



WAIKATO REGION  
EMERGENCY MANAGEMENT

GROUP

# Group Plan

2018–2023

Mahere o te Rōpū Whakahaere Raru-Ohotata o Waikato



WE ARE ALL CIVIL DEFENCE

# WAIKATO CIVIL DEFENCE EMERGENCY MANAGEMENT GROUP PLAN

## Mahere o te Rōpū Whakahaere Raru-Ohotata o Waikato

**2018 – 2023**

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### Plan Development and Review

This is the third plan prepared by the Waikato CDEM Group. It has been prepared in accordance with the Act and the Director's Guideline on CDEM Group Plan Reviews. The Plan was developed as follows:

1. April 2015 – June 2016 developed by a Waikato CDEM Group working party in consultation with CDEM Members and Partners;
2. 20 June 2016, made available for public submission in accordance with the CDEM Act (Section 52);
3. 28 September 2016, submitted to the Minister of Civil Defence for review and comment in accordance with the CDEM Act (Section 49(1)) (with feedback received on 14 October 2016);
4. 28 November 2016, adopted by the Waikato CDEM Group Joint Committee in accordance with the CDEM Act (Section 52(1) (e)) with effect from that date.
5. The Waikato Group CDEM Plan 2016 – 2021 was significantly amended in November 2017 to incorporate the changes required by the Civil Defence Emergency Amendment Act 2016. It is now a requirement for all Civil Defence Emergency Management Groups to incorporate strategic planning for recovery into their Group Plans. A Director's Guideline – Strategic Planning for Recovery: Director's Guideline for Civil Defence Emergency Management Groups [DGL 20/17] has been produced to assist CDEM Groups with their approach to strategic planning for recovery.
6. 25 January 2018 - made available for public submission in accordance with the CDEM Act (Section 52)
7. 28 March 2018, submitted to the Minister of Civil Defence for review and comment in accordance with the CDEM Act (Section 49(1)) (with feedback received on 11 April 2018)
8. 14 May 2018, adopted by the Waikato CDEM Group Joint Committee in accordance with the CDEM Act (Section 52(1) (e)) with effect from that date.
9. 2 August 2021 minor review in accordance with the CDEM Act s57, to maintain currency of document

The amendments to the Act achieve the following outcomes:

- establish legislative framework for recovery management, by providing statutory powers for recovery managers and by requiring members to engage in strategic planning for recovery
- support a seamless transition from response into the initial recovery phase, by establishing a transition notice mechanism that will make some emergency powers available for a specified period of time (local or national transition period), and
- makes some minor and technical amendments to improve the Act, and consequential amendments to other legislation and the National Civil Defence Emergency Management Plan Order 2015.

*The amendments focus on recovery from small to medium events, however, they are not limited to these types of emergencies. The provision can also be used in a large scale emergency until any bespoke legislation is created.*

The Plan will remain in effect until reviewed by the Group and either amended, revoked, replaced or left unchanged.

In accordance with the CDEM Act (Section 56(1)), this plan will be reviewed and proposed five years from when this plan was adopted (14 May 2023).

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# Executive Summary

This Plan sets out the arrangements for Civil Defence Emergency Management (CDEM) in the Waikato CDEM Group (the Group) and its future intentions over the next five years. The Group includes local authorities, emergency services, lifeline utilities, welfare services and other agencies with a mandated role in the CDEM Act 2002 and National CDEM Plan 2015.

The Group's vision in this Plan **"We are all Civil Defence"** expresses an aspiration that the people, organisations and communities in the Waikato work together to be more resilient to hazards. Being resilient means that collectively we have "the capacity to survive a crisis and thrive in an uncertain world"<sup>1</sup>.

## We are all civil defence



Eight goals frame the Group's approach to delivering this Vision. The approach to delivering these goals is summarised below.

### Build and sustain an understanding of hazards and risks (Section 2)

The Group maintains a register of hazards and applies a risk rating for each hazard considering both the likelihood and consequence of the hazard occurring. The register includes a summary of arrangements in place to manage the hazards and these arrangements are taken into account in determining the risk rating. The highest risk hazards in the region are assessed as drought, pandemic (both animal and human), tsunami and volcanoes (caldera unrest and ashfall).

The Group aims to continually improve its understanding of hazards and risks, such as through ongoing work being done by the Waikato Lifeline Utilities Group to understand the risks that hazards pose to Waikato's lifelines infrastructure. Another area of focus is to provide easy access to, and promote the use of, hazard and risk information by stakeholders and communities in their own emergency planning initiatives.

The 'Strategic Planning for Recovery' Director's Guideline requires the Group Plan to provide for strategic planning for recovery from the hazards and risks in the CDEM Group plan. The approach requires local authorities and other agencies to engage with local communities in order to understand the hazards and risks within their communities, what the consequences may mean for their communities and what support may be needed to help their communities adapt. The local authorities will work collaboratively to prepare for recovery, and the Group Emergency Management Group (GEMO) will coordinate across the Group area.

<sup>1</sup> [www.resorgs.org.nz](http://www.resorgs.org.nz)

### Reduce risks from hazards to acceptable levels (Section 3)

The Group's risk reduction framework considers the implementation of appropriate strategies in three areas:

- **Reducing the likelihood that a hazard will occur**, such as reducing the likelihood of an animal pandemic through biosecurity measures;
- **Reducing the likelihood of exposure of a community** to a hazard, such as land use planning to avoid building in hazard-prone areas; and
- **Reducing the vulnerability of the community** to a hazard such as through warning systems and building standards to mitigate the impacts of a hazard when a community is exposed.

The Group aims to ensure a consistent and comprehensive understanding of 'acceptable risk' to communities. Risk levels are currently expressed through regulatory tools (such as the Building Act) and plans (such as the District Plan). There is an opportunity to better use these plans as a means of communicating and engaging with communities over hazards and risk management.

### Increase community preparedness and ownership (Section 4)

Community engagement is a vital component of the Group's work. Three particular areas of focus are the ongoing development of Community Response Plans for our communities, the preparation for recovery pre-event and partnering more effectively with other community-facing agencies to deliver CDEM messages to communities.

Other components of community resilience that the Group aims to maintain and enhance include the provision of appropriate Civil Defence Centres (CDCs), effective management of volunteers and improved partnering with businesses.

### Enhance capability to deliver an effective response and recovery (Section 5 and 6)

To coordinate an effective CDEM response and recovery, the Group needs to have in place:

- Emergency Operation and Coordination Centres with appropriate facilities that meet the requirements for facilities that are essential to post-disaster recovery;
- The right people – both in terms of capability and capacity – to lead and coordinate the CDEM response and recovery;
- Warning systems to mobilise agencies and communities in the event of a potential or actual hazard;
- Communication systems and processes to ensure all agencies are effectively coordinated; and
- Access to critical resources to support the response and recovery.

### Enhance capability to recover from emergencies (Section 7)

The CDEM Act 2002 was amended in 2016 to strengthen recovery requirements. This included the need to strategically plan for recovery, appoint a Group Recovery Manager and have the ability to give notice of a transition period which allows Recovery Managers to use extraordinary powers if needed to support a seamless transition from recovery into the initial recovery phase.

The 'Strategic Planning for Recovery' Director's Guideline further mandates the requirement for local authorities to engage with local communities to prepare and plan for recovery.

The Group plans to audit its Group Recovery arrangements against relevant recovery related Director's Guidelines and information.

### Maintain effective partnerships (Section 8)

Our CDEM partnerships are outlined in Section 8 of this Plan including Emergency Services, lifeline utilities, welfare services, iwi, volunteering partners and other CDEM agencies (NEMA and neighbouring Groups). The actions in this Plan require the ongoing development and reporting on business plans (Welfare Coordination Group and Lifeline Utilities Group) and the establishment or review of coordination arrangements with other partners.

### Maintain effective leadership, governance and delivery arrangements (Section 9)

The Joint Committee is the governing body for CDEM in the Group. It is established in accordance with the CDEM Act, Section 13 and the *Waikato CDEM Group Constituting Agreement*. The CDEM Act requires Members of the Joint Committee (the local authorities within the Waikato region) to give effect to this Plan.

The Coordinating Executive Group (CEG) provides oversight and decision making in relation to strategic, planning, risk and accountability matters. It plays a pivotal role in coordinating and integrating CDEM Group strategy with local CDEM planning and implementation.

The delivery of Group programmes is supported by the Group Emergency Management Office (GEMO), the administering authority (Waikato Regional Council – WRC), local authorities and our partners.

Proposed actions in relation to these arrangements include the review of the CDEM delivery model, to achieve greater coordination of work programmes, and the establishment of a Group Relief fund.

### **Effectively monitor CDEM outcomes (Section 10)**

The Joint Committee is required under the CDEM Act to monitor and report on compliance within its area and to develop, approve, implement, monitor and regularly review a CDEM Group Plan (this Plan).

The Group has identified the need for improved reporting of progress against all CDEM work programmes, as well as considering more outcome-based progress reporting. The CDEM Act 2002 (*section 20 (2) (c)*) states that the executive group (CEG) is responsible for monitoring and evaluation of the CDEM Group Plan. For the plan to be effective, this will now include monitoring and evaluating the effectiveness of strategic planning for recovery.

### **Action Plan**

The Action Plan in Attachment 2 lists 75 actions that will guide the Group in working towards these goals outlined above. The Action Plan sets out the Group's intentions in terms of what we are going to do in order to achieve our target competency.

Project plans with deliverables, costs and timeframes will be developed to support the development of long term and annual plans that incorporate these actions. The scope and timing of the actions will be reviewed annually as part of Group Members' and Partners' planning and budgeting arrangements.

# 1. Introduction

## 1.1 Plan Overview

### 1.1.1 Purpose

Civil Defence Emergency Management (CDEM) Groups are required to prepare a plan describing local CDEM arrangements and how these arrangements support the national framework for CDEM in New Zealand. (*CDEM Act 2002 – ‘the CDEM Act’*).

The purpose of this Plan is to enable effective and efficient CDEM within the Waikato CDEM Group (‘the Group’) area by:

- Defining the vision, goals and principles for CDEM within the Group area;
- Identifying the hazards that present the greatest risk to the community, and how these risks will be actively managed over time to minimise consequences and reduce risks;
- Defining the principles of operation as to how the key emergency management agencies will work together to prepare for, respond to and recover from civil defence emergencies; and
- Outlining roles and responsibilities and management and governance arrangements.

The CDEM Act requires Members of the Joint Committee (the local authorities within the Waikato region) to give effect to this Plan. The specific actions required to deliver CDEM outcomes will be outlined within the Group Members’ Long Term Plans and annual work programmes, along with Group Partner business and activity plans. Other plans owned by members (e.g. district plans) may also be influenced by this plan.



#### Notes:

The Act defines the ‘CDEM Group’ as:

*“The Joint Committee established under section 12 or re-established under section 22 of the CDEM Act.”*

In this Plan we use the term ‘Joint Committee’ to refer to this statutorily appointed Committee and the term ‘CDEM Group’ (or ‘the Group’) is used to refer to:

*“The consortia of local authorities and Group Partners, including emergency services, lifeline utilities, welfare organisations, Government departments and non-government organisations with a role in CDEM in the region.”*

### 1.1.2 Plan Audience

This Plan has been developed primarily for the CDEM sector, including CDEM Group Members, Partners and other stakeholders with involvement and vested interest in CDEM. This includes the various organisations that have a mandated role through the National CDEM Plan.

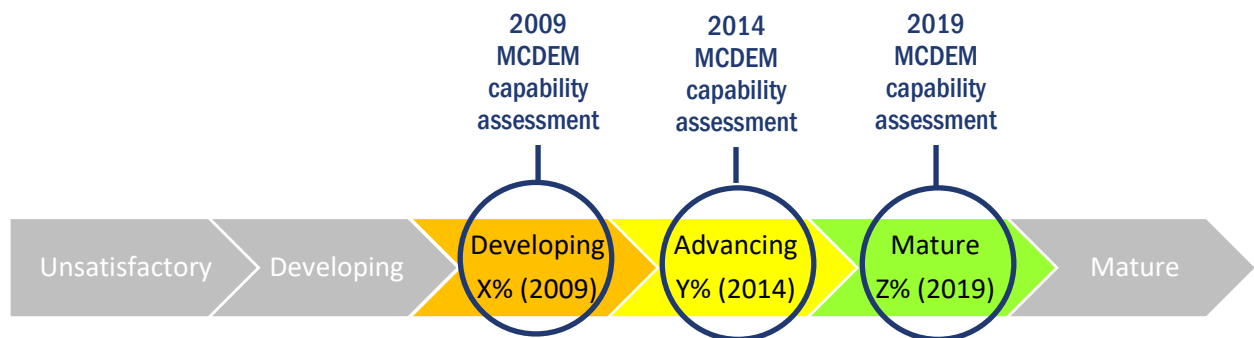
Communities play a very important role in being prepared and being able to get through and recover from emergencies when they happen. This Plan is also a means of informing the communities within the Group of the hazards and risks they face. However, this Plan is not the primary mechanism for communicating with communities, there are a wide range of methods described in this Plan.



### 1.1.3 Background to this Plan Development

In October 2009 the Ministry of Civil Defence and Emergency Management (MCDEM) conducted a capability assessment of the Group. The Group was found to have an adequate baseline capability to respond to localised or short duration emergencies but a general level of concern was expressed about the capability and capacity to respond to larger or longer duration events. The Waikato 2010 CDEM Plan set out an action plan to address the findings of the assessment and the following five years have been focussed on establishing the necessary leadership, resources, arrangements and tools to enable delivery of CDEM objectives.

The second Capability Assessment Report version 2.0 - June 2014, showed that significant progress has been made, with overall scores increasing from 45% to 72%. The report also outlined further areas for improvement which were developed into a Corrective Action Plan. This CDEM Plan presents the Capability Assessment results in the relevant sections and incorporates the agreed Corrective Action Plan targets using the following diagram.



## 1.2 Strategic Framework

### 1.2.1 Our Vision

A theme that threads its way through this Plan is that Civil Defence is not an agency or combination of agencies. It is all the people, communities and organisations in the Waikato Group area, a concept illustrated in Figure 1-1. This concept lies at the heart of our Vision:

**We are all civil defence**



FIGURE 1-1: CIVIL DEFENCE IN WAIKATO

## 1.2.2 Goals and Objectives

The CDEM Group goals are shown in Figure 1-2. The goals are derived from, and expand on, the goals in the National CDEM Strategy 2007. Under each goal, a number of objectives have been identified. These are outlined in each section of the plan.



FIGURE 1-2: CDEM GROUP VISION AND GOALS

## 1.2.3 Guiding Principles

The following principles guide the way in which the Group delivers the vision, goals and objectives outlined above.

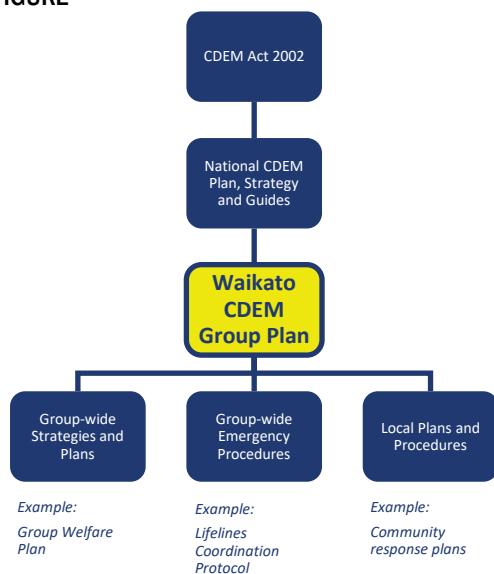
- Promote the sustainable management of hazards.
- Empower communities to achieve acceptable levels of risk.
- Provide for planning and preparation in response to, and recovery from, emergencies.
- Coordinate programmes and activities, and encourage cooperation and joint action, among agencies across the 4Rs
- Provide the basis for the integration of local with national CDEM policies, processes and operations.

(Guide to the National CDEM Plan, 2015).

## 1.3 CDEM Plan Structure and Relationships

### 1.3.1 The National Context

National CDEM legislation, strategy and guidance provide the context for this CDEM Plan. In turn, this Group Plan guides the development of Group-wide and local CDEM strategies and plans. This framework is illustrated in



1-3.

FIGURE 1-3: CDEM PLAN RELATIONSHIPS

### 1.3.2 Plan Structure

This Plan has been structured in a manner consistent with that described in the *Director's Guideline on CDEM Group Planning (DGL09/15)*. The plan structure is shown in Figure 1-4.



**FIGURE 1-4: PLAN STRUCTURE**

## 1.4 The Waikato CDEM Group Context

### 1.4.1 Overview

The Group area is the largest in New Zealand in terms of numbers of local authorities with ten territorial authorities (illustrated in Figure 1-5) and the Waikato Regional Council. Around 10% of NZ's population is resident in Waikato.

The Waikato region covers around 25,000 km<sup>2</sup> stretching from the Bombay Hills and Coromandel Peninsula in the north, to the King Country and Central Plateau in the south. It also borders 5 other CDEM Groups that have hazards that may indirectly impact the Waikato CDEM Group.

The environment varies from built-up urban areas to remote, isolated small communities. The hazards faced are equally diverse with variation in level of hazard risk around the region, notably higher tsunami risks on the east coast, volcanic risks in the southern areas and severe storm and flooding risks in the Coromandel area.



FIGURE 1-5: WAIKATO CDEM GROUP AREA

### 1.4.2 Members of the Waikato CDEM Group

The Group is a consortia of the following organisations that have a function in relation to CDEM:

- Local authorities (11 in total).
- Emergency services (police, fire and health).
- Organisations involved in delivering welfare services.
- Lifeline utilities (broadcasting, fuel, gas, telecommunications, three waters, transport and electricity).

The CDEM function of each organisation is defined by a combination of the CDEM Act and the National CDEM Plan, along with the range of guidelines that make up the CDEM doctrine for New Zealand. The functions of these agencies are further described in each section of this plan.

### **1.4.3 Social Environment**

The Waikato Group's community is briefly described as follows (*Statistics New Zealand 2013 Census*):

- A usually resident population of around 400,000;
- A median age of 36 years;
- 73% of people in this area class themselves as European;
- 21% of people in this area identify themselves as Māori; and
- The average median income for people aged 15 years and over was \$27,280.

These statistics are similar to the national profile, though the percentage of Māori is notably higher (21% in the Waikato compared to 15% nationally).

There are significant differences in economic and social circumstances between communities across the Group and therefore varying ability to provide for everyday needs and prepare for emergencies. Some areas are recognised as having "above average deprivation", including some urban communities within Hamilton City and Waikato, Hauraki, South Waikato and Waitomo Districts, and some rural communities. There are also a number of rest homes and retirement villages that host communities that may be more vulnerable to hazards.

### **1.4.4 Natural Environment**

The Waikato CDEM Group jurisdiction covers an area that has a rich array of natural assets and resources, including:

- 100 lakes, 20 rivers and 1,420 streams;
- 1,150 kilometres of coastline, including iconic west coast and Coromandel beaches;
- 80 per cent of New Zealand's geothermal systems;
- 3 out of 6 of the country's internationally important wetlands (recognised under the Ramsar Convention); and
- Important mineral producing areas providing coal, aggregate, iron sand, gold, silver and limestone.

The area covered by the Group is all within 80 km from the coast, which means temperatures are quite regulated. Sheltered and elevated inland places experience extremes of hot and cold. The north central Waikato region tends to have warm, humid summers and mild winters. The average annual rainfall is 1,250 mm; generally enough for agriculture but with potential for drought during summer. The three areas with the highest annual rainfall figures are the Coromandel Peninsula, Waitomo/Kawhia and Tongariro National Park.

The topography of this area is varied and includes flat floodplains, rolling hills, mountain ranges and steep volcanoes. The Group area can be divided into four distinct topographical areas, characterised by different landscapes – the Taupō Volcanic Zone, the Waikato Lowlands and Hauraki Plains, the Western and Central Hill Country and the Eastern Ranges. The topography has a significant influence on land use, hazards and risks within each area.

### 1.4.5 Built Environment

The largest population centre in the Group area is Hamilton City, with an estimated population in 2013 of 141,612 people (2013 census). The other main population centres are shown in Figure 1-6.

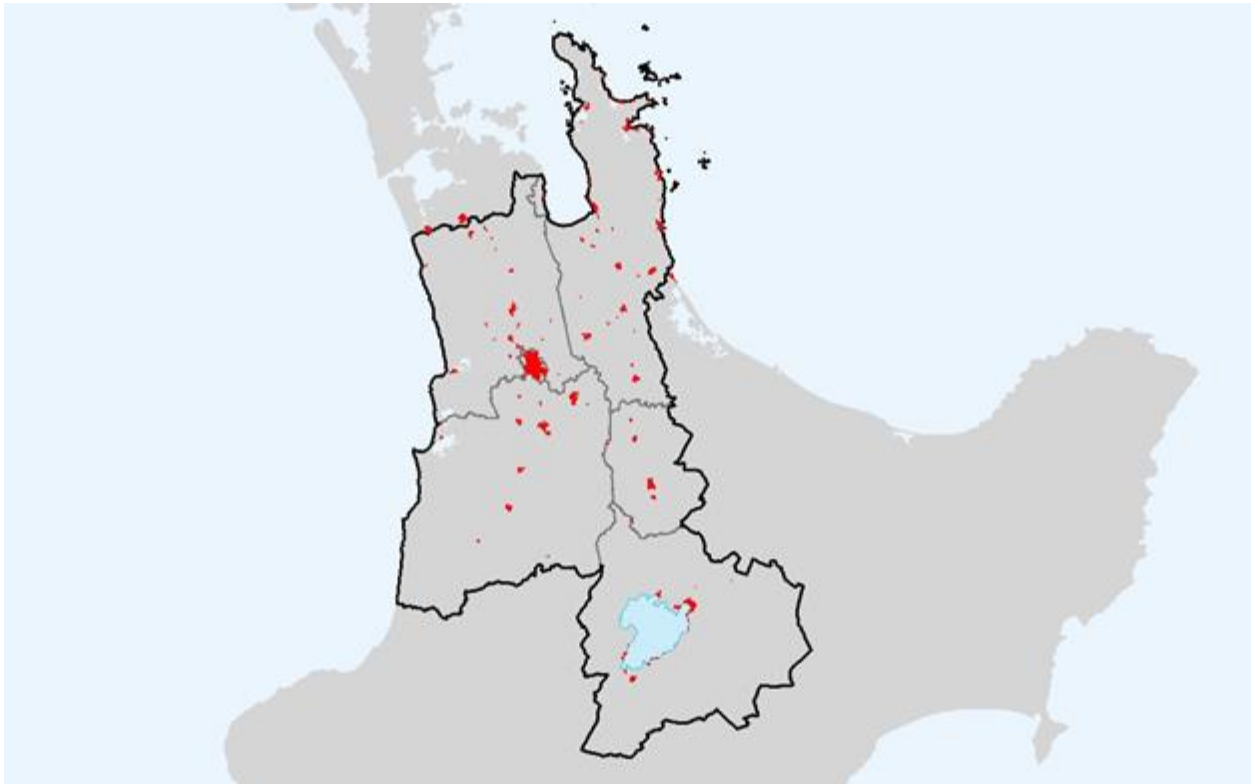


FIGURE 1-6: POPULATION CENTRES IN THE WAIKATO CDEM GROUP AREA

In addition to the main population centres, there are numerous small communities within the Group area. Some communities are isolated, including those in the northern Coromandel Peninsula and those on the west coast such as Raglan and Kawhia. A key consideration of the built environment for the Group is the spread of relatively remote population centres over a large geographic area. Also of note is the spill over of communities from the Auckland Council area, placing additional pressures on the built environment in the northern part of Waikato District.

The area of the Waikato CDEM Group has complex networks of infrastructural assets including 1,700km of state highways and 8,500km of local roads. The region is a major road transport corridor that links Auckland and Tauranga to the rest of the North Island and also a major corridor for the supply of essential services such as electricity generation and distribution, telecommunications networks, rail and gas distribution.

Industry across the Group area produces and processes heavy bulk goods, which are transported to the two busiest ports in the country, along with other freight that passes through the region. Therefore, there are strong links between local GDP and the role of the Group as a major transport corridor. The Waikato region is experiencing strong population growth and ever-increasing freight transport requirements.

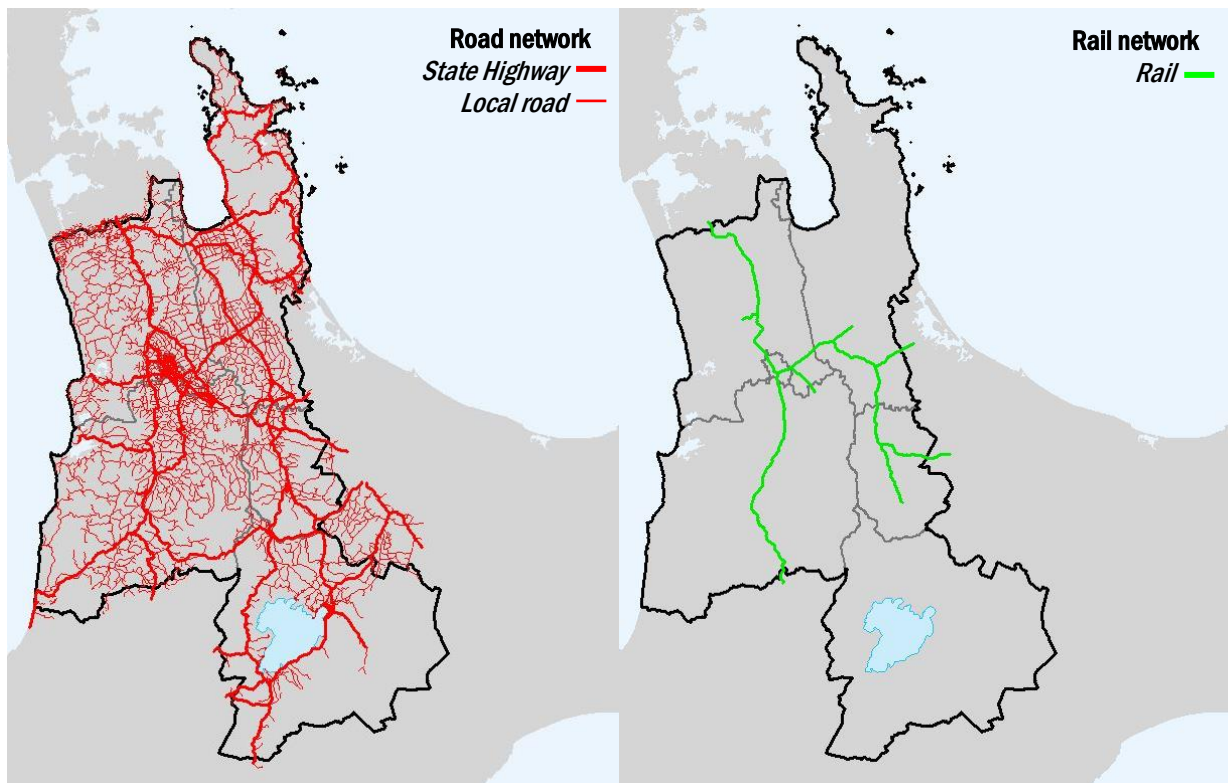


FIGURE 1-7: TRANSPORT INFRASTRUCTURE

### 1.4.6 Economic Environment

During 2014, the Waikato region produced an estimated gross domestic product of \$18.2 billion, or 9% of the New Zealand total. The ten largest industries contributing towards GDP in the Waikato region in 2014 were<sup>2</sup>:

- Dairy farming
- Health care and social assistance
- Property operators and real estate services
- Professional, scientific and technological services
- Education and training
- Electricity and gas supply
- Mining
- Wholesale trade
- Construction services
- Central government administration, defence and safety

Electricity generation and distribution is an important industry at both the regional and national levels. The power generating base of the North Island is located within the Waikato region, with nine hydroelectric stations on the Waikato River, geothermal power stations including Wairakei, Ohaaki, Nga Awa Puria, Ngatamariki, Rotokawa and Mokai, and the Huntly thermal power station. The backbone of the nation's electricity system is located within the Waikato CDEM Group area, with almost 40 per cent of the nation's electricity generation capacity, and it is capable of generating up to 50 per cent of New Zealand's electricity when required<sup>3</sup>.

