

Strategic Recovery Planning

Director's Guideline for Civil Defence Emergency Management
Groups [DGL xx/xx]

Strategic Recovery Planning

Director's Guideline for Civil Defence Emergency Management Groups [DGL xx/xx]

Month year

ISBN xxx (from comms)

Published by the Ministry of Civil Defence & Emergency Management

Authority (required for DGLs and TS, not IS)

This guideline has been issued by the Director of the Ministry of Civil Defence & Emergency Management pursuant to s9(3) of the Civil Defence Emergency Management (CDEM) Act 2002. It provides assistance to CDEM Groups in the xxx.

This document is not copyright and may be reproduced with acknowledgement. It is available, along with further information about the Ministry, on the MCDEM website www.civildefence.govt.nz.

Cover images

insert description and attributions here once cover finalised. Confirm with providers of photographs
If this page goes over to next page, on 'View' tab tick 'rulers' and lift margin by dragging LH ruler



Ministry of Civil Defence & Emergency Management
PO Box 5010
Wellington 6145
New Zealand
Tel: +64 4 817 8555
Fax: +64 4 817 8554

Email: emergency.management@dpmc.govt.nz
Website: www.civildefence.govt.nz

Foreword

[Insert foreword from Director before publication]

[intentionally blank]

Contents

Section 1 Introduction	1
1.1 About this guideline	1
1.2 Why strategically plan for recovery?	2
1.3 Strengthening the Recovery Framework	3
Section 2 Responsibilities of the CDEM Group.....	5
2.1 The requirement for strategic planning for recovery	5
2.2 What strategic planning for recovery means	5
2.3 Aims of Strategic Planning for Recovery	6
2.4 Your responsibilities for strategic planning for recovery	6
2.5 Whole of local authority approach	8
2.6 Relevant CDEM Act 2002 provisions.....	8
2.7 Other Legislative Provisions	9
Section 3 Approach to Strategic Planning for Recovery.....	10
3.1 Approach	10
3.2 Step 1: Understanding the communities values and priorities for recovery	11
3.3 Step 2: Recovery vision and outcomes	14
3.4 Step 3: Managing consequences and opportunities from specific hazards and risks	15
3.4.1 Understanding consequences and opportunities from specific hazards and risks	15
3.4.2 Hazard and risk management	18
3.5 Step 4: Capacity, capability, collaboration and leadership	19
3.5.1 Capacity and capability	19
3.5.2 Collaboration and leadership.....	21
3.6 Step 5: Evaluation and monitoring	22
3.6.1 Performance frameworks	22
3.7 Step 6: Prioritise and implement strategic recovery actions	24
Section 4 Applying strategic planning recovery outcomes to a specific emergency	27
Section 5 Key terms	29

[intentionally blank]

Section 1 Introduction

1.1 About this guideline

The **purpose** of this guideline is to help CDEM Groups meet requirements to state and provide for strategic planning for recovery specific to their hazards and risks in CDEM group plans.

The **intended audience** of this guideline is CDEM Groups, particularly Mayors and Chief Executives of Local authorities. It also needs to be read by CDEM Coordinating Executive Groups who may assist CDEM Groups with amending their CDEM group plans.

Structure

This guideline has the following main sections:

- Section 1 *Introduction* – an introduction to this guideline, including an overview of changes to the legislative framework to increase the focus on recovery
- Section 2 *Responsibilities of the CDEM Group* – guidance on the key aspects of strategic planning for recovery.
- Section 3 *Approach to Strategic Planning for Recovery* – guidance about how to approach strategic planning for recovery.
- Section 4 *Applying strategic planning recovery outcomes* – guidance about how to apply strategic planning outcomes following an emergency.
- Section 5 *Key terms* – clarification of the key terms used.

Use of icons



The icon on the left indicates more information is available in another document or website.

The *Civil Defence Emergency Management Act 2002 (CDEM Act 2002)*, section 53, specifies that CDEM group plans must take account of Director's guidelines. This requirement must be applied to this document.

1.2 Why strategically plan for recovery?

All emergencies result in a need to recover. The scale and nature of recovery will vary for each emergency, however the need or desire to regenerate and enhance the community will exist in every situation.

Additionally emergencies often identify and highlight certain recovery aspects that could have been mitigated if consideration was given to them prior to an emergency occurring.

The complexity of recovery

Recovery is a complex part of civil defence emergency management in terms of scale, range of activities, and duration. The impacts of recovery on CDEM Groups and local authorities can be significant, even for small emergencies. Experience shows that recovery management can significantly impact the business of local authorities, and fundamentally change the assumptions behind annual and long-term plans.

Recovery management goes well beyond the 'business-as-usual' of local authorities, and involves collaboration of multiple stakeholders across the social, economic, built and natural environments. The significant negative consequences of recovery to the social and economic wellbeing of people and communities are well documented. Recovery management occurs against a backdrop of community distress and uncertainty, and is highly dynamic in nature.

Prioritising Recovery

Despite the potential for significant and prolonged consequences for impacted communities, the local authorities, and the CDEM Group, planning for recovery prior to emergencies is often not considered to be a priority. Local authorities are often unaware of the level of resourcing and coordination that may be required during recovery, and the potential consequences this may have on their business.

Recovery was the weakest scoring component of the National CDEM Capability Assessment Report 2015. The report highlighted that generally, there are few strategic discussions about risk appetite, risk management, intergenerational investment through risk reduction, and resilience approaches such as 'build back better' or retreat. Decisions and choices over the priority of essential community assets such as rugby clubs, schools, religious or historic landmarks are often not made prior to emergencies in consultation with the community. In addition, there is often little attention paid to planning for the on-going shocks and stressors that people and communities inevitably face during recovery and the resultant impacts on local authorities.

The opportunities of strategic planning for recovery

Strategic planning for recovery presents an opportunity for CDEM Groups and local authorities to identify hazards and risks, and prepare for recovery. It enables investment choices to be made in consultation with the community to maximise risk reduction opportunities. Strategic planning will improve the ability of CDEM Groups and local authorities to manage recovery effectively and efficiently for the benefit of their communities.

Becoming better at recovery is more than simply planning for the operational activities of recovery. CDEM Groups need to identify and understand what they want to achieve in recovery, and set a path to achieve this. Establishing the right capacity and capability, collaborative relationships, and leadership prior to an emergency enable these to be applied as necessary to the specific recovery. The importance of recovery within the CDEM framework needs to be acknowledged by CDEM groups and be given prevalence and adequate resourcing prior to an emergency occurring.

1.3 Strengthening the Recovery Framework

Recovery in New Zealand legislation

Prior to 2016, recovery planning was required under the *CDEM Act 2002*.

