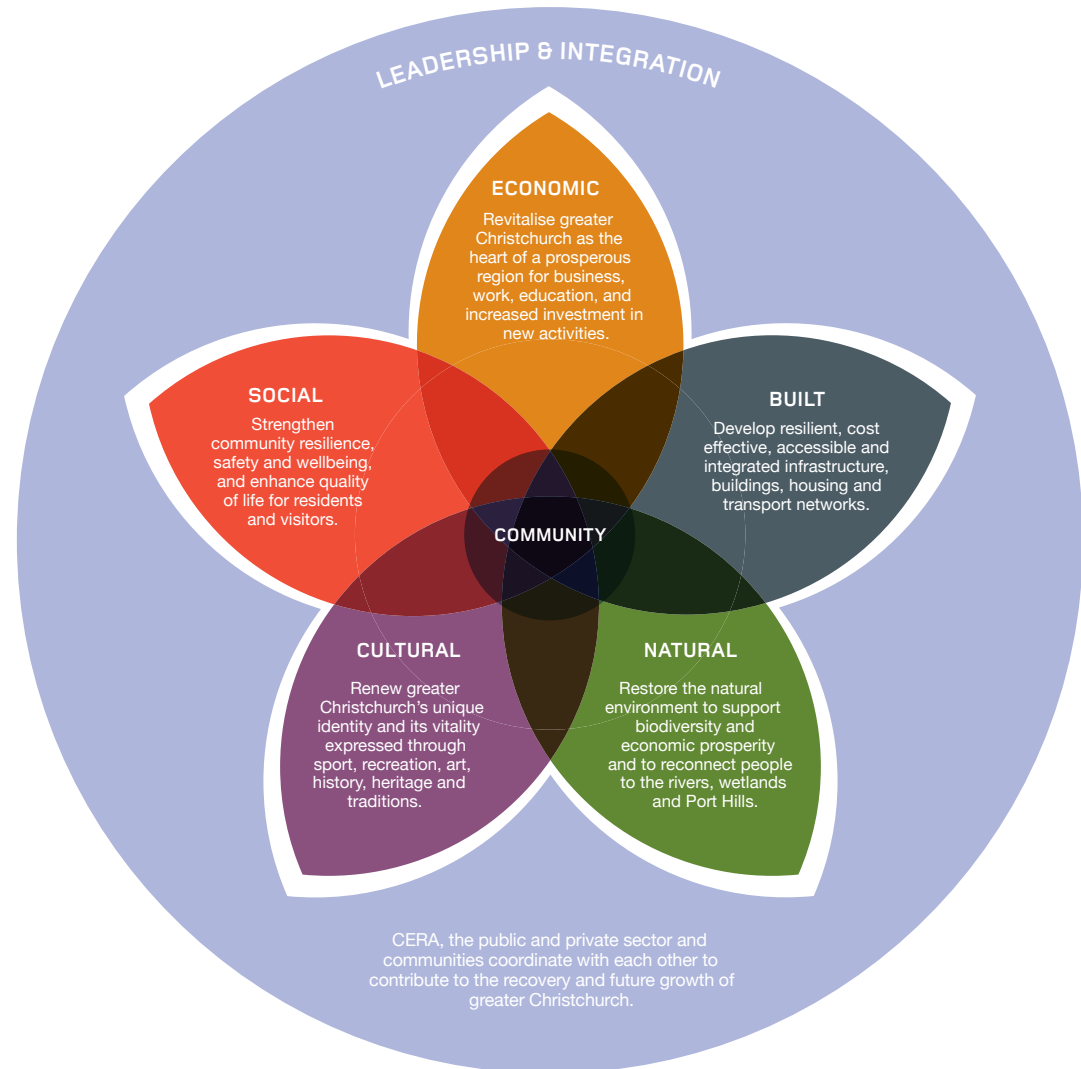
Ngā Wawata

Vision

Greater Christchurch recovers and progresses as a place to be proud of – an attractive and vibrant place to live, work, visit and invest, mō tātou, ā, mō kā uri ā muri ake nei – for us and our children after us.

Supporting this vision are the following goals, which relate to the six components of recovery.

The community is at the heart of the vision and the success of recovery.



1. CERA, the public and private sector and communities coordinate with each other to contribute to the recovery and future growth of greater Christchurch - by:

- 1.1 facilitating a timely and efficient recovery, including intervening where necessary to remove impediments, resolve issues and provide certainty;
- 1.2 considering the effects of ongoing seismic activity;
- 1.3 reporting and communicating how recovery work programmes are delivering integrated recovery;
- 1.4 facilitating engagement that will result in constructive and enduring governance, partnerships and relationships for recovery;
- 1.5 delivering smarter council and government planning and services;
- 1.6 ensuring that public sector investment and expenditure are transparent;
- 1.7 identifying opportunities to leverage the significant investment needed for new and upgraded infrastructure; and
- 1.8 providing research and knowledge that will help to make well-informed decisions for a robust and enduring recovery.

2. Revitalise greater Christchurch as the heart of a prosperous region for business, work, education, and increased investment in new activities - by:

- 2.1 planning for a well-functioning Christchurch central city, thriving suburban centres, flourishing rural towns and a productive rural sector;
- 2.2 leading and working with strategic partners and both the public and private sector;
- 2.3 restoring the confidence of the business sector and the insurance and finance markets to enable economic recovery and growth;
- 2.4 renewing the region's brand and reputation as a safe, desirable and attractive place to live, study, visit and invest;
- 2.5 identifying and facilitating increased opportunities for early and substantial local and international investment;
- 2.6 ensuring a range of employment options to attract and retain a high-calibre, appropriately skilled workforce;
- 2.7 collaborating with the private sector and government agencies to address obstacles to economic recovery and to match supply with demand for resources;
- 2.8 enabling a business-friendly environment that retains and attracts business;
- 2.9 aligning provision of education and training to support long-term economic growth;
- 2.10 ensuring science, technology and innovation supports recovery and growth; and
- 2.11 facilitating the recovery and development of the Central Business District.



SOCIAL RECOVERY

3. Strengthen community resilience, safety and wellbeing, and enhance quality of life for residents and visitors - by:

- 3.1 enabling and empowering local communities to shape and lead their own recovery;
- 3.2 growing capacity, knowledge and skills within the community to build resilience;
- 3.3 delivering community, health, education and social services that are collaborative, accessible, innovative and inclusive;
- 3.4 supporting people, in particular those facing hardship and uncertainty, by providing quality housing, education and health services; and
- 3.5 supporting communities as they go through the processes of resettlement.

CULTURAL RECOVERY

4. Renew greater Christchurch's unique identity and its vitality expressed through sport, recreation, art, history, heritage and traditions - by:

- 4.1 acknowledging and celebrating the rich and diverse Ngāi Tahu, colonial and other heritages and connections;
- 4.2 resuming cultural, community and sports events and activities;
- 4.3 encouraging participation in a range of entertainment, cultural, recreational and sporting activities;
- 4.4 restoring historic buildings, where feasible, for the benefit of the community; and
- 4.5 acknowledging losses and creating spaces to remember, while embracing necessary changes to the city's character and urban form.

BUILT ENVIRONMENT RECOVERY

5. Develop resilient, cost effective, accessible and integrated infrastructure, buildings, housing and transport networks - by:

- 5.1 coordinating and prioritising infrastructure investment that effectively contributes to the economy and community during recovery and into the future;
- 5.2 supporting innovative urban design, buildings, technology and infrastructure to redefine greater Christchurch as a safe place built for the future;
- 5.3 rebuilding infrastructure and buildings in a resilient, cost-effective and energy-efficient manner;
- 5.4 developing a transport system that meets the changed needs of people and businesses and enables accessible, sustainable, affordable and safe travel choices;
- 5.5 zoning sufficient land for recovery needs within settlement patterns consistent with an urban form that provides for the future development of greater Christchurch;
- 5.6 having a range of affordable housing options connected to community and strategic infrastructure that provides for residents participation in social, cultural and economic activities; and
- 5.7 drawing on sound information about ongoing seismic activity and environmental constraints, including other natural hazards and climate change.

NATURAL ENVIRONMENT RECOVERY

6. Restore the natural environment to support biodiversity and economic prosperity and to reconnect people to the rivers, wetlands and Port Hills - by:

- 6.1 ensuring recovery activities value, protect and sustainably manage the sources of our water;
- 6.2 ensuring ecosystems are healthy and functioning;
- 6.3 improving the quality and function of estuaries, waterways and wetlands to support the unique biodiversity that is endemic to Te Waipounamu;
- 6.4 providing public access to and opportunities for outdoor recreation, cultural, social and economic activities;
- 6.5 enhancing air quality through managing recovery activities that impact on air quality, such as heating, transport, demolition and construction; and
- 6.6 storing, sorting and processing waste in an environmentally safe and effective manner, including minimising and recycling construction and demolition wastes.

Priorities

Ngā Whāinga tōmua

This strategy identifies the following priorities to address and promote social, economic, cultural and environmental wellbeing.

People's safety and wellbeing by:

- enabling people, particularly the most vulnerable, to access support;
- addressing the risk to life posed by unsafe buildings and from natural hazards;
- providing options for repairing housing and temporary or replacement housing;
- deciding whether land is suitable for residential use and providing a process for purchasing affected residential property; and
- repairing and maintaining essential services to all homes and businesses until major infrastructure is completed and/or land use decisions are finalised and implemented.