<sup>2</sup> Source: Infometrics Waikato Regional Economic Profile (2014)  
<https://ecoprofile.infometrics.co.nz/Waikato%20region/Gdp/GrowthIndustries>

<sup>3</sup> Source: Waikato Regional Energy Strategy  
<http://www.waikatoregion.govt.nz/PageFiles/13327/Waikato%20regional%20energy%20strategy.pdf>

While not currently in the top ten industries from an economic perspective, it is acknowledged that tourism is very important for the Waikato CDEM Group area.

### **1.4.7 Summary of the Challenges**

The context described above presents several challenges:

- A large number of organisations engaged in the management of the same risks, including several instances where multiple jurisdictions also need to be considered with the one organisation.
- A large geographic area with widespread small population centres with areas of particularly vulnerable communities subject to a wide range of hazards;
- An increasing population and development pressure on land that is at risk from a number of hazards, including significant spill over from the Auckland Council area;
- A strong local economy that produces a significant proportion of New Zealand's GDP;
- Important national lifeline infrastructure, power generation and transport corridors with relatively widespread resources;
- Potential large numbers of people away from their normal homes (holiday houses, tourists) that need a higher level of support;
- A changing population with increasing numbers of new migrants and a large Māori population that has a special relationship with the Waikato region; and
- Low levels of household awareness of risks and preparedness for emergencies (*NEMA 'Get Ready Get Thru' Surveys*).

In order to respond to these challenges, it is essential that the Group provides an effective and efficient foundation for local authorities, emergency services, lifeline utilities and welfare services organisations to collectively build a more resilient community. It is also important that the assessment of risks within the Waikato CDEM Group area takes into account the variety of environments that these challenges relate to.



## 2. Understanding and Communicating our Risks

### 2.1 Overview

#### 2.1.1 Goal

An understanding of the hazards that could affect the Group area, along with the risk associated with those hazards, is fundamental information that guides the work that the Group undertakes. The Group goal is to:

**Build and sustain an understanding of the hazards and risks that affect the Group.**

#### 2.1.2 The Function of the Waikato CDEM Group

The functions of the Joint Committee in relation to understanding our risks includes:

- Identification, assessment and management of hazards and risks (*CDEM Act Section 17(1) (a) (i)*).
- Consultation and communication about risks (*CDEM Act Section 17(1) (a) (ii)*).
- The identification of hazards and risks that may require national level support and coordination (*National CDEM Plan Section 29(3) (a)*).

The Joint Committee is supported by the Coordinating Executive Group and Group Partner agencies to fulfil these functions (*National CDEM Plan (Section 26(d))*). The roles of these partners are outlined in the National CDEM Plan as follows.

#### 2.1.3 Key Issues and Opportunities

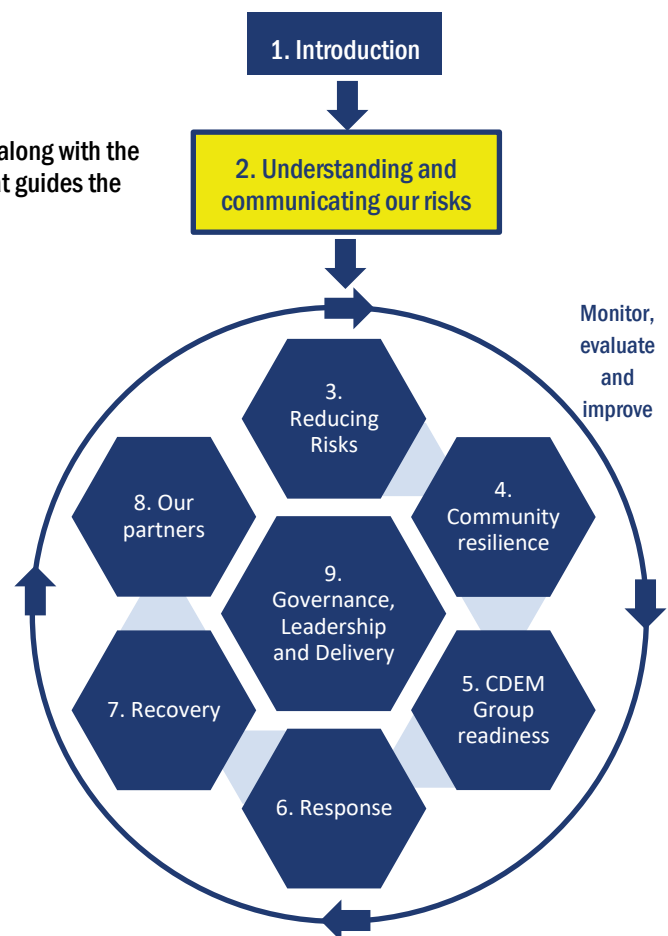
The following key issues and opportunities have been identified:

- Maintaining and completing hazard information:** Information describing the Group hazardscape is incomplete and needs to be kept up to date, requiring ongoing resourcing.
- Improving understanding of risks and mitigations required:** A Group risk register has been established and actions being taken to mitigate risks identified. This needs ongoing review and improvement.
- Improved access to hazard information:** Hazard information is not easily accessible, limiting organisational and community awareness.
- Engaging with communities:** Communities are engaged to educate them on the hazards and potential risks they face so that they are fully informed and can participate in shared decision making concerning the immediate, medium and long term recovery processes identified through strategic planning for recovery activities.

## 2.2 Understanding our Hazards and Risks

### 2.2.1 Objective

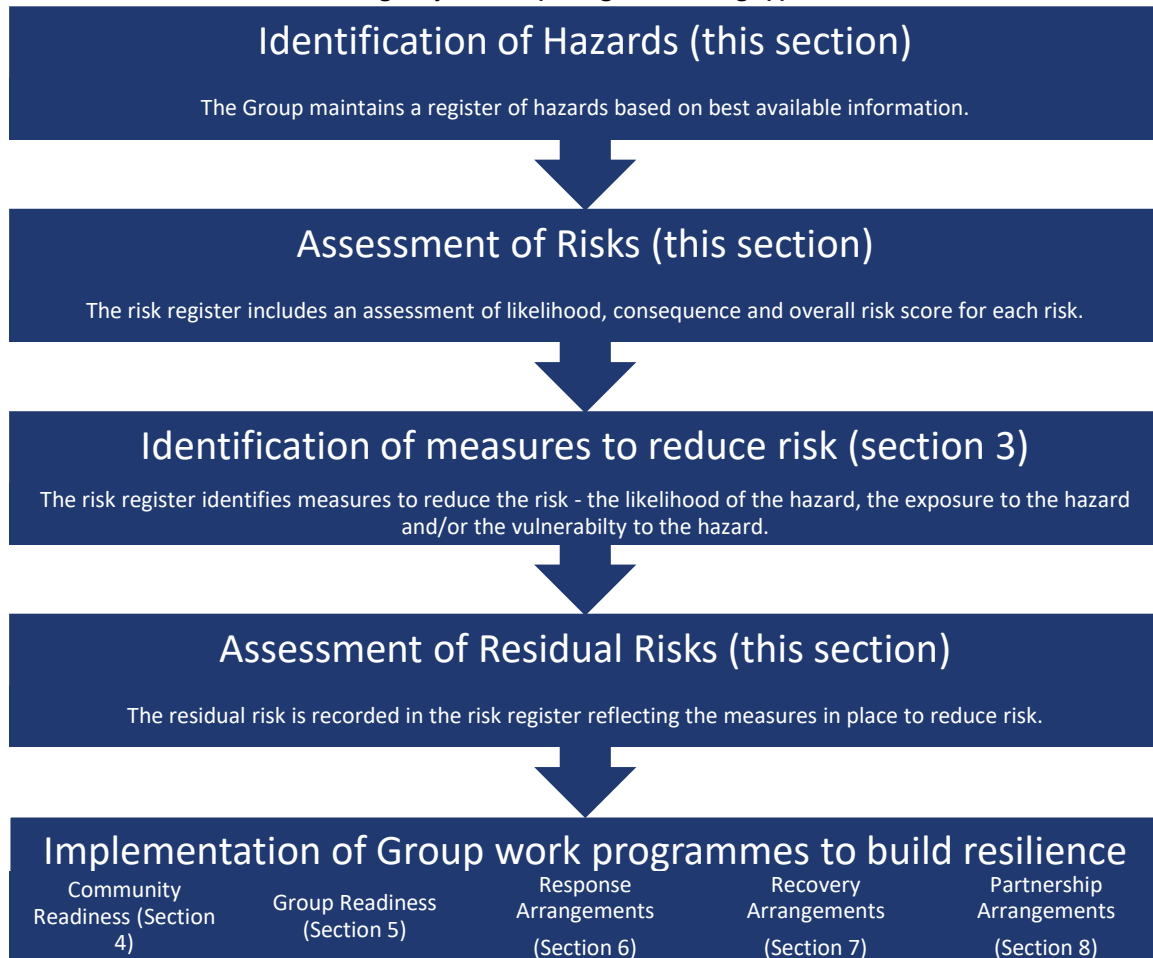
A comprehensive understanding of the hazards that affect the Group and the associated risks and the consequences to inform risk reduction, readiness, response and recovery activities.



## Group-Wide Arrangements

### Overview

The Group area is affected by a number of hazards, which result in risks to our social, natural, built and economic environments. These risks are managed by the Group using the following approach.



**FIGURE 2-1: WAIKATO CDEM GROUP APPROACH TO RISK MANAGEMENT**

The Group work programmes are developed to ensure that planning and arrangements for each hazard are appropriate to the level of residual risk. The prioritisation of resources is collectively agreed and based on the discrepancy between the level of residual risk and planning arrangements in place.

The hazards and risks will be reviewed on an ongoing basis as follows:

- If a new hazard is identified, this will be incorporated into this approach, including an assessment of the associated risk, the identification of measures to reduce that risk, an assessment of the residual risk, and the creation of the projects and/or tasks in the Group work programme that are necessary given the level of residual risk.
- If a measure to reduce a risk changes, the residual risk will be re-assessed and the Group work programme priorities reviewed and amended as agreed.
- If the risk or residual risk associated with a hazard changes, the Group work programme priorities will be reviewed and amended as agreed.

### Identification of Hazards

The Group maintains a register of hazards based on best available information. This information is based on a combination of local hazard research undertaken by territorial authorities and other CDEM partners, along with region-wide hazard research undertaken by the Waikato Regional Council. It is acknowledged that the Waikato CDEM Group relies heavily on the Waikato Regional Council's regional hazards programme to undertake this work, along with individual territorial authority work programmes.

Further details on the hazards that have been identified as presenting a risk to the Waikato CDEM Group area are provided in Attachment 1 of this plan.

There are a number of groups involved in supporting the development of hazard information and efforts to manage hazards. These include:

- Central Plateau Volcanic Advisory Group (volcanic risk on the central plateau)
- Caldera Advisory Group (risk from caldera volcanoes)
- Regional Hazards Forum (all hazards).

### Assessment of Risks

The hazards that could potentially impact the Group each have an associated risk, which is determined by:

- The likelihood of an event occurring.
- The consequence of the event occurring.

The likelihood of an event occurring is described as the probability of it occurring during a person's lifetime (with the average life expectancy currently 81 years).

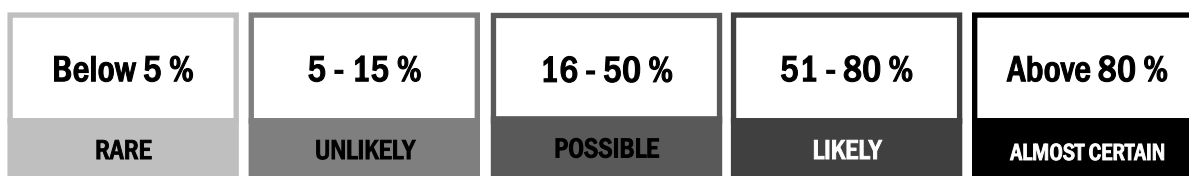


FIGURE 2-2: LIKELIHOOD RATING SCALE

The consequence of an event is based on the expected scale of the event with regard to casualties (injuries and/or deaths), the built environment and the economic environment, and is based on the assumption that the bigger the scale, the greater the consequence. This is a particularly relevant assumption for a CDEM Group risk assessment as it recognises the greater level of coordination that is required for events that have a wider impact.

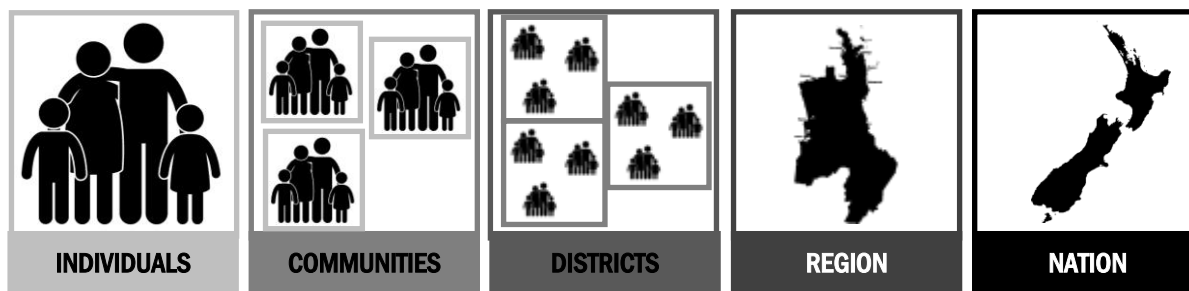


FIGURE 2-3: CONSEQUENCE RATING SCALE

The risk that is assessed for each hazard, based on likelihood and consequence, is then placed in one of six categories. The relationship between likelihood, consequence and risk is shown below, and is taken from the *Directors Guideline for CDEM Groups (DGL 09/15 - CDEM Group Planning)*.

The Group, in preparing the risk matrixes, has also taken cognisance of the fact that some hazards create risks that can have significant secondary consequences that do not immediately impact on the Waikato Region in terms of life or property losses. For example, a Foot and Mouth disease outbreak could have significant consequences for other sectors such as tourism. Similarly, a volcanic eruption and resultant ash cloud could seriously affect air travel domestically and internationally.

		CONSEQUENCE				
		INDIVIDUALS	COMMUNITY	DISTRICT	REGION	NATION
LIKELIHOOD	RARE	Very low	Very low	Low	Moderate	High
	UNLIKELY	Very low	Low	Moderate	High	Very high
	POSSIBLE	Low	Moderate	Moderate	High	Very high
	LIKELY	Low	Moderate	High	Very high	Extreme
	ALMOST CERTAIN	Moderate	High	Very high	Extreme	Extreme

FIGURE 2-4: RISK MATRIX

This approach has been used to assess the risk associated with each hazard that has been identified as having the potential to affect the Group area. This assessment has been completed using the two stage process outlined above, that first considers the risk if all current reduction measures are ignored. The impact of existing reduction measures are then incorporated into the assessment, which could be a plan, process or ongoing aspect of a work programme. An assessment of the risks that remain after the identified reduction measures is then produced and used to guide the Waikato CDEM Group work programme in areas such as community resilience, organisational readiness, response arrangements and recovery.

Hazard	Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
	Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Drought	Possible	Nation	Very high			✓	Possible	Nation	Very high
Pandemic (animal)	Almost certain	Nation	Extreme	✓	✓	✓	Possible	Nation	Very high
Pandemic (human)	Almost certain	Nation	Extreme	✓	✓	✓	Possible	Region	Very high
Tsunami	Possible	Nation	Very high		✓	✓	Possible	Nation	Very high
Volcanic (ashfall only)	Likely	Region	Very high			✓	Likely	Region	Very high
Volcanic (caldera unrest only)	Likely	Region	Very high			✓	Likely	Region	Very high
Earthquake	Possible	Region	High			✓	Possible	Region	High
Infrastructure failure (lifeline)	Almost certain	Region	Extreme	✓	✓	✓	Possible	Region	High
Infrastructure failure (technological)	Almost certain	Nation	Extreme	✓	✓	✓	Possible	Region	High
Land instability (long-term deformation)	Almost certain	Community	High			✓	Almost certain	Community	High
Marine oil spill	Likely	Nation	Extreme	✓	✓	✓	Possible	Region	High
River flooding	Likely	Region	Very high		✓	✓	Possible	Region	High
Severe storm	Likely	Region	Very high		✓	✓	Likely	District	High
Volcanic (caldera eruption)	Rare	Nation	High			✓	Rare	Nation	High
Volcanic (eruption)	Likely	Region	Very high		✓	✓	Likely	District	High
Coastal (surge/flood/erosion)	Possible	District	High		✓	✓	Possible	Community	Moderate
Dam break	Possible	Region	High	✓		✓	Rare	Region	Moderate
Fire (structure)	Almost certain	Community	High	✓	✓	✓	Likely	Community	Moderate
Fire (vegetation)	Almost certain	District	Very high	✓	✓	✓	Likely	Community	Moderate
Hazardous substance incident	Almost certain	District	Very high	✓	✓	✓	Likely	Community	Moderate
Land stability (subsidence)	Likely	Community	Moderate	✓	✓		Likely	Community	Moderate
Land stability (landslide)	Possible	Community	Moderate			✓	Possible	Community	Moderate
Mass casualty incident (land/air/sea)	Likely	Community	Moderate	✓	✓	✓	Possible	Community	Moderate
Terrorism	Rare	Region	Moderate	✓	✓	✓	Rare	Region	Moderate
Geothermal ground activity	Likely	Individual	Low		✓		Likely	Individual	Low

FIGURE 2-5: WAIKATO CDEM GROUP RISKS

*Important note: Within each broad category of risk (high, moderate, etc.) the risks are not listed in order of ranking or priority. Also, the likelihood of an event occurring is described as the probability of it occurring during a person's lifetime (with the average life expectancy currently 81 years).*

## 2.2.2 Actions

The following actions have been identified to address issues relating to our understanding of hazards and risks. Arrangements to manage these risks, and further mitigation actions required, are outlined in Section 3.

Issue / Opportunity	Responses and Actions
Maintaining and completing hazard information	1. Collation of hazard and risk information, gap analysis and data improvement programme.
Improving understanding of risks and mitigations required	2. Ongoing development of the regional multi-hazard lifeline utilities vulnerability assessment project.
	3. Ongoing implementation of the hazard and risk data improvement programme.
Identify the consequences and opportunities from specific hazard risks.	4. Identify the implications for recovery from the agreed priority hazards.

## 2.3 Communicating Our Risks

### 2.3.1 Objective

Communities understand their risks.

### 2.3.2 Group-Wide Arrangements

The Waikato CDEM Group and its Members are required to communicate with their communities so that those communities fully understand the risks those hazards potentially pose to them. The primary mechanisms for sharing risk information are currently:

- Land Information Memoranda
- Project Information Memoranda
- District Plans
- Organisational websites
- Group hazard/risk register (under development)
- Community Response Plans
- Hazard/risk public education
- Asset management plans

The effective application of strategic planning for recovery also requires communities to have a sound knowledge in relation to the hazards and risk they are exposed to. This knowledge enables fully informed shared decisions to be made to manage the risks. This in turn will also enhance individual and collective resilience. Through sound risk and hazard education, the Waikato CDEM Group will also achieve the following;

- Understanding of a community's values and priorities for recovery across the four areas of the built, economic, natural and social environments
- Have clearly defined shared vision and outcomes
- Identify the consequences and opportunities from specific hazards and risk
- Develop capacity, capability, collaborative networks along with trusted leadership

To maintain the effectiveness of hazard and risk education requires robust monitoring and evaluation of the approaches being applied.

### 2.3.3 Actions

The following actions have been identified to improve the communication of hazard and risk information across the Group:

Issue / Opportunity	Responses and Actions
Improved access to hazard information	5. Develop a platform for collection, collation and sharing of hazard and risk information (Waikato Hazards Database).
	6. Promote the availability of hazard and risk information to CDEM Partners, stakeholders and the community.
Communicating risks to local communities	7. Local authorities to utilise risk consequence information to communicate with local communities to assist them to understand the possible consequences on their community and identify their risk tolerance level.
Apply knowledge of hazard consequences	8. Local authorities to develop strategic planning for recovery processes to better inform reduction, readiness, response and recovery (immediate, medium and long term).

## 3. Reducing our Risks

### 3.1 Overview

This section outlines a three-pronged approach to achieving this goal by reducing the likelihood, exposure or vulnerability associated with a hazard.

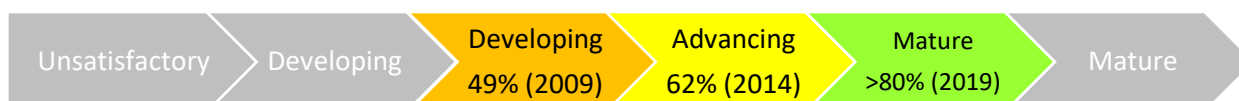
For example:

- The likelihood that a hazard will occur can be reduced for technological and biological hazards – an example is reducing the likelihood of an animal pandemic through biosecurity measures;
- The likelihood of exposure of a community to a hazard can be reduced through measures such as land use planning to avoid building in hazard-prone areas;
- The vulnerability of the community when they are exposed to a hazard can be reduced through a wide range of mechanisms from warning systems to building standards.

#### 3.1.1 Goal

### Reduce Risks from Hazards to Acceptable Levels

Achievement of this Goal is measured through the Risk Reduction section of the Capability Assessment Tool. The 2014 Capability Assessment Report identified that the Group has moved from a developing to advancing level in the last five years. The target capability for this work area is **Advancing** (60-80%) by 2019.



#### 3.1.2 The Function of the Waikato CDEM Group

Some risk reduction strategies are undertaken as part of the Group work programme, but many occur as part of the day-to-day activities of Group Members and Partners. Given the number of agencies engaged in this work and the resulting highly complex operating environment, the Group advocates for a coordinated and consistent approach to avoid gaps and duplication.

The functions of the Joint Committee in reducing risks are:

- Identification and implementation of cost-effective risk reduction (*CDEM Act Section 17(1)(a)(iii)*)
- The reduction of risks that may require national level support and coordination (*National CDEM Plan Section 29(3)(b)*).

The Joint Committee is supported by the Coordinating Executive Group and Group Partner agencies to fulfil these functions (*National CDEM Plan (Section 26(d))*). The roles of these partners are outlined in the National CDEM Plan.

In addition to this support from partner agencies, the risk reduction functions of the Joint Committee are also supported by other organisational functions, including:





- Risk-based decision making in relation to land use and subdivision using the Resource Management Act (e.g. Regional Policy Statement and district plans).
- The provision of hazard and risk information using the Local Government Official Information and Meetings Act (e.g. the provision of LIMS).
- Risk-based building design using the Building Act.

A full list of the legislation that contributes to reducing risk is provided in the National CDEM Plan (Section 89).

### 3.1.3 Key Issues and Opportunities

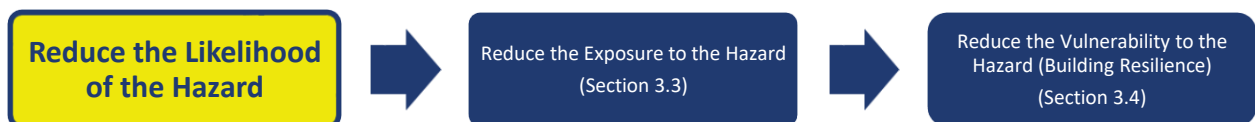
Reducing risk is an integral part of all CDEM agency activities, however it is generally recognised that reducing risk is not well understood or coordinated as a CDEM function – within the Group as well as across New Zealand.

The risk profile presented in the previous section provides a strategic foundation for risk management across the Group area. It identifies the hazards that require the coordination of local authorities, emergency services, lifeline utilities and welfare services organisations to effectively manage the associated risks.

In summary, the following issues and opportunities have been identified in relation to risk reduction:

- Coordination of resilience initiatives:** There are a number of organisations undertaking activities to reduce risks, leading to potential duplication, conflict and contradiction.
- Alignment with local authority planning:** There is poor alignment between local authority planning and other CDEM risk reduction activities.
- Lack of understanding of “acceptable risk levels”:** The Capability Assessment Tool identified particular areas of improvement required in the area of risk reduction programmes and monitoring, and the encouragement of all CDEM stakeholders to reduce risks to acceptable levels. There is a poor understanding of what level of risk is acceptable.

## 3.2 Reducing the Likelihood that Hazards Occur



### 3.2.1 Objective

Risks, where manageable, are reduced to acceptable levels.