The *Civil Defence Emergency Management Amendment Act 2016 (Amendment Act 2016)* strengthens this requirement, to help communities recover more efficiently and effectively from small to moderate scale emergencies. These types of emergencies (which include severe weather resulting in flooding) remain our most frequent emergencies. The amendments can be used for larger scale emergencies.

The Amendment Act 2016 recognises that the focus to date has largely been on preparing for and responding to emergencies. It recognises the need to emphasise the importance of recovery preparedness. All four Rs are important – reduction, readiness, response and recovery.

Recovery experience in New Zealand

There have been a number of emergencies in New Zealand since the enactment of the CDEM Act 2002 that have required a managed recovery. These emergencies have advanced our understanding of:

- the types, scales and frequencies of emergencies that occur in New Zealand;
- community strengths, priorities, and vulnerabilities;
- the consequence for people, buildings and infrastructure, and the economic and natural environments; and
- the measures that can be taken to reduce risks, manage consequences and enhance community wellbeing.

**The requirement
to strategically
plan for recovery**

Part of the changes under the Amendment Act 2016 introduced a requirement on CDEM Groups to state and provide for strategic planning for recovery from the hazards and risks by 1 June 2018. This is an ongoing requirement in CDEM Group plans.

The change to incorporate strategic planning for recovery into CDEM Group plans was to strengthen the requirements to plan for recovery and ensure that the planning recognised the specific recovery needs and strategic opportunities from emergencies within the CDEM Group area.

The term 'strategic planning' was used in the Amendment Act 2016 because this type of planning focuses on determining what the ideal state is, and sets a path to achieve this.

See section 2 for the definition of strategic planning.

Section 2 Responsibilities of the CDEM Group

2.1 The requirement for strategic planning for recovery

From 1 June 2018 CDEM Groups have responsibility for ensuring that their CDEM Group Plan states and provides for strategic planning for recovery from the hazards and risks.

Section 19(2) of the Amendment Act 2016 comes into force on 1 June 2018. This clause amends section 49 of the CDEM Act 2002, so that from 1 June 2018 section 49 of the CDEM Act will state:

“The plan must state and provide for—

the strategic planning for recovery from the hazards and risks...”

Implications for CDEM Groups and their members

Section 17(1)(i) of the CDEM Act 2002 provides that it is a function of a CDEM Group, and of each member, ‘to develop, approve, implement, and monitor a civil defence emergency management group plan and regularly review the plan’

Section 20(2)(c) of the *CDEM Act 2002* provides that the Coordinating Executive Group (CEG) is responsible to the CDEM Group for “overseeing the implementation, development, maintenance, monitoring, and evaluation” of the CDEM Group Plan – including strategic planning for recovery.

2.2 What strategic planning for recovery means

Strategic planning for recovery focuses on determining what CDEM Groups and each member need to do to ensure their communities are well-placed and supported to recover from any emergencies from the hazards and risks identified in the CDEM group plan.

Strategic planning aims to achieve the outcomes set out in section 2.3, and requires a whole of local authority approach, CDEM Group and partnering agencies, involving planners, building officials, finance, infrastructure etc. It is important that all are involved in conversations about the hazards and risks, potential consequences of an emergency, what recovery might involve, and what can be done prior to and following an emergency.

All have a part to play and can influence the extent to which the CDEM Group and local authorities are prepared for, and can manage the recovery from, an emergency.

2.3 Aims of Strategic Planning for Recovery

Strategic planning for recovery undertaken by the CDEM Groups needs to achieve the following outcomes:

- Comprehensive understanding of what is needed to support the communities overcome the consequences from specific hazards and risks, and the opportunities to reduce risk and strengthen resilience;
- The communities are engaged and prepared to adapt, and decision-makers understand what is important to the communities;
- The immediate, medium-term and long-term recovery outcomes and a community recovery vision are defined;
- The recovery risks are managed through additional reduction, readiness, response and recovery measures;
- The local and regional capacity and capability to prepare for, manage and deliver recovery is readily available, with a clear understanding of local, regional and national roles and responsibilities;
- Collaborative relationships and processes are established, managed and maintained at local, regional and national level;
- Performance frameworks are developed to monitor and evaluate the progress and effectiveness of recovery preparedness and the management of recovery, and prompts improvement actions to be implemented; and
- Local authorities engage business and community leaders to educate them about the risks and actively demonstrate leadership in the management of risk and community preparedness.

2.4 Your responsibilities for strategic planning for recovery

Local authority Chief Executives

To support the CDEM Group in this process, local authority Chief Executives (as members of the CEG) need to:

- examine and understand the specific hazards and risks within their local authority area and the likely consequences on their community, from a recovery perspective;
- examine and understand the specific hazards and risks within their local authority area which they share with other local authorities within their CDEM Group area or adjoining CDEM Groups, integrate the hazards and risks across the CDEM Group and consider joint initiatives to prepare for recovery;
- Identify additional measures that can be taken across reduction, readiness, response and recovery, to ensure the community are well-placed to recover. Additionally, confirm funding for any resulting proposals are included in their Long Term Plan;

- Identify and resource what capacity and capability is needed within the local authority, the CDEM Group, other non-government agencies, businesses and the broader community to support recovery preparedness and the management of recovery;
- Identify leaders in their community and work collaboratively with Groups, stakeholders and organisations to ensure roles and responsibilities in recovery are understood;
- Take steps to understand what is important to their community, define recovery outcomes and develop priorities and processes collaboratively with their community.

This information should be collated to inform the CDEM Groups' considerations of strategic planning for recovery, and also the local authorities' programme of work to meet its duties under the CDEM Act, section 64.

The CDEM Groups' then need to assess the additional actions needed from a strategic recovery perspective, prioritise these, and apply their normal processes for the allocation of funding needed to deliver any proposed actions.

Mayors as members of the CDEM Group

Mayors, as members of the Joint Committee (CDEM Group) are responsible for strategic planning for recovery and provide direction to their council.

Once the local authorities have collated their findings and proposed actions, Mayors as members of the CDEM Group should:

- Collate and prioritise strategic actions across the CDEM Group area
- Ensure that strategic actions, responsibilities and timeframes that are recorded in the CDEM group plan are delivered, and
- Establish measures that monitor and evaluate progress of implementation of the strategic actions.

The CDEM Group needs to examine hazards and risks that are common across more than one local authority area within their Group area or adjoining CDEM Groups. CDEM Groups should then consider what joint initiatives or actions can be taken for the collective benefit of the local authorities.