Investment conditions in greater Christchurch to support the rebuild and development of the area.

Permanent repair or rebuild of infrastructure in areas identified for redevelopment and development in the short to medium term. This strategic and horizontal infrastructure includes lifeline utilities, major transport routes, public transport services and electricity and communication networks.

Supply of land for recovery needs through efficient consenting processes and timely provision, restoration or optimisation of infrastructure. This enables developers to provide a mix of quality housing options that are connected to services and infrastructure (for example, schools, communications, shopping and transport networks) and new business developments.

Coordinate work across central government, iwi, local authorities, insurers and the private sector to:

- establish and facilitate clear arrangements for governance and work programming;
- align and sequence work including the early identification of risks and removal of obstacles to the rebuild;
- respond to housing needs; and
- encourage the provision of a variety of accommodation that is sufficient for residents, including temporary construction workers and people displaced due to the rebuild.

Communicate and engage with communities

including youth so that they understand and can participate in recovery activities and inform the development of recovery programmes.

Regulation, standards and other information to support the rebuild and repair of housing to a quality that

meets the technical requirements for the land categories and building standards. One of these requirements is that:

- when making a resource consent application or a request for a plan change for the subdivision of land, the person proposing the subdivision must address the risk of liquefaction. As a minimum, that person must provide the local authority with a geotechnical assessment in accordance with the *Guidelines for the geotechnical investigation and assessment of subdivisions in the Canterbury region* (Department of Building and Housing, 14 November 2011).² [This requirement does not apply where a building will not be permitted as a result of the subdivision of land.]

A functioning Central Business District, suburban areas and rural towns that provide opportunities for local businesses and economic activities to relocate, maintain services and grow.

Opportunities and facilities for sporting, recreational and cultural activities.

Phases of Recovery and Milestones

Ngā Wāhanga me ngā Tohu o te Whakaara

Many actions are needed to support the community early in the recovery; other activities can be undertaken only after investigation and planning. Recovery activities can be organised into typical phases that indicate what to expect as the community moves from the emergency response to short-term recovery and then medium- to longer-term recovery.

As seismic activity continues in greater Christchurch, progress through these recovery phases may be complex. If there is another earthquake, it may be necessary to return to a previous phase to deal with immediate recovery needs.

The following table outlines typical recovery phases and some key milestones for greater Christchurch. For more information about the timeline and achievements to date, see the CERA website.



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Typical phases of recovery

IMMEDIATE	<p>Repair, patch and plan</p> <ul style="list-style-type: none"> • Provide basic human needs and support services. • Address health and safety issues. • Make safe or demolish unsafe and damaged buildings and structures. • Investigate, scope and initiate recovery programmes and initiatives. • Plan for land use and settlement patterns so land can be made available for displaced residents. <ul style="list-style-type: none"> • Conduct ongoing programme of investigation and research to understand the geotechnical issues and seismic conditions. Use this information to guide recovery activities and decisions on land suitability for rebuilding.
SHORT TERM	<p>Begin to rebuild, replace and reconstruct</p> <ul style="list-style-type: none"> • Engage both established and new communities and inform them about rebuilding and future planning. • Establish new social and health support and service delivery models. • Continue demolition of damaged buildings. • Continue repair and rebuild. • Deliver early projects to instil confidence. <ul style="list-style-type: none"> • Planning and supporting community resilience. • Begin replacement activity. • Begin restoration and adaptive reuse of heritage features. • Continue, monitor and review recovery.
MEDIUM TO LONGER TERM	<p>Construct, restore and improve</p> <ul style="list-style-type: none"> • Continue to build resilient communities. • Continue reconstruction. • Major construction projects are underway. • Complete restoration and adaptive reuse of heritage features. <ul style="list-style-type: none"> • Phase out recovery organisations. • Economy is growing and businesses are sustainable. • Labour market is active and attracting employees.

Indicative recovery milestones for greater Christchurch

<p>SEPTEMBER 2010 TO DECEMBER 2011</p>	<p>Repair, patch and plan</p> <ul style="list-style-type: none"> Support, assist and provide information to communities and individuals. Stronger Christchurch Infrastructure Rebuild Team (SCIRT) Alliance assesses damage and starts repairs to infrastructure. Restore non-chlorinated water supply to residents and declare beaches safe for swimming. Decide on suitability of land for rebuilding. Establish green and red residential zones. <ul style="list-style-type: none"> Government makes offer to purchase residential red zone properties and settlements begin. Begin to demolish dangerous buildings. New Building Act Guidelines establish new standards for buildings. Earthquake Commission (EQC) and insurance companies undertake damage assessments and payouts are underway. <ul style="list-style-type: none"> Greater Christchurch residents engage with government and local government on the future of the central city and the nature and coordination of recovery activities (draft Recovery Plan for the CBD and draft Recovery Strategy). Facilitate the release of land for new subdivisions.
<p>2012 TO 2014</p>	<p>Begin to rebuild, replace and reconstruct</p> <ul style="list-style-type: none"> Approve Recovery Strategy to direct and coordinate recovery activities and agencies involved in recovery. Restore access to and transportation networks in central city. Establishment of the Christchurch Central Development Unit (CCDU). Finalisation of the Recovery Plan for the CBD. Rebuilding of the CBD starts. <ul style="list-style-type: none"> Complete decisions on land zones and geotechnical issues. Continue repair of infrastructure and make decisions about long-term repair and provision of infrastructure. Finish demolition of larger commercial buildings. Government and statutory partners undertake recovery programmes. <ul style="list-style-type: none"> Complete settlements and land clearance for residential red zone properties. EQC and insurers undertake residential repairs and rebuilds. Establish new residential subdivisions. Find facilities for sporting and cultural activities. Construct temporary buildings for entertainment and retail in greater Christchurch.
<p>2015 TO 2020 AND BEYOND</p>	<p>Construct, restore and improve</p> <ul style="list-style-type: none"> Government and strategic partners continue to implement recovery programmes. Continue rebuilding and construction. EQC and insurers complete residential repairs and rebuilds. <ul style="list-style-type: none"> Major sporting and cultural facilities are under construction. Recovery responsibilities are transferred when necessary. Put new arrangements in place.

Note: Ongoing seismic activity in greater Christchurch may mean return to a previous phase to deal with immediate recovery needs.

Recovery Programmes

Te Huanui Angitu

CERA has worked across government and with strategic partners to develop programmes to implement the Recovery Strategy. These programmes deal with each of the six components of recovery and are interconnected. They include activities, projects and larger programmes of work and will seek to achieve multiple goals where appropriate.

Government-led recovery programmes should:

- be consistent with the Recovery Strategy, particularly the goals and principles;
- integrate activities to achieve multiple goals of the Recovery Strategy where possible;
- investigate opportunities for risk reduction and enhancement to build a stronger and more resilient community and region;
- use appropriate impact assessment methodologies and tools;
- identify programme targets and objectives; and
- identify pre-earthquake baselines and expectations for the components of recovery (social, economic, natural environment, cultural and built environment). These baselines can then be used when measuring the success of the recovery programmes.

Recovery programmes will be implemented in a number of ways. For example, some agencies will coordinate with each other on new initiatives and others will reorient or adapt business-as-usual work. Some programmes may use the statutory tools provided by the CER Act (such as Recovery Plans and Orders in Council) or other Acts such as the Resource Management Act 1991 and the Local Government Act 2002.

7.1 Recovery Plans

In some cases a programme of work may need a Recovery Plan. Recovery Plans can be developed under the CER Act. This Act also identifies the need for the Recovery Plan for the CBD (known as the Central City Plan). Recovery Plans impact on other regulatory plans created under other laws. They need to be carefully considered and consulted on before they are finalised.

Why might a Recovery Plan be developed?

- A Recovery Plan is appropriate if statutory intervention is needed to undertake a particular programme of work. Sections 23 and 26 of the CER Act provide for this intervention.

- A Recovery Plan may be appropriate when usual methods of work cannot achieve the required intervention because of the type of work or timeframe involved.

At this stage, several Recovery Plans are being scoped. Part of preparing any Recovery Plan will be to consider any existing Treaty of Waitangi obligations. To integrate activities, connect the components of recovery, and implement the goals of this strategy, the preparation of Recovery Plans will use impact assessment methodologies and tools, such as the Integrated Recovery Planning Guide (June 2011).

8.1 Monitoring

CERA will develop a monitoring plan by the end of June 2012, in consultation with the strategic partners and government agencies. This plan will coordinate and outline responsibilities for monitoring and reporting on the recovery's progress. Monitoring will track recovery over time and make information available to decision-makers and the community. If any recovery activities are not effective, this process will also help identify the required changes.

The plan will address three levels of monitoring and reporting.

1. **Monitoring indicators for the Recovery Strategy goals.** In collaboration with the strategic partners and other agencies, CERA will develop baseline indicators for the Strategy's goals. These indicators will be used to measure progress towards recovery, including outcomes for iwi. For example, social recovery indicators may relate to trends in education, health, housing and demography, and may be analysed in terms of age, ethnicity, employment status and gender. A few key indicators, such as for community and economic wellbeing, will be linked to more detailed monitoring that closely tracks progress.