### 3.2.2 Group-Wide Arrangements

The Group is engaged in a number of work areas to reduce risks by either removing the hazard, and when this is not possible, reducing the risk (likelihood x consequences) to an acceptable level by the application of suitable risk treatments. The key focus of this work is targeted towards technological and biological hazards (as opposed to natural hazards, the likelihood of which is unable to be reduced).

#### Elimination or isolation

Organisations within the Group undertake work to either eliminate or isolate hazards. Examples of these hazards are:

- Animal pandemic (through the provisions in the Biosecurity Act 1993)
- Human pandemic (through the provisions in the Health Act 1956 and subsequent amendments)

### Reduction in likelihood

Where a hazard is unable to be isolated or eliminated, organisations within the Group undertake work to reduce the likelihood that hazards will occur. Examples of these hazards pandemic, as described above, plus:

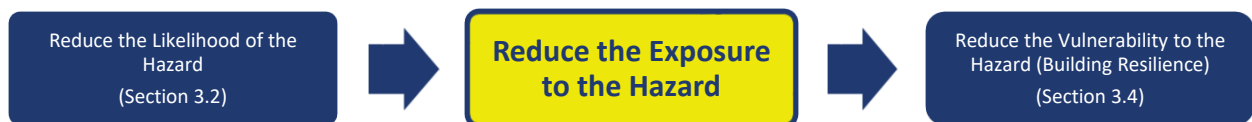
- Dam break (under the provisions in the Building Act 2004)
- Hazardous substance release (under the provisions in the HSNO Act 1996)
- Lifeline infrastructure failure (through the provisions in the CDEM Act 2002)
- Marine oil spills (under the provisions of the Maritime Transport Act 1994)
- Structural and vegetation fire (under the provisions in the Fire and Emergency Act 2017 and related regulations)

### 3.2.3 Actions

The following actions have been identified to either sustain or improve efforts to reduce the likelihood that hazards will affect the Group.

Issue	Responses and Actions
Coordination of risk reduction initiatives	9. Audit the hazard risks identified in the Waikato Regional Policy Statement, Regional Plans, District Plans and Long Term Plans and report their effectiveness as a CDEM mechanism for risk reduction and identifying prioritisation and implementation of strategic recovery actions.
	10. Review risk reduction reporting requirements to CEG to support a more coordinated approach across all agencies.
	11. Implement the risk reduction framework to facilitate a consistent approach to risk reduction across the Group.

## 3.3 Reducing the Exposure to Hazards



### 3.3.1 Objective

Where the hazard cannot be eliminated, the likelihood of exposure to that hazard is acceptable.

### 3.3.2 Group-Wide Arrangements

The Group is engaged in a number of work areas that reduce the likelihood of exposure. This work relates to all hazards (i.e. natural, technological and biological).

#### Decisions in relation to changing land use and subdivision

Local authorities, through provisions in the Resource Management Act 1991, make decisions on land use and subdivision applications, designations and plan changes using decision making processes and guidance provided in the Waikato Regional Policy Statement, Waikato Regional Plan and District Plans.

In some cases this decision making process can include a consideration of what natural hazards a proposal is exposed to and what the decision making response should be to those hazards. Local authorities may be able to require controls on a proposal that reduces the likelihood or consequence of exposure to the hazard (e.g. by requiring building platforms in a new residential area to be outside of a 1 % AEP floodplain). Examples of hazards that are managed in this way are:

- Coastal hazards
- Geothermal ground activity
- Land instability (subsidence)
- Landslide
- River flooding

### Monitoring, identification and containment

Where organisations are unable to eliminate or isolate a hazard, further work is undertaken to reduce the likelihood or consequence of hazard exposure by having systems, processes and resources to assist with the monitoring, identification and containment of hazards. Examples of these hazards are:

- Animal pandemic (through the provisions in the Biosecurity Act 1993)
- Human pandemic (through the provisions in the Health Act 1956 and subsequent amendments)
- Hazardous substance release (under the provisions in the HSNO Act 1996)
- Lifeline infrastructure failure (through the provisions in the CDEM Act 2002)
- Marine oil spills (under the provisions of the Maritime Transport Act 1994)
- Structural and vegetation fire (under the provisions in the Fire and Emergency New Zealand Act 2017 and related regulations)

### Infrastructure

Organisations within the Group develop, maintain and improve infrastructure to reduce the likelihood of exposure to various hazards. Examples of strategies for reducing the exposure of hazards are:

- Coastal (erosion protection and flood protection infrastructure provided by local authorities).
- Drought (water supply infrastructure provided by territorial authorities).
- Infrastructure failure (locate away from hazard prone areas).
- River flooding (drainage and flood protection schemes provided by local authorities).
- Pandemic (human) (health infrastructure provided by health organizations).

*Note: Territorial authorities refers to the ten district and city councils, local authorities include territorial authorities plus the Waikato Regional Council.*

### Warning Systems

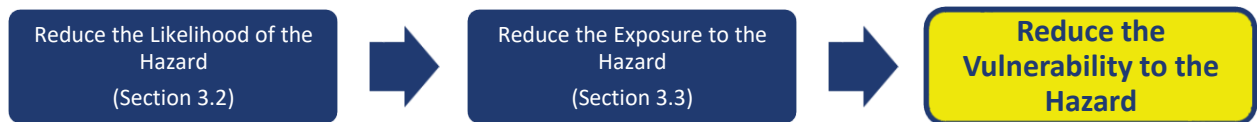
A range of warning systems operate across the Waikato CDEM Group (refer to Section 6.4), which provide the community with an opportunity to prepare for an imminent event. For example, a heavy rainfall warning may allow landowners to temporarily move assets out of harm's way before an expected flood. The effectiveness of warning systems will depend on a number of factors, including the time that is provided to take the necessary actions and the resilience of the system used to provide the warning.

### 3.3.3 Actions

The following actions have been identified that focus on reducing hazard exposure (actions in section 3.2.3 also contribute to this objective):

Issue	Responses and Actions
Alignment with local authority planning.	12. Review processes for integrating local authority planning with other CDEM resilience building activities.

## 3.4 Building Resilience to Hazards



### 3.4.1 Objective

Where exposure to a hazard cannot be avoided, our resilience to that hazard is acceptable.

### 3.4.2 Group-Wide Arrangements

Where hazards are unable to be eliminated, the Group is engaged in a number of work areas that build resilience (or reduce the consequence) of the communities exposed to those hazards.

#### Building controls

Local authorities, through provisions in the Building Act 2004, control the design and construction of new buildings, along with alterations and renewal of existing buildings. In many cases, this control relates to the imposition of requirements that build resilience by reducing the vulnerability of the building to the hazards that it is exposed to. Examples of these hazards are:

- Coastal hazards
- Earthquake
- Geothermal ground activity
- Land instability (subsidence)
- Landslide
- River flooding
- Severe storm (flood, high winds)
- Structural fire

#### Business Continuity Planning

Organisations and businesses undertake business continuity planning to understand the risks that they are exposed to, agree on the actions that may be necessary in the event of an emergency. A wide range of issues are considered during this process, including the impact that an emergency may have on the workforce, essential systems and supply chains. By having a business continuity plan in place and undertaking proactive actions to prepare for an emergency, organisations and businesses can increase their resilience to the hazards they are exposed to.

#### Other work areas outlined in this plan

This plan outlines a number of work areas developed and overseen by the Waikato CDEM Group. These are:

- Understanding and communicating our risks (outlined in Section 2 of this Plan).
- Community resilience (outlined in Section 4 of this Plan (Being Ready – Our Communities)).
- Organisational readiness (outlined in Section 1 of this plan (Being Ready – the CDEM Group)).
- Response arrangements (outlined in Section 6 of this plan (Response Arrangements)).
- Recovery arrangements (outlined in Section 7 of this plan (Recovery Arrangements)).
- Partnership arrangements (outlined in Section 0 of this plan (Partnership Arrangements)).

These work areas all contribute to the building of resilience in our community to the hazards it is exposed to.

### 3.4.3 Actions

The actions to reduce vulnerability to hazards are included in the relevant sections of this plan listed above.

## 3.5 Defining 'Acceptable' Levels of Risk

### 3.5.1 Objective

There is a consistent and comprehensive understanding of acceptable risk.

### 3.5.2 Group-Wide Arrangements

The end result of 'reducing our risks' is to ensure that the characteristics of the hazard, along with the exposure and vulnerability in the community, is acceptable.

The parameters that define an acceptable level of risk are included in a number of documents that are prepared across the Group, many of which are informed by views across the community regarding what is considered acceptable. Some examples are described below.

#### National regulatory tools

Different pieces of national legislation require the development of national regulatory tools. These are useful for the development and description of nationally consistent requirements for risk acceptability (noting that hazard exposure and vulnerability often crosses local and regional jurisdictions, thereby driving a need for national consistency). Examples of national regulatory tools include:

- National policy statements and environmental standards: The Resource Management Act enables the development of National Policy Statements and National Environmental Standards. These documents provide nationally consistent guidance to the regional and local regulatory tools that are outlined below.
- Building Act: The Building Act places requirements on building work, some of which relates to risks that the building is exposed to (e.g. seismic performance, minimum floor levels and wind loads). These requirements define how resilient a building design needs to be to these environmental factors (i.e. the vulnerability of the building is only acceptable if these requirements are complied with).
- Building Code: The Building Act requires the development of the Building Code, which provides a detailed description of building design and construction requirements.

#### Regional regulatory tools

Sitting under the national regulatory tools is a set of regional regulatory tools that are applied across the Group and provide a platform for the consistent description of acceptable risks across the Waikato Region (and the Group). Examples of regional regulatory tools include:

- Waikato Regional Policy Statement: The Resource Management Act requires the development of a Regional Policy Statement by the Waikato Regional Council, which provides a consistent set of objectives, policies and methods for the Waikato Region (and the Group) across activities that are covered by the Resource Management Act. This includes the management of land use and subdivision in response to natural hazards.
- Waikato Regional Plan: The Resource Management Act requires the development of a Regional Plan by the Waikato Regional Council, which provides a consistent basis for decision making with regard to a range of activities that impact on the environment, as well as those being undertaken in the coastal marine area.
- Waikato Regional Council Infrastructure Strategy: The Local Government Act requires the Waikato Regional Council to develop an infrastructure strategy for those assets under its control. Part of the infrastructure strategy involves describing the level of service that is provided by different assets which help to define how risks will be managed (i.e. the risk associated with an asset is only acceptable if the corresponding level of service is met).

#### Local regulatory tools

Sitting under the national and regional regulatory tools is a set of local regulatory tools that are developed and applied by individual territorial authorities which provide a platform for the consistent description of acceptable risk across territorial authorities (i.e. the aspects of resilience where it has been agreed that national or regional consistency is not necessary). Examples of local regulatory tools include:

- District plans: The Resource Management Act requires the development of a district plan by each territorial authority, which provides a consistent basis for decision making with regard to activities such as land use and subdivision.

- Territorial authority infrastructure strategies: As with the Waikato Regional Council, the Local Government Act requires territorial authorities to develop infrastructure strategies, part of which involves describing the level of service that is provided by different assets.

**Long-term, asset management and annual planning**

Local authorities prepare Long Term Plans every 3 years and annual work programmes every year. These plans include a description of the work that will be undertaken over the corresponding period, and how that work will be funded. The decisions on which works are funded helps to define acceptable risk (i.e. a decision to not undertake a piece of work means that the associated risk is accepted by the local authority). Lifeline utility providers also have in place long term asset management plans.

These Long Term Plans, and the Asset Management Plans that support them, have level of service statements that relate to their capability to manage the hazards that they are exposed to or associated with. These levels of service are another way of defining what level of risk is acceptable, for example through targets, emergency response times and service reliability standards.

**3.5.3 Actions**

The following actions have been identified to either sustain or improve the understanding of risk acceptability across the Group:

Issue / Opportunity	Responses and Actions
Lack of understanding of "acceptable risk levels"	<p>13. During the next review periods, review the effectiveness of the Waikato Regional Policy Statement, Regional Plans, District Plan and Long Term Plans as a CDEM mechanism for defining acceptable risk.</p> <p>14. Collate data from local authority preparation for recovery with communities to:</p> <ul style="list-style-type: none"> <li>- understand risk tolerance;</li> <li>- minimise the escalation of the consequences of emergencies;</li> <li>- reduce future exposure to hazards and their associated risk to build resilience;</li> <li>- identify opportunities to regenerate and enhance communities that will meet future needs (across the built, economic, natural and social environments), and;</li> <li>- Support the cultural, emotional and physical wellbeing of individuals and communities.</li> </ul>

## 4. Being Ready – Our Communities

### 4.1 Overview

Community resilience is the ability of individuals, families, businesses and communities to be able to meet their own needs during and after emergencies. Community readiness activities are intended to build community resilience.

Enhancing community resilience is primarily about public education, effective public warning systems and supporting community-level response planning.

#### 4.1.1 Goal

##### Increase community awareness, understanding, preparedness and ownership

Achievement of this goal is measured through the Capability Assessment Tool. The 2014 Capability Assessment Report identified that this has been an area of significant focus and improvement since the last CDEM Plan.

The target capability for this work area is **Mature** (>80%) by 2019.



#### 4.1.2 The Function of the Waikato CDEM Group

The function of the Joint Committee with regard to community resilience covers the following area:

- Public awareness of CDEM (CDEM Act Section 17(1) (g)).
- The provision of timely warnings and public information (*National CDEM Plan Section 29(3) (c)*).
- The requirement for Strategic Planning for Recovery which focuses on communities being well-placed and supported to recover from any emergencies arising from hazards and risks.

The community resilience function of the Joint Committee is enabled by the National CDEM Plan (Sections 109-111), which describes the national approach to CDEM public education and community engagement. In addition to this, the Joint Committee is supported by the Coordinating Executive Group and Group Partner agencies to fulfil these functions (*National CDEM Plan (Section 26(d))*). The roles of these partners are outlined in the National CDEM Plan.

#### 4.1.3 Issues and Opportunities

Increased community resilience through self-preparedness is a key focus in the next five years. There is an identified need to discuss community levels of service expectations in relation to hazards and associated risks before deciding on appropriate actions to reduce or otherwise manage risk.

The Waikato CDEM Group is required to strategically plan for recovery by engaging with the communities of the Waikato Region to ensure they fully comprehend the likelihood and consequences of the risks posed by hazards they are exposed to so that they can prepare effective recovery plans.

The Capability Assessment review in 2014 identified that the monitoring and reviewing of community resilience programmes, and support of volunteer participation are two areas requiring significant improvement.

Other key issues and opportunities identified include:

- a. **Targeted community information:** The need to develop more useful and targeted information to enable communities to plan for themselves (generic information messaging is not considered adequate).
- b. **Effective community engagement:** How to engage with communities and determine each community's 'risk appetite'. This includes trying to overcome the 'it's not going to happen to me' mindset.
- c. **Facilitating active community involvement in CDEM:** How to translate community awareness of hazards into actions, including the coordination of both planned and spontaneous volunteers.
- d. **Facilitating active business involvement in CDEM:** Community recovery relies on the sustainment of business activity and businesses can also play a key role supporting CDEM response and recovery.
- e. **Coordinating engagement initiatives:** There has been limited coordination of initiatives among CDEM Group Members and Partners in the development of public information and awareness initiatives. There are opportunities to work with other organisations (community groups, corporates, etc.), to get the messaging out.
- f. **Standardising and rationalising Civil Defence Centres:** Historical practices have resulted in a wide range of facilities developed and maintained to various standards.

In order to respond to these challenges, the CDEM Group needs to agree how the existing approach to the delivery of CDEM outcomes can be further optimised, with a particular focus on smarter solutions that improve connectivity, coordination and collaboration across all members of the Group.

## 4.2 Community Engagement

### 4.2.1 Objective

The community understands its hazards and the associated risks.

### 4.2.2 Group-Wide Arrangements

The CDEM Group carries out a number of public education initiatives, as detailed in the Group Public Education Plan:

- The website ([www.waikatoregioncdemg.govt.nz](http://www.waikatoregioncdemg.govt.nz)) provides information on hazards, being ready, news and events and CDEM policies and plans.
- Social media is used to generate both pre-event awareness and updates during events via Facebook, Twitter and Instagram.
- Good relationships with print and electronic media are maintained and used as another channel for communication.
- Other local opportunities used for awareness raising and education on self-preparedness include the community newsletters, displays at libraries and events, presentations to schools, community groups, and other relevant stakeholder meetings.

The Group Public Education Plan will be updated and expanded to a 'Community Engagement Strategy'. Particular focus will be given to using opportunities to partner with other agencies involved in community engagement such as Neighbourhood Watch and iwi organisations, to create community resilience building opportunities.

The Group is actively promoting Community Response Planning and is seeing significant interest and growth in this area. Communities regularly adversely affected by weather events have become more engaged and the Group is using this wave of interest to help other communities to see the benefits of Community Response Planning. Geographic communities in rarely affected areas are less likely to see the benefits. The Group is responding to that challenge by supplying Community Response Planning tools to additional existing community group structures (such as Neighbourhood Support). The Group will use the lessons learned from Community Response Planning to determine how best to approach strategic planning for recovery with affected communities.



### 4.2.3 Actions

The following actions have been identified to either sustain or improve community engagement:

Issue / Opportunity	Proposed Actions
Targeted community information	15. Incorporate hazard and risks (including infrastructure risks) as part of community response and recovery planning.
Facilitating active community involvement	16. Use Waikato Hazard and Risk database to prioritise community response planning and vice versa.
Coordinating engagement initiatives	17. Develop and implement a Community Engagement Strategy with a focus on coordinating initiatives amongst key partner agencies.
Develop a strategic planning for recovery framework	18. Engage with other CDEM groups to identify their approaches to strategic planning for recovery. Pilot 2-3 approaches in the Waikato and determine the 'best' approach for the Waikato.

## 4.3 Community Response Planning and Recovery Preparation

### 4.3.1 Objective

Ownership of individual, community and business preparedness.

### 4.3.2 Group-Wide Arrangements

Community response plans aim to provide communities with pre-arrangements to support a self-sufficient community response for at least three days. The CDEM Group has developed three guidance documents to support the development of community response plans:

- Community-Driven Emergency Response Plan Development – Guidance for Communities.
- Community Response Plan Template.
- Guidance for Local CDEM Staff.

The Group also maintains a set of web-based resources to support the sustainment and development of community response plans, along with providing a platform for communities to discuss and share ideas.

The Group will continue to support communities to develop and sustain community response plans and will prioritise this work based on the level of risk and the availability and willingness of community members to progress this work.

Community response planning engagement provides the opportunity to educate communities in their hazards and the risks they are potentially exposed to. Strategic planning for recovery processes when combined with community response planning enables communities to identify opportunities to maximise risk reduction activities while being better prepared to initiate recovery activities more seamlessly following an emergency based on previously agreed vision for recovery, and outcomes of recovery.

### 4.3.3 Actions

The following actions have been identified to either sustain or improve community response planning across the Group:

Issue / Opportunity	Proposed Actions
Encouraging active community involvement	19. Develop a prioritised programme for development and updates of CRPs.
	20. Test, review and maintain community resilience plans.

***Section 4: Being Ready – Our Communities***

	21. Review the CRP framework post the pilots for recovery planning and assess 'the fit' of combining response and recovery planning with local communities.
Effective community engagement	22. Develop a programme to measure community resilience outcomes.
	23. Establish and sustain communication processes between communities and CDEM.

## 4.4 Civil Defence Centres

### 4.4.1 Objective

Appropriate Civil Defence Centre (CDC) facilities are provided.

### 4.4.2 Group-Wide Arrangements

Historically, communities have had identified sites, variously named, including schools and halls, that were the designated Civil Defence Centre sites for their community. This practice has resulted in a wide range of CDC facilities across the Waikato, equipped to varying levels. In 2015/16, a stock take was commenced to assess the current status and level of provision of all CDCs with the intention to rationalise and/or expand as appropriate. The intended approach for future management of CDCs is to:

- Establish a Group wide process for the identification and management of our CDC and contacts.
- Implement a registration process to provide a system for the Group to record the location, facility contacts and resources the facility has.

This approach is detailed in the *Civil Defence Centre Project Plan (December 2015)* and incorporated in the actions below.

### 4.4.3 Actions

The following actions have been identified to either sustain or improve CDC arrangements across the Group:

Issue / Opportunity	Proposed Actions
Standardising and rationalising Civil Defence Centres	24. Complete a stock take of CDC facilities and plan for removal/development.
	25. Implementation of CDC plan.
	26. Establish standardised arrangements for CDC administration and communication arrangements.
	27. Implementation of CDC arrangements Group-wide.
	28. Promote CDC locations appropriate to community requirements.

## 4.5 Volunteers

### 4.5.1 Objective

Community volunteers are capable and available for disaster response and recovery activities.

### 4.5.2 Group-Wide Arrangements

The Group's volunteer management arrangements are outlined in the Waikato CDEM Group Volunteer Management Plan, developed in line with the Directors Guidelines for CDEM Groups (Volunteer Coordination – DGL15/13).

The implementation of the Group Volunteer Coordination Plan will be a key area of focus over the next five years. The Plan identified the need to:

- Engage with community focused groups before, during and after a significant emergency event including during the recovery phase.
- Support our preferred volunteer coordination partner in the identification, recruitment and registration of volunteers.
- Provide specific training for roles where skilled volunteers are likely to undertake specialist roles.
- Hold regular meetings between the Group, our preferred volunteer coordination partner, and relevant community groups to discuss volunteer coordination in an emergency.
- Reduce the number of spontaneous volunteers and increase the number of trained CDEM volunteers.
- Identify and train volunteer coordinators from within existing volunteer groups.
- Test the identification, availability and deployment of volunteers as part of local, regional and national exercise schedules.

### 4.5.3 Actions

Issue / Opportunity	Proposed Actions
Facilitating active community involvement	29. Establish and sustain protocols with volunteer groups for the oversight, mobilisation and coordination of community volunteer capability (including aspects identified in the Volunteer Plan).
	30. Develop and deliver a programme for CDEM trained volunteers in partnership with our preferred volunteer coordination partner.

## 4.6 Business Outreach

### 4.6.1 Objective

Businesses are resilient to disasters and have a defined role in disaster response and recovery.

### 4.6.2 Group-Wide Arrangements

#### Supporting business resilience

The CDEM Group engages with businesses for two key reasons – firstly to support their ability to survive (and thrive) both during and following emergencies. This work builds on the work being undertaken by the Group in the broader community to reduce vulnerability and build resilience, but provides a focus on aspects that are particularly relevant to business.

#### Business support to response and recovery

The second aspect to business outreach by the Group involves working alongside businesses to identify how they can become involved in a response. This includes understanding the available capability of these businesses, for example in terms of trained personnel and equipment/resources, and then developing plans for how those available resources can be deployed in response to an emergency, or during the recovery from an emergency.

At a group-wide level, the focus is on those businesses that have a group-wide footprint. At a local level, the focus is on leveraging off any group-wide engagement, along with those businesses that have a local footprint.

### 4.6.3 Actions

The following actions have been identified to either sustain or improve business resilience across the Group:

Issue / Opportunity	Proposed Actions
Facilitating active business involvement in CDEM.	31. Establish CDEM relationships with large scale businesses.
	32. Establish CDEM relationships with professional bodies and institutions.
	33. Promote and build business engagement with CDEM (e.g.: Waikato Hazard and Risk Information).
	34. Establish and sustain protocols with businesses for the oversight and mobilisation of skills and assets during an emergency response and recovery
	35. Develop evaluation framework to measure the effectiveness of regional and local business engagement by CDEM.

## 4.7 Organisational readiness

An important part of community resilience is the capability and capacity of organisations to respond to an emergency. This aspect is covered in more detail in Section 5 of this plan.

# 5. Being Ready – The Waikato CDEM Group

## 5.1 Overview

Continual improvement of The Waikato CDEM Group readiness is achieved through a combination of strategic planning for recovery informed by a sound understanding of the hazards and assessed risks posed by those hazards. This approach provides the data to guide readiness activities, setting standards and processes. It also highlights potential reduction initiatives, provides effective and efficient response while assisting a seamless transition into the phases of recovery.

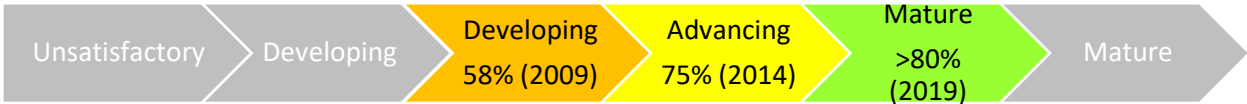
### 5.1.1 Goal

**Enhance capability to deliver an effective, expedient and efficient response and recovery**

Achievement of this goal is measured through the Capability Assessment Tool that shows that the Group has moved into 'advancing' level. The target for this work area is to achieve **Mature level (>80%)**.



#### Enhancing Capability to Manage Emergencies:



#### Organisational Resilience Score:



A specific target has not been established in the Corrective Action Plan developed by the Group. The responsibility for improving organisational resilience lies with the individual agencies that are part of the wider CDEM Group.

### 5.1.2 The Function of the Waikato CDEM Group

The functions of the Joint Committee in relation to Group readiness cover the following areas:

- Personnel capability (CDEM Act Section 17(1) (b)).
- Materials, services, information and other resources (CDEM Act Section 17(1) (c)).
- Plan for and carry out recovery activities (CDEM ACT Section 17(1) (e)).
- The development, maintenance and review of organizational capability (National CDEM Plan Section 29(3) (d)).
- The appointment, development and maintenance of key operational positions (National CDEM Plan Section 29(3) (e)).

The Group readiness functions of the Joint Committee are enabled by several aspects of the CDEM Act, including:

- The establishment of the Group (Sections 12-19).
- The appointment of persons who can declare a state of local emergency (Section 25).
- The appointment of the Group Controller.
- The appointment of the Group Recovery Manager (Section 29) and Local Recovery Managers (Section 30).
- The duties of various organizations (Sections 60-65).

These functions of the Joint Committee are also enabled by the National CDEM Plan (Part 7), which describes planning, capability development, exercising and testing. In addition to this, the Joint Committee is supported by the Coordinating Executive Group and Group Partner agencies to fulfil these functions (*National CDEM Plan (Section 26(d))*). The roles of these partners are outlined in the National CDEM Plan.