2.5 Whole of local authority approach

It is critical that local authorities take a ‘whole of local authority’ approach to strategic planning for recovery because many roles across a local authority can influence the effectiveness of recovery. These include, but not limited to:

- Policy planners developing spatial plans, catchment management plans and undertaking Resource Management Act 1991 functions, such as regional and district planning, can consider adaptive policies and contingencies. This not only assists with recovery when needed, but also making the most of opportunities for improved environmental outcomes in general that the recovery process may provide for. Local Government Act 2002 and Local Government Act 1974 functions such as asset management, management of local roads, priorities for infrastructure expenditures, e.g. requirement for resilience planning for strategic assets such as Ports
- Building Act – procedures after an emergency, surge staffing procedures, building consent requirements
- Economic and community engagement – encouraging businesses and communities to consider resilience and business continuity, together with priority actions post recovery from their perspective
- Information on land information memorandum about hazards to help homeowners and prospective buyers make informed decisions;
- Insurance coverage and maintenance of local authority assets
- Programme of resilience work to ensure key assets can function after an emergency, e.g. access to freshwater.

2.6 Relevant CDEM Act 2002 provisions

The relevant provisions of the CDEM Act to CDEM Group responsibilities for strategic recovery planning are:

- Section 4 – various definitions
- Section 17, Functions of Civil Defence Emergency Management Groups
- S19(2)(ca) of the CDEM Amendment Act 2016 which amends s49(2) to require that the Group Plan must state and provide for “the strategic planning for recovery from the hazards and risks referred to in para 49(2)(b)”
- Section 20, Appointment and functions of Civil Defence Emergency Management Co-ordinating Executive Groups
- Section 48, Civil defence emergency management group plans
- Section 49, Proposed plan to be sent to Minister
- Section 64, Duties of local authorities

2.7 Other Legislative Provisions

The functions of a CDEM Group and each member include to plan for recovery. Therefore, CDEM Groups and each member must consider how they meet these functions as part of their strategic planning for recovery. For example, there may be actions that need to be taken to ensure there are sufficient trained and competent recovery personnel.

CDEM Groups and each local authority member must familiarise themselves with other parts of the CDEM Act 2002 and National Civil Defence Emergency Management Plan Order 2015 requirements in relation to recovery before they undertake strategic planning for recovery. In particular, the following legislative requirements impact on them or their role in recovery:

- Definition of recovery in section 4 of the CDEM Act 2002.
- Definitions of civil defence emergency management in section 4 of the CDEM Act 2002. It includes the application of knowledge, measures and practices that are designed to recover from, or overcome any hazard or loss that may be associated with any emergency, and planning, organisation, co-ordinate, and implementation of those measures, knowledge and practices.
- Definition of recovery activity in section 4 of the CDEM Act 2002. For example, it includes matters such as 'measures to enable community participation in recovery planning'. The term is used in relation to the functions of CDEM Groups (section 17(1)(e)), functions of recovery managers (section 30A(1)) and tests for considering giving notice of a transition period or extending one (section 94B(4));
- Functions of CDEM Groups in section 17 of the CDEM Act 2002. These functions include promoting and monitoring the delivery of functions under other Acts as these are relevant to achieving the purpose of the CDEM Act (subsection 17(3)), and includes recovery planning outcomes.
- Transition period provisions in Parts 5A and 5B of the CDEM Act 2002.
- Duties of local authorities in section 64 of the CDEM Act 2002.

Section 3 Approach to Strategic Planning for Recovery

3.1 Approach

Before commencing with strategic planning for recovery, local authorities and CDEM Groups, together with their Recovery Managers, should consider what current activities and information is held in relation to specific hazards and risks, community values, critical functions, economic drivers etc. Strategic planning for recovery should build on what is already in place, and extend the thinking to the longer term recovery aspects.

The recommended approach to strategic planning for recovery that is specific to hazards and risks has the following steps:

Step 1: Take steps to understand the communities' values and priorities to inform strategic planning for recovery;

Step 2: Develop desired recovery vision and outcomes in consultation with the communities;

Step 3: Using the information produced from the hazard identification and risk assessment process, engage the communities to understand the following by local authority area:

- a) the consequences from the specific hazards and risk that will need to be addressed to support the community to recover; and
- b) strategic opportunities that may arise from the specific hazards and risks to enable risk management options and decisions to be made;

Step 4: Identify the capability, capacity, collaboration, and leadership needed to recover from emergencies resulting from the hazards and risks;

Step 5: Develop performance frameworks to evaluate and monitor recovery preparedness and management, and

Step 6: Prioritise and implement strategic actions to prepare, manage and deliver recovery.

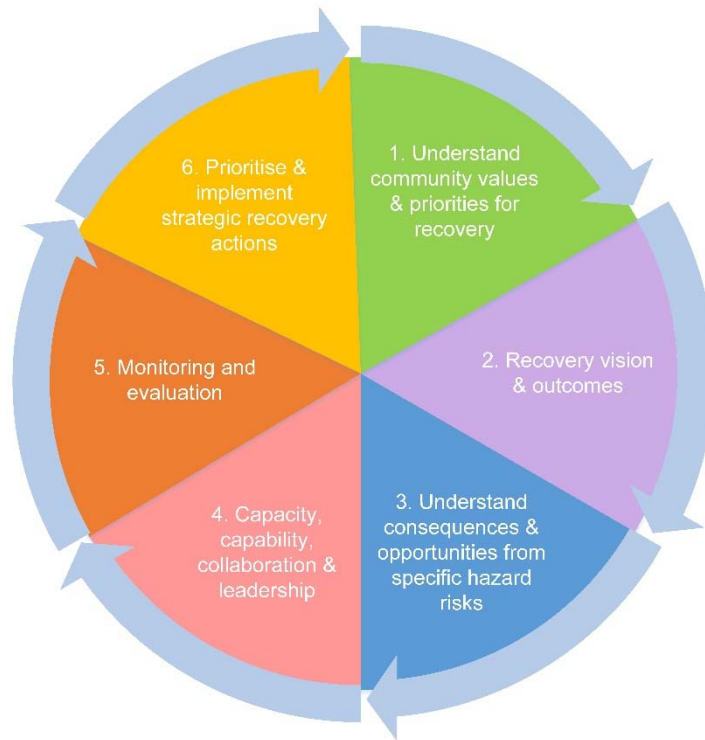


Figure 1 Approach to strategic planning for recovery

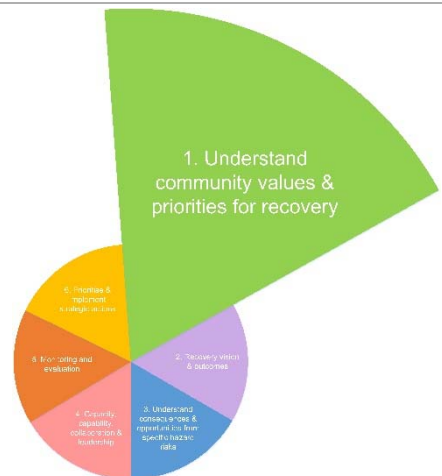
3.2 Step 1: Understanding the communities values and priorities for recovery

The importance of community engagement

Community engagement is critical to:

- Understand the strengths, vulnerabilities, needs, and priorities of those that will be, or have been, affected by an emergency;
- Understand what is critical to the function of the communities to enable choices and priorities regarding risk reduction and community enhancement to be made and embedded into the local authorities' plans and investments;
- Identify and understand how best to apply community assets, groups, leaders, and other community strengths to support community recovery;
- Optimise the preparedness of the communities.