2. **Monitoring progress towards the goals.** Recovery programmes for the six components of recovery will identify targets and objectives that will be used to measure progress towards the goals.
3. **Financial monitoring and reporting by central government and local authorities.** Financial reports make the spending of public funds accountable and transparent. They also provide information about future work programmes.
 - a) Central government produces quarterly financial reports on Vote appropriations. Information includes programme and activity spend (actual and projected) on the greater Christchurch earthquake recovery.
 - b) Local authorities produce financial reports under the Local Government Act 2002 on their programme and actual and projected activity spend.

8.2 Reporting and review

CERA will review and report publicly on the implementation of the Recovery Strategy, recovery programmes and progress towards milestones. Reporting will show where outcomes are, or are not, being achieved and where conditions have changed –

for example, because knowledge has changed or there is ongoing seismic activity. Reports will be posted and updated on the CERA website.

CERA provides available research and information (for example, on land decisions and liquefaction, tsunami and rockfall risk) through its website and updates via Facebook and Twitter.

The Recovery Strategy will be reviewed as required to keep it current and relevant.

In particular, a review may be required for any of the following reasons.

- Another significant earthquake or aftershock forces changes to the longer-term approach to recovery.
- Monitoring shows a need to change approach, or to address an ongoing market failure.
- Other influences or risks have a significant impact on recovery activities - for example, there are changes to the availability of finance or to other strategic documents that influence the recovery.

In addition, the Minister for Canterbury Earthquake Recovery will review the CER Act in terms of its operation and implementation and will report on it each year (see section 92 of the CER Act).

Pace of Recovery

Te Waihoe

Many factors can influence the pace of recovery. Recovery activities need to be sequenced carefully to avoid bottlenecks and minimise frustrations. Although a fast recovery is desirable, going too fast can create further problems. It creates competition for resources between projects, drives up costs and creates pressure on existing services and facilities. It may also not produce the best outcomes in the long term. As the aftershocks are continuing, time is needed for the land to settle down or be remediated. It is important to obtain the right information, including scientific data, and take a considered approach to planning and developing robust solutions before implementing them.

Influences on phasing and pace include:

- the nature of, and the risks posed by, ongoing seismic activity;
- the availability of sufficient land for rebuilding and infrastructure services provided to this land (e.g. for greenfields developments);
- whether skilled construction workers and machinery are available;
- the timing and nature of insurance settlements;
- the capacity of building industry professionals to design, build and inspect developments;
- the preparation of quality consent applications and council processing of resource and building consents; and
- whether there is sufficient funding and insurance cover for recovery activities.

At the moment there are not enough skilled construction workers and machinery in greater Christchurch to work on all recovery tasks at the same time. Additional training courses are already available in Christchurch through the Skills for Canterbury package. Increasing the number of trade workers may speed work up but would also increase the pressure on temporary accommodation and other services. CERA is liaising with insurers and their project managers, councils and representatives from engineering and other professions involved in the rebuild about this issue. In this way it is developing a clearer understanding of the requirements of the rebuild in terms of timing and the demand for labour, skills and building materials, and consenting and professional advisory services. Closer working relationships on the rebuild will help to identify and resolve any risks or unintended consequences that may interfere with the recovery of greater Christchurch.

Projects that create impetus for additional services or investment to stimulate recovery have been successfully used by other cities recovering from disasters. CERA, its strategic partners and the private sector will identify and progress these kinds of projects. Two examples are the Re:START Cashel Mall and the Christchurch Stadium, both now completed.



The cost of earthquake damage in 2010 and 2011 is currently estimated to exceed \$20 billion (see the table below). The earthquakes reduced New Zealand's GDP by an estimated 1.5 per cent in 2011. Financial impacts will continue into the future as resources will be used to rebuild, rather than grow, the capital stock. While business activity has continued at a high level, damage has been made worse by ongoing seismic activity. The rebuild will boost economic activity in greater Christchurch, but as a result of the earthquakes, some people have already suffered a drop in wealth and living standards.

Current damage estimate

Sector	Residential	Commercial	Infrastructure	Land remediation	Total
Recovery cost (billions)	\$10.5B	\$4B	\$3B	\$2.5B	\$20B

Insurance

EQC, private insurance companies and international reinsurers will cover a significant proportion of the financial cost of the damage and subsequent rebuild. Timely settlement of insurance claims and the ability of households, businesses and government agencies to obtain insurance cover in future are important factors in the recovery process. Insurance premiums will be higher than before the earthquakes, and insurance may be more difficult to obtain and could include changed terms and conditions, such as excess levels. Over time, the insurance market can be expected to settle to a "new normal" in which insurance premiums and conditions reflect the earthquake risk of the region, as well as risk management initiatives. CERA will liaise with insurers to

monitor and encourage timely settlement of claims and to help create the right conditions for the insurance market to flourish in future.

Crown

The Crown will contribute more than \$8.8 billion to the recovery in the period to 2015. It has allocated \$5.5 billion of core expenditure through a notional fund, the Canterbury Earthquake Recovery Fund (CERF).³ Another \$3.3 billion is estimated to be required for the State-owned enterprise and Crown entity sectors.

Overall, the Crown's contribution to the recovery must be balanced with other important demands for funding outside of greater Christchurch. The Crown will use funding in ways that maximises value for money and catalyses funds from other sources.

Investment proposals seeking Crown funding will be assessed against Treasury's Better Business Cases (BBC) guidelines.⁴ Public sector investment early in the recovery process is vital to re-establishing infrastructure and building community and economic confidence.

Local government

Local government is also contributing financially to the recovery by sharing the cost of repairing and reinstating water, sewerage, road and transport infrastructure and other council facilities. Councils are also making significant

investments in social recovery. Local government will wish to use capital efficiently so that they can keep rates contributions for the recovery at a reasonable level. CERA will work closely with strategic partners and will explore a full range of financial options to support the recovery through the development of the *Funding and Finance Recovery Programme*.

Private sector

Private capital is essential for funding the aspects of recovery that insurance and central and local government funding do not cover. Establishing confidence among businesses and investors is therefore critical. To develop this confidence, the Government can help create an environment that attracts private capital. Without the right level of appropriately priced private sector investment, recovery will not occur in a timely manner, potentially leaving many of the community's goals and aspirations for greater Christchurch unrealised. Naturally, government's funding strategy will seek to leverage private sector investment as much as is reasonably possible.

Private sector investment is expected to grow as the recovery progresses and to become the greater proportion of recovery investment. It will be used, for example, to create businesses, employment and housing. Public and private sector roles will be defined in the *Funding and Finance and Economic Recovery Programmes*.

The not-for-profit sector (such as charities and individual philanthropists) can provide funding and support for non-commercial projects. CERA will work closely with this sector as part of the *Funding and Finance Recovery Programme*.

³<http://www.treasury.govt.nz/budget/2011>

⁴www.infrastructure.govt.nz/publications/betterbusinesscases

Implementing the Recovery Strategy

Ngā ara hei whakatutuki i te Mahere Haumanutanga

The rest of this document provides additional detail about how the Recovery Strategy is being implemented. Sections 12–17 discuss the rationale, goals and projects or programmes associated with the six recovery programmes. As many programmes are still in the planning stages, CERA will give updates on its website when more details are available about the specific projects, who is involved and key milestones. Visit www.cera.govt.nz to remain up-to-date on the Recovery Strategy and recovery programmes.

11.1 Collaboration and engagement

No one agency or group will be able to achieve recovery alone. Collaboration is essential to connect those who have a role in recovery, including those in the government, iwi, business, cultural and other non-government sectors. By establishing and maintaining constructive relationships, agencies will be able to take initiatives that are coordinated, timely and enduring.

CERA has been engaging with Christchurch residents since it was established. This includes information sessions and workshops for those affected by the zoning decisions as well as business and social recovery support.

Engaging communities extends well beyond the development of this Recovery Strategy. If the Strategy is to be implemented successfully, they must continue to be engaged in the recovery. Communities may be engaged in different ways during the development of the recovery programmes and plans. How they are involved will depend on what issues are being addressed and who is involved. The International Association for Public

Participation (IAP2) Spectrum of Public Participation describes various tools for engaging the community, such as website information, written submissions, public meetings, stakeholder workshops and community forums. The Community Forum established under the CER Act provides information and advice to the Minister for Canterbury Earthquake Recovery.

In many instances communities, non-governmental organisations and neighbourhood groups have well-developed networks, initiatives or ideas which can inform recovery. Some communities organised themselves quickly to respond to the disaster, plan for the future and care for each other. Some community groups have developed neighbourhood plans which are useful for the community and can inform council-led planning processes such as master planning or emergency responses.

CERA has developed its Community Engagement Strategy in consultation with strategic partners and community stakeholders. The strategy commits CERA to work with people and communities to rebuild and revitalise greater Canterbury. It is available on the CERA website.

A range of communication tools are in place to provide more information about CERA's work programmes and progress on recovery. These include monthly updates distributed to households, information brochures and leaflets, media releases, public notices, email updates and the CERA website.