### **5.1.3 Issues and Priorities**

**Maintaining capability and capacity** is a particular issue highlighted during stakeholder meetings for the development of this Plan. Each of the 11 local authorities in the region have historically chosen to provide sufficient staff to operate the GECC and EOCs, and to maintain the capability of staff to fulfil key roles (e.g. Controller, Recovery Manager and Welfare Manager). This can be an onerous requirement, particularly for smaller territorial authorities, which has been partly addressed through Shared Service arrangements in some areas (Emergency Operating Areas).

Other CDEM Group readiness issues and opportunities include:

- a. **Development of communication and information management systems:** Investment has been made to communication and emergency information management systems which meet the collective needs of the CDEM Group Member and Partner organisations.
- b. **Clarifying roles and arrangements at different emergency levels:** Greater clarity is required across the Group regarding the transition between levels of emergency events.
- c. **Improving coordination between key response organisations in large-scale events:** There are opportunities to better define and align CDEM procedures across the group for more centralised support and coordination. Another opportunity is to include fast-moving consumable goods (FMCG) and fuel providers into emergency management plans as they are a critical part of response and recovery during major emergencies.
- d. **GECC facilities:** The current Group Emergency Coordination Centre (GECC) does not meet the essential requirements for facilities in post-disaster recovery. However, investment has been approved for a new facility which will enable operations to continue during and after a catastrophic event. This will align the Waikato GECC with the facilities operated by our colleagues around New Zealand. In addition, there is opportunity to build greater efficiencies through the co-location of partner agencies into the new building.
- e. **Arrangements for sharing of Waikato CDEM staff resources:** The capacity for local authorities / local ECCs to sustain a significant response is limited. While support would be provided from across the Group there are opportunities to create formal protocols and agreements for this to occur. It is however acknowledged that the Waikato CDEM Group Constitution supports this occurring in principal.
- f. **Identifying and planning for critical resources:** As identified by the Capability Assessment Tool, there is an opportunity to enhance the processes for logistics and the sourcing of critical resources.
- g. **Organisational resilience of key response agencies:** The Capability Assessment Tool also identified opportunities to strengthen organisational resilience amongst key response agencies.

## **5.2 Emergency Operation and Coordination Centres**

### **5.2.1 Objective**

The Group's EOCs and ECC are maintained at a high level of readiness to support local, regional and national events.

## 5.2.2 Group-Wide Arrangements

The Group's arrangements for EOCs and the ECC are outlined in Section 6.3. However as the development of these arrangements is considered a readiness activity, the Action Plan for both 'readiness' and 'response' is outlined below.

## 5.2.3 Actions

The following actions have been identified to sustain or improve ECC and EOC arrangements across the Group.

Issue / Opportunity	Actions
Development of communication and information systems	36. Develop situational awareness processes.
	37. Implementation and exercising of EMI and other ICT solutions.
Improving coordination between key response organisations	38. Improve and align all Group operational documents based on an agreed minimum requirement.
GECC Facilities	39. Identify and implement a plan addressing the accommodation arrangements for the GEMO/GECC.

## 5.3 Capability and Capacity Development

### 5.3.1 Objective

Capable people are available to support an appropriate level of response.

### 5.3.2 Group-Wide Arrangements

#### Training

As a first step toward improving capability, the Group adopted the *2012-2017 Integrated Training Strategy*, which defined the required capability and competency requirements for Group and identified the approach to the implementation of a training programme. This approach to capability development was subsequently adopted nationally as the Integrated Training Framework and continues to be the basis for training across the Group, along with other targeted training material as required.

#### Exercise Programmes

The Group participates in exercises to reinforce and sustain the training that is delivered, along with providing an opportunity for organizations to build and sustain their capability to respond to scenarios that are particularly relevant. CDEM Members and Partners are expected to arrange their own local exercises, appropriate to their response and recovery functions, and participate in Tier 2, 3 and 4 exercises that would involve their agency.

Tier	Description
1	- Local exercise (individual organisation)
2	- Group exercise (within CDEM Group)
3	- Inter-group exercise (across CDEM Groups, may include NEMA)
4	- National exercise (New Zealand or part thereof, including central government).

TABLE 5-1: EXERCISE TIERS



### 5.3.3 Actions

The following actions have been identified to sustain or improve capability development arrangements across the Group.

Issue / Opportunity	Actions
Maintaining capability and capacity	40. Support the development of the Integrated Training Framework (ITF). Include training for Recovery Managers.
Improving coordination between key response organisations in large-scale events.	41. Develop and implement a training exercise programme to improve CDEM capability development .
	42. Develop the professional capability of professional CDEM staff through goal setting, reviews and training opportunities.
Arrangements for sharing of Waikato CDEM staff resources	43. Develop protocols for sharing of CDEM staff resources across the Group and maintaining key positions during a prolonged activation, including recovery.
Organisational Resilience of key response agencies.	44. Establish a Group business continuity forum for members to review organisational resilience and identify collective areas for improvement. As a first step in the establishment of this forum, members are to provide a copy of their current business continuity arrangements/plans in order to establish a baseline for future improvements.

## 5.4 Warning Systems

### 5.4.1 Objective

Effective and expedient warning systems are in place.

### 5.4.2 Group-Wide Arrangements

The Group's arrangements are outlined in the Group Warning Systems Strategy and these are summarised in Section 6.4 of this Plan. However, as the development of these arrangements is considered a readiness activity, the Action Plan for both 'readiness' and 'response' is outlined below.

### 5.4.3 Actions

The following actions have been identified to sustain or improve warning system arrangements across the Group:

Issue / Opportunity	Actions
Development of communication and information management systems	45. Implement the Warning Systems Strategy

## 5.5 Inter-Agency Communication

### 5.5.1 Objective

Effective and efficient interagency communications are in place.

### 5.5.2 Group-Wide Arrangements

The Group has established and maintains a number of systems and protocols to support interagency communication and these are summarised in Section 6.6 of this Plan. However, as the development of these arrangements is considered a readiness activity, the Action Plan for both 'readiness' and 'response' is outlined below.

### 5.5.3 Actions

The following actions have been identified to either sustain or improve inter-agency communication across the Group. Actions specifically relating to Welfare and Lifeline Utilities communication protocols are included in Section 0.

Issue / Opportunity	Actions
Improving coordination between key response organisations in large-scale events.	46. Improve and sustain interagency operational communications protocols (including the principles of consistent messaging)
	47. Establish and sustain the coordination of interagency public information and social media management.

## 5.6 Resource Coordination (Logistics)

### 5.6.1 Objective

Response and recovery resources are available.

### 5.6.2 Group-Wide Arrangements

Local CDEM agencies and a number of response partners each hold lists of critical resource requirements and how these will be managed (to varying degrees).

### 5.6.3 Actions

The following actions have been identified to either sustain or improve resource coordination across the Group.

Issue / Opportunity	Actions
Identifying and planning for critical resources	48. Review resource requirements for a major Group response.
	49. Develop a Group Logistics Plan for use of the resources <sup>4</sup> .

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<sup>4</sup> in accordance with the Director's Guidelines for CDEM Groups (Logistics – DGL 17/15).

## 6. Response Arrangements

### 6.1 Overview

Response comprises the actions taken immediately before, during, or directly after a civil defence emergency to save lives, protect property and to support communities in the transition to recovery. Response starts prior to an emergency being declared and lasts until the immediate threats to lives, safety and property are over, and systems and processes are in place to manage the recovery process.

#### 6.1.1 Goal

**Sustained capability to deliver an effective, expedient and efficient response**

#### 6.1.2 The Function of the Waikato CDEM Group

The functions of the Joint Committee in relation to response cover the following areas:

- Response to emergencies (CDEM Act Section 17(1) (d)).
- Support to other CDEM Groups (CDEM Act Section 17(1) (f)).
- Being available to activate response arrangements if requested or directed by the National Controller (*National CDEM Plan Section 29(4)*).

The response functions of the Joint Committee are enabled by several aspects of the CDEM Act and National CDEM Plan, including:

- The functions of the Group Controller (*CDEM Act Section 28*).
- The state of emergency concept (*CDEM Act Part 4*).
- General powers in relation to CDEM (*CDEM Act Part 5*).
- General response arrangements (National CDEM Plan (Part 8, response)).

In addition to this, the Joint Committee is supported by the Coordinating Executive Group and our partner agencies to fulfil these functions (*National CDEM Plan (Section 26(d))*). This support is underpinned by other sections in the National CDEM Plan that define the role of these partners.

#### 6.1.3 Objectives

The Group's **response objectives** are:

1. Response plans are implemented effectively during emergencies, in accordance with agreed priorities (see box to right).
2. Response arrangements are monitored and continuously improved.

The issues, priorities and actions for improving response are considered Group readiness activities, and included in Section 5.



#### EMERGENCY RESPONSE PRIORITIES

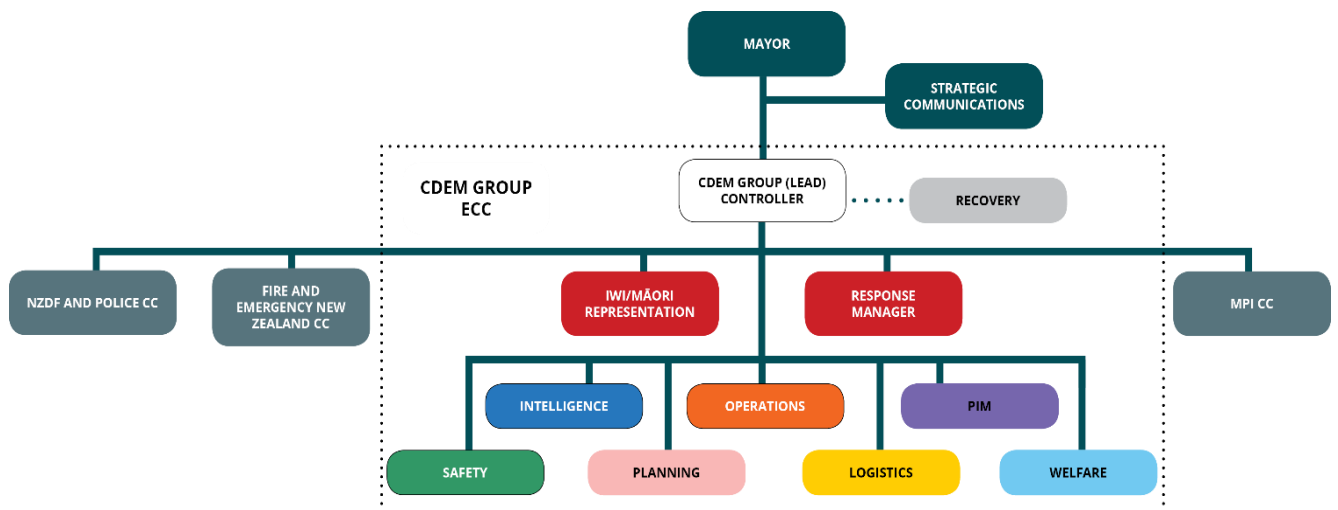
(in no particular order):

- Preservation of life;
- Prevention of escalation of the emergency;
- Maintenance of law and order;
- Care of sick, injured, and dependent people (first aid, medical, and evacuation facilities, and welfare);
- Provision of essential services (lifeline utilities, food, shelter, public information, and media);
- Preservation of governance (continuity of the machinery of government);
- Asset protection, including buildings and historic heritage assets (including structures, areas, landscapes, archaeological sites, and waahi tapu);
- Protection of natural and physical resources; and
- Preservation of economic activity.

## 6.2 Response Structure, Roles and Functions

The National CDEM Plan 2015 outlines the responsibilities of each CDEM Group Partner during response. This Section summarises the key roles of CDEM agencies at a local, group and national level.

The response structure for the CDEM Group is illustrated in Figure 6-1 and is in accordance with the New Zealand Coordinated Incident Management System (CIMS) 3<sup>rd</sup> edition.



**FIGURE 6-1: WAIKATO CDEM GROUP RESPONSE COORDINATION STRUCTURE**

Further information regarding the sub-functions that sit under each of the above functions is provided in CIMS documentation. The roles of EOCs, GECC and NCMC are summarised in Table 6-1. Further detailed arrangements for EOC and GECC operations are provided in Operating Manuals.

## 6.3 Activation of Response Arrangements

Activation of response coordination is on the basis of need, generally as a result of receipt of a warning, or a response to a sudden or gradually escalating event. Activation involves the mobilisation of personnel and EOCs in response to an event. Initial activation of response coordination occurs via CDEM Duty Officers, who maintain a continuous response capacity at both the EOC and GECC levels.

The specific activation procedures for EOCs and the GECC are contained within the respective Standard Operating Procedures of the administering organisation. The nature and extent of the emergency will dictate the functions required in the EOC and the staffing levels necessary to manage them. Due consideration must be given to the advice of emergency services and CDEM Group staff as well as the need for the functions of the EOC and GECC.

### GECC or EOC ACTIVATION STATUS 1 (MONITOR)

GECC or EOC monitors incidents/events that may lead to an emergency or that may require support.  
 Controller informed.  
 Limited staffing.  
 Other CDEM stakeholders informed.  
 Public may be informed (consider public information needs).

### GECC or EOC ACTIVATION STATUS 2 (SUPPORT)

GECC or EOC supports the response.  
 Controller involved.  
 Increased staffing.  
 Other CDEM stakeholders informed and may be involved.  
 Political stakeholders informed.  
 Public informed.

### GECC or EOC ACTIVATION STATUS 3 (COORDINATE)

GECC or EOC coordinates the response.  
 Controller coordinates.  
 Full staffing.  
 Other CDEM stakeholders informed and involved.  
 Political stakeholders involved.  
 Public informed.

### GECC or EOC ACTIVATION STATUS 4 (DIRECT)

GECC or EOC directs the response.  
 Controller directs.  
 Full staffing.  
 Other CDEM stakeholders informed and involved.  
 Political stakeholders involved.  
 Public informed.

TABLE 6-1: ROLES OF CDEM RESPONSE CENTRES

Local Emergency Operations Centres	Group Emergency Coordination Centre	National Crisis Management Centre
<p>Each territorial authority is responsible for maintaining the EOC identified within its jurisdiction according to local arrangements. Some territorial authorities have shared services arrangements for delivery of the EOC functions. EOCs may be activated at the request of responding agencies, the Local Controller or the Group Controller. The role of the EOC is to:</p> <ul style="list-style-type: none"> <li>- Provide permanent coordination facilities for supporting responses within territorial authorities</li> <li>- Provide a base for the Local Controller to exercise coordination and control functions.</li> <li>- Provide a coordination and liaison point for all emergency services, voluntary organisations, territorial authority personnel and Government departments involved in emergency management during significant, multi-agency events.</li> <li>- Collect, collate, analyse and disseminate intelligence and information about the impact of the emergency from all parts of the district.</li> <li>- Control and coordinate the deployment of personnel and material resources throughout the District.</li> <li>- Keep the GECC informed on the emergency situation.</li> <li>- Provide public information management.</li> <li>- Activate CDCs to support affected communities.</li> <li>- Request assistance from the GECC as required.</li> </ul>	<p>The GEMO is responsible for maintaining GECC facilities. An event may be considered regionally significant, whether a state of local emergency has been declared or not. However, the GECC is activated in support whenever an emergency response by the territorial authorities is being initiated through an EOC. The role of the GECC is to:</p> <ul style="list-style-type: none"> <li>- Provide a permanent coordination facility for response to regionally significant events.</li> <li>- Provide a base for the Group Controller to exercise his/her functions.</li> <li>- Collect, collate, analyse and disseminate intelligence and information about the event.</li> <li>- Provide advice to the NCMC on the status and nature of response within the group.</li> <li>- Provide advice to EOCs on response and gathered intelligence.</li> <li>- Liaise between EOCs and the Group Controller.</li> <li>- Coordinate the responses of regional level agencies in support of the local response.</li> <li>- Provide coordination for national resources assigned to the group.</li> <li>- Organise support with other CDEM Groups.</li> <li>- Provide and coordinate resources and facilities for the Group Controller.</li> <li>- Coordinate a group-wide response (communications, database access, expert advice, briefing and liaison).</li> <li>- Collect and evaluate information related to the incident and reporting this to the Group Controller and developing appropriate action plans.</li> <li>- Preparation, dissemination and coordination of public information.</li> <li>- Coordinated liaison / communication with Partner agencies.</li> <li>- Allocate and prioritise facilities, services and materials or resources necessary for emergency management response.</li> </ul>	<p>The NCMC is the Government's facility for coordinating the response to events of national significance and providing national support to Groups for regionally significant events. It is managed, and usually activated by, NEMA (though other agencies may lead Government responses).</p> <p>The NCMC may activate in support of Waikato Group responses at any level, but typically will activate in support of a GECC response.</p> <p>The primary interaction between the NCMC and the Group will be between the National Controller and Group Controller. The role of the NCMC is to:</p> <ul style="list-style-type: none"> <li>- Gather, collate, assess and produce information.</li> <li>- Direct response operations and support, issue public information and conduct media liaison.</li> <li>- Inform and advise the Government.</li> <li>- Where required, coordinate government and non-government resources.</li> </ul>

## 6.4 Warning Systems

### Agencies responsible for issuing warnings

Warnings are the notifications used to advise agencies, authorities, and the public of possible events, enabling them to prepare for a potential or actual emergency. Early warnings and alerts to potential hazards and emergency events enables effective response and timely mobilisation of resources.

There are a number of agencies involved in surveillance, monitoring and assessment of hazards, both at the national and local levels, as summarised in Table 6-2. In addition to this, the Waikato CDEM Group has identified several actions to enhance the capability of warning systems (refer to Section 5.4).

### National Warning System

The National Warning System establishes a process for the receipt of general warnings and communication of CDEM related warning information. NEMA maintains the system to issue civil defence warnings received from responsible agencies. National warnings must be provided by NEMA to CDEM Groups, local authorities, police as well as certain government departments, lifeline utilities and broadcasters.

### Waikato CDEM warning system

The Group is responsible for maintaining warning systems and disseminating warnings to local communities within the Group area. The Waikato CDEM warning system is illustrated in Figure 6-2. Initial notification of hazard events comes from alert notification systems from either the National Warning System, local or Government agencies responsible for warnings and/or directly from local communities. Warnings from the National Warning System are distributed to local authority CDEM Duty Officers. Local arrangements and procedures are then used to disseminate warning messages, activate response and notify other agencies.

Hazard	Agency	Responsibilities
Volcanic unrest or eruption	GNS Science (Geonet)	Develop and disseminate volcanic status (Volcanic Alert Levels) to NEMA and CDEM Groups.
Earthquake	GNS Science	Develop and disseminate seismic activity (magnitude/location) to NEMA and CDEM Groups and public.
Severe weather	MetService	Issue severe weather outlooks, watches and warnings; special weather advisories; severe convection and thunderstorm outlooks; road snowfall warnings; heavy swell and storm surge.
Regional and distal source tsunami	NEMA	Receive tsunami information bulletins, watches or warnings from the Pacific Tsunami Warning Centre and issue warnings to CDEM Groups and the public.
Local source tsunami	NEMA	It may not be possible to warn the public due to short timeframes, so response relies on the public responding to physical warnings.
Public health and pandemic	MoH/DHBs	Develop and disseminate alerts and warnings to NEMA, CDEM Groups and the public.
River flood	WRC	Develop and disseminate regional river flood warnings and flood level predictions.
Rural Fire	Fire and Emergency New Zealand	Develop and disseminate warnings about adverse weather conditions likely to increase the possibility of rural fires.
Animal disease	Ministry for Primary Industries	Develop and disseminate alerts and warnings to NEMA, CDEM Groups and the public
Tides	NIWA	Develop and disseminate warnings about tidal events that are likely to present risks to coastal communities.
Drought	MPI	Identify conditions that may lead to droughts and issue advice to communities and stakeholders.



Hazard	Agency	Responsibilities
Land instability	GNS Science	Issue alerts and warnings.
Any hazards that may lead to or exacerbate an emergency	NEMA and emergency services	Warnings may be issued for any hazard by the National Warning System, and NEMA is responsible for notification to CDEM Groups.

TABLE 6-2: AGENCIES RESPONSIBLE FOR HAZARD WARNINGS

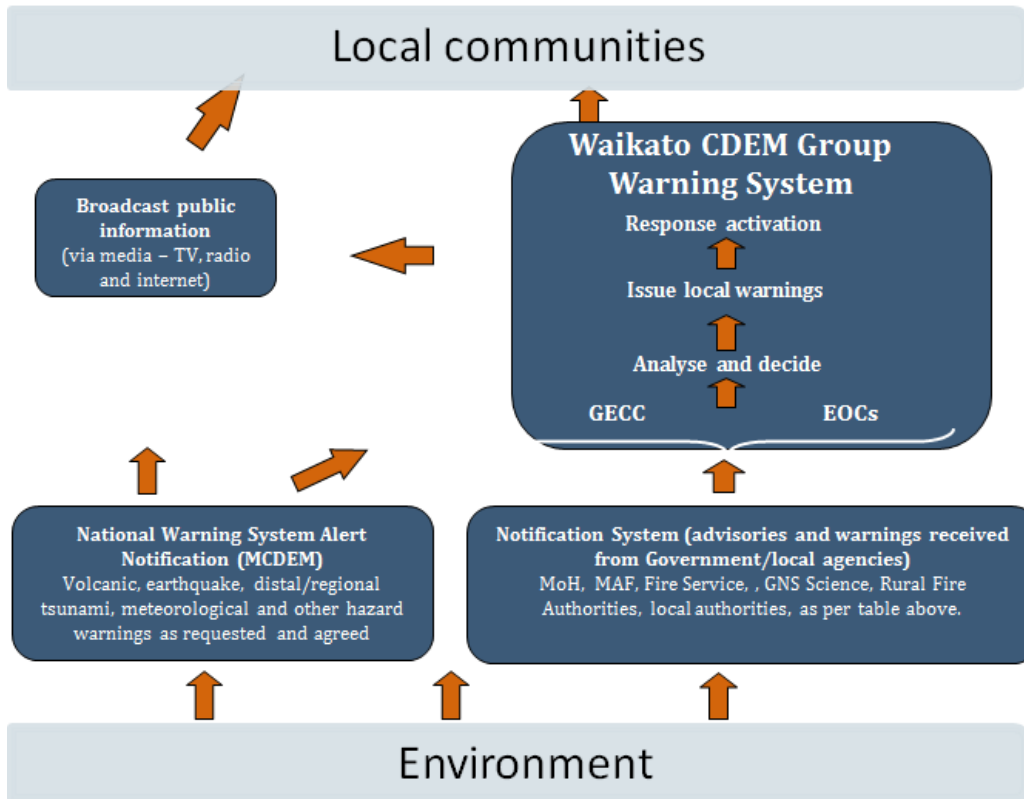


FIGURE 6-2: WAIKATO CDEM WARNING SYSTEM

## 6.5 Declaration Arrangements

### Background

This Plan identifies situations that require consideration to be given to the declaration of a state of emergency. Under the CDEM Act 2002, there are two types of declarations.

1. National declarations - Under section 66 of the Act, the Minister of Civil Defence may declare that a state of national emergency exists over the whole of New Zealand, or any areas or districts, if an emergency has occurred or may occur, and the emergency is, or is likely to be, of such extent that it is beyond the resources of the CDEM Group(s) whose area(s) may be affected by the emergency.
2. Local declarations - Under section 68 of the Act, a state of local emergency may be declared by those persons authorised under the CDEM Act (refer box following page).

While the Lead Agency for a specific function may not change as a result of a declaration, overall coordination becomes the responsibility of the CDEM Group. Declaring a state of emergency gives the Group Controller access to statutory powers under the CDEM Act to protect life and property in emergency events (refer Glossary for definition of emergency events). Local Controllers also gain statutory powers under a declaration.

## Factors to consider before declaring

Factors to consider before making a declaration include:

- Can the emergency be managed through the existing powers of agencies without a declaration being made?
- Can a Controller coordinate without the need for a declaration?
- Is there clear and present danger to the population within the group area?
- Is there a need to evacuate significant numbers of people?
- Are lifeline utility services still functioning e.g. power, roads, water supplies?
- Are any problems perceived if any (or all) of the lifeline utility services are unavailable for several days?
- Is sufficient and correct information available?
- Have other agencies and appropriate persons been consulted in reaching a decision to declare?

## Extension and termination of local declarations

In accordance with Section 71 of the CDEM Act 2002, a state of local emergency may be extended by declaration by a person authorised by the Group or by the Minister of Civil Defence. Cessation of a state of declaration, either through expiry of the declaration or through termination, will also be publicised to stakeholders and the public in accordance with the Public Information Plan. Cessation of the declaration marks the formal end of the execution of the statutory powers of the Controller.

Before a declaration terminating a state of local emergency is made, all arrangements for recovery management should be in place.

*See also: NEMA's publications: Factsheet: Declaring states of local emergency Quick guide to declaring a state of local emergency)*

## AUTHORISATION TO DECLARE

*In accordance with section 25(5) of the Act, the following persons are appointed to make local declarations within all or part of a territorial authority area:*

- The Mayor, or a designated elected member of the territorial authority in the absence of the Mayor.

*Where practicable, the following should be consulted:*

- The Chief Executive Officer of the territorial authorities.
- The Local Controller.
- A representative from NEMA.
- The Group Controller.
- The Chair of the Joint Committee, as required.
- Senior members of the emergency services, as required.
- Local iwi (where appropriate)
- Other agencies as deemed appropriate.

*In accordance with Section 25 of the CDEM Act 2002, the following persons are appointed by the Joint Committee to make local declarations for all or part of the Waikato Group area:*

- The Chairperson of the Joint Committee.

*In the absence of the Chairperson, the following person is authorised, in order, to undertake this function:*

- The Deputy Chairperson of the Joint Committee.

*In the absence of the Chairperson and Deputy Chairperson, the following persons are authorised to undertake this function:*

- Any other Member's representative on the Joint Committee.

*Prior to making a declaration for all or part of the Waikato Group area, where practicable, the person authorised to declare should consult with:*

- The Group Controller.
- Persons appointed to make local declarations within territorial authorities.
- Local Controllers.
- CEOs of affected Councils.
- A representative from NEMA.
- Senior members of the emergency services, as required.
- Other agencies as deemed appropriate.