Understanding the local communities prior to any emergency not only assists in identifying those potentially most vulnerable, and the services or



assistance that may be needed during a recovery, but enables the community assets, leaders and general strengths to be channelled

Understanding needs to go beyond simply demographics. CDEM Groups need to understand what the communities' values and priorities are and why. For example, a rugby club may be a valuable asset for the community, not only because it provides a recreational facility but also because it is a regular social meeting place and community group venue.

They also need to understand the strengths within the community and how to make best use of them. For example, community leaders aren't always immediately obvious, there may be individuals who are great influencers amongst the community but who don't have an authoritative position. Could these individuals facilitate difficult conversations with the community when faced with critical decisions that will determine the future for those affected?

Engaging with communities

Local Authorities must know and understand their communities prior to an event so that recovery preparedness and management decisions can be informed by the values and priorities of the communities. Engagement strategies need to be bespoke to the specific communities. Further information on how to engage communities can be found in *Community Engagement in the CDEM Context, Best Practice Guide [BPG 4/10]*.

It can be challenging for affected communities to engage in strategic recovery conversations after an event, as their priority is their individual or families immediate needs. The CDEM Group and the Local Authorities need to build collaborative relationships with Groups and community leaders. Communication channels and processes for engagement need to be established pre-event and continue post event in the immediate, medium and long-term.

Communicating Risk

Communities need to be involved in decisions regarding the acceptability of risks relevant to them. To do this, they require good information about the risks, presented in a way that can be easily understood.

The challenge for technical experts is to communicate with the communities in a way that recognises the factors that are important to individuals and communities, provides them with the information that they are looking for to assist in their personal decision making, and increases their understanding of the hazard and the risks present.

The local authority has a leading role in communicating risks, however, they should identify other, more indirect, channels of communications to reach communities, for example, through key community leaders.

Risk Tolerance

Local authorities need to take account of the communities' perceptions and tolerance of risks, and recognise that there may be factors that may not be considered by experts making technical assessments of the same risks.

Understanding the communities' level of risk tolerance will assist the CDEM Group make informed decisions about risk management and engage communities in managing risks prior to emergencies.

The tolerance of risk within communities will vary both due to the differing views of individuals, but also over time.

Incorporating community values and priorities into risk management

The local authority should take into consideration the communities' understanding and tolerance of risk when making risk management decisions.

The assessment of hazards and risks for the purpose of strategic planning for recovery should build on the CDEM Group and local authorities' current understanding, but expand the assessment to consider the consequences from a recovery perspective.

To assess the hazards and risks, and truly understand the consequences for the communities and the opportunities to strengthen resilience, it is critical that the local authorities know and understand the values, priorities and risk tolerance of their communities prior to an emergency.

Key considerations

- What are the strengths, vulnerabilities, needs, and priorities of those that will be affected by an emergency?
- What is critical to the functioning of the community? What can the community not live without?
- Do we have a collaborative relationship with the community leaders? Do they understand the risks to the community and their role in an emergency? How can they help us understand the community and communicate with the community?
- What is the community's level of understanding of risk? What methods have we used to communicate the risks to the community? For example, modelling tools can create a visual representation of the consequences that the community can understand, or other channels such as house sales, insurance policies, and property information can be used.
- What is the level of risk tolerance within our community? Are the risks that have been identified tolerable?
- What community leaders and influencers do we collaborate with to communicate risks? For example, emergency services, iwi, community groups. What others can we work with?

More information



Welfare Services in an Emergency, Director's Guideline for CDEM Groups and agencies with responsibilities for welfare services in an emergency [DGL 11/15], Section 3, Reduction and readiness.

CDEM Group Planning Director's Guideline [DGL09/15]

MCDEM Community Engagement in the CDEM Context, Best Practice Guide [BPG 4/10]

3.3 Step 2: Recovery vision and outcomes

Developing a vision and outcomes prior to emergencies allows people to focus on long-term, strategic thinking while not being distracted by dealing with urgent 'here and now' issues after an emergency.

Through engaging with communities to understand their values and priorities, the desired recovery vision and outcomes also need to be developed.



Vision

Developing a vision of what communities want their environments to look and feel like following an emergency is a key step in strategic planning for recovery as it allows recovery activities to be quickly focused towards achieving the vision, for example, would the communities want to have different infrastructure? Would they want to build prosperity? Would their preference be to be a 'tourist town' or a 'town with tourists'?

CDEM Groups should recognise that the communities' vision may be challenged during a recovery as the community needs and aspirations change. As a result, recovery outcomes and activities may need to adapt in response to these changes to reflect the vision.

The vision will likely build upon, or could be similar, to other community visions developed in local planning processes, plans and strategies, such as community development plans.

Immediate, medium and long-term outcomes

Immediate, medium and long-term outcomes should be pre-determined, based on the CDEM Groups and Local Authorities understanding of their risks and communities. They should be clearly articulated and developed through consultation with the community and wider stakeholders who will have a critical part in delivering the recovery.

The outcomes are likely to be targeted to deal with consequences of emergencies and should provide leaders and decision-makers with a head start in the management of recovery, enabling the needs of the affected community to be addressed as early as possible.

Taking a strategic approach to developing these outcomes will support decision-making during a recovery, and will ensure recovery activities collectively remain aligned to, and contribute towards, realising the community vision.

Key considerations

What does the community want to look like in the future?

Does the vision represent views, values and priorities of all the community? Were all parts of the community involved in its development?

Is it a strategic vision that is applicable no matter what the emergency, or are there hazards or risks with unique consequences that require a tailored vision?

How does this vision link to other community plans, strategies and processes? Does the local authority need to think about its long term plan in a new way?

Do the immediate, medium and long-term outcomes cover all recovery environments? Are these outcomes applicable to most emergencies and consequences?

Will achieving these outcomes contribute to achieving the community vision?

More information



For more information on the benefits of taking a strategic approach to developing recovery outcomes see 'Benefits of a strategic approach to recovery: CERA's lessons on the journey from emergency to regeneration'.

3.4 Step 3: Managing consequences and opportunities from specific hazards and risks

3.4.1 Understanding consequences and opportunities from specific hazards and risks

The *CDEM Group Planning Director's Guidelines* describes how CDEM Groups need to assess and treat all hazards and risks in their area.

The process involves:

- Risk identification: gathering information from a variety of sources including quantitative modelling, hazard maps, building and infrastructure maps, and



asset plans. Information should not be limited to that held by CDEM Group members.