11.2 Relationship with existing strategies and plans

The Recovery Strategy sets the overall direction for the rebuild and recovery of greater Christchurch. It also inserts provisions necessary for the recovery into specific planning documents and instruments (sections 15 and 26 of the CER Act), as shown in the following diagram.

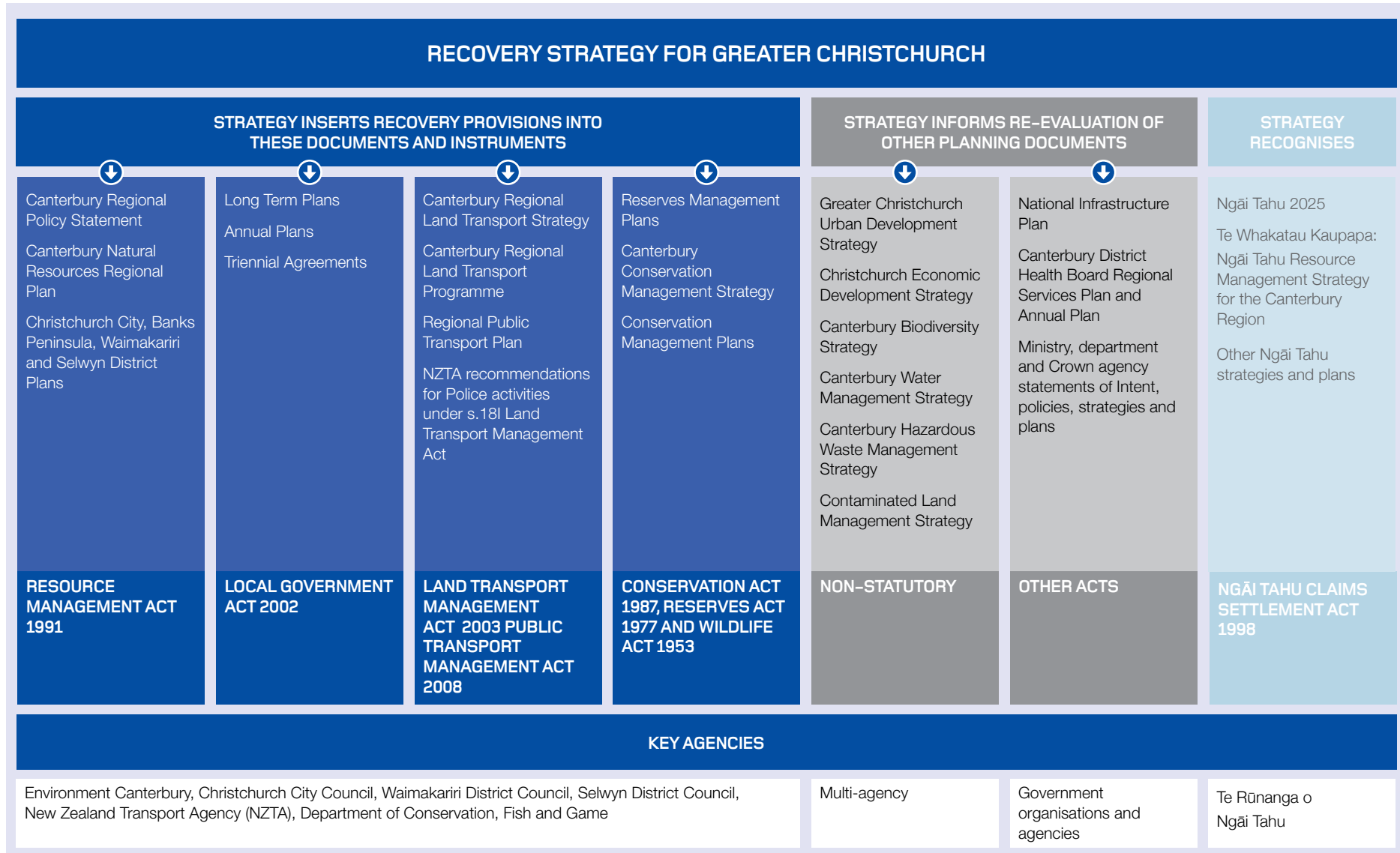
Strategies that were developed before the earthquakes to guide planning and growth in greater Christchurch will need to be re-evaluated in the light of recovery needs. The most significant of these is the Greater Christchurch Urban Development Strategy (UDS). This non-statutory strategy was developed under the Local Government Act 2002 by Environment Canterbury, the Christchurch City Council, Selwyn and Waimakariri District Councils and the New Zealand Transport Agency. The UDS is implemented primarily through a range of statutory planning processes—in particular, the Canterbury Regional Policy Statement, District Plans, Councils' Long Term Plans, and the Canterbury Regional Land Transport Programme. As all of these are required to be consistent with the Recovery Strategy, the Strategy will also influence any re-evaluation of the UDS.

Using the CER Act powers, the Minister for Canterbury Earthquake Recovery has fast-tracked changes to the Regional Policy Statement. These changes are set out in chapters 12A and 22 of the Regional Policy Statement. Further changes are possible as a result of any re-evaluation of the UDS.



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The relationship between the Recovery Strategy and other strategies, policies and plans for greater Christchurch



11.3 Governance

The New Zealand Government established the Canterbury Earthquake Recovery Act 2011 as the legislative framework to enable a faster recovery in greater Christchurch.

The CER Act requires accountability to the Parliament as the elected representatives of the New Zealand public. The Recovery Strategy is an important document in signalling the intentions of the Government and partners involved in recovery.

The role of the Minister for Canterbury Earthquake Recovery was appointed by the Prime Minister to coordinate the recovery effort at the executive government level. This role reports to Cabinet Committee on Canterbury Earthquake Recovery (CER), which was tasked to oversee and coordinate the government's response to support the recovery and reconstruction following the earthquakes.

The Minister works closely with CERA as the primary agency for recovery, however virtually all government departments are contributing to the recovery efforts. Other government agencies and departments are coordinated through a Senior Officials Group, chaired by the Chief Executive of CERA.

The Recovery Strategy is the primary document to coordinate action amongst government and strategic partners. A clear governance framework is supporting the work related to the Recovery Strategy and recovery programmes.

The framework provides for input and alignment at the political, advisory, strategic and technical levels.

It:

- establishes clear accountability to the elected government and the Parliament;
- reflects both the greater Christchurch context, including existing frameworks (such as the UDS);
- establishes clear relationships both at the local government level and with central government agencies;
- reflects a collaborative and integrated approach to the development of recovery programmes through the establishment of effective working relationships; and
- enables a smooth transition in April 2016 when CERA is no longer an established entity.

The resulting framework covers all levels of governance (political, central government, local government and stakeholder/community).

Elected members, commissioners and leaders of the strategic partners are engaged through the Recovery Strategy Advisory Committee (RSAC). This committee will ensure an aligned approach amongst partners to the implementation of the Recovery Strategy.

This committee is supported by the Recovery Strategy Chief Executive Advisory Group (RSCEAG) which includes the Chief Executives of strategic partners and NZTA. Officials of all groups involved in the Recovery Strategy will work at management and technical levels to coordinate and align recovery programmes.

11.4 Transition

The State Sector (Canterbury Earthquake Recovery Authority) Order 2011 established CERA on 29 March 2011. On 19 April 2011 the Canterbury Earthquake Recovery Act 2011 came into force. It gave CERA the functions and powers to assist in the recovery and required the development of a Recovery Strategy. The CER Act expires five years after the day it commenced (i.e. on 19 April 2016).

A transition plan is required to deal with the time when CERA ceases to exist. Transition will not override or compromise existing processes resulting from other legislation. This transition plan will be developed in collaboration with strategic partners by April 2015. The aim will be to make a smooth transfer of responsibilities and maintain the recovery effort.



Leadership and Integration

He Tātaki, he Mahi ngātahi

CERA is leading and coordinating an efficient and effective recovery programme through involving strategic partners, stakeholders and sectors. This will include intervening where necessary to remove impediments and resolve any issues, for example by using the powers provided for in the CER Act.

As well as coordinating the governance and decision-making processes, CERA is collecting information, engaging with people, and planning or project managing on-the-ground action (for example, the demolitions, public bus tours and red zone information sessions).

The Christchurch Central Development Unit (CCDU) has been established to lead the rebuild of the Christchurch CBD. More information about the unit can be found at www.ccd�.govt.nz

Integrating action across the recovery components can achieve greater positive results. For example, a well-designed built environment can also improve health and cultural vitality, attract tourists and investors, and reduce harm to the natural environment. Careful planning and sequencing of recovery programmes can achieve multiple goals and reduce duplication of effort.

The pool of resources for the recovery is not unlimited. Therefore, approaches are needed to both expand and use the available funds as effectively as possible

to maximise recovery outcomes. An attractive financing environment signals that greater Christchurch opportunities represent an attractive risk–return balance. To achieve such an environment and engage the private sector, the Government needs to promote the right framework of policy, institutions, legislation and regulations. Funding is improved when good decisions are made around investment priorities and sequencing. Other helpful measures are robust business case analysis, openness to selecting the best funding options from the full range of financing possibilities, effective procurement and delivery monitoring.