*If at any time it appears to the Minister of Civil Defence that an emergency has occurred or may occur in the area and a state of local emergency has not been declared, the Minister of Civil Defence may declare a state of local emergency for that area.*

## 6.6 Emergency Communications and Information Management Systems

### 6.6.1 Information Management Systems

In the CDEM context, information management systems are those systems that are used to receive, process and disseminate all information in support of emergency response activities. The CDEM Group will adopt any National system to ensure inter-operationality across the Group.

### 6.6.2 Telecommunications systems

The primary means of emergency telecommunications within the Group is land and cellular telephone systems. In case of failure of these primary systems, alternative telecommunications systems available in the GECC and EOCs include:

- HF (State Services Band), some territorial authorities and the GECC.
- Fleetlink maintained by GECC (all local EOCs and the GECC have Fleetlink capability).
- Satellite communications (five of the six local EOCs and the GECC have Satellite capability)
- Amateur radio provision is maintained by the GECC.

CDEM telecommunications systems must be able to function in both day-to-day and emergency conditions. The order of preference for communication methods within the group during responses is as follows:

1. Email.
2. Voice over the public switched telephone network.
3. Voice over HF or VHF radio.
4. Satellite phone

Specific arrangements for the Group telecommunications and information management systems are documented within the local EOC and the GECC Operating Manuals and communications plans.

### 6.6.3 Public information management

Public information management (PIM) during an emergency involves collecting, analysing and disseminating information to the public. It promotes effective leadership and decision-making, and enables the people affected by the emergency to understand what is happening and take the appropriate actions to protect themselves. The primary responsibilities of Public Information Managers are set out in the Group Public Information Plan.

## 6.7 Stakeholder Coordination during a Response

### 6.7.1 Lifeline Utility Coordination

Coordination of lifeline utility information and response is a key function of the GECC and EOCs. The Group's Lifeline Utility Coordination arrangements are outlined in the *Group Lifelines-CDEM Coordination Protocols*, developed in line with the Directors Guidelines for CDEM Groups (Lifelines Utilities – DGL16/14).

The Group maintains the appointment of the Lifeline Utilities Coordinator, who is also a CDEM professional based at the Group Emergency Management Office. To support lifeline utility coordination processes, utility providers are expected to be able to provide the following information where possible:

- The scale and extent of event impact on networks;
- Major disruptions experienced, including location and number of users affected and estimated restoration times;
- The nature and locations of immediate actions that require the support of access and tasking prioritisation;
- Alternative solutions available to users where appropriate;
- Precautions, and public information to be promulgated; and
- Requests for support or specific information.

Further information regarding the coordination of lifeline utilities by the Group outside of a response (through the Waikato Lifeline Utilities Group) is provided in Section 5.6.

### 6.7.2 Welfare Coordination Group

While welfare services management takes place across the 4Rs, the actual provision of welfare services begins in response, and continues into recovery.

During a response, communities are affected differently, the Group welfare services response requires coordination of multiple welfare services agencies to support communities affected by the event. The mechanism for this is through the *Waikato Welfare Coordination Group* (established in line with the *Director's Guidelines for CDEM Groups and agencies with responsibilities for welfare services in an emergency (Welfare Services in an Emergency - DGL 11/15)* or local welfare committees, who are responsible for the delivery of welfare services. It is coordinated by the welfare manager at either group or local level.

Further information regarding the coordination of welfare services by the Group outside of a response is provided in Section 0.

## 6.8 Delegated Authorities, Functions and Powers during an Emergency

The Joint Committee has legislative responsibilities to appoint Group and Local Controllers to lead a CDEM response. The appointment process, authorities, functions and powers associated with these roles are outlined in this Section. The implementation of the outcomes detailed in this Section will be achieved through a revision of the *Waikato CDEM Group Controller Policy*.

### 6.8.1 The Role of Controllers

Coordination Centres serve as the primary location for a council, agency or organisation to carry out all or some of the functions of coordinating operations, including planning, developing intelligence, gathering and managing resources, providing information and warnings to the public and ensuring the welfare needs of those impacted (refer Section 6.2). The person with overall responsibility for coordinating the emergency response at each level, will ordinarily operate out of a Coordination Centre, and is referred to as the National, Group or Local Controller.

During a response, controllers in the Group are tasked, in accordance with the Group Controller Protocol, to establish priorities, objectives and action plans intended to ensure a response is coordinated, resources are appropriately allocated and necessary intelligence is shared across all response or support entities involved in an effective, efficient and expedient manner best suited for the needs of the community.

During a state of national emergency, and in accordance with the CDEM Act (Section 28(4)), the decision of controllers within the Group needs to be consistent with any priorities for the use of resources and services that have been determined by the National Controller.

To effectively support this task, controllers, both at the Group and Local level, must be engaged in the planning and implementation of activities which prepare the community to respond effectively to any emergency. In addition, they should also be engaged in reduction and recovery initiatives as an advocate for CDEM.

Local and Group Controllers will ensure that all requests for national level resources such as urban search and rescue and support from the New Zealand Defence Forces will be directed through NEMA.

### 6.8.2 The Functions and Powers of Controllers

The functions of the Group Controller are defined by the CDEM Act (Section 28). The Act provides controllers with a range of powers in the event of a declaration of a state of emergency, including:

- Section 78 (Power of entry to obtain information in urgent cases)
- Section 86 (Evacuation of premises and places)
- Section 87 (Entry onto premises)
- Section 88 (Closing of roads and public places)
- Section 89 (Removal of aircraft, vessels, vehicles, etc.)

- Section 90 (Requisitioning powers)
- Section 91 (Power to give directions)
- Section 92 (Power to carry out inspections etc.)
- Section 94 (Power to enter into contracts)

In addition to these functions and powers that are provided directly to the controller, the CDEM Act (Section 85) also provides the Group (through the Joint Committee) with a number of powers. These powers, as authorised by the Act, have been delegated to the Group Controller.

### **6.8.3 The Appointment of Controllers**

The power to appoint the Group Controller and Local Controllers is provided by the CDEM Act (Section 26 and 27). In addition to this, the Group has adopted a Controllers Policy to provide further details on the appointment process for both the Group Controller and Local Controllers. Further details are provided in the following sections.

### **6.8.4 Waikato CDEM Group Controller**

The Group Controller, a full-time dedicated resource within the Group, is the head of the Group response organisation and has two key functions:

1. To lead the coordination of the planning and implementation of activities which will prepare the community to respond effectively to any emergency
2. To lead, direct, and coordinate all resources as necessary to respond effectively to the impact of a disaster during a state of emergency.

As noted above, the appointment of the Group Controller is required by the CDEM Act (Section 26 (1)).

The Joint Committee delegates the authority to make financial decisions on behalf of the Group during an emergency (as defined by the CDEM Act (Section 4)) for a regional event for all resources and services under the control of the Group Controller to the Group Controller.

In accordance with the CDEM Act (26 (4)), the authority to replace the Group Controller or Deputy Controllers during a state of emergency has been delegated to two Joint Committee representatives, being in order of preference the:

1. Chair and Deputy Chair of the Group;
2. In the absence of the Chair and/or Deputy Chair, other members of the Joint Committee.

Where practicable, this delegation should be exercised by the same Joint Committee Member representatives who were responsible for the declaration.

### **6.8.5 Local Controllers**

The CDEM Act (Section 27 (1)) allows local controllers to be appointed. Within the Waikato CDEM Group, Local Controllers are appointed to direct or coordinate the response to an emergency at the local level.

Where these appointments are made, the functions and powers available to local controllers are derived from those provided to the Group Controller by the CDEM Act, but with the following important distinctions:

- Local Controllers are authorised to exercise the functions and powers only within the territorial authority(s) to which they are appointed (see Tiers below); and
- Notwithstanding the Local Controllers mandate to direct or coordinate a local emergency (declared or not), the Local Controller must follow any direction given by the Group Controller during an emergency (Section 27(2)). Circumstances where this may apply are outlined in 6.8.6 below.

The Group has decided to appoint local controllers using a system of 3 tiers:

- Tier 1: Controllers approved to act as controller for all territorial authorities (subject to the formal endorsement by each territorial authority) and as deputy for the Group Controller.
- Tier 2: Controllers approved to act as controller for all territorial authorities (subject to the formal endorsement by each territorial authority).
- Tier 3: Controllers approved to act as controller for a specific territorial authority.

To enable this approach, each territorial authority must formally endorse (by way of council resolution) all Tier 1 and 2 local controllers as a potential local controller for that territorial authority as well as their specific Tier 3 controller where this applies.

This approach to local controllers in the Group has been developed as an efficient approach to the sustainment of competency across the Group.

### **6.8.6 Relationship between the Group and Local Controller during an Emergency**

The interaction between a Group and Local Controller is a critically important interface in the CDEM environment. Knowing the boundaries of responsibilities before, during and after an emergency is essential to ensure an effective response.

The responsibilities of the Group Controller in a response (declared or not) are generally more strategic in nature, working mostly with command staff or senior management of agencies or organisations with regional response or support obligations. The Group Controller operates out of the Group Emergency Coordination Centre (GECC).

The Local Controller's responsibilities are to address the needs of a specific community, working directly with agencies and organisations responsible for local emergency response or support. The Local Controller operates out of the local Emergency Operations Centre (EOC).

In most cases the Local Controller will be the primary individual responsible for providing direction or coordinating instructions during a CDEM emergency. Working with the staff of the EOC, the Local Controller determines what must be achieved and in some cases exactly how it will be done. Where it is required the Group Controller can activate the GECC to support the Local Controller. The GECC will provide such things as advice, situational awareness, and/or source technical input where requested (refer to Figure 6.3).

However, where the emergency requires broader coordination due to such things as multiple council/agency involvement, complexity of response or magnitude of impact, the Group Controller may assume primary control at the regional level. In these cases the Group Controller will provide direction or coordinating instructions in the form of strategic priorities and objectives to the Local Controllers. In turn, the Local Controllers develop local strategies and tactics to deliver on those objectives. In these circumstances, the Local controllers are providing direction or coordination at the local level on behalf of the Group Controller (refer to 6.4). The Group Controller also serves as the primary contact or liaison with central government, taking direction from the National Controller where required.

### **6.8.7 Schedule of Controllers**

A current schedule of Local and Group Controllers is available at [www.waikatocivildefence.govt.nz](http://www.waikatocivildefence.govt.nz).

### **6.8.8 Controller Financial Delegations**

The existence of a declaration of an emergency is not necessarily an indication of the size or complexity of an incident, merely the fact that certain powers may or may not be required by a Controller. Noting this, reimbursement of costs from the New Zealand government for certain response actions (e.g. provision of welfare) does not require a declaration of a state emergency nor does the lack of a declaration negate the appointment of a Controller to manage the emergency (noting that for a Controller to use powers a declaration must be in force).

When formally placed in control of an event by the relevant local authority Chief Executive Officer a Controller is accountable for the actions carried out and the expenses incurred, regardless of whether they are using the powers conferred upon by the CDEM Act 2002 or not. Where placed in control of an event, councils must provide Local and Group Controllers with uncapped financial delegations to manage emergency events (as defined in the act), declared or otherwise, within their area. This delegation should apply to all Tier 1 and 2 Controllers and the specific Tier 3 Controller in the case of a council where they exist. This does not limit the right of a council to impose a lower delegation for business as usual activities.

However, to ensure oversight of expenditure during an emergency, each Controller is required, over and above any local finance protocol, to report ongoing total expenditure to the applicable CEO and also, in the case of local controllers, to the Group Controller at predefined increments.

FIGURE 6-3: CONTROLLER RELATIONSHIP (LOCAL EMERGENCY)

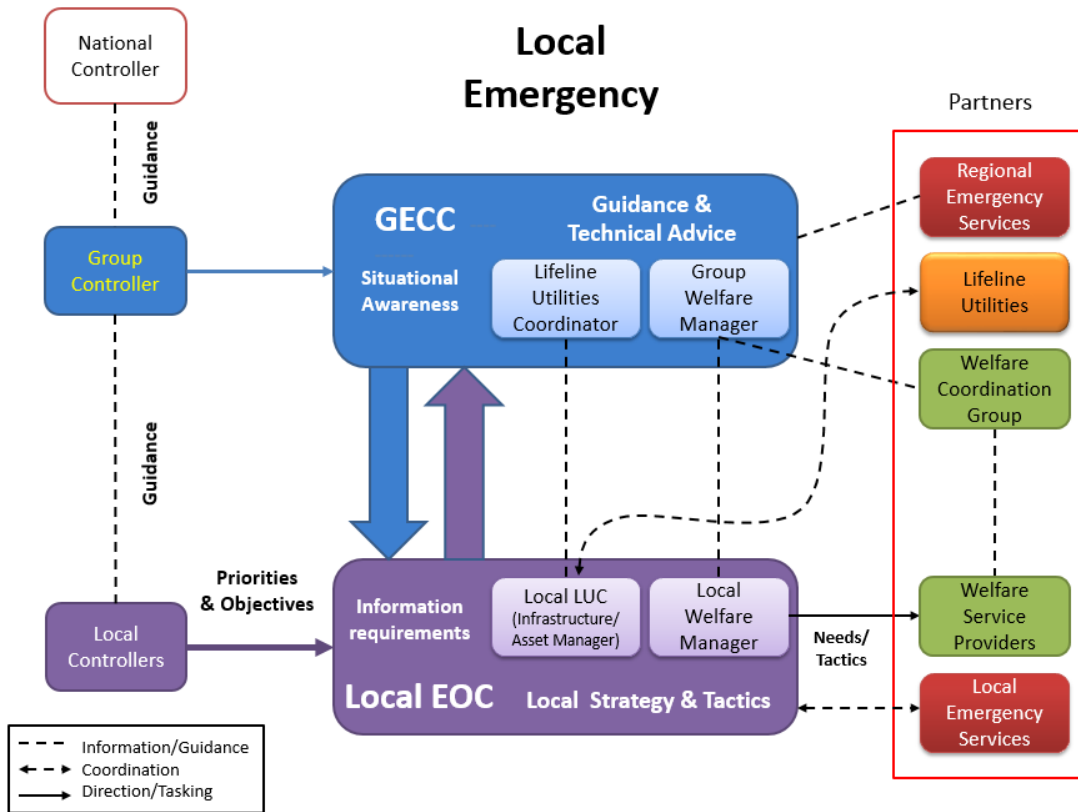
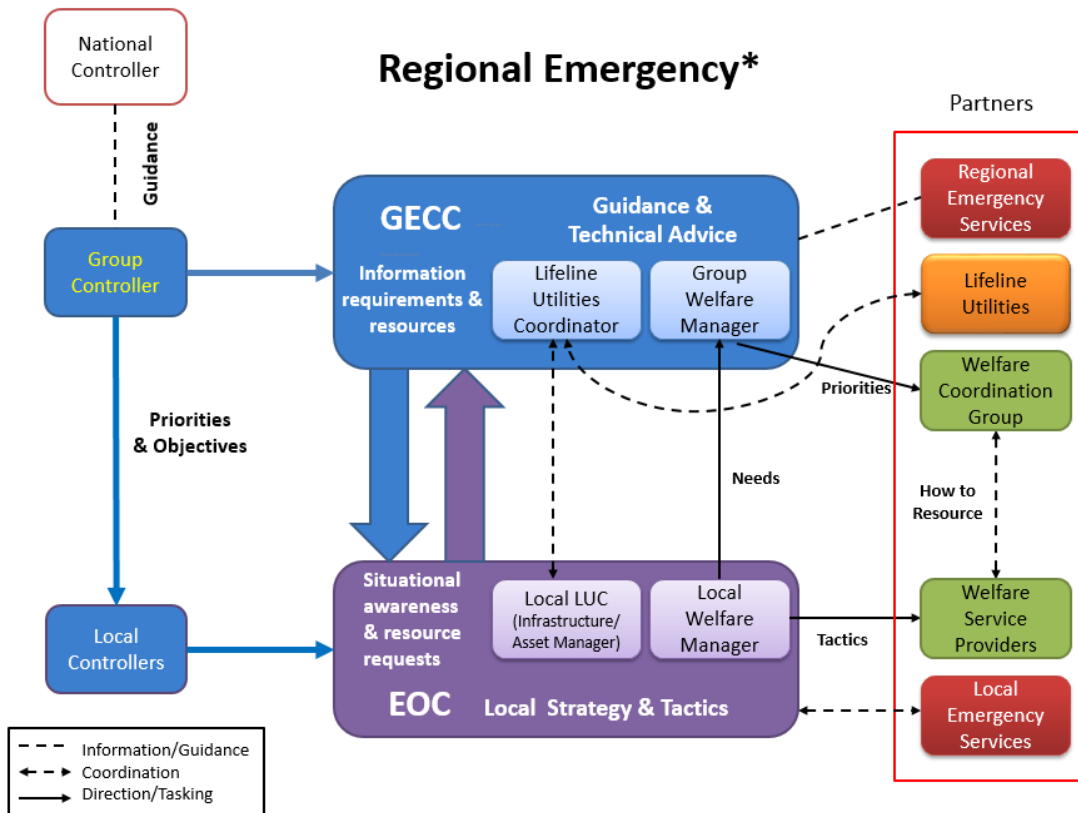


FIGURE 6-4: CONTROLLER RELATIONSHIP (REGIONAL EMERGENCY)



Note\*: Regional Emergency may include emergencies that are entirely contained within the boundaries of one Territorial Authority but due to size or complexity are still viewed as regionally significant.



## 7. Recovery

### 7.1 Overview

The Waikato CDEM Group undertakes key functions relating to recovery;

1. Planning and preparing for recovery activities post an emergency
2. Strategic planning for recovery to better inform reduction, readiness, response and recovery activities in the future.

The Civil Defence Emergency Management Act 2002 has defined Recovery and Recovery Activities;

“Recovery – means the coordinated efforts and processes used to bring about the immediate, medium-term, and long-term holistic regeneration and enhancement of a community following an emergency.”

“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”.

The holistic approach undertaken by the Waikato CDEM Group to recovery is intended to strengthen individual and community (including organisations) resilience so that they can adapt to their environment post an emergency, including returning to what might be a new normal.

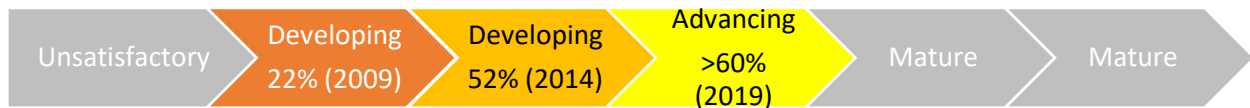
#### 7.1.1 Goal

### Enhanced capability to prepare for and recover from civil defence emergencies

Achievement of this goal is measured through the Capability Assessment Tool which shows that, while significant improvement has been made since the last CDEM Plan, this remains a key area for development. There has been a lack of Group leadership for recovery. The 2016 amendments to the Act and the appointment of a Group Recovery Manager will enable a focus on significantly improving the recovery culture across the Waikato CDEM Group.

The target for this work area is to achieve **Advancing** level (60-80%) by 2019.





### 7.1.2 The Function of the Waikato CDEM Group

The functions of the CDEM Group in relation to recovery are covered in the CDEM Act (Section 17 (1) (e)) and enabled through Part 9 of the National CDEM Plan (Section 26(d)). The Group is responsible for planning for and carrying out recovery activities. The Group Plan identifies preparatory action for recovery in Section 2 (Understanding and communicating our risk), Section 3 (Reducing our risks), Section 4 (Being ready - our communities) and Section 5 (Being ready - The Waikato CDEM Group) of the Plan. Section 10 (Monitoring and evaluation) identifies the responsibility the Group has to monitor and evaluate progress in strategic planning for recovery.

The responsibilities of the CDEM Group in relation to strategic planning for recovery include the following areas:

- Educating local authorities, agencies and communities on the legislative requirements in respect to recovery, and their role in preparing for and carrying out recovery activities.
- Ensuring that strategic planning for recovery (pre-event planning) is coordinated, integrated and resourced at the regional and local level.
- Collaboration between local authorities, agencies and communities to understand and manage risks and hazards.
- Community participation in recovery planning, including Iwi, community and business leaders.
- Measuring and monitoring the effectiveness of progress towards compliance with strategic planning for recovery.

The recovery functions of the CDEM Group enabled by the 2016 amendments to the CDEM Act 2002 include:

- The requirement to appoint a Group Recovery Manager (*CDEM Act Section 29 (1)*).
- The functions of the Group Recovery Manager (*CDEM Act Section 30A*).
- The power to appoint one or more Local Recovery Managers (*CDEM Act Section 30 (1)*).
- Involvement in decisions in respect of any local Notice of Transition Period (*CDEM Act Section 94B*).
- The appointment of at least one person authorised to give notice of a local transition period for the area (*CDEM Act Section 25 1 (b)*) and the powers to act in that period (*CDEM Act Section 94G-P*).

### 7.1.3 Issues and Opportunities

The requirements under the CDEM Act 2002 for the Waikato Group and its Members to undertake strategic planning for recovery provides the opportunities to;

- Better understand the hazards and potential risks the Group is exposed to both within the Region and from neighbouring Regions
- Learn what is important to communities in relation to recovering from emergencies in the short, medium and long term
- Enter into meaningful shared decisions pertaining to recovery options involving all sectors in communities
- Better inform current reduction, readiness, response and recovery activities
- Strengthen community engagement in developing effective response plans that include transition to recovery elements
- Put in place meaningful tools to measure the effectiveness of the strategy and approaches being undertaken to enable refinements.

There are also opportunities for the group and its members to work with their communities to address the challenges that are being created by climate change, e.g. coastal erosion, to develop short, medium and long term recovery plans in consultation with the communities.

## 7.2 Statutory Recovery Framework

### 7.2.1 Objective

New statutory requirements and powers in the amended CDEM Act 2002 are widely understood.

### 7.2.2 Local Transition Period

The CDEM Act 2002 allows for certain authorised persons to give notice of a local transition period. This will generally follow the end of a state of emergency (however, notice of a local transition period can be given without there being an initial state of emergency, providing the Minister's approval is obtained first).

CDEM Groups must appoint a Group Recovery Manager who, during a transition period, has access to powers designed to assist the recovery phase. CDEM Groups may appoint Local Recovery Managers who will also have these powers.

Powers during transition periods include the ability to enter, examine and mark buildings, close roads, require assessments of buildings, carry out works and keep areas clear of the public.

The Minister of Civil Defence can also give notice of local or national transition notices if the Minister believes this is required.

### Notice of Transition Period Arrangements

The Civil Defence Emergency Management Act 2002 provides statutory requirement to allow for national or local transition periods

1. Notice of national transition period - Under section 94A of the Act, the Minister of Civil Defence may, after a state of emergency has been declared for any area or after a state of emergency arises for any area, give notice of a national transition period for the whole of New Zealand or any areas if it appears that a national transition period is required. This will invoke powers to manage, control and direct recovery in the public interests and as necessary to ensure a timely and effective recovery.
2. Notice of local transition period - Under section 94B of the Act, a person who is authorized to give notice of a local transition period by being appointed under section 25(1)(b) or otherwise authorized under section 25 (4) or (5) may, after a state of emergency has been declared (or after an emergency arises for which a state of emergency has not been declared) for the area of the Civil Defence Emergency Management Group concerned, give notice of a local transition period for the area of the Civil Defence Management Group concerned, or for 1 or more districts or wards within the area, if it appears to the person that a local transition period is required.

#### **AUTHORISATION for notice of transition period**

*In accordance with section 25(1) (b) of the Act, persons must be appointed to authorize a notice of transition period within all or part of a territorial authority area. Across the Waikato CDEM Group:*

- The Mayor, or a designated elected member of the territorial authority, in the absence of the Mayor.

*Where practicable before any notice of transition period is issued the following should be consulted:*

- The Chief Executive Officer of the territorial authorities.
- The Group and Local Controller
- The Group and Local Recovery Manager
- A representative from NEMA.
- The Chair of the Joint Committee, as required.
- Senior members of the emergency services, as required.
- Local iwi (where appropriate)
- Other agencies as deemed appropriate.

*In accordance with Section 25 of the CDEM Act 2002, the following persons are appointed by the Joint Committee to authorize a notice of transition period within all or part of the Waikato Group area:*

- The Chairperson of the Joint Committee.

*In the absence of the Chairperson, the following person is authorised, in order, to undertake this function:*

- The Deputy Chairperson of the Joint Committee.

*In the absence of the Chairperson and Deputy Chairperson, the following persons are authorised to undertake this function:*

- Any other Member's representative on the Joint Committee.

*If at any time it appears to the Minister of Civil Defence that notice of a local transition period is required and a local notice of transition period has not been declared, the Minister of Civil Defence may declare a local transition period emergency for that area.*

## Factors to consider before giving notice of local transition periods

A notice of local transition period must not be given unless the person authorised to give notice is satisfied that the following legal tests are met:

- It must appear to the person giving the notice that a local transition period is required (94B(1));
- Invoking the powers to manage, coordinate, or direct recovery activities is:
  - (i) In the public interest; and
  - (ii) Necessary or desirable to ensure a timely and effective recovery (s94B (4)).

The person authorised must also have regard to the areas, districts, or wards affected by the emergency and whether the focus is moving from response to recovery, including if the state of emergency is about to expire or be terminated (s94B (5)).

There are also other situations when a notice of local transition period can be given e.g. if there has been no local state of emergency declared (needs Minister's approval), or there has been a 'gap' between the local state of emergency and the need for a transition period (doesn't need Minister's approval but legal tests for transition period need to be met).

## Extension and termination of local periods of transition

In accordance with Section 94D of the CDEM Act 2002, a transition period may be extended by a person authorised by the Group or by the Minister of Civil Defence if it appears to that person that that the extension is required.

In accordance with Section 94E of the CDEM Act 2002, a transition period may be terminated by a person authorized by the Group or by the Minister of Civil Defence. Notice must be in the form prescribed by the regulations under section 115.

### 7.2.3 Delegated Authorities, Functions and Powers during Recovery

The Joint Committee has legislative responsibilities to appoint a Group Recovery Manager and powers to appoint Local Recovery Managers to lead a CDEM recovery. The appointment process, authorities, functions and powers associated with these roles are stated in CDEM Act, 2002.