- Risk analysis: analysing the risk in terms of likelihood and consequences on the affected community and evaluating how they would potentially impact on the four environments by using methods compatible with the international risk management standard
- Risk evaluation: prioritising risks that need to be further managed.
- Risk treatment: setting out the means by which the risks will be managed.

Building an understanding of hazards and risks

For strategic planning for recovery, the CDEM Group and each member of the CDEM Group (e.g. Mayor / Chairperson) and local authorities need to build on their current hazard and risk understanding, and expand their thinking to the immediate, medium and long-term recovery perspectives, by:

- Grouping hazards and risks according to their type, scale and likely consequences. This involves understanding all risks from small scale, frequent events through to the maximum creditable event (as depicted in Figure 2).
- Exploring the consequences to each of the recovery environments (social, economic, natural and built). CDEM Groups may also choose to adopt other environments that reflect the unique nature of their communities, for example, rural or cultural environments.
- Identifying and planning for all hazards and risks at both a Group and local authority level, to ensure planning is tailored and opportunities to improve the 4Rs– reduction, readiness, response and recovery- are identified.
- Collaborating with communities, iwi, experts and specialist agencies, and specialist teams and departments from local authorities to fully understand the consequences and opportunities for the community.

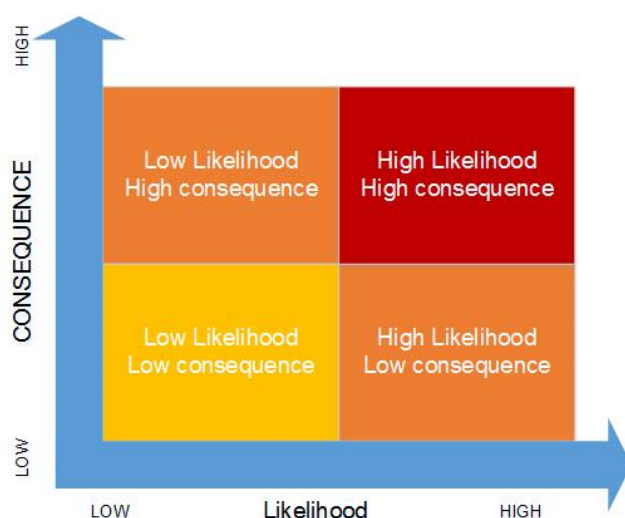


Figure 2 Various level of risk shown in relation to likelihood and consequence

Built environment	<p>In the built environment, it is important to identify and understand the risks associated with critically important built assets, infrastructure and resources including strategically important national and regional assets. This includes understanding why they are critical, e.g. what community need is met by this asset?, what the consequence for the community would be if they were compromised or lost, and if there are alternative assets, infrastructure or resources that could meet the needs of the community. What business or community assets would be the highest priority for recovery?</p>
Economic environment	<p>In the economic environment, it is essential to understand what is critical to maintaining local incomes, businesses and industry, e.g. telecommunications, tourists, road infrastructure, and what the likely immediate, medium and long-term consequences would be on the community if these critical assets or resources were lost or disrupted? CDEM Groups should engage with local businesses to understand their business continuity plans, the resources they have available to support their own recovery and that of the communities, but also their limitations.</p>
Natural environment	<p>In understanding the consequences to the natural environment, CDEM Groups need to consider the impacts from an emergency itself on the environment and the damage that could be caused from any recovery activity e.g. rebuild or clean up. Understanding what natural resources or assets are critical and valuable to the community, e.g. regional park or coastal marine area, and why they are valuable e.g. local industry is dependent on the fishery. What are the consequences on the community if these were lost or disrupted as a result of an emergency? For example, if vineyards are destroyed this will have an impact on employment and the economy in the area. This could then lead to national economic consequences as a result of reduced wine exports from New Zealand or a decline in tourism.</p>
Social environment	<p>When considering the social environment, CDEM Groups need to recognise the diverse needs of different communities such as those within a rural or urban context, high or low socio-economic groups and cultural diversity and belief systems.</p> <p>Any consequences across the built, economic or natural environments are likely to have a direct or cascading consequence on the social environment, and so the collective social consequences need to be considered.</p>
Cumulative and Cascading Consequences	<p>The speed recovery progresses in one environment will influence recovery in other environments. Therefore to understand all the consequences on the community, consequences in one environment should not be considered in isolation. For instance, failure of water systems is a consequence on the built environment but will also have consequences on the social environment as it will impact the health and psychological well-being of the community. It is essential that the focus is not solely on reinstating the water supply but also providing for the well-being of the community.</p> <p>Similarly, consequences that cascade into other communities should be considered. For example, the loss of Tauranga Port would have a significant regional and local impact as it is a main gateway for the</p>

economic community in the Bay of Plenty, but would also have a national impact as it provides redundancy if the Wellington Port was inoperable due to an emergency.

Key
considerations

- What is critical to the successful recovery of each environment?
- What actions could we undertake now within each environment to enable improved outcomes during recovery? For example, relocate infrastructure to reduce future risks?
- What collaborative relationships do we need to develop and maintain across the environments? Do these people and groups understand their role in recovery planning and management?
- Are local and regional planning policies, rules and arrangements agile and flexible enough to allow innovative and sustainable actions in the 4Rs and during recovery?
- What would be the cumulative and cascading consequences on the community in the immediate, medium and long-term from any loss or damage to the built, economic, natural and social environments? i.e. what are the collective consequences for the community?
- What are the consequences on an environment caused by any loss or damage to any other environment, e.g. what are the consequences on other recovery environments from any loss or damage to the economic environment?

3.4.2 Hazard and risk management

Managing
hazards and
risks

CDEM Groups and local authorities, in collaboration with businesses, and government agencies, need to ensure that they embed strategic planning recovery across the other Rs of risk management (reduction, readiness and response) to identify actions that can be taken prior to an emergency to reduce the consequences of the emergency and the burden of recovery.

To do this, CDEM Groups and local authorities must identify and make long-term investment decisions that:

- reduce risks
- improve readiness;
- incorporate recovery focused actions into response
- prepare for recovery.

In making risk management decisions, the Group and local authorities should consider increasing risks that, at some point in the future, can no longer be tolerated e.g. more regular flooding due to climate change. This will also encourage conversations with vulnerable populations, for example, coastal communities, to better understand the risks, make personal decisions whether to accept the risk, and also how they might prepare themselves to adapt to a changed future.

Examples of
risk reduction

There are many examples across New Zealand where risk reduction measures have been taken that have resulted in positive recovery implications. These include:

- An alternative access road was built to support the sustainability of a meat processing plant in Taranaki after multiple emergencies damaged a main access bridge which had been a single point of failure.
- Land use management changes to plant native vegetation in catchments to reduce sediment loads and therefore flood risks, but also creating opportunities to support emerging manuka honey production businesses.
- Installation of multiple plastic water tanks with flexible attachments following the Kaikoura earthquake in 2016 to reduce the likelihood of damage, rather than fewer, rigid concrete tanks.
- Planting of low fuel plants to prevent or minimise the risk of rural bush fires.