Quality scientific data and other information are needed to inform and make robust decisions. Property owners require clear information about the status of their land, homes and businesses so they can plan and move forward with repairing and rebuilding their properties. This information is particularly important for those dealing with severe land damage, flooding and disruption to services. Government is working with partners on science and information such as geotechnical issues including rockfall risks, cliff collapse, debris inundation and land movement. It is working to provide certainty to home owners as soon as practicable so as to improve confidence for home and business owners, insurers and investors.



**Mā te mahi tahi
ka ora te iwi.**

*Working together
the people will prosper.*

For more information about land zoning, see Built Environment: Implementation (section 16.2).



12.1 Leadership and integration goals

1. CERA, the public and private sector and communities coordinate with each other to contribute to the recovery and future growth of greater Christchurch - by:

- 1.1 facilitating a timely and efficient recovery, including intervening where necessary to remove impediments, resolve issues and provide certainty;
- 1.2 considering the effects of ongoing seismic activity;
- 1.3 reporting and communicating how recovery work programmes are delivering integrated recovery;
- 1.4 facilitating engagement that will result in constructive and enduring governance, partnerships and relationships for recovery;
- 1.5 delivering smarter council and government planning and services;
- 1.6 ensuring that public sector investment and expenditure are transparent;
- 1.7 identifying opportunities to leverage the significant investment needed for new and upgraded infrastructure; and
- 1.8 providing research and knowledge that will help to make well-informed decisions for a robust and enduring recovery.

12.2 Implementation

Recovery Governance and Coordination led by CERA is establishing and supporting the recovery governance framework. It is also providing project management guidance to support the alignment, implementation and monitoring of the Recovery Strategy and the development, implementation and monitoring of recovery programmes and Recovery Plans.

The **Funding and Finance Recovery Programme** led by CERA is coordinating central government recovery spending. It is identifying funding and sequencing/timing gaps in all projects requiring capital across all classes of infrastructure, including hard-to-finance projects. The programme is also providing guidance to make the most of earthquake recovery funds; developing a macro-level portfolio approach to attract investment (including identifying sources of funding); and working on an investment prospectus to underpin business cases to give support and confidence to private investors.

The **Christchurch Central Development Unit** will provide leadership for the redevelopment of the CBD to deliver the vision of a distinctive, vibrant and green 21st century city. A blueprint for the CBD will provide greater certainty about the nature, location and timing of key anchor projects. It will build on the vision set out in the draft Central City Plan developed by the Christchurch City Council. The CCDU will work collaboratively with key partners such as the Christchurch City Council, Ngāi Tahu and stakeholders in the public and private sectors.

The **Iwi Māori Recovery Programme** led by Ngāi Tahu is ensuring that recovery issues specific to Ngāi



Tahu, Ngā Papatipu Rūnanga and Māori in greater Christchurch are identified, analysed and implemented in an effective, integrated and innovative manner. The programme will cover issues such as housing and redevelopment on Māori land and reserves, potential development of cultural services and facilities or alignment with other initiatives (such as performing arts venues, sports facilities, and health services) and the restoration and recovery of the rivers and other significant natural features.

Many aspects of the programme will relate directly to Ngā Papatipu Rūnanga interests, but may also have relevance for the wider Māori community residing in greater Christchurch. Guidelines will be provided in the Iwi Māori recovery programme so that recovery programmes and plans:

- address the relationships and obligations derived from the Treaty of Waitangi;
- provide meaningful opportunities for Ngāi Tahu and Māori involvement in decision-making; and
- develop collaborative interventions and solutions to address Ngāi Tahu and Māori concerns and interests in recovery.

The **Natural Hazards Research Platform** is an ongoing programme of research to understand the geotechnical issues and seismic conditions. The research includes work to understand geotechnical issues, seismic conditions, liquefaction, rockfall risk, building and infrastructure performance, and the impacts on and resilience of society and communities. It is helping to inform decisions (such as zoning decisions) on where, when and how to rebuild in greater Christchurch.

Economic Recovery

Whakaara Tahua

Economic wellbeing is essential to a high quality of life. In addition, the productivity of greater Christchurch contributes significantly to the economic output and wellbeing of the whole country and of the South Island in particular.

The foundations needed for economic growth include:

- a high-performing education sector;
- an active research and innovation environment;
- business-friendly and enabling institutions and services;
- effective investment capital and insurance markets;
- high-quality infrastructure;
- a healthy and plentiful natural resource base;
- a diverse productive and resilient business sector;
- collaborative and effective leadership;
- national and international connectivity;
- an attractive environment and social and cultural community;

- effective development of the areas of competitive advantage; and
- a highly skilled workforce and sufficient labour supply.

Together these foundations create an attractive environment for investors, businesses and individuals. They also help to create a flourishing commercial sector in which there are high-value opportunities for employment and business.

Economic recovery involves two streams of activity that depend on each other:

1. *reconstruction* of the central city and other damaged areas such as Lyttelton and Kaiapoi; and
2. *economic stimulus* to encourage sustainable growth in the local economy.

The reconstruction of greater Christchurch has already begun. Development activity will increase during 2012 as building projects get underway. Investment in reconstruction is driving short-term growth in local and national construction markets, and will enable long-term sustainable growth by providing the built environment greater Christchurch needs for the future.



Nāu te rourou, nāku te rourou, ka ora te iwi.

“By your food basket and mine, we all will be satisfied.” Cooperative enterprise succeeds where individual efforts are insufficient.

Modern technology and communications infrastructure such as ultra-fast broadband are attractive to businesses as they enable growth opportunities in the technology sector and support business productivity.

Reconstruction and private sector investment will stimulate the economy. A stronger economy will enable local businesses to grow and develop, attract new businesses, create new jobs and add value to the local economy.

Local and central governments have important roles in economic recovery and are making significant investments. However, the bulk of the financial investment will come from the private sector. Therefore economic recovery must be collaboratively planned to establish solid foundations for economic growth.

Investing in greater Christchurch must be both a sound commercial decision and achieve quality outcomes for people.

13.1 Economic goals

2. Revitalise greater Christchurch as the heart of a prosperous region for business, work, education, and increased investment in new activities - by:

- 2.1 planning for a well-functioning Christchurch central city, thriving suburban centres, flourishing rural towns and a productive rural sector;
- 2.2 leading and working with strategic partners and both the public and private sector;
- 2.3 restoring the confidence of the business sector and the insurance and finance markets to enable economic recovery and growth;
- 2.4 renewing the region's brand and reputation as a safe, desirable and attractive place to live, study, visit and invest;
- 2.5 identifying and facilitating increased opportunities for early and substantial local and international investment;
- 2.6 ensuring a range of employment options to attract and retain a high-calibre, appropriately skilled workforce;
- 2.7 collaborating with the private sector and government agencies to address obstacles to economic recovery and to match supply with demand for resources;
- 2.8 enabling a business-friendly environment that retains and attracts business;
- 2.9 aligning provision of education and training to support long-term economic growth;
- 2.10 ensuring science, technology and innovation supports recovery and growth; and
- 2.11 facilitating the recovery and development of the Central Business District.



13.2 Implementation

Economic Recovery is led by CERA in partnership with economic stakeholders. Together they are working to ensure the foundations for economic wellbeing and growth are in place and to create the conditions that give greater Christchurch the strongest competitive advantage. The Partnership for Economic Prosperity and Recovery (PEPR) brings together a team of central government, strategic partners and business representatives to guide the development of the economic recovery programme. The programme will make the best use of the existing plans and capabilities of greater Christchurch's economic agencies and community organisations.

Economic recovery will include the following programmes.

Capital Investment Programme

- **Investment retention and attraction** will provide early and commercially attractive investment options for existing and new investors. This will include the compelling investment story, our brand and prospectus.
- **Anchor projects and significant projects** will identify and support a few significant projects that will stimulate other investment, as well as projects that will support long-term economic returns.
- **Assistance for the CBD Recovery Plan** is helping to implement the Recovery Plan for the CBD.
- **Insurance liaison** includes CERA and Treasury engaging with insurers and reinsurers to facilitate



Photo courtesy of New Zealand Trade and Enterprise.



the resolution of any barriers to timely claim settlements and to monitor trends in the insurance landscape; and encourage sound risk management principles for recovery.

Business Environment Programme

- **Worst-affected sectors recovery** will work with industry sectors hardest hit by the earthquakes to assist them to recover and adapt.
- **Growth sectors** will focus on areas of competitive advantage and sectors that could increase their productivity for example through better use of modern technology and communications.
- **Business support and networks** is ensuring businesses have access to responsive support and are well networked. It includes the support provided by Recover Canterbury.
- **Business-friendly environment** is ensuring that local and central government services are smart, responsive and helpful to business and commercial activity while maintaining quality regulation.

- **Innovation and knowledge environment** includes ensuring the conditions are in place to encourage and support innovation, entrepreneurship and technology transfer to support growth.
- **Monitoring, evaluation and reporting** is ensuring that economic wellbeing, conditions, barriers and opportunities are constantly monitored and reported. Where necessary, it will see that plans, projects and programmes are reviewed and adjusted.

Labour Market Programme

CERA is facilitating the Labour Market Programme along with stakeholders. Its purpose is to ensure that citizens have high-value employment opportunities and a skilled workforce is available to support business and growth. The programme will retain, attract, educate and train the skilled workforce needed for the rebuild and ongoing economic growth. It will also identify and remove any obstacles or barriers to the labour supply required for the rebuild.