#### Group Recovery Manager

The Joint Committee must appoint a Group Recovery Manager, who is a suitably qualified and experienced person to perform the functions and duties and exercise the powers of the Group Recovery Manager and at least one other person, also suitably qualified and experienced, to carry out the role if the Group Recovery Manager is absent (*CDEM Act, 2002, section 29*). The Joint Committee authorizes the following functions of the Group Recovery Manager (*CDEM Act, 2002 section 30A*):

- A Group Recovery Manager must, during a local transition period for the area for which the Group Recovery Manager is appointed, direct and co-ordinate the use of the personnel, material, information, services, and other resources made available by departments, Civil Defence Emergency Management Groups, and other persons for the purpose of carrying out recovery activities.
- The Group Recovery Manager must also perform any functions or duties delegated to the Group Recovery Manager by the Civil Defence Emergency Management Group or conferred on Group Recovery Managers by the Act, and may exercise any power conferred on the Group Recovery Manager by delegation under the Act.
- A Group Recovery Manager may request an Authorised Person appointed under section 25(1)(b) to give notice of a local transition period if the criteria in Part 5B, section 94G(3) (i) to (iii) inclusive, are fully met.

#### Local Recovery Managers

The Joint Committee may appoint a Local Recovery Manager(s). The Waikato CDEM Group will develop a role description for local recovery managers and assess the current role-holders for competence. It will appoint local recovery managers who are responsible for recovery preparation and work for territorial authorities, and direct them to perform any of the functions and duties of, or delegated to, the Group Recovery Manager of the Group and to exercise the powers of the Group Recovery Manager in the area for which the Group Recovery Manager is appointed, including, but not limited to, the powers in sections 94H, 94I, and 94K to 94N. These sections describe the powers during transition periods including the ability to enter, examine and mark buildings, close roads, require assessment of buildings or types of buildings, carry out works and keep areas clear of the public.

A Local Recovery Manager must follow any directions given by the Group Recovery Manager during a transition period.

A Group or Local Recovery Manager has authority to perform the following functions (*CDEM Act, 2002, section 30A*):

- A Group Recovery Manager or a Local Recovery Manager may authorise any suitably qualified and experienced person to perform any function or duty or exercise any power of that Group Recovery Manager or Local Recovery Manager, except the power to authorise another person to perform those functions and duties or to exercise those powers.
- A Group Recovery Manager or Local Recovery Manager who authorises a person under subsection (3) to perform a function or duty or to exercise a power remains responsible and accountable under this Act for the performance of the function or duty or the exercise of the power.
- No Group Recovery Manager or Local Recovery Manager, and no person performing the functions or duties or exercising the powers of a Group Recovery Manager or Local Recovery Manager, may exercise any power conferred on Group Recovery Managers by this Act during any national transition period in any manner contrary to any priorities for the use of resources and services that have been determined by the Director or National Recovery Manager.

Whilst the CDEM Act provides appointed Group and Local Recovery Managers with specific authority during the transition period following an emergency, successful recovery is reliant on sound preparation with local communities as documented in the Group Recovery Plan and local recovery planning and arrangements.

#### **7.2.4 Relationships between the Group/Local Controller and Group/Local Recovery Manager during an emergency**

The interactions between a Group and Local Controller and a Group and Local Recovery Manager are important communication channels when transitioning from response to recovery. All role holders must be clear of the statutory responsibilities of each function and not interfere with these, but know when to inform and when to consult each other. The Recovery Manager needs to be included in the response in order to seamlessly transition to recovery with full knowledge of what has gone before. It should be noted that the Recovery Manager has no legislated powers until any notice of transition period is authorised. Prior to this the Recovery Manager's role in response is one of providing feedback to the Controller on matters that might impact or assist the recovery. These are for consideration by the Controller as the Recovery Manager does not have decision-making responsibility on the Incident Management Team. The recommended approach is that the Recovery Manager works within the planning function in the EOC to plan for recovery, to prevent unnecessary negative impacts on recovery and to leverage opportunities that may present. The Recovery Manager will step up to the recovery role as the need for preparatory recovery actions arises (e.g. activation of task groups, establishing the Recovery Office, communicating with local authority Chief Executives and formulating recovery plans).

The CDEM Group will establish protocol to follow in the changeover from response to recovery.

The interactions between the National, Group and Local Recovery Managers needs to operate smoothly during any recovery with clear knowledge of boundaries and responsibilities and with good communication. In most cases the Local Recovery Manager will have responsibility for providing direction and coordinating within the local authority area. Dependent on the size of the recovery operation this may require the Group Recovery Manager to activate technical support and advice.

#### **7.2.5 Schedule of Recovery Managers (Schedule of Recovery Managers required)**

A current schedule of Group and Local Recovery Managers is available at [www.waikatocivildefence.govt.nz](http://www.waikatocivildefence.govt.nz).

## 7.3 Recovery Planning

### 7.3.1 Objective

Comprehensive recovery arrangements are in place.

### 7.3.2 Group-Wide Arrangements

#### Strategic planning for Recovery

The 2016 amendments to the CDEM Act 2002 provide an increased focus to strengthen recovery planning to ensure that measures are in place to minimize the consequences of emergencies on communities and help communities recover more efficiently and effectively from emergencies. The Sendai Framework for Disaster Recovery refers to this pre-event planning as 'Build Back Better'. It refers to the fact that communities which have taken actions prior to the onset of a disaster to strengthen recovery capacity and decision-making effectiveness will 'Build Back Better' during the extended period of recovery, rehabilitation and reconstruction. This preparation includes building capacity with the creation of recovery-focused relationships, the establishment of planning and coordination mechanisms and the introduction of methods and procedures to ensure recovery activities are adequately informed and supported.

It is the responsibility of the CDEM Group and each member to ensure our communities are well-placed and supported to recover from any emergencies from the hazards and risks identified in the CDEM Group Plan. The 'Strategic Planning for Recovery' Director's Guideline is a key reference document to support recovery planning.

#### Group Recovery Plan

The Waikato CDEM Group Recovery Plan, 2013 is a means for describing the group-wide recovery arrangements that are in place. It is also a document to guide and support consistent local arrangements. This plan requires a comprehensive review to align it with the 2016 amendments to the CDEM Act 2002, with an emphasis on these actions:

1. The role description, appointment and training of Group and Local Recovery Managers.
2. The inclusion of recovery activity across reduction, readiness and response.
3. A model or framework for local authorities to engage with local communities in the preparation for recovery. This must include establishing a community vision(s) for recovery and evidence of community values, priorities and risk tolerance prior to an emergency.
4. A model for local recovery planning is required that relates to the Group Recovery Plan with a consistent process for the identification of local risks and hazards and their consequences.
5. A performance framework that enables consistent reporting to the CDEM Group on progress to achieving the recovery preparedness outcomes.

#### Local Recovery Planning

In addition to the Group Plan, each territorial authority must review their Local Recovery Plan ensuring they integrate with the group-wide recovery arrangements described in the Group Recovery Plan ensuring:

- A community engagement approach which includes a recovery vision and outcomes.
- A community understanding of the consequences from specific hazards and risks and identification of the opportunities to reduce risk and strengthen resilience from specific hazards.
- A focus on collaborative relationships and processes, including the engagement of local business and community leaders.
- A local recovery work programme.

A connection of the local plan/arrangements to the Waikato CDEM Group Plan, including reporting on the performance framework to monitor the effectiveness of recovery preparedness.

## Recovery Activation

The key components of “actions during recovery activation” are shown in Fig 7-1 below.



**FIGURE 7-1: KEY COMPONENTS OF ACTIONS DURING RECOVERY ACTIVATION**

Actions during recovery are the collective actions required to ensure recovery occurs efficiently and effectively following emergency events. These roles are required in the group recovery office, the purpose of which includes:

- Coordinating and supporting the recovery process with communities, sector groups and recovery staff;
- Continuation of response initiatives that support recovery;
- Emphasising reduction opportunities to those in a position to influence change; and
- NEMA or National Recovery Manager if appointed.

The Group has a key role in providing support for local recovery offices and local recovery managers following local emergencies and coordinating recovery on behalf of the Waikato CDEM Group following significant events. A key role of the Group Recovery Office is to liaise with central government agencies, and the National Recovery Manager if appointed, to access the support needed to support recovery activities.

The Group Recovery Office will be set up and located along the following lines depending on the size of the emergency event and recovery required:

- Local event within one district: set-up at the TA, alongside the local recovery office, with support staff for the group recovery manager. Activation will generally be at the request of the TA, in consultation with the CEG Chair.
- Significant event, covering more than one district: set up at the Group Emergency Coordination Centre (GECC). The office will use the same systems and processes as the response at the GECC, with initial set up during the emergency and staffing by the Group Recovery Manager and the Recovery Administrator. The group Recovery Manager will work alongside the Group Controller in an advisory capacity. At transition, the Group Recovery Office will expand and take over the functions of the GECC-populated with the required positions. The structure of the Group Recovery Office is in Fig 7-2 on pg. 74.

### 7.3.3 Actions

The following actions have been identified to either sustain or improve recovery planning:

Issue / Opportunity	Responses and Actions
Strategic planning for recovery	50. Educate the Group in respect of the requirements of the 2016 amendments to the CDEM Act 2002 and the 'Strategic Planning for Recovery' Director's Guideline which require local authorities to prepare communities for recovery.
Gaps in Recovery Arrangements	51. Complete an audit of the Group Recovery arrangements against the legislative requirements and relevant recovery related Director's Guidelines and information.
	52. Update Local Recovery Plans in line with the legislation and Group Plan. A work programme for strategic planning for recovery activity must be set.
	53. Report on achievements against Recovery Plan actions.
Clarify coordination between controllers and recovery managers	54. Develop protocol for Controllers and Recovery Managers to transition from response to recovery.

## 7.4 Recovery Capability

### 7.4.1 Objective

Capable people are available to lead and support recovery.

### 7.4.2 Group-Wide Arrangements

#### Group and Local Capacity to Sustain Recovery

The region is increasingly impacted by severe weather events and the capacity to sustain a recovery effort that needs to continue for a period has challenged resources, primarily those of smaller local authorities. Investigation is needed into the impact of recovery on business continuity in local authorities and ways of managing this identified. If an emergency has severe consequences on the community over a number of districts it is likely that regional and/or national support is needed, compared with an emergency that has localised consequences that must be managed by the local authority or by collaboration with neighbouring districts.

Each local authority needs to determine the roles and responsibilities of key government agencies, non-government agencies, the private sector, community groups and other key stakeholders in supporting both the preparedness and management of recovery. Predetermined arrangements and protocols need to be established between councils and parties before an emergency, taking into account the different types of emergencies that may arise.

#### Training and Exercising

The Group will support training and exercising for recovery managers and key agencies, local leaders and businesses with whom collaborative recovery relationships are required. It is hoped that the new legislation will drive a national training programme for recovery managers to enable a nationally consistent standard. The Group will coordinate regional training initiatives to educate recovery managers in the legislative requirements and ensure the incorporation of aspects of recovery into exercises. This activity serves to develop capability by:

- Ensuring recovery managers are equipped to lead their local authorities to engage with communities in recovery preparation.
- Facilitating a collaborative local recovery environment with key agencies, community leaders and businesses.
- Providing recovery managers with an opportunity to become familiar with the practical expectations of their role.
- Exposing response focused roles to the needs of recovery (during a response and the transition to recovery).

### 7.4.3 Actions

The following actions have been identified to either sustain or improve recovery capability across the Group.

Issue / Opportunity	Responses and Actions
Sustaining recovery	55. Review Group and local authority capacity to staff and sustain recovery over an extended timeframe and document reciprocal arrangements.
	56. Train Local Recovery Managers in their role and responsibilities.
Educate local authorities on the requirements of the 2016 CDEM Amendment Act.	57. Promote the inclusion of strategic planning for recovery as a key aspect of an integrated approach to community engagement across all aspects of council business.



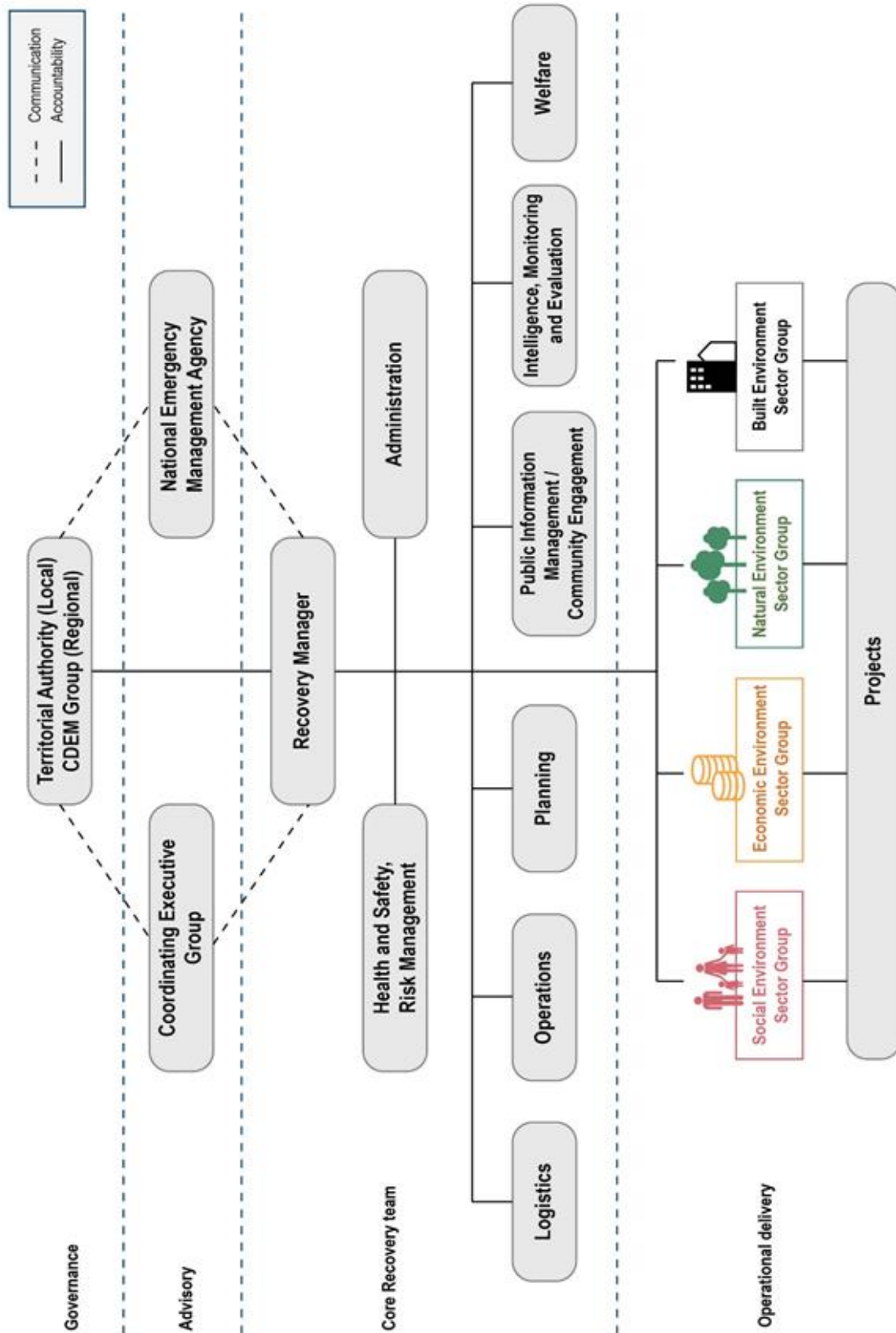


FIGURE 7-2 GROUP RECOVERY OFFICE STRUCTURE PARTNERSHIP ARRANGEMENTS

## 8. Partnership Arrangements

### 8.1 Overview

The CDEM operating environment requires alignment and cooperation across numerous organisations to support all work areas (reduction, readiness, response and recovery).

To support this requirement, the Group has a number of arrangements in place with the partner agencies outlined in this Section.

### 8.2 Issues and Opportunities

The following issues and opportunities have been identified:

- **Emergency Services / CDEM partnership opportunities:** There are opportunities to explore integration of emergency services and CDEM activities, both in terms of function and location.
- **Implementation of the 2016-21 Welfare Coordination Group (WCG) Plan:** Significant changes to the welfare sector in 2015/16 have seen local authorities taking on a much larger role alongside a raft of other changes. The Group has prepared the WCG Plan to ensure that arrangements and capabilities reflect these new requirements. Implementation of the actions in that Plan are a priority.
- **Engagement of iwi in Group activities:** While arrangements exist, there is no oversight by the Group regarding the engagement of iwi in the work undertaken by the Group.
- **Maintain effective lifeline partnership arrangements and plans:** Lifeline utilities have an effective partnership with CDEM through the Waikato Lifeline Utility Group and lifeline utility coordination arrangements. These arrangements should continue to be maintained, tested and improved.



### 8.3 Emergency services

#### 8.3.1 Background

Emergency services in New Zealand are the New Zealand Police, Fire and Emergency New Zealand, hospital and health/ambulance services. These agencies have a number of duties in relation to CDEM, outlined in the CDEM Act Section 63 and the National CDEM Plan.

Emergency Services support the delivery of the Group strategy and work programme through their participation in the CEG (refer to Section 9.2.2), various advisory groups established by the Joint Committee (refer to Section 9.6), as well as their contribution to objectives and actions in this Plan.

This support requires the integration of the Group Plan and work programmes into many existing aspects of emergency service business and is a responsibility of individual CEG members (refer to Section 9.2.2).

### **8.3.2 Group-Wide Arrangements**

#### **Membership on CEG**

In accordance with the CDEM Act, the New Zealand Police, Fire and Emergency New Zealand, Waikato District Health Board and St John are members of CEG.

#### **Welfare Coordination Group**

The New Zealand Police and Waikato District Health Board (DHB) are members of the Waikato WCG.

#### **Emergency Services Advisory Group**

The Group will establish an Emergency Services Advisory Group or participate in an existing group to allow focused discussion on emergency services / CDEM matters.

#### **Jurisdictional issues**

For a number of emergency services, the Group encompasses several jurisdictions that all need to be taken account of in the design of group-wide arrangements (refer to

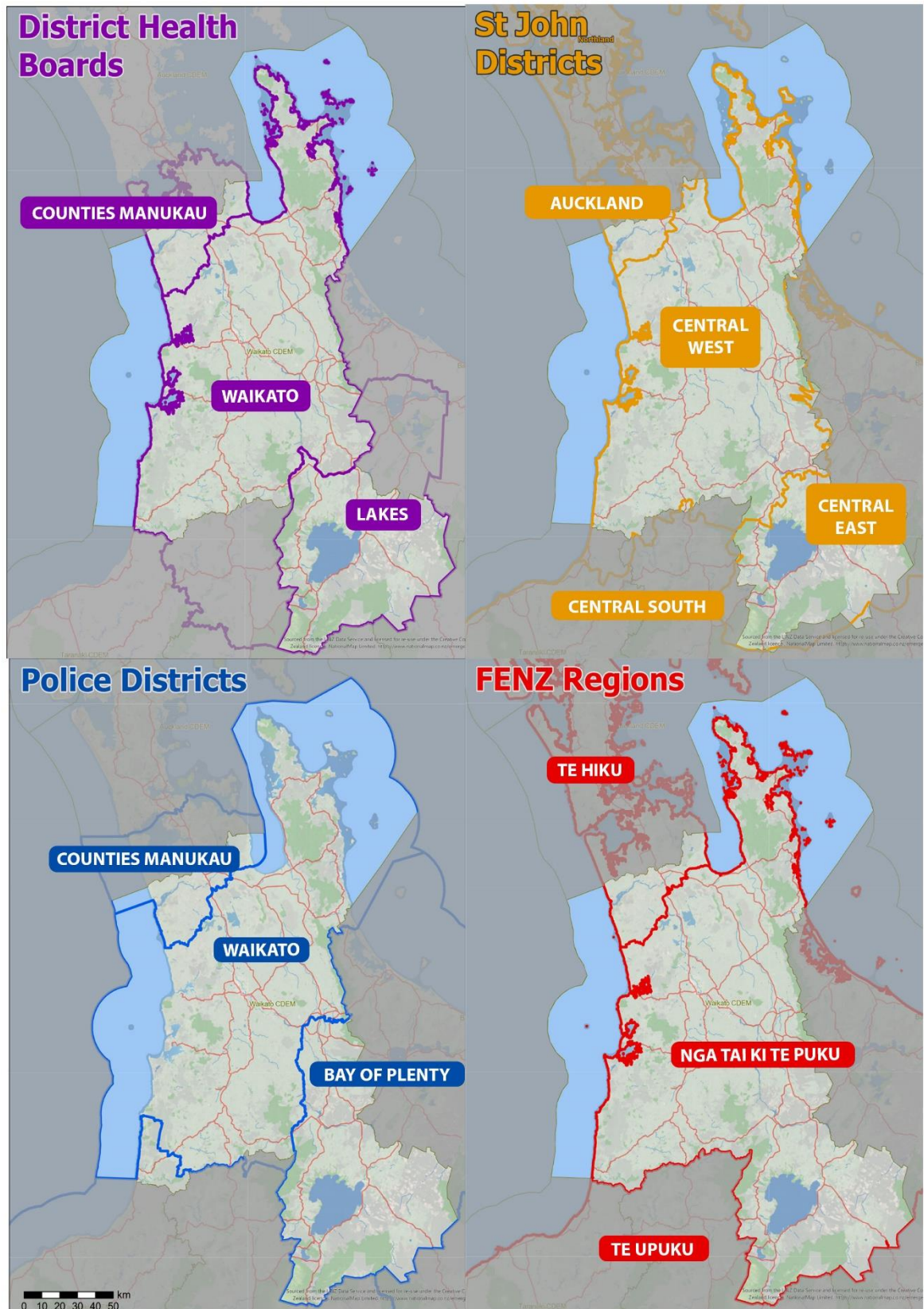


Figure 8-1).

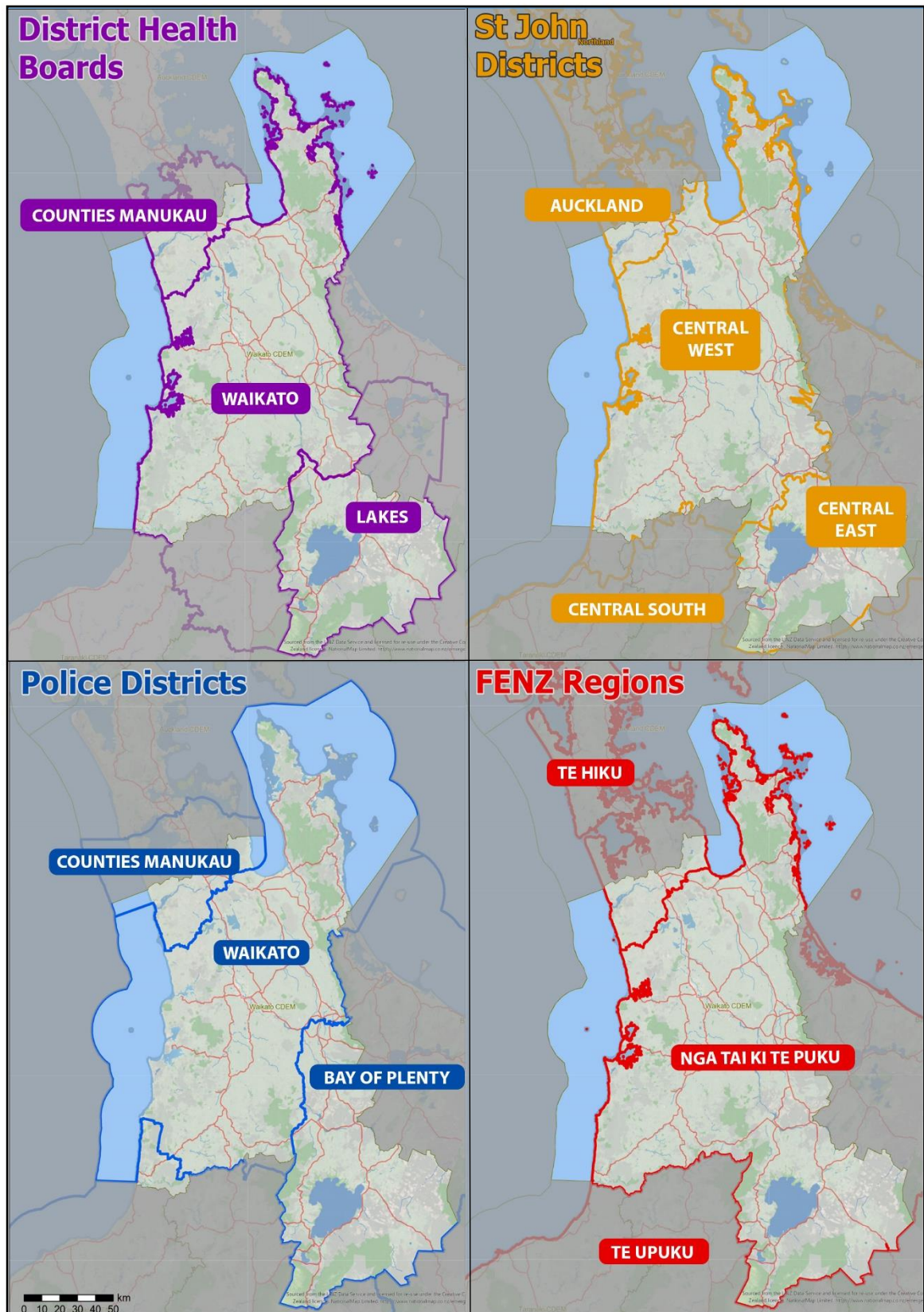


FIGURE 8-1: EMERGENCY SERVICES JURISDICTIONS ACROSS THE WAIKATO CDEM GROUP AREA

Table 8-1 provides an overview of these issues.

Emergency service	Jurisdictional issue	Resolution
Fire and Emergency New Zealand	The Group includes the following NZFS Areas: <ul style="list-style-type: none"> <li>- Te Hiku</li> <li>- Ngā Tai Ki Te Puku</li> </ul>	To be resolved.
New Zealand Police	The Group includes the following Police Districts: <ul style="list-style-type: none"> <li>- Counties Manukau</li> <li>- Waikato</li> <li>- Bay of Plenty</li> <li>- Central</li> </ul>	To be resolved.
Health	The Group includes the following DHBs: <ul style="list-style-type: none"> <li>- Counties Manukau DHB</li> <li>- Waikato DHB</li> <li>- Lakes DHB</li> </ul>	The Waikato DHB representative on the Coordinating Executive Group represents all DHBs.
St John	The Group includes the following St John regions: <ul style="list-style-type: none"> <li>- Auckland</li> <li>- Central West</li> <li>- Central East</li> <li>- Central South</li> </ul>	To be resolved.