Key considerations

- What risk mitigation is currently in place to reduce the consequences on the four environments? What more can be done to reduce these risks?
- What more can be done to manage these risks through readiness, response or recovery measures?
- What opportunities are there to invest in long-term resilience?
- What opportunities are there to improve the preparedness of the community to recover?

More information



The Guide to the National Civil Defence Emergency Management Plan 2015: Section 17 (Reduction); Section 18 (Readiness); Section 24 (Response); Section 32 (Recovery).

More information about reduction in the welfare context is available on pp. 39-42 of the Welfare Services in an Emergency Director's Guideline [DGL 11/15] on the MCDEM website www.civildefence.govt.nz.

More information about risk tolerance is available in GNS Science General Natural Hazard Guidance, [Acceptable Risk](#).

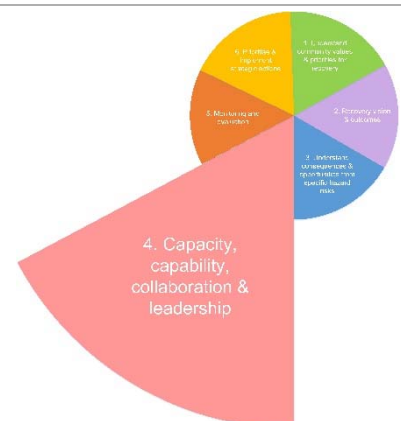
3.5 Step 4: Capacity, capability, collaboration and leadership

3.5.1 Capacity and capability

The CDEM Group and local authorities must identify the resources, capacity and capabilities needed to support recovery activities and strategically plan for recovery.

Factors that influence the scale of Recovery

There are a number of factors that will influence the consequences of emergencies, including:



- Type of event i.e. earthquake, tsunami, flood
- Scale of the emergency
- Community affected
- The geographical area affected
- Multiple or cascading emergencies

Each emergency will require a tailored approach to manage and deliver the recovery.

Every recovery will require a different level and composition of resources, and whilst the Group may primarily plan for emergencies that will have more localised, small-medium scale consequences, they must also identify and establish the resources, capacity and capability that would be needed should the emergency be larger either geographically or in the scale of consequence, or both.

For example, an emergency that has severe consequences on the community over a number of districts is likely to need regional, and often national, support compared to an emergency that results in localised consequences that can be managed by the local authority.

Resources, roles and responsibilities

Experience has shown that recovery structures are not easily 'scaled up', as often the agencies involved, or support needed is well beyond what would be needed for a locally managed recovery.

The roles and responsibilities of key government agencies, non-government agencies, the private sector and other key stakeholders in supporting both the preparedness and the management of recovery, should be defined and pre-determined, allowing their capacity and capability to support recovery activities to be assessed, established and demonstrated.

Recovery requires pre-determined protocols and arrangements to be established between agencies and other key stakeholders before an emergency if they are to be activated quickly and effectively.

It is important to understand the nuances between the recovery requirements for different hazards and risks. For example, recovery from pandemic flu would require different agencies, or a different level of support from agencies, than recovery from a tsunami.

CDEM Groups may need to develop specific recovery plans for hazards or risks that differ from other recoveries, for example, where the level of harm is significant or the consequences are different in nature.

Key considerations

- Are you confident that the planning done to date for recovery has sufficiently identified the capabilities and capacity that is needed to prepare for and manage recoveries of varying scale?
- Has this included local, regional and national government support? Non-government agency support? Support from other CDEM Groups? Support from the private sector or community groups?

- Do you have a mutual understanding of their roles and responsibilities? Do you have the necessary protocols and procedures in place to activate their support?
- Do they have the capacity and capability to provide the level of support needed? Are they able to access resources as quickly as you might need them to?
- Is there any additional training that you need to provide to any individuals or agencies? Can you collaborate with other CDEM Groups to raise capability?

3.5.2 Collaboration and leadership

Role of the CDEM Group

The CDEM Group is responsible for promoting and raising awareness of risks within their area. By educating, influencing and collaborating with the broad range of leaders and decision-makers, they will enable the collective contributions to prepare for, manage and deliver recovery, reduce and manage risks, and grow community resilience.

Collaborating to manage risks

For strategic planning for recovery to be effective it requires the cumulative efforts of leaders within the CDEM Group and beyond, including individuals, groups and agencies within:

- Government Agencies, both central and regional;
- Local Authorities;
- Welfare Services;
- Lifeline Utilities;
- Private Sector;
- Science and Research;
- Community; and
- Iwi

For example, infrastructure and financial strategies within local authorities will have a major influence over any risk reduction investment decisions. Also, policies regarding land use falls under the responsibility of the local authority planning teams, but it is essential for the CDEM Group to have input into, or have influence over, the development of District Plans.

Likewise, lifeline utilities and central government have a significant part to play in managing risk through investment in public infrastructure.

Collaborating to prepare for and manage recovery

Recovery processes need to be pre-planned through an integrated approach by local, regional and national stakeholders, including non-government organisations, community organisations and businesses. Recovery preparedness must include clarification of roles and responsibilities in the recovery context and promote an understanding of multi-agency interdependencies.

Effective coordination of recovery is then based on long-term collaboration, coordination and communication between agencies. Integrated plans and relationships should enable a quick and efficient activation for recovery as required, including local, regional and national arrangements, whilst dovetailing with other related plans, such as business continuity plans.

Key considerations

- Having considered the hazards and risks from a recovery perspective, are you confident that you have strong relationships with all of the relevant leaders whose decisions or influence contribute to risk management, recovery preparedness or management of recovery? e.g. Planning Managers, Chief Finance Officer, Chief Executive of local large employer, local community groups, Chamber of Commerce.
- Are you confident they have sufficient understanding of the risks to understand the impact of their decisions or the level of support they need to provide?
- What more can the CDEM Group and local authorities do to educate, influence and collaborate with these leaders?
- What arrangements and processes have already been prepared? What more could be done prior to an emergency to prepare for recovery?

More informations



For more information on the roles and responsibilities of various agencies and organisations see 'The Guide to the National Civil Defence Emergency Management Plan 2015'.