Social Recovery

He toko i te ora



People are likely to participate and flourish in the life of the region when they have access to quality housing, transport, education and health services and communities are inclusive. Restoring social wellbeing is a holistic and collaborative process. It empowers communities who are in transition as people leave familiar neighbourhoods and resettle in new areas.

Investment in community leadership and support is enabling community connections which helps strengthen personal resilience.

Integrated and community-led initiatives can help people to cope with stress and uncertainty. These initiatives can also minimise hardship, inequity and unnecessary disruption to housing, education and health services. As well as assistance, government and non-government health and social service providers are investigating how to reorient services and better reach out to people in need. Social service NGOs based in Christchurch have developed new ways of working and delivering

services. With greater agency collaboration on social and public health recovery, services can be more efficient, improve public health and build the resilience of communities.

Education is a critical area for both social and economic recovery. It can contribute significantly to regional business and provide the workforce skills needed for the development of the region. The earthquakes have damaged land and education infrastructure, changed population and settlement patterns, and had social impacts on students, teachers and communities. Yet these same changes provide an opportunity to rethink the way education is delivered. The *Education Renewal Recovery Programme* will enhance educational services from early childhood to tertiary levels in a coordinated and timely way. These services will give people in greater Christchurch the new skills and competencies needed for long-term recovery.



Ruia taitea, kia tū ko taikākā anake.

“Strip away the sapwood and let the heartwood alone stand.’ Be not concerned with what will not last, but concentrate efforts on quality and endurance.



14.1 Social goals

3. Strengthen community resilience, safety and wellbeing, and enhance quality of life for residents and visitors - by:

- 3.1 enabling and empowering local communities to shape and lead their own recovery;
- 3.2 growing capacity, knowledge and skills within the community to build resilience;
- 3.3 delivering community, health, education and social services that are collaborative, accessible, innovative and inclusive;
- 3.4 supporting people, in particular those facing hardship and uncertainty, by providing quality housing, education and health services; and
- 3.5 supporting communities as they go through the processes of resettlement.

14.2 Implementation

The **Community Resilience Programme** led by CERA aims to build capacity and empower local communities to lead their own recovery. It strengthens and supports collaborative initiatives already underway in greater Christchurch. It also engages with communities, including iwi, to encourage and support the development of further neighbourhood plans and initiatives. The programme is coordinating services that provide accessible and timely psychosocial support especially to vulnerable people.

The **Education Renewal Recovery Programme** is led by the Ministry of Education and Tertiary Education Commission. It is developing an innovative and cost-effective education network to establish strong learning foundations and lift educational outcomes for all learners. The programme will draw on the knowledge and expertise of educational leaders and teachers; youth, parents, families and whānau; Ngāi Tahu; and business and community leaders.

The **Residential Red Zone Programme** is coordinating and providing support to individuals and households in the red zones. The programme is implementing the government offer to purchase insured residential red zoned properties. It offers information and support to property owners so that they understand the options and can decide which offer is best for them. It also manages the acquisition and ongoing ownership of the properties sold to the government.

Effective Government Services is identifying, encouraging and embedding successful cross-sector innovations adopted locally after the earthquakes. It will also explore how Canterbury innovations can be replicated nationally, as appropriate.

The **Canterbury Wellbeing Index** is being developed with government agencies and city and district councils. It will measure and track recovery progress over time and inform the activities and priorities of CERA and other agencies.

The **Canterbury District Health Board Transition Programme** is fast-tracking work already underway to transform, deliver and fund health services by reorienting the Canterbury health system to improve health outcomes for the wider population. The programme's key priority is to manage demand by creating services and environments that support people to stay well.



Cultural Recovery

Whakaara Tikanga

Cultural activities are an integral part of life in greater Christchurch and of our identity as a region. Cultural activities, including sport, art, recreation, and enjoyment of heritage, attract residents and visitors. There are many wāhi tapu and wāhi taonga of significance as a consequence of Ngāi Tahu's long-standing occupation of the region and use of natural resources. Heritage places, memorials and commemorative sites, museums and archives, performing and visual arts spaces, and sports and recreation facilities were significantly affected by the earthquakes. Iconic sport and recreation facilities are a significant part of the region's infrastructure and economy as they provide venues for participation and high-performance activities. By repairing or replacing lost facilities and maintaining events in the cultural sector, the many clubs and societies will continue to exist and bind communities together.

Greater Christchurch has lost much of the heritage that was one of its defining characteristics. Retention and conservation of restorable heritage buildings, places, archaeological sites and places of cultural significance, and restoration of access to heritage collections, will help recreate that distinctive sense of place and identity that has defined the region and contributed to its economic development.

The cultural recovery of greater Christchurch is vital for a functioning and liveable city. There are opportunities to consider cultural, sporting and recreational requirements as a whole. All partners can work together to identify community needs and, where appropriate, consider facilities that offer a range of cultural activities. New opportunities will be sought so cultural activities contribute to community wellbeing and economic growth.



Kia mau ki te kura whero.

Hold fast to the valued treasures.





15.1 Cultural goals

4. Renew greater Christchurch's unique identity and its vitality expressed through sport, recreation, art, history, heritage and traditions - by:

- 4.1 acknowledging and celebrating the rich and diverse Ngāi Tahu, colonial and other heritages and connections;
- 4.2 resuming cultural, community and sports events and activities;
- 4.3 encouraging participation in a range of entertainment, cultural, recreational and sporting activities;
- 4.4 restoring historic buildings, where feasible, for the benefit of the community; and
- 4.5 acknowledging losses and creating spaces to remember, while embracing necessary changes to the city's character and urban form.



15.2 Implementation

Cultural Recovery is led by the Ministry for Culture and Heritage, in partnership with sports and arts agencies. They are repairing and rebuilding facilities and events. They are also working to restore participation in activities to at least the level it was at before the earthquakes. There are three specific programmes.

The **Arts, Culture and Heritage Collections Programme** aims to ensure that people once again enjoy the full range of arts and cultural activities and have full access to heritage collections of national and local significance. It includes the contribution of cultural institutions to developing formal memorial spaces, as well as collecting and archiving earthquake stories.

The **Heritage Buildings and Cultural Places Programme** is ensuring heritage buildings and places remain an important part of greater Christchurch's identity. It considers a broad range of heritage such as buildings, archaeological sites, heritage spaces and landscapes and places of cultural significance to Ngāi Tahu, including wāhi tapu and wāhi taonga areas.

The **Sport and Recreation Programme** is working to recover the sport and recreation infrastructure so that people can participate in them at least as much as they did before the earthquakes. It will also support and develop the volunteers and paid professionals who deliver sport and recreation activities.



Built Environment Recovery

He Whakatika i ngā Mea Hanga

The recovery of the built environment will leave the greatest legacy. Activities are already underway to recover and, wherever possible, enhance the built environment and infrastructure of greater Christchurch. The built environment includes land, land use, network infrastructure (energy, transportation, water and telecommunication) and the part of the natural environment that has been integrated into our lifeline networks (flood banks, rivers, the estuary and coastline). It also includes residential housing, commercial and significant buildings that make up our economic, community and social infrastructure such as schools, government offices, police stations and public buildings.

Well-designed, connected communities and buildings that are constructed to a high standard have benefits for health and wellbeing. These communities and buildings are also more energy efficient, increase use of active or public transport and work in harmony with the natural environment. During consultation people expressed strong support for taking the opportunity to make buildings and infrastructure more interconnected and resilient. With the rebuild it is now possible to rethink the form and integration of the built and natural environments so it increases economic productivity, strengthens community vitality and improves quality of life.

Studies of land damaged by the earthquakes have shown there are two critical factors that can delay and

increase the costs of rebuilding. First, thin crust reduces the load bearing capacity of the land and increases the severity of liquefaction. It is both a cause and a result of falls in land levels. Second, lateral spread means the land splits and slides towards the weakest point – away from built or buildable areas (usually by waterways). As more information becomes available on the state of land and the performance of buildings and infrastructure, decisions are being made about where, when and how to rebuild.

Sufficient land is needed to house people displaced from the red zone and other locations, and for strategic infrastructure and community facilities. In addition, the



Photos courtesy of the Department of Building and Housing



He waka kōtuia, kāhore e tukutukua ngā mimira.

A canoe that is interlaced will not become separated at the bow.

additional workforce required for the recovery need accommodation. The Greater Christchurch Urban Development Strategy and statutory plans provide for a mix of land uses so that people can live in an attractive built environment within a compact urban form.





16.1 Built environment goals

5. Develop resilient, cost effective, accessible and integrated infrastructure, buildings, housing and transport networks - by:

- 5.1 coordinating and prioritising infrastructure investment that effectively contributes to the economy and community during recovery and into the future;
- 5.2 supporting innovative urban design, buildings, technology and infrastructure to redefine greater Christchurch as a safe place built for the future;
- 5.3 rebuilding infrastructure and buildings in a resilient, cost-effective and energy-efficient manner;
- 5.4 developing a transport system that meets the changed needs of people and businesses and enables accessible, sustainable, affordable and safe travel choices;
- 5.5 zoning sufficient land for recovery needs within settlement patterns consistent with an urban form that provides for the future development of greater Christchurch;
- 5.6 having a range of affordable housing options connected to community and strategic infrastructure that provides for residents participation in social, cultural and economic activities; and
- 5.7 drawing on sound information about ongoing seismic activity and environmental constraints, including other natural hazards and climate change.