**TABLE 8-1: EMERGENCY SERVICES JURISDICTIONAL ARRANGEMENTS**

### Local Emergency Services Committees

Some territorial authorities have established committees or groups to support local coordination across emergency services, as follows.

Territorial authority	Local coordination arrangement
Hamilton City Council	
Hauraki District Council	Eastern Waikato Emergency Services
Matamata-Piako District Council	Eastern Waikato Emergency Services
Otorohanga District Council	
South Waikato District Council	Emergency Services Committee
Taupō District Council	Emergency Services Committee
Thames-Coromandel District Council	Eastern Waikato Emergency Services
Waikato District Council	
Waipa District Council	
Waitomo District Council	

**TABLE 8-2: LOCAL EMERGENCY SERVICES COORDINATION ARRANGEMENTS**

### 8.3.3 Actions

Issue / Opportunity	Actions
Emergency Services / CDEM partnership opportunities	59. Develop a Terms of Reference for the Emergency Services Advisory Group.

## 8.4 Welfare Services

### 8.4.1 Background

Welfare Services support individuals, families and whanau, and communities in being ready for, responding to, and recovering from emergencies. Welfare services are managed and delivered at the local level and coordinated and supported at the regional and national levels. Activities include registration, inquiry, needs assessment, care and protection services for children and young people, psychosocial support, household goods and services, shelter and accommodation, financial assistance and animal welfare.

In accordance with the National CDEM Plan (Sections 62-75), a number of agencies provide welfare services to the Group in relation to reduction, readiness, response and recovery. The Group has established the Welfare Coordination Group (WCG), which in turn has adopted the Waikato WCG Plan which outlines the responsibilities of a wide range of CDEM Partners and other agencies in the delivery of welfare services.

Welfare services agencies support the delivery of the Group strategy and work programme through their participation in the WCG as well as their contribution to tasks and projects agreed by the development of an annual WCG Business Plan.

### 8.4.2 Group-Wide Arrangements

#### Group Welfare Manager

The Group maintains the appointment of a Group Welfare Manager in accordance with section 14 of the National CDEM Plan 2015, who is also a CDEM professional based in the Group Emergency Management Office and the Chair of the Waikato Welfare Coordination Group. Please refer to the Waikato CDEM Group website for the most up-to-date details on this appointment.

The roles and responsibilities of the Group Welfare Manager are described in the *Waikato CDEM Group Welfare Roles and Responsibilities Policy*, along with the appointment process.

#### Waikato Welfare Coordination Group

The WCG is collective of welfare services agencies that are active at the CDEM Group level and/or the local level. The WCG provides a mechanism for collaboration and coordination between agencies, who work together to:

- Plan for and establish arrangements for the effective delivery of welfare services, and
- Develop welfare services work programmes

The membership of the WCG includes those agencies named in the National CDEM Plan as having the responsibility for a welfare service:

- Waikato CDEM Group (household goods and services, registration, needs assessment, shelter and accommodation).
- New Zealand Police (inquiry).
- Waikato DHB (psychosocial support).
- Ministry of Social Development via Work and Income (financial assistance).
- Ministry of Social Development via Oranga Tamariki (care and protection services for children and young people).
- Ministry of Business, Innovation and Employment (shelter and accommodation).
- Ministry for Primary Industries (animal welfare).

These agencies named in the National CDEM Plan are supported in the Waikato Welfare Coordination Group by other support agencies.

The WCG operates under the direction of the CEG in readiness, and the Group Controller during response. In recovery, the WCG will coordinate its activities with those of the Waikato CDEM Group Recovery Manager, and the work of any related recovery groups or teams.

Wider WCG membership also includes any of the agencies who support the welfare services sub-functions. It also includes representatives of community-based or volunteer organisations who are active at the regional or local level.

### Waikato Welfare Coordination Group Plan

The Waikato Welfare Coordination Group Plan outlines:

1. The role and membership of the WCG.
2. The appointment and responsibilities of key welfare roles including Chair of the WCG, the Group Welfare Manager and Local Welfare Managers.
3. The responsibilities of individual agencies under the National CDEM Plan.
4. The arrangements necessary to provide a coordinated approach to the delivery of welfare services.
5. The focus of the WCG for the next 5 years.

### Welfare Roles and Responsibilities

Following the National CDEM Plan Order 2015 coming into effect, the Group decided to align the appointment of alternate and local welfare managers with the structure of the Group, i.e., use the same process to be used as for local controllers and recovery managers. The aim of the 'Welfare Roles and Responsibilities' Policy is to formalise the appointment process of welfare positions and identify the commitment and expectations for each position.

### Waikato Welfare Coordination Group Business Plan

The WCG annual business plan describes projects and tasks for the coming year.

### Welfare Coordination Group Protocols

These describe the welfare arrangements during response and recovery and are summarised in Section 6.7.2.

### Local Welfare Managers

Each territorial authority within the Group area maintains the appointment of a Local Welfare Manager. The roles and responsibilities for the Local Welfare Manager are provided in the Waikato CDEM Welfare Roles and Responsibilities Policy, along with the appointment process. Please refer to the Waikato CDEM Group website for the most up-to-date details of these appointments.

### Local Welfare Committees

Each territorial authority within the Group area has established a Local Welfare Committee. The membership of each local welfare committee varies, but in general includes local representation of those agencies that are members of the Waikato Welfare Coordination Group. The exception to this is where share service arrangements are in place in which case:

- Thames-Coromandel District Council, Hauraki District Council and Matamata-Piako District Council have a combined local welfare committee.
- Otorohanga District Council and Waitomo District Council have a combined local welfare committee (noting that the Waipa District Council local welfare committee remains independent of this shared service arrangement).

### Local Welfare Business Plans

Each Local Welfare Committee maintains an annual business plan. Detailing how it will deliver the 5 year goals of the WCG at a local level.

### Jurisdictional issues

For a number of welfare services, the Group encompasses several jurisdictions that all need to be taken account of in the design of group-wide arrangements.

### 8.4.3 Actions

Issue / Opportunity	Actions
---------------------	---------



Implementation of the WCG Plan.	60. Develop a Welfare Coordination Group (WCG) business plan and report on progress to CEG.
	61. Review the WCG Plan.
	62. Develop local welfare plans.

## 8.5 Iwi

### 8.5.1 Background

The organisations that make up the Group have arrangements in place to ensure that iwi views and values are understood and integrated into all work that is undertaken, from strategic decision making to day-to-day operations. These arrangements extend to the work undertaken by these organisations as a member or partner of the Group. The sum of these organizational arrangements provides a comprehensive iwi liaison arrangement for the Group.

In addition to the broad integration of iwi views and values into the work undertaken by the Group, the Group also has several arrangements in place to help build the resilience of iwi and marae. These arrangements acknowledge the important contribution that iwi and marae make to the overall resilience of communities.

### 8.5.2 Group-Wide Arrangements

#### Local Authority iwi liaison

Each local authority in the Group has arrangements with iwi to ensure their views and values are understood and integrated into all work that is undertaken. The nature and scope of these arrangements is varied, but as a sum provides a group-wide platform that ensures iwi views and values are also understood and integrated into the work undertaken by the Group.

#### Response liaison and advice

During an emergency, the response structure established within the Group (either group-wide or within an individual organization) includes an iwi liaison function in the Coordination Centre. This ensures the views and values of iwi are understood and taken into account by the emergency response.

#### Recovery liaison and advice

Following an emergency, the recovery structure established within the Group (either group-wide or within an individual organization) includes an iwi liaison function in the Recovery Office. In addition to this, some or all aspects of an event recovery may revert back to “business-as-usual” arrangements for organisations. Both these aspects ensure that the views and values of iwi are understood and taken into account during the recovery from an emergency.

#### Representation of the WCG

The Welfare Coordination Group brings together organisations that have a responsibility to provide welfare services for a community during an emergency, and undertakes work to improve coordination and develop targeted plans. The membership of the Welfare Coordination Group includes Te Puni Kōkiri to ensure that views and values of iwi are integrated into the work undertaken by the Welfare Coordination Group.

#### Marae Preparedness Strategy

The Group (through the WCG) has created the Marae Preparedness Strategy, which provides a framework for the Group to work with iwi to help improve the understanding of the hazards that their marae are exposed to, along with actions that they can take to reduce the vulnerability and build the resilience of the marae to those hazards. This strategy acknowledges the important role that marae have in providing their broader communities with support during and after an emergency, along with providing a platform for marae focused discussions to build resilience before an emergency.

### 8.5.3 Actions

Issue / Opportunity	Actions
Engagement of iwi in Group activities	63. Report on iwi engagement across the Group on CDEM matters.

## 8.6 Lifeline utilities

### 8.6.1 Background

The CDEM Act (Schedule 1) details specific entities that are considered lifeline utilities. It also details certain business types where entities are also considered lifeline utilities, including:

- Producers, suppliers and distributors of gas.
- Generators and distributors of electricity.
- Suppliers and distributors of water.
- Providers of waste water and storm water networks and disposal.
- Providers of telecommunications.
- Providers of road and rail networks.
- Producers, processors or distributors of petroleum products.

The CDEM Act (60) requires that every lifeline utility must:

- (a) Ensure that it is able to function to the fullest possible extent, even though this may be at a reduced level, during and after an emergency.
- (b) Make available to the Director in writing, on request, its plan for functioning during and after an emergency
- (c) Participate in the development of the national CDEM strategy and CDEM plans
- (d) Provide, free of charge, any technical advice to any CDEM Group or the Director that may be reasonably required by that Group or the Director
- (e) Ensure that any information that is disclosed to the lifeline utility is used by the lifeline utility, or disclosed to another person, only for the purposes of this Act.

The role of lifeline utilities is further described in the National CDEM Plan (Sections 57-61).

### 8.6.2 Group-Wide Arrangements

#### Waikato Lifeline Utilities Group (WLUG)

Lifeline utilities support the delivery of the Group Plan through their participation in the WLUG and their contribution to tasks and projects as agreed by the development through the annual WLUG Business Plan. The WLUG also maintains:

- The WLUG Charter, which outlines objectives, roles, relationships, expectations and approach to funding.
- The WLUG Annual Business Plan, which describes projects and tasks for the coming year, along with confirmation of funding arrangements as outlined in the Charter.
- The WLUG communication protocols which outline response and recovery arrangements between lifeline utilities and CDEM.

The WLUG's role is primarily on reduction, and some readiness, activities. Lifeline utilities coordination arrangements are in place for the coordination of lifeline utilities and CDEM in response and recovery (refer Section 6.7.1).

#### Waikato Lifeline Utilities Group Chairperson

The WLUG maintains the appointment of a chairperson. The role of the chairperson is described in the WLUG Charter, and includes representation of the WLUG on the CEG.

### 8.6.3 Actions

Issue / Opportunity	Actions
Maintain effective lifeline partnership arrangements.	64. Support capability development of lifeline utilities.
	65. Maintain and review the WLUG Charter and business plan and report progress to CEG.

## 8.7 The CDEM Community

### 8.7.1 NEMA and the national CDEM community

NEMA provides national support to the CDEM sector, summarised as follows:

- Operation of the NCMC (refer Section 6.2) to lead national emergencies and support local CDEM operations;
- Provision of national coordination for recovery activities.

The relationships between the National, Group and Local Controllers are outlined in Section 6.8.

It is also acknowledged that a number of organisations are mandated through the National CDEM Plan to have a national role in CDEM. The engagement of the Waikato CDEM Group varies, depending on the involvement of those organisations in group-wide and national arrangements.

### 8.7.2 Neighbouring CDEM Groups and authorities

The Waikato CDEM Group borders the following CDEM Groups:

- Auckland
- Bay of Plenty
- Hawkes Bay
- Manawatu-Whanganui
- Taranaki

Each territorial authority within the Group also has several neighbouring territorial authorities.

In accordance with section 17(1) (f) of the CDEM Act, the Group will support other CDEM Groups in New Zealand. The basis of this support is built upon memoranda of understanding.

The specific nature of support that the Group can provide during the response and recovery phases of an emergency will depend on the circumstances at the time and to what extent an emergency has affected each CDEM Group. The support will be conditional on a best endeavours basis having regard for all of the circumstances.

The CDEM Act (2002) (s113) provides for the recovery of actual and reasonable costs associated with provision of assistance to other CDEM Groups.

In addition to the above arrangements, the Waikato CDEM Group also works alongside neighbouring CDEM groups where there are hazard or risk issues that require coordination. These arrangements are shown in Table 8-3.

Arrangement	CDEM groups	Scope
Caldera Advisory Group	Waikato Bay of Plenty	Management of the volcanic risk associated with the caldera volcanos to the south and east of the Waikato CDEM Group area.
Central Plateau Volcanic Advisory Group	Waikato Manawatu-Whanganui	Management of the volcanic risk associated with the Central Plateau (Ruapehu, Ngāruhoe and Tongariro).

TABLE 8-3: CDEM PARTNERSHIP ARRANGEMENTS TO MANAGE RISK

### 8.7.3 Local arrangements

In addition to the general group-wide arrangements that are in place to support CDEM partnerships, the following specific local arrangements are acknowledged:

Territorial authorities	Nature of arrangement	Scope
Taupō District Council South Waikato District Council	Memorandum of Understanding	When mutually agreed, general cooperation across reduction, readiness, response and recovery, including: <ul style="list-style-type: none"> <li>- Joint exercising.</li> <li>- Joint training.</li> <li>- Observer rights at CDEM meetings.</li> <li>- Sharing of information.</li> <li>- Provision of electronic management support when requested (and when available).</li> </ul>
Taupō District Council Rotorua District Council	Memorandum of Understanding	When mutually agreed, general cooperation across reduction, readiness, response and recovery, including: <ul style="list-style-type: none"> <li>- Joint exercising.</li> <li>- Joint training.</li> <li>- Observer rights at CDEM meetings.</li> <li>- Sharing of information.</li> </ul> Provision of electronic management support when requested (and when available).

TABLE 8-4: LOCAL CDEM PARTNERSHIP ARRANGEMENTS

## 8.8 Volunteering Partners

### 8.8.1 Background

The Group is proactive in the use of volunteers to support the response to an emergency, and has adopted the *Waikato CDEM Group Volunteer Management Plan*. An important aspect of this plan is the establishment of a number of partnership arrangements with groups that are either engaged in the coordination of volunteers and/or have an established volunteer network. These are discussed below.

### 8.8.2 Group-wide arrangements

#### Volunteering Waikato

The Group maintains a Memorandum of Understanding with Volunteering Waikato. The purpose of this is to define how the two organisations will work together to recruit, train and (in the event of an emergency) deploy volunteers to provide additional support to affected communities.

### **Volunteer organisations**

The Group works alongside the following volunteer organisations to provide specific roles and skills:

- Lions
- Rotary

### **Amateur Radio Emergency Communications**

The Group maintains a Memorandum of Understanding with Amateur Radio Emergency Communications. The Purpose of this is to define how the Group will work with amateur radio operations to provide additional lines of communication during an emergency.

## 9. Our Structure

### 9.1 Overview

#### 9.1.1 The Waikato CDEM Group

The Waikato CDEM Group comprises the following:

- Joint Committee;
- Coordinating Executive Group (CEG);
- A number of advisory groups that focus on specific CDEM work areas.
- Group Emergency Management Office (GEMO);
- Local Authorities;
- Emergency services;
- Lifeline utilities (via the Waikato Lifeline Utilities Group); and
- Welfare services organisations (via the Welfare Coordination Group).

This section describes the structures that the Group has implemented to support their functions in relation to governance, leadership and delivery.

In addition to describing these arrangements, this section also describes the interaction between these different structural aspects, which is outlined in Figure 9-1.



#### 9.1.2 Goal

**To provide leadership and governance to deliver effective CDEM outcomes.**

Achievement towards this goal is measured through the Capability Assessment Tool. The 2014 Capability Assessment Report highlighted a significant improvement in this area since the last Plan review. The target result is to sustain a mature level.



#### 9.1.3 Issues and Opportunities

The following issues and opportunities have been identified:

- a. **Developing and resourcing work programmes:** To ensure the achievement of objectives in this Group Plan.
- b. **Enhanced coordination and integration:** The last five years has seen greater coordination of Group-wide activities, however there are considered to be further opportunities to optimise CDEM outcomes and improve efficiencies through even stronger integration. In September 2015, the Joint Committee agreed to progress with the following, subject to more detailed analysis of the cost and implications for each individual local authority.

*The full integration of group-wide and local CDEM work programmes with locally imbedded staff, supported via a central core of specialists, and with the flexibility to cross-resource where required to meet a specific project challenge or an emergency. The work programme is established in concert with the local council and agreed to by both parties. A document is created that details the deliverables and expectations on each party. Metrics are then assigned that are used to track progress or identify issues.*

In determining the CDEM Model to align with the above, the following outcomes were defined as being important (see box to right).

## 9.2 Governance

### 9.2.1 Group-Wide Arrangements (Waikato CDEM Group Joint Committee)

#### Membership

The Joint Committee is established in accordance with the *Waikato CDEM Group Constituting Agreement* and is formed from one elected representative from each of local authorities in the Group. (*CDEM Act, Section 13*).

#### Objective

To provide leadership in the delivery of co-ordinated and collaborative arrangements for CDEM among member local authorities, partner agencies, clusters and communities within its group area. (*National CDEM Plan, Section 6.2*).

#### Functions

In accordance with the CDEM Act (Section 17), the functions of the Joint Committee are summarised as follows:

- Risk Management: Identify, assess and manage relevant hazards and risks. Consult and communicate on risks, and identify and implement cost-effective risk reduction measures.
- Planning for CDEM: Develop, implement, monitor and review the CDEM Group Plan. Participate in the development of the National CDEM Strategy and Plan.
- Delivering CDEM: Maintain and provide resources for effective CDEM, including equipment, materials, services, information and suitably trained and competent personnel, including volunteers, and response and recovery activities.
- Provide assistance to other CDEM Groups.
- Promoting and Monitoring CDEM: Promote and raise public awareness of the purposes and requirements of the Act and monitor and report on compliance with it.

#### Desirable CDEM Model Outcomes

*Develop CDEM work programmes, processes and relationships that:*

- Align with agreed Group priorities.
- Identify local needs.
- Identify the necessary resources.
- Reflect local processes, procedures and plans.
- Define operational relationships.
- Facilitate the building of community resilience.

*Implement and sustain what is developed, ensuring:*

- The delivery of the broader Group priorities.
- The maintenance of local procedures and plans.
- The necessary level of operational capability.
- Administrative excellence, including specialist advice, monitoring and reporting.
- The optimisation of resources to support both group-wide and local priorities.

*Integrate what is developed into all work undertaken by the respective organisation, with a particular focus on:*

- Executive level championing of CDEM outcomes across organisations.
- The informed approval and resourcing of local CDEM work programmes.
- The consideration of how CDEM outcomes impact all aspects of business-as-usual.
- The use of applicable plans and processes.
- Reporting on the progress being made against local CDEM outcomes.
- Appointment and sustainment of key CDEM roles (e.g. controller, recovery manager and welfare manager).



## Responsibilities

The Joint Committee is responsible for ensuring the Group fulfils its CDEM responsibilities and will:

1. Set the strategic direction of the Group via the Group Plan.
2. Approve the Group annual and long-term CDEM work programmes (as part of local authority long-term and annual planning processes).
3. Monitor the progress in implementing the Group work programme.
4. Amend and approve the Group Plan as required.
5. Appoint CDEM roles as required.

The democratic arrangements are summarised in Table 9-1.

<b>Chair of the Joint Committee</b>	One of the Joint Committee Members' representatives will be elected as chair for three years.
<b>Nature of the Joint Committee</b>	The Joint Committee is permanently established (under clause 30(7), schedule 7 of the Local Government Act 2002) and is not discharged following triennial elections.
<b>Voting</b>	The voting system is one vote per Member representative with the Chair having a casting vote.
<b>Delegated Authority</b>	Each Member's representative has authority to vote and make decisions on behalf of that Member without further recourse to that Member, subject to the decision being within approved budgets.
<b>Standing Orders</b>	The standing orders for the Joint Committee are NZS9202:2003, except as may be varied by the Joint Committee by resolution.
<b>Quorum</b>	The quorum for the Joint Committee, as provided for in LGA Schedule 7, C30 (9B).
<b>Meetings</b>	Meetings occur up to four times per year, or as required to fulfil the functions and duties required.

**TABLE 9-1: DEMOCRATIC ARRANGEMENTS**

## Individual Member Representatives Roles

As stated in the Group constituting agreement, each Member confers full delegated authority on its representative, or in their absence the alternate representative on the Joint Committee, to exercise the functions, powers and duties of Members under the CDEM Act.

The role of Joint Committee Member representatives within their local authority includes:

- Providing a point of contact for elected members relating to CDEM matters;
- Advocating CDEM development and delivery; and
- Liaising with CEG members to ensure that their local authority is delivering the outcomes of the Group Plan via its work programmes.

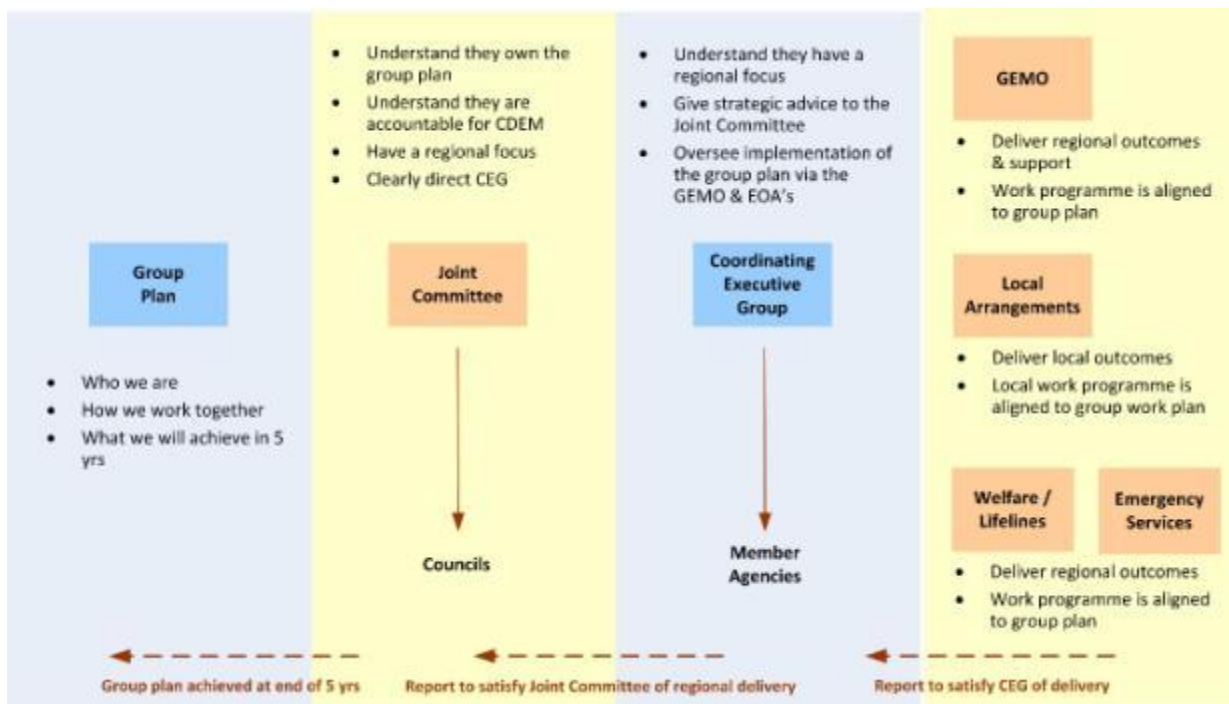


FIGURE 9-1: GROUP AND LOCAL REPORTING ROLES

### 9.2.2 Local arrangements

In addition to the Group-wide arrangements for the governance of CDEM, each territorial authority has implemented local arrangements for the governance of their respective CDEM work programmes. The following arrangements are acknowledged:

Territorial authority	Local governance arrangement
Hamilton City Council	Hamilton City Council Community Committee
Hauraki District Council	Hauraki District Council Emergency Management Committee
Matamata-Piako District Council	Matamata-Piako District Council
Otorohanga District Council	Otorohanga District Council
South Waikato District Council	South Waikato District Council
Taupō District Council	Taupō District Council Emergency Management Committee
Thames-Coromandel District Council	Thames-Coromandel District Council Emergency Management Committee
Waikato District Council	Audit & Risk Committee
Waipa District Council	Waipa District Council
Waitomo District Council	Waitomo District Council

Table 9-2: Local CDEM Governance Arrangements

## 9.3 Leadership

### 9.3.1 Group-Wide Arrangements (Coordinating Executive Group)

#### Background

Oversight and decision making in relation to strategic, planning, risk and accountability matters across the Group is led by the Coordinating Executive Group (CEG), operated under the *CEG Terms of Reference*. The appointment and functions of the CEG are in accordance with the CDEM Act (Section 20), with further information provided in the following sections.

#### Members of the CEG

The CEG comprises Chief Executive Officers, or a senior management representative acting on behalf of the Chief Executive Officer, from each of the 11 local authorities in the Group, the New Zealand Police, Fire and Emergency New Zealand and Waikato/Lakes District Health Boards (*CDEM Act (Section 20(1)(a-d))*).

In addition to these statutory members specified in the CDEM Act, in accordance with the CDEM Act (Section 20(1)(e)), the Joint Committee shall appoint or co-opt non-statutory CEG members as full CEG members and specialist advisors of the CEG (or their nominated alternate) as appropriate. For the Group, the following shall also be members of CEG:

- Waikato Lifeline Utilities Group Chairperson.
- A St John's Ambulance representative.

The Group Manager/Controller, Group Welfare Manager (who is also the Welfare Coordination Group Chairperson) and Group Recovery Manager have speaking rights but not voting rights.

A representative from NEMA is also accorded observer status.

#### Roles and Responsibilities

The CEG plays a pivotal role in coordinating and integrating CDEM Group strategy with local CDEM planning and implementation, and has the following prescribed functions in accordance with the CDEM Act (Section 20(2)):

- Providing advice to the Joint Committee and any subgroups or subcommittees;
- Implementing, as appropriate, the decisions of the Joint Committee;
- Overseeing the implementation, development, maintenance, monitoring, and evaluation of the CDEM Group Plan (refer Section 10 for more details on monitoring and evaluation role); and
- Responsibility for the preparation and implementation of the annual work programme and associated budget.