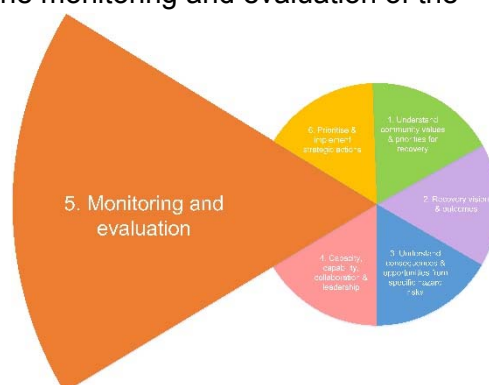
3.6 Step 5: Evaluation and monitoring

3.6.1 Performance frameworks

The CEG is responsible for overseeing the monitoring and evaluation of the CDEM group plan (section 20(2)(c)). For the plan to be effective, it requires the strategic planning for recovery to be robust, therefore, the effectiveness of the strategic planning must also be assessed.

The JC and CEG need to ensure that performance frameworks that provide clear indicators, baselines and targets, are developed and implemented to monitor and evaluate:

- Recovery preparedness; and
- Managing and delivery of recovery



These performance frameworks need to measure and evaluate both *progress* in delivering recovery activities and the *effectiveness* of these activities in achieving the desired outcomes.

Performance measures need to identify what results are acceptable and unacceptable, and need to indicate emerging risks or issues that require action.

It is likely that many performance measures will need to apply qualitative information rather than quantitative data, and some may require baselines to be established on which to measure progress and the resultant impact of improvement actions.

Recovery Preparedness Performance Framework

There are a range of options to monitor and evaluate the effectiveness of strategic recovery planning and recovery preparedness, including:

- Recovery exercises, particularly those that test the limitations of recovery preparedness to maximise learning
- Peer review by other CDEM Groups to share ideas, promote learning and encourage consistency
- Independent review by a third party with relevant recovery experience
- Testing individual components of recovery preparedness, for instance, an assessment of the level of community understanding of risks can be an indication of effective community engagement. Testing individual components can give assurance that all components will come together effectively when applied during a recovery.
- Assurance from emergency services regarding their ability to respond to emergencies based on their performance to other emergencies.

Likewise, following an emergency the hazardscape is likely to have changed, or it will result in a greater level of understanding of the risks. This will trigger the need to re-examine the strategic planning for recovery in relation to the changed hazards and risks, effectively 're-entering' the strategic planning cycle, to establish whether there is further risk reduction measures that can be taken, or whether more can be done to manage these risks and prepare for recovery.

Similarly, as risk reduction measures take effect, or as other risks increase e.g. climate change, or the community changes with the passing of time, the CDEM Group need to monitor and evaluate how this impacts the strategic planning for recovery. For example, at which point will the risk to the community become intolerable? Have the needs and priorities of the community changed due to a changing population?

Key considerations

- Does your current monitoring and evaluation sufficiently indicate areas for improvement in your recovery preparedness? Does it provide the CDEM Group the necessary assurance that recovery preparedness is robust?
- What areas of recovery preparedness do you need to improve, and how can you measure improvement?
- What is your process for monitoring your changing hazardscape, and any changes in the needs and priorities of your communities? What improvements are needed?

Managing Recovery Performance Framework

Performance measures need to measure and evaluate progress with recovery action plans and delivery of immediate, medium and long-term recovery outcomes. These need to consider each of the recovery environments; social, built, economic and natural, and any others that the CDEM Group decides.

The performance framework should be developed pre-emergency, and refined post-emergency to reflect the specific circumstances.

Key considerations

- What do you want to achieve during recovery? Therefore what might you need to monitor across the recovery environments to ensure both progress and delivery of your immediate, medium and long-term recovery outcomes?
- What lead and lag indicators could you use to monitor and evaluate these aspects of your recovery management? What information is likely to be available, or could you establish, to provide either quantitative or qualitative measures?
- Do you need to establish baselines for any of these measures? Can any of them be established pre-emergency?
- What will these measures tell you? What results would be acceptable? What would be unacceptable, and how can these trigger corrective action?



More information

For more information on the roles and responsibilities of various agencies and organisations in monitoring and evaluation see 'The Guide to the National Civil Defence Emergency Management Plan 2015', Section 22 Monitoring and Evaluation

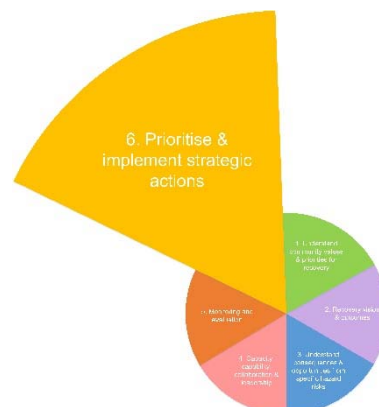
For more information on monitoring and evaluation see the 'About Monitoring and Evaluation' page at www.civildefence.govt.nz where there is a number of resources.

3.7 Step 6: Prioritise and implement strategic recovery actions

Identify areas for improvement

The strategic planning for recovery process needs to compare what is already being done across the CDEM Group areas against what is needed for strategic planning for recovery. This needs to identify areas for improvement across each of the following areas:

- Understand hazards and risks - for example, the CDEM Group may already have processes in place to engage the community on risk reduction measures, but these conversations may need to be extended to consider the consequences on the community from a recovery perspective, and



understand what would be required to recover from these emergencies;

- Recovery vision and outcomes – for example, the CDEM Group are likely to already have recovery outcomes or principles in place, but there may be other opportunities to engage the community to develop them further and ensure they are based on the values and priorities of the community;
- Enabling recovery – for example, the CDEM Group will have identified a number of leaders and stakeholders, but there may be others identified when the hazards and risks are considered from a recovery perspective, and there may be additional protocols and procedures that need to be developed pre-emergency; and
- Monitoring and Evaluation – for example, the CDEM Group will already monitor a number of areas, but the performance frameworks may need to be extended to monitor and evaluate the effectiveness of recovery preparedness and the management of recovery. There may also be additional measures needed to monitor the changing hazardscape and community needs to ensure that the recovery activities continue to align with, and deliver, the long-term aspirations of the community.

Develop an approach to address gaps

Recognising that achieving effective strategic planning for recovery will be an iterative change process, and that there may be a number of actions to undertake over the period of the CDEM group plan, CDEM Groups may need to prioritise their actions for improvement taking into account factors such as:

- Actions that would result in the greatest reduction in consequences for the community, and therefore their ability to recover e.g. risk reduction measures;
- Actions that result in the greatest reduction in cumulative risk from recurring events e.g. recurring floods;
- Actions that address areas for improvement that cover multiple hazards, and therefore benefits community recovery overall e.g. if retreat was a viable option, this would protect the community from those particular hazards;
- Timing of investment and planning decisions e.g. Long-Term Plans, District Plans, Annual Plans;
- Opportunities to work jointly with other agencies or groups; and
- Potential risk of not taking action.

A timeframe for implementing these actions for improvement must be developed, and the necessary funding and resources must be secured, for instance, through the Long Term Planning process.

Measures to monitor and evaluate both progress and the effectiveness of these actions need to be established to ensure that the components of strategic planning for recovery continue to be strengthened.