16.2 Implementation

Built Environment Recovery led by CERA will direct a coordinated and timely repair and recovery of the built environment. This programme will identify the priorities and provide sequencing timeframes for land and natural hazard remediation, residential housing rebuild, significant buildings and network infrastructure. Built environment recovery is organised into four programmes of work.

The **Built Environment Recovery Integration Programme** includes the following activities.

- **Integrated planning** will cover underground, on-ground and above-ground rebuilding programmes. This includes developing solutions to minimise risks that might constrain the rebuild such as the supply and demand of building materials and machinery. It will also develop indicators and measure progress to help monitor the recovery of the built environment. Opportunities will be identified to be smarter with our infrastructure including modern technology and communications infrastructure.
- **Strategic directions** for land use and infrastructure are being developed with UDS partners. These will guide and coordinate land use and infrastructure recovery planning; help realise opportunities arising from the earthquakes; and provide a strong foundation for the future development of greater Christchurch.
- **Stocktakes of built assets** will summarise the state of the built environment prior to the earthquakes and what has happened to it. Three stocktakes will be

undertaken (for land and land use, buildings and infrastructure). They will describe the previous policy and regulatory frameworks; summarise the asset network for transportation, water, energy and telecommunications; summarise community, cultural and public service built assets that existed; state the levels of service that were available; and describe the strategic buildings that are regarded as crucial to recovery.

- **Action planning** will identify what needs to be done, by whom and when, based on the stocktakes above. Actions are likely to include policy and regulatory changes; temporary repair or replacement projects; and understanding and re-establishing levels of service and investigations. Actions such as modelling population and settlement patterns will provide information for all recovery components and help to integrate their activities. Opportunities will be sought to improve the design of buildings and infrastructure so they function effectively and contribute to economic, environmental and community outcomes across the recovery components.
- A **toolkit** will be developed for recovery and will include prioritisation and sequencing frameworks, blueprints for integrated recovery and 3D and 4D visualisation models to encourage integrated recovery.
- **Community engagement** will communicate progress and include communities in their local repairs. Local government consenting processes will apply.

The **Land and Land Use Programme** includes the following activities.

- **Land zoning decisions** – the Government is continuing to assess the state of the land damage across greater Christchurch. It is using this information to make policy decisions about the land on which rebuilding is practicable in the short to medium term.

Red zones cover over 7,400 properties. In these zones there is area-wide land damage and an engineering solution to remediate the land damage would be uncertain; disruptive, and not timely and cost effective; and the health and wellbeing of residents is at risk.

As of May 2012 over 180,000 properties have been zoned green. In these areas land is generally suitable to be repaired and rebuilt on. Some green zone properties may have had land damage but this can be repaired on an individual basis as part of the normal insurance process.

Further geotechnical investigations are underway to determine the appropriate zoning decisions for the remaining 1,700 properties on the Port Hills (currently white). The Government is committed to making decisions about these properties as quickly as possible based on the best possible information.

- **Land supply** - CERA, working with councils, will monitor land supply for residential and commercial development and will remove constraints to bring suitable land to the market. To accommodate the



resettlement of people from damaged lands as well as future population growth, infrastructure and efficient planning and consenting processes are required.

- **Re-evaluation of existing planning documents** will take account of the residential red zone decisions, any changes in demand for types of housing and an increase in the short-term demand for housing. It will consider new land hazard information to confirm where residential and commercial building is and is not appropriate. Guidance will be provided on the conditions for land and building development so that homes and business premises are well-designed and more resilient to future natural hazards.
- **Residential red zone land clearance** is overseeing the clearance of residential red zone properties and the return of the land to open space. It consists of three stages over two to three years. The first stage is to remove built structures and services. The second will involve larger-scale land clearance and grassing. The final stage will be to liaise with utility providers to remove public infrastructure no longer needed. After that, Land Information New Zealand will manage the open space. Wherever possible, these activities will preserve significant trees and will keep options open for the way the land will be used in future.
- **Future long-term use of red zone land** will be considered once a substantial proportion of red zone land has been transferred to the Crown. CERA, on behalf of the Crown, will lead an assessment of future options for land use. The assessment will consider hazard risk, opportunities for economic return, natural features and ecology of the land and adjacent

waterways. It will also consider any community input required as part of the process and look for consistency with urban growth policies for greater Christchurch. Land Information New Zealand and CERA will be responsible for interim land management.

The **Rebuilding Programme** includes the following activities.

- The **demolition and operations programme** is undertaking detailed engineering evaluations of all commercial and multi-unit residential buildings, and the demolition of dangerous buildings to enable the rebuild of greater Christchurch. The programme sets out the works for demolition and business restart projects overseen by CERA, and for the reduction of the cordoned area of the inner city. It covers buildings within the cordon and other significant buildings such as those over five storeys in the central city and commercial buildings outside of the city. It also deals with foundations and basements left after the national emergency and the removal of debris from demolition sites. CERA requires detailed engineering assessments so that there is clear information about the structural integrity of commercial and public buildings, and people can be confident about the buildings they work in or enter. Urgent demolitions take priority and may therefore disrupt planned work. The aim is to remove large areas of the central city cordon by July 2012.
- The **building quality programme** is improving understanding of the Building Act's seismic performance requirements for both residential and

commercial buildings. It is also developing solutions to better meet those requirements. The Department of Building and Housing is leading this programme and has already provided updated guidance.

- The **housing recovery programme** is considering the market's response to the housing issues arising from the recovery; the opportunity to coordinate the range of central and local government housing activities; and the pace of the residential rebuild. For example, CERA, EQC, private insurers, the Department of Building and Housing and local government are working to identify and resolve issues to progress the green zone rebuild.
- **Buildings of strategic significance** will focus on planning and rebuilding community network assets open to the public. These assets include public service buildings such as schools, hospitals and courts as well as community facilities for sport and recreation, arts, culture and heritage. CERA will liaise with councils, across government and with the private sector on this programme.

The **Infrastructure Programme** includes the following activities.

- **Identify and reconfirm** existing infrastructure programmes that are still appropriate and required to help greater Christchurch to recover and grow in the longer term. These programmes (and associated infrastructure) are, or will be, incorporated in Council Long Term Plans rather than in specific recovery programmes. By rethinking about where assets are placed and what their function is, it is possible to enhance infrastructure networks as part of the recovery.



- **Transportation solutions** for recovery issues will be developed. This work will consider the changes to customer needs for public transport and the need to reinstate and repair damaged infrastructure. It will also identify opportunities to improve the resilience and sustainability of the transport system, such as by improving infrastructure to increase walking, cycling, and use of public transport and freight. Existing transport planning programmes will be considered and integrated to ensure the transport network operates seamlessly and is relevant to the post-earthquake environment.
- **Horizontal infrastructure repair and rebuild** work will be ongoing throughout the city for several years.
 - The Stronger Christchurch Infrastructure Rebuild Team (SCIRT) is repairing the city's roads, water supply, storm water, and wastewater systems that were damaged by the earthquakes. The SCIRT project is one of the largest and most complex civil engineering projects ever

undertaken in New Zealand. SCIRT is an alliance of Christchurch City Council, CERA, New Zealand Transport Agency, City Care, Downer, Fletcher Construction, Fulton Hogan, and MacDow New Zealand.

- Commercial infrastructure providers such as Orion, Telecom and Vodafone are rebuilding telecommunications and energy infrastructure systems. CERA and SCIRT will liaise with these providers to align and coordinate repairs where possible to minimise disruption.
- **Infrastructure standards and specifications** will be reviewed to ensure they are fit for the new seismically active environment and represent value for money.
- A **decision support tool** to decide how the infrastructure rollout will be prioritised will be developed by SCIRT. This tool will specify what infrastructure will be repaired, where and when. It will

prioritise what is best from an engineering viewpoint, while taking into account efficiency and community needs. It will also consider other factors such as the concern to continue services important to the local economy. SCIRT will use the tool to coordinate the sequencing and timing of infrastructure projects across service and utility providers. In this way it will help them line up replacement or repair works and apply the “dig once and dig right” principle. The decision support tool will be reviewed periodically to ensure it remains fit for purpose.

- **Communications** for the network infrastructure repairs including providing information about the SCIRT programme in communities.

17 Natural Environment Recovery

Whakaara Taiao

Greater Christchurch relies on its healthy natural environment which includes the air, coasts, water, land and biodiversity and the ecosystem services they provide. Recovery programmes need to be undertaken and sequenced in ways that do not harm the health and functioning of the natural environment. They should also consider how they can help the environment to adapt to global environmental issues such as climate change, sea level rise and resource scarcity.

Using existing mandates, local authorities are working hard to rebuild and enhance infrastructure and buildings. This work opens up a significant opportunity to: solve discharge issues; design our city structures to adapt to changes in our natural systems; and improve the natural environment. The flood-carrying capacity of rivers and stopbanking is being restored to pre-earthquake levels. Fixing sewerage and storm water systems has reduced discharges of raw sewage and other pollutants into the rivers and the sea. Actions to address land subsidence and silt inundation are improving the water quality and reducing the flood vulnerability of drains, waterways and rivers.