Record

The CDEM group plan must record for the strategic planning for recovery:

- their strategic actions to support recovery preparedness and recovery management;
- their priorities for action;
- their timeline for implementation; and
- how they will monitor and evaluate progress and improvement.

Implement

To ensure delivery of these actions, the CDEM Group need to ensure a work programme is developed and implemented that details how these actions will be delivered, including who is responsible for deliver and a date by which these actions will be delivered.

Monitoring and Evaluation

The CDEM Group need to monitor and evaluate progress of these strategic actions, and whether these actions are achieving the desired outcomes.

This requires the CDEM Group to ensure a performance framework is developed and implemented to monitor and evaluate:

- Progress of actions against the defined work programme;
- Risks or issues that could impact the work programme, and how these will be managed;
- Whether the actions are effective in achieving the desired outcomes, and if not, have mechanisms in place to better address any areas for improvement.

Section 4 Applying strategic planning recovery outcomes to a specific emergency

Strategic planning for recovery recognises that there are a range of emergencies for which the consequences will vary both in scale and in the geographical area, or population affected, and each will require a tailored approach to manage the recovery.

Common components of recovery such as capacity, capability, leadership, and recovery outcomes are developed during the strategic planning process before an emergency happens. These should then be applied, and tailored, as needed to manage a specific recovery.

For example, strategic planning for recovery should achieve the recovery outcomes described in section 2.3 and shown in the table below. Each outcome should then be applied, and tailored as needed to manage a specific recovery. Examples of this are described below.

Strategic Planning Outcome	How does this support the management of recovery?
Comprehensive understanding of the consequences for the communities from specific hazards and risks, and the opportunities to reduce risk and strengthen resilience	<ul style="list-style-type: none"> • Can any opportunities for investment identified in strategic planning now be realised given the consequences of the emergency, for example, renew or relocation of infrastructure or a change in land use for a particular area? • Has the emergency created opportunities that weren't identified in strategic planning that can be realised now? • Can we utilise the alternative assets, infrastructure or resources identified in strategic planning to meet the needs of the community in the immediate, medium or long-term? • How are consequences on critical assets, infrastructure or resources affecting all areas of the community and recovery environments? For example, how is damage to the national port affecting economy activity and community wellbeing? • Has the emergency changed our understanding of the likely consequences?
The communities are engaged and prepared to adapt, and decision-makers understand what is important to the communities	<ul style="list-style-type: none"> • Is the strategic recovery vision developed in strategic planning still appropriate given the actual consequences of the emergency? Is it still the vision the community want to achieve? • Have community values, strengths, vulnerabilities, needs, and priorities changed as a result of the emergency? • Has the emergency presented an opportunity to build on or start conversations with the community, for example, should we begin a community retreat process? Has the community's level of risk tolerance changed? • How have the things identified as critical to the functioning of the community been affected? How are the actual consequences affecting the community?

Strategic Planning Outcome	How does this support the management of recovery?
The immediate, medium-term and long-term recovery outcomes and a community recovery vision are defined	<ul style="list-style-type: none"> • Are the immediate, medium and long-term recovery outcomes still appropriate given the actual consequences of the emergency? • Work towards these outcomes can begin earlier and happen more seamlessly as we have pre-defined these and how we will achieve them.
The risks are managed through reduction, readiness, response and recovery measures	<ul style="list-style-type: none"> • Have the consequences of the emergency changed the hazardscape? Does this change our understanding of our risks? • Do we need to implement additional or different risk management measures given what we now know about the actual consequences?
The local, regional and national capability to prepare for and manage recovery is readily available, with a clear understanding of roles and responsibilities	<ul style="list-style-type: none"> • What capabilities do we need to draw on for this recovery, for example, spatial mapping, private sector? • Are the pre-defined roles being fulfilled or do we need to prompt people/groups/organisations? • Are there any services or needs that require resources and action that were not identified earlier? Who has responsibility for these?
Collaborative relationships and processes are established, managed and maintained at local, regional and national level	<ul style="list-style-type: none"> • What pre-established relationships do we need to draw on for this recovery, for example, direct connections into central agencies, community development groups, iwi? • Who is the best person to retain these relationships throughout the recovery? e.g. Recovery Manager, Mayor, Chief Executive?
Performance frameworks are developed to monitor and evaluate the progress and effectiveness of recovery preparedness and the management of recovery, and prompts improvement actions to be implemented.	<ul style="list-style-type: none"> • What measures will be applied for this specific recovery based on the performance framework that has been developed? • What information will trigger us to adapt our activities to respond to the changing nature of the recovery? • What has been learned from this recovery? • Was our strategic planning for recovery effective? • Do we need to do anything different in our strategic planning for future recoveries as a result of these learnings?
Local authorities engage business and community leaders to educate them about the risks and actively demonstrate leadership in the management of risk and community preparedness.	<ul style="list-style-type: none"> • What community leaders need to stand up and be visible in this recovery? How can we leverage off their leadership? • What messages do we want them to deliver? What actions do we want them to take?

Section 5 Key terms

Civil Defence Emergency Management

Civil defence emergency management –

(a) means the application of knowledge, measures, and practices that—

(i) are necessary or desirable for the safety of the public or property; and

(ii) are designed to guard against, prevent, reduce, recover from, or overcome any hazard or harm or loss that may be associated with any emergency; and

(b) includes, without limitation, the planning, organisation, co-ordination, and implementation of those measures, knowledge, and practices

Recovery

Recovery involves the co-ordinated efforts and processes used to bring about the immediate, medium-term, and long-term holistic regeneration and enhancement of a community following an emergency”

Civil Defence Emergency Management Act 2002, s4

Recovery activity

Recovery activity means an activity carried out under this Act or any civil defence emergency management plan to deal with the consequences of an emergency, including, without limitation,—

(a) the assessment and ongoing monitoring of the needs of a community affected by the emergency; and

(b) the co-ordination and integration of planning, decisions, actions, and resources; and

(c) measures to support—

(i) the regeneration, restoration, and enhancement of communities across the 4 environments (built, natural, social, and economic); and

(ii) the cultural and physical well-being of individuals and their communities; and

(iii) government and non-government organisations and entities working together; and

(d) measures to enable community participation in recovery planning; and

(e) new measures—

(i) to reduce risks from hazards; and

(ii) to build resilience

Civil Defence Emergency Management Act 2002, s4

Monitoring

Monitoring is a continual process that aims to provide management and stakeholders of an ongoing intervention with early indications of compliance with responsibilities, and progress, or lack thereof, in the achievement of results.

Evaluation	Evaluation is about measuring effectiveness. It compares what is happening against what was intended (goals, objectives and targets) and interpreting the reasons for any differences.
Engagement	Engagement is a process where people come together to participate in decision making on an issue that affects them and their community.