There are opportunities to enhance Ngāi Tahu cultural and environmental values through re-establishing or increasing the extent of indigenous flora and fauna as river banks are rehabilitated, and by creating river corridors, parklands and wetlands in appropriate areas. Biodiversity also benefits from all this work to address environmental degradation caused by the earthquakes.

Many of the recovery activities mentioned in the previous sections can improve the health and resilience of the natural environment so that it is better than it was before

the earthquakes. Certain recovery activities and new developments may need to apply for resource consent. This process provides the normal safeguards for the environment as the effects of activities are assessed against existing Resource Management Act plans.

There is a lot more work to be done to restore the natural environment and improve its resilience and sustainable management. At this stage it is not clear whether a specific Recovery Plan is needed or whether the existing tools will be sufficient for this work.



Toi tū te marae o Tāne; Toi tū te marae o Tangaroa; Toi tū te Iwi.

When the domains of Tāne (land) and Tangaroa (water) are nurtured and sustained, so too will people prosper and flourish.



Photo courtesy of Environment Canterbury.

17.1 Natural environment goals

6. Restore the natural environment to support biodiversity and economic prosperity and to reconnect people to the rivers, wetlands and Port Hills - by:

- 6.1 ensuring recovery activities value, protect and sustainably manage the sources of our water;
- 6.2 ensuring ecosystems are healthy and functioning;
- 6.3 improving the quality and function of estuaries, waterways and wetlands to support the unique biodiversity that is endemic to Te Waipounamu;
- 6.4 providing public access to and opportunities for outdoor recreation, cultural, social and economic activities;
- 6.5 enhancing air quality through managing recovery activities that impact on air quality, such as heating, transport, demolition and construction; and
- 6.6 storing, sorting and processing waste in an environmentally safe and effective manner, including minimising and recycling construction and demolition wastes.



17.2 Implementation

Natural Environment Recovery is led by Environment Canterbury (in partnership with Te Rūnanga o Ngāi Tahu, Ngā Papatipu Rūnanga, Christchurch City Council, Selwyn District Council, Waimakariri District Council and CERA). **The Natural Environment Recovery Programme** will assess the extent of the damage to the natural environment and identify the best tools to help restore it. As part of this programme, studies are being undertaken to understand the effects of the earthquake on the natural environment and ways to remediate any harm and prevent damage in future.

Assessment will cover the following aspects of the natural environment:

- **air** – effects of insulation and heating choices in the residential rebuild, dust from central city and residential demolitions, and infrastructure recovery;
- **biodiversity** – the impacts on biodiversity arising from degraded air, land, freshwater and sea, and the changing land use patterns around the main waterways;
- **coasts** – coastal water quality and estuarine processes;
- **hazards** – new seismic risk profile, susceptibilities to rockfall, landslide and land damage, new flood risks to low-lying land arising from the individual and combined effects of sea level rise, altered river bed levels and intense rainfall events;
- **land** – future treatment and uses of land no longer suitable for urban, residential or commercial use;



Photos courtesy of Environment Canterbury.

- **waste** – the effective and sustainable management of all solid and liquid waste in order to avoid the contamination of land, surface water and groundwater during the recovery and beyond;
- **water** – quality of groundwater and surface water in rivers, streams and wetlands;
- **recreation** – safe recreational opportunities in outdoor spaces, parks and waterways by improving the above aspects of the environment; and
- **implementation tools** – the best means to achieve the recovery of the natural environment in tandem with social, cultural, economic and built environments.

Glossary

He Rārangi Kupu

CBD	Central Business District	Ngā Papatipu Rūnanga	The representative bodies of the six Ngāi Tahu Papatipu Rūnanga in greater Christchurch – Te Ngāi Tūāhuriri Rūnanga, Te Hapū o Ngāti Wheke (Rāpaki), Te Rūnanga o Koukourarata, Wairewa Rūnanga, Te Taumutu Rūnanga, Ōnuku Rūnanga
CCDU	Christchurch Central Development Unit www.ccd.govt.nz	Ngāi Tahu	The iwi of Ngāi Tahu consisting of the collective of the individuals who descend from the primary hapū of Waitaha, Ngāti Māmoē and Ngāi Tahu, namely, Kāti Kurī, Kāti Irakehu, Kāti Huirapa, Ngāi Tūāhuriri and Kāi Te Ruahikihiki
CEDS	Christchurch Economic Development Strategy	NZTA	New Zealand Transport Agency
CERA	Canterbury Earthquake Recovery Authority	SCIRT	Stronger Christchurch Infrastructure Rebuild Team - comprises of CERA, the New Zealand Transport Agency, the Christchurch City Council, Fulton Hogan, Downer Construction, Fletcher Construction, MacDow New Zealand and City Care
CER Act	Canterbury Earthquake Recovery Act 2011	Strategic infrastructure	Facilities, services and installations that are of importance beyond a local area and sustain the community. It includes horizontal infrastructure, strategic transport networks, port, airport, railway, defence facilities, strategic telecommunication facilities and the Electricity Transmission Network
CERF	Canterbury Earthquake Recovery Fund	Strategic partners	Te Rūnanga o Ngāi Tahu, the Christchurch City Council, Selwyn District Council, Waimakariri District Council and Environment Canterbury (TRONT, CCC, SDC, WDC and ECAN)
Community infrastructure	Buildings and infrastructure that benefit and are accessed by the community such as swimming pools, sports facilities (including sports fields) and community halls	Te Rūnanga o Ngāi Tahu	The body corporate known as Te Rūnanga o Ngāi Tahu established by section 6 of the Te Rūnanga o Ngāi Tahu Act 1996
EQC	Earthquake Commission	UDS	Greater Christchurch Urban Development Strategy
Greater Christchurch	The districts of the Christchurch City Council, the Selwyn District Council and the Waimakariri District Council, and includes the coastal marine area adjacent to these districts	Vulnerable people	Vulnerable people include children, the elderly, people with disabilities, Māori and non-English speaking migrants and refugees
Horizontal infrastructure	Infrastructure that runs horizontally including roads; storm water, drinking water and sewage pipes; telecommunications; and electricity		
IAP2 Spectrum of Public Participation	The International Association for Public Participation's Spectrum of Public Participation was designed to assist with the selection of the level of participation that defines the public's role in any public participation process. The spectrum shows that each of the levels of participation is legitimate and the appropriate one depends on the goals, timeframes, resources, and levels of concern in the decision to be made. The levels of participation on the spectrum are inform, consult, involve, collaborate and empower. More information is available at www.iap2.org		

Young People's Vision of Recovery in Photos

In 2011, CERA invited schools in greater Christchurch to take part in a photography competition. Schools were asked to submit photographs that reflected their students' visions of recovery - what greater Christchurch will be like in the future. Students submitted photographs under each of the recovery areas identified in the draft Recovery Strategy and for the overall vision. The winning photographs are featured on these pages. All of the entries can be viewed online at <http://www.livingheritage.org.nz/Competition>



Leadership

WINNER - Rebuilding Christchurch Together
"If we do it together it might not take as much time."
By Eddy Stanton, Redcliffs School



Economic

WINNER - Willow Shoes is Back!
"The image shows the owner of Willow Shoes outside her new shop. Her old shop was destroyed on 4 September 2010 and it has been rebuilt the way it used to look."
By Liam Helleur, Heaton Intermediate



Natural

WINNER - All Abuzz
"This photo is of a dahlia flower being visited by a monarch butterfly and a bee. Christchurch getting back to normal with nature at its finest."
By Nikita Jacobs, Branston Intermediate



HIGHLY COMMENDED - Greening the spaces
"The earthquake knocked down our Selwyn Street dairy so Addington School decided to "green the spaces". We planted flowers where the rubble was cleared away and now we think it looks ataahua."
By Renalia Savello, Addington School



Social

WINNER - Rebuild our central city

“As a class, we decided that we wanted lots of areas to play in. It is important to have children come to the city so we have put really cool areas in place so this may happen. We feels that we need parks with trampolines, swimming pools, picnic areas and skate parks.”

By Linwood Avenue School



Built

WINNER - Our vision. Our children’s future.

“Low rise buildings with many green spaces are the key to rebuilding Christchurch. Roof top walkways and gardens for all to enjoy while moving around our city.”

By Julia Coopens, Rose Siebuhr and Eva Weir, Redcliffs School



HIGHLY COMMENDED - The School Grounds

“Our school grounds have fallen down. I want it to look just flat so rocks don’t fall.”

By Bella Hansen-Ratter, Redcliffs School



Vision

WINNER - Hope Flower

“A daisy grows in the grass a the front of a fenced-off petrol station. The sun is shining and there is a rainbow in the corner beside the flower. It is a sign of hope for the people of Christchurch.”

By Frances Zhang, Ilam School



HIGHLY COMMENDED - Ultimate Vision Goggles

“Room 17 made some vision goggles to look into the future.”

By Room 17 Redcliffs School



HIGHLY COMMENDED - My Vision

“My vision goggles show me that Christchurch’s future looks great!”

By Jaxon Skews, Redcliffs School