As well as participating in CEG discussions and decision making, individual CEG members are also accountable for ensuring the duties assigned to their respective organisations by the CDEM Act (Sections 60 to 65), including the integration of CDEM into their respective organisation, including:

- Executive level championing of CDEM outcomes.
- Informed approval and resourcing of organizational work programmes.
- Consideration of how CDEM outcomes impact all aspects of business-as-usual.
- Integration of CDEM plans and processes across the organization.
- Reporting on the progress made against agreed organizational outcomes.
- Appointment and sustainment of key CDEM roles.

In order for CDEM activity to be planned and delivered effectively, the CEG may establish CEG sub-committees with specific roles and these subcommittees will be chaired by a CEG member.

### 9.3.2 Local arrangements

In addition to the group-wide arrangements leadership arrangements described above, the following local leadership arrangements are also acknowledged.

Territorial authority	Local leadership arrangement
Hamilton City Council	Hamilton City Council Senior Leadership Team
Hauraki District Council	Hauraki District Council Executive Leadership Team
Matamata-Piako District Council	Matamata-Piako Executive Leadership Team
Otorohanga District Council	Western Waikato Emergency Management Committee
South Waikato District Council	South Waikato District Council Executive Leadership Team
Taupō District Council	Taupō District Council Senior Leadership Team
Thames-Coromandel District Council	Thames-Coromandel District Council Executive Leadership Team
Waikato District Council	Waikato District Council Executive Leadership Team
Waikato Regional Council	Incident & Emergency Management Leadership Team
Waipa District Council	Western Waikato Emergency Management Committee
Waitomo District Council	Western Waikato Emergency Management Committee

TABLE 9-3: LOCAL CDEM LEADERSHIP ARRANGEMENTS

## 9.4 Integration

### 9.4.1 Group-wide arrangements

Along with providing the Group with the necessary leadership and governance, the members of the Joint Committee and Coordinating Executive Group are also responsible for ensuring the decisions and priorities that are agreed for the Group are integrated into their respective organizations.

## 9.5 Delivery

### 9.5.1 Group-Wide arrangements

#### Group Emergency Management Office

To support the delivery of the Group strategy and work programme, the Group has established and maintains a Group Emergency Management Office (GEMO).

The GEMO coordinates and facilitates the 'day-to-day' Group-wide planning and project work on behalf of the Joint Committee and CEG. The work programme and budget of the GEMO is overseen by CEG and Joint Committee, however GEMO staff are employees of Waikato Regional Council (WRC).

The functions of the GEMO include:

- Advice and technical support to the CEG, the Joint Committee and Group Members.
- Project coordination and management for group-wide projects, including the ongoing development; implementation, monitoring and review of the Group Plan and supporting documentation.
- Coordination of Group policy development and implementation.
- Management of contracts entered into on behalf of the Joint Committee or CEG.
- Monitoring and responding to adverse effects of emergencies on behalf of the Group and disseminating warnings.
- Maintaining the GECC.
- External liaison with Group partners and stakeholders.
- Preparation (in consultation with CEG) of quarterly reports covering the Group performance with regard to work programme and budget.
- Representing (or facilitating representation of) the Group on national bodies and projects.

- Supporting CDEM professionals and individuals in named roles (e.g. Controllers) across the Group.
- Administrative services for CEG such as convening meetings, providing venues, organising agendas, providing minutes and catering.
- Where service level agreements exist, the GEMO provides direct delivery of local CDEM services through means of coordinators dedicated to (and in some cases imbedded with) specific territorial authorities.

The functioning of the GEMO is supported by the Waikato Regional Council, as defined by the Service Level Agreement with the Joint Committee. The services provided as part of this agreement are:

- Accountant for CDEM Group finances and budgets;
- Publishing the CDEM Group's work programme, budget and performance (once adopted);
- Provision of the GECC; and
- Entering into contracts with service providers on behalf of the Group.

The costs of undertaking these services are to be met in accordance with the CDEM Group financial policy.

To ensure a coordinated approach across the Group the following approach is used when undertaking group-wide tasks and projects:

- CEG members task and direct the appropriate local authority or agency to carry out a Group Plan objective;
- The GEMO will call meetings of the Group CDEM professionals staff to ensure a regionally consistent approach to matters relating to CDEM; and
- Local CDEM staff work collaboratively with each other and GEMO staff and participate in GEMO meetings and initiatives as requested.

### **Administering Authority**

In accordance with the CDEM Act (Section 23(1)), the WRC is the administering authority for the Group.

### **Local CDEM Work Programmes**

Local authorities support the delivery of the Group strategy and work programme through their participation in the Coordinating Executive Group (refer to Section 9.3), various advisory groups established by the Group (refer to Section 9.6), as well as their contribution to tasks and projects (as agreed by the development of this Plan).

Local authorities also maintain their respective Emergency Operating Centre (EOC) capability to support the overall response capability of the Group. Further information is provided under Response Arrangements (Section 1).

This support requires the integration of the Group strategy and work programme into many existing aspects of local authority business.

### **Local Authority Shared Service Arrangements**

The geographical extent, hazardscape and number of local authorities within the Group may lead to some of the territorial authorities adopting a shared services approach for delivery of readiness and response functions through Emergency Operating Areas (EOAs). Territorial authorities are able to establish and manage such shared services arrangements, but any new establishment or modification of arrangements must be advised to the Joint Committee.

Shared services arrangements do not devolve each territorial authority's responsibility for managing CDEM activities within its own area, providing support across the Group area as required, and for reporting to CEG on progress against the Group work programme.

Governance, funding and operation of any shared services arrangement is the responsibility of the territorial authorities, including:

- Approval of annual work programmes and budgets.
- Establishing methods of control, organisation and communication to facilitate the coordinated deployment of resources and services.
- Review of and input into local and district emergency management plans.
- Planning, support for, and review of local exercises.
- Liaising with CEG on significant CDEM issues.
- Recommending appointments for Local Controllers to the Joint Committee.

## 9.6 Advisory Groups

The Group will establish and or support groups whose purpose is to provide advice on specific CDEM work areas. The purpose of these advisory groups is to maintain an awareness of their respective operating environment and provide advice to the Coordinating Executive Group (CEG) with regard to:

- The capability of the Group in relation to the current operating environment.
- Any changes to the operating environment and any consequential changes to the approach taken for the CDEM work area.
- Strategic issues (both internal and external) that require the attention of the Group.

## 9.7 Financial Arrangements

The activities of the CDEM Group incur costs as part of:

- **Programmed Activities.** Administrative and related services under s.24 of the CDEM Act 2002 and the approved annual work programme.
- **Emergency Expenditure.** Expenditure incurred by the Group in the lead up to, during and immediately after a declared state of emergency (e.g. reimbursement for cost of specialist advice).

### 9.7.1 Programmed Activities

The Group is responsible for funding administrative and related services under s.24 of the CDEM Act 2002 and an agreed annual work programme. The Group has adopted a Charging Policy that sets out a clear, transparent and equitable framework for the allocation of costs associated with the operation of the Group and for Members involved in Group activities. The Policy is based on four guiding principles:

1. The operation of GEMO, and the administrative support provided to the Joint Committee and GECC (non-active status) are core Group activities, and therefore these costs are cover by a region-wide Targeted Rate. The level of resourcing for GEMO is determined by the work programme (and associated budget) approved by the Joint Committee.
2. The effective operation of the Group relies on the appointment of senior management staff to the CEG and elected members to the Joint Committee. The time and associated costs for these personnel fulfilling their responsibilities to the Group will be borne by the Member or Partner organisation.
3. Where a staff/elected member is appointed to a Group role, such as Controller, Recovery Manager, Public Information Manager, etc., the costs associated with such appointments will be borne by the Member or Partner organisation.
4. Where equipment, facilities or other non-personnel resources are specifically and solely required to support the operation of the GEMO/GECC, then those costs shall be borne by the Group and reflected in the Group budget.

The following table sets out how the charging principles will apply.

Role	Situation	Resourcing Type	Group Cost	Member Cost
Administering Authority staff & GEMO/ GECC Manager/ staff	Activities in accordance with approved work programme (including GECC administration/activation).	Time	✓	
	Approved training & associated costs (e.g. representing Group at recognised CDEM event).	\$	✓	
Key Appointment – Controller, Recovery Manager, Public Information Manager, etc. (fulfilling all aspects of role – i.e. steady state and activation)	Staff of a member organisation.	Time		✓
	External appointment.	\$	✓	
	Approved training & associated costs (e.g. representing Group at recognised CDEM event).	\$	✓	
CEG Member (Council & non-Council appointees)	Fulfilling responsibilities of a CEG member – attendance at meetings/workshops and related work. Includes costs relating to travel, training and upskilling.	Time		✓
Joint Committee Member	Fulfilling responsibilities of a JC member – attendance at meetings /workshops and related work.	Time		✓
GECC Staff	GECC training/ activation.	Time		✓
Non-CDEM staff	Periodic support of CDEM Group activities on an ‘as required’ basis.	Time		✓

**TABLE 9-4: GROUP CHARGING POLICY (DOC # 1796819)**

Unless agreed otherwise, the costs of completing any specific agency actions as outlined in the annual work plan will be met by the local authority or agency concerned. There will be other occasions where charging to the Group is appropriate, but falls outside the scope of the policy. In such circumstances the decision shall rest with CEG where the matter is in general accordance with the approved work programme/budget. Other matters will be referred to the Joint Committee for consideration.

### 9.7.2 Expenditure in a Civil Defence Emergency

In an emergency, in the interim, costs will lie where they fall, or where a territorial authority requests a resource, the cost will lie with the relevant territorial authority. Where the Group Controller directs a resource, the cost will be apportioned by agreement until such time as a WRC-administered funding source is in place.

In the lead up to, and during a declared emergency, the Group is responsible for funding:

- All costs associated with the resourcing, activation and operation of the GECC
- All reasonable direct expenses incurred by the Group Controller; and
- All reasonable direct expenses (such as travel, meals and accommodation) incurred by recognised technical advisors when they are requested to attend meetings to provide specialist technical advice.

Local authorities are responsible for meeting all costs associated with their own CDEM personnel, facilities and resources.

Through their appointed response representative, local authorities take first line responsibility for dealing with the impact of disaster in their geographic and functional areas of responsibility. This includes the prior provision of the physical and financial resources needed for response and recovery. Each local authority is to be responsible for meeting all emergency expenditure incurred in its district or under its jurisdiction, and arising out of the use of its resources and services under the control of either a Local Controller (directed to carry out any of the functions or duties of, or delegated to by, the Group Controller), or the Group Controller.

The Controller will ensure all costs are properly recorded and accounted for.

### 9.7.3 Recovering Costs in a Civil Defence Emergency

Upon termination of a declared emergency, the Group Controller will recommend to the CDEM Group which costs could reasonably be met by the Group. There may be circumstances where shared Group funding could be applied where there are widespread adverse regional impacts, and consequential regional benefits from localised response efforts to reverse these impacts.

Claims for government assistance are to be made by the organisation incurring the expenditure. When a declaration involves more than one district, the GEMO will co-ordinate and check respective local authority claims, independently prepare a claim for agreed Group costs, and submit the consolidated application.

Volunteers suffering personal injury or damage to or loss of property while carrying out emergency work under the control or authority of a Controller may also submit claims to the local authority employing the Controller, or in the case of the Group Controller to the CDEM Group (refer to sections 108 and 109 CDEM Act 2002).

### 9.7.4 Emergency Recovery Finances

Upon termination of a declared emergency, the expenditure management regime established for the response phase must be closed off and re-commenced for the recovery phase under the control of the Recovery Manager.

The Recovery Manager will ensure all costs are properly recorded and accounted for.

The Recovery Manager will recommend to the CDEM Group which recovery costs could reasonably be met by the Group, and which costs could be recovered from the government. Claims for government assistance are to be made by the organisation incurring the expenditure, or in the case where there are agreed Group costs, by the CDEM Group. Any central government involvement will be contingent upon the principles and conditions set out in section 33 of the Guide to the National CDEM Plan (2015).

Central government assistance for recovery from damage to private property, business, etc., is only available if it can be shown that the risk was uninsurable, and hardship can be demonstrated.

If it becomes apparent that there will be a significant number of people suffering financial hardship and more immediate relief is required, Mayoral Relief Funds may be established.

## 9.8 Actions

Issue / Opportunity	Responses and Actions
1. Develop and resource work programme.	66. Establish CDEM Group-wide work programmes, including securing funding.
	67. Agree financial delegations between the Group Controllers, Local Controllers and the Joint Committee.
2. Enhance coordination and integration.	68. Review the CDEM delivery model to achieve greater coordination of work programmes.
	69. Consider the establishment of a Group Relief Fund.



## 10. Monitoring and Evaluation

### 10.1 Overview

Ongoing monitoring and evaluation provides assurance to the Group and Waikato communities that the Group is complying with its obligations, achieving its objectives and making progress towards its goals.

#### 10.1.1 Goal

### Monitor the Effectiveness of CDEM Delivery

#### 10.1.2 The Function of the Waikato CDEM Group

The functions of the Joint Committee in relation to monitoring and evaluation are:

- Monitor and report on compliance within its area with this Act and legislative provisions relevant to the purpose of this Act (*CDEM Act Section 17.1 (h)*)
- Develop, approve, implement, and monitor a CDEM Group Plan and regularly review the plan (*CDEM Act Section 17.1 (j)*).
- Monitor and evaluate the progress of strategic planning for recovery and ensure the actions, responsibilities and timeframes are recorded and reported on.

#### 10.1.3 Issues and Opportunities

- **Monitoring and reporting is currently largely input based** (e.g.: hours committed to various work programmes) and focused on GEMO activities (as opposed to taking a “whole-of-group” approach that includes local work programmes).
- **Lack of transparency and accountability in CDEM delivery:** Some concerns have been expressed about the alignment of, and visibility of progress of, local CDEM work programmes. While flexibility in local CDEM delivery is important, delivery of Group Plan actions should be given priority where there are resource / funding constraints.
- **New Responsibilities to monitor and evaluate planning for recovery:** Groups to plan for, and carry out, recovery activity (*CDEM Act 2002 s-17(1) (e)*). It is vital that a performance framework is established to enable monitoring and evaluation of progress towards achieving this.

#### 10.1.4 Objectives

Progress towards the CDEM Group Plan objectives and outcomes is monitored across all Group Members and Partners.

## 10.2 Group-Wide arrangements

### 10.2.1 NEMA Monitoring and Evaluation

NEMA maintains a national monitoring and evaluation programme, which involves a 5-yearly review of the Group against a series of performance measures that are based on the CDEM Act, the National CDEM Plan and CDEM doctrine. The resulting capability assessment report is provided to the Group so that areas for improvement can be identified and implemented (with a corrective action plan submitted to NEMA).



The last capability assessment report was produced for the Group during 2014 and the results have been taken into account in the development of this plan. The next capability assessment report is expected in 2019 and will inform the next review of this plan.

### 10.2.2 Group Plan Monitoring and Reviews

An annual assessment will be conducted by the Group to ensure that the plan is still accurate and legislatively compliant. In addition, the Waikato CDEM Group Plan will be reviewed in accordance with the requirements of the CDEM Act (every 5 years).

### 10.2.3 Group Work Programmes

Each local authority and the GEMO develops work programmes which it leads and resources in support of the delivery of objectives and actions in this Plan. These will be monitored as follows:

- Quarterly reports provided to CEG will determine progress against the CDEM Group's and territorial authorities annual work programme.
- An annual report against the annual local and Group work programmes and broad five year work programme will be provided by the CEG to the Joint Committee.

## 10.3 Actions

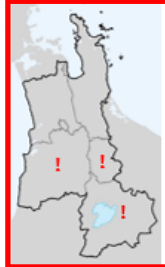
Issues	Responses and Actions
Monitoring and reporting is largely input-based and focused on GEMO activities.	70. KPIs established and reported on by each Member. Evaluation and reporting of achievement against all work programmes.
	71. MCDEM Capability Assessment Review (including moderated assessments for each Waikato CDEM Group member)
	72. Waikato CDEM Group Plan review
Lack of transparency and accountability in CDEM Delivery	73. Evaluation and reporting of achievement against all work programmes (aligned to actions and objectives in this Plan).
	74. Develop a performance framework to measure and monitor progress towards strategic planning for recovery.
	75. Establish reporting programme to provide oversight that CDEM Partners are meeting their responsibilities under the National CDEM Plan.

TABLE 10-1: MONITORING AND EVALUATION OBJECTIVES AND ACTIONS

# Attachment 1: Our hazards

## Guide to using this information

Name of hazard **Volcanic (ashfall only)**



Hazard hotspots within the Waikato CDEM Group

How the risk associated with the hazard is reduced

Risk associated with hazard if present reduction is ignored

Risk assessment (BEFORE reduction)		
Likelihood	Consequence	Risk
Likely	Region	Very high

Risk reduction focuses on...		
Hazard	Exposure	Vulnerability
		✓

Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk
Likely	Region	Very high

Risk associated with hazard after present reduction is considered

The scenario assumed when assessing the risk associated with the hazard

<p><b>BACKGROUND</b></p> <p>The Waikato CDEM Group area is vulnerable to a volcanic ashfall hazard from various sources both within and outside the area. The primary source within the Waikato CDEM Group area is the Tongariro Volcanic Centre, which is the most active volcanic centre in New Zealand and includes the recently active Mount Ruapehu, Ngauruhoe and Tongariro. The primary source outside of the Waikato CDEM Group area is Mount Taranaki.</p>
<p><b>SCENARIO</b></p> <p>The eruption of Mount Ruapehu, Ngauruhoe or Tongariro, coupled with strong winds from the south, result in ashfall across parts of the Waikato CDEM Group area. Lifeline infrastructure (including electricity generation/transmission, roads and water supplies) are impacted, along with agriculture.</p>
<p><b>HISTORICAL EXAMPLE</b></p> <p>1995 eruption of Mount Ruapehu.</p>
<p><b>REDUCTION</b></p> <ol style="list-style-type: none"> <li>The likelihood of the HAZARD occurring cannot be reduced as this is a natural hazard.</li> <li>The likelihood of EXPOSURE to the hazard is not currently reduced, and it would be difficult to do so given the widespread and uncertain nature of the hazard.</li> <li>The VULNERABILITY of the community to the hazard is reduced by: <ul style="list-style-type: none"> <li>Ashfall-specific public education and awareness.</li> <li>Having infrastructure redundancies.</li> </ul> </li> </ol>

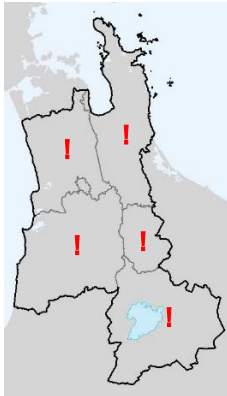
Background information on the hazard and associated risk

A historical example of the assumed scenario

Further details on how the risk is reduced.

*Note: This information covers items specific to each hazard, and is over and above the general work undertaken to provide organizational readiness and community resilience.*

# Drought



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Possible	Nation	Very high			✓	Possible	Nation	Very high

## BACKGROUND

Droughts occur when the rainfall deficit for a given period is more than the average rainfall deficit for the same period. Historically, water shortage and potential drought within the Waikato CDEM Group area has not been as severe as in other areas of New Zealand, though water shortage events have impacted our communities.

Areas in within the Waikato CDEM Group area that are particularly vulnerable to the consequences of drought are the Hauraki Plains, lower Waikato Basin and Thames-Coromandel District.

## SCENARIO

A meteorological drought with a 1 % AEP, resulting in little or no rainfall during summer across much of the North Island. Low soil moisture reduces pasture growth and agricultural productivity, while low surface water flows and levels reduces the availability of potable water throughout the community.

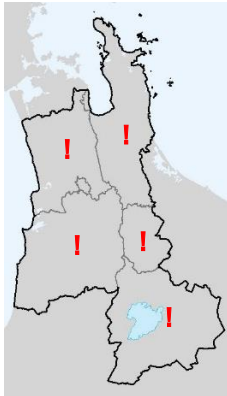
## HISTORICAL EXAMPLE

2012/2013 drought that affected much of New Zealand and especially the North Island.

## REDUCTION

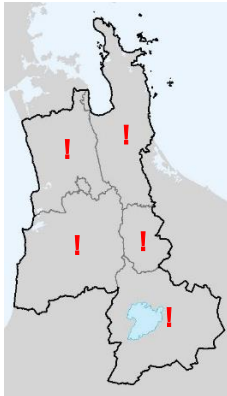
1. The likelihood of the HAZARD occurring cannot be reduced as this is a natural hazard.
2. The likelihood of EXPOSURE to the hazard is not currently reduced, and it would be difficult to do so given the widespread nature of the hazard.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - The use of alternative stock feed and water sources.
  - Active management of potable water takes and consumption.
  - The availability of alternative potable water sources.

## Pandemic (animal)



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Almost certain	Nation	Extreme	✓	✓	✓	Possible	Nation	Very high
<p><b>BACKGROUND</b></p> <p>Animal pandemic relates to a range of animal diseases typically found in livestock such as Foot and Mouth Disease, Bovine Encephalitis and Equine Influenza. A widespread animal pandemic has the potential for major consequences due to New Zealand's dependence on horticultural, agricultural and forestry industries. New Zealand has limited historical exposure to disease, and is very susceptible to biological hazards.</p> <p><b>SCENARIO</b></p> <p>The widespread infection of livestock with Foot and Mouth Disease, impacting horticultural, agricultural and forestry industries within the Waikato CDEM Group area and across New Zealand.</p> <p><b>HISTORICAL EXAMPLE</b></p> <p>No relevant historical event identified.</p> <p><b>REDUCTION</b></p> <ol style="list-style-type: none"> <li>The likelihood of the HAZARD occurring is reduced by: <ul style="list-style-type: none"> <li>Biosecurity controls at the New Zealand border to prevent disease entering New Zealand.</li> </ul> </li> <li>The likelihood of EXPOSURE to the hazard is reduced given the widespread nature of the hazard: <ul style="list-style-type: none"> <li>Disease surveillance and reporting to monitor activity and (where required) initiate containment and/or eradication.</li> <li>Procedures for the containment and/or eradication of outbreaks.</li> </ul> </li> <li>The VULNERABILITY of the community to the hazard is reduced by: <ul style="list-style-type: none"> <li>Hazard-specific national response capability lead by MPI.</li> </ul> </li> </ol>								

## Pandemic (human)



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Almost certain	Nation	Extreme	✓	✓	✓	Possible	Region	Very high

### BACKGROUND

The 2009 incidence of influenza A (H1N1), also known as “swine flu”, has demonstrated to the world the speed with which modern transportation can facilitate the spread of disease. Since 2004, the potential of the H5N1 avian influenza virus to create a pandemic has been the cause of concern to governments worldwide. Considerable research, planning and preparation has been undertaken within New Zealand to prepare for response to a pandemic.

While the likelihood of a pandemic is uncertain, the consequences of a full-blown event would also certainly be significant for the Waikato CDEM Group and for New Zealand.

### SCENARIO

The widespread infection of the community with a disease such as one of the many strains of Influenza.

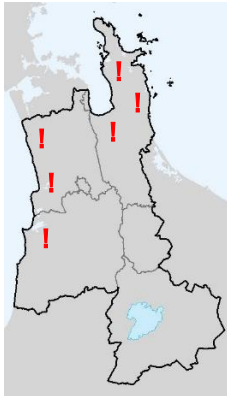
### HISTORICAL EXAMPLE

1918, 1957 and 1968 influenza pandemics that affected New Zealand. 2020 COVID-19 pandemic.

### REDUCTION

1. The likelihood of the HAZARD occurring is reduced by:
  - The New Zealand Influenza Pandemic Plan (keep it out)
2. The likelihood of EXPOSURE is reduced given the widespread nature of the hazard:
  - The New Zealand Influenza Pandemic Plan (plan for it, stamp it out and manage it)
3. The VULNERABILITY of the community to the hazard is reduced by:
  - The New Zealand Influenza Pandemic Plan (plan for it and manage it).

## Tsunami



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Possible	Nation	Very high		✓	✓	Possible	Nation	Very high

### BACKGROUND

The tsunami hazard could affect the east and west coasts of the Waikato CDEM Group area. The sources for tsunami include:

- Distant sources such as South America (particularly southern Peru), and to a much lesser extent Cascadia (North America) and the Aleutian Islands.
- Regional sources such as the Solomon Islands, and to a much lesser extent the southern New Hebrides (Vanuatu).
- Local sources, particularly the Tonga-Kermadec Trench to the north-east and the Hikurangi Trench off East Cape, and to a lesser extent Mayor Island and the undersea landslides to the north of East Cape.

### SCENARIO

An 8-9 magnitude earthquake on the Tonga-Kermadec Trench creates a 3-5 m tsunami that impacts the east coast of New Zealand (with the area of impact within the Waikato CDEM Group area being the Coromandel Peninsula). Coastal communities are inundated within 1 hour of the earthquake occurring, causing widespread damage and requiring the evacuation of thousands of people from areas within the Waikato CDEM Group area, as well as neighbouring CDEM Group areas (e.g. Bay of Plenty).

### HISTORICAL EXAMPLE

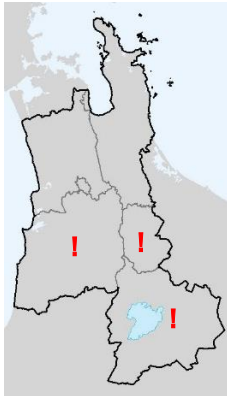
2011 Tohoku earthquake and tsunami that impacted Japan (the earthquake mechanism that caused this tsunami is similar to the subduction zone off the east coast of New Zealand).

**REDUCTION**

1. The likelihood of the HAZARD occurring cannot be reduced as this is a natural hazard.
2. The likelihood of EXPOSURE to the hazard is reduced by:
  - Tsunami-specific research to improve the understanding of this hazard and inform the management of the associated risk.
  - The use of district plans to restrict the use of land affected by a tsunami hazard (e.g. by avoiding critical support services and ensuring changes to land use support emergency response planning).
3. The VULNERABILITY of the community to the hazard is reduced by:
  - Tsunami-specific public education and awareness targeted at coastal communities (including self-evacuation based on natural warnings).
  - Pre-identified tsunami evacuation routes and safe-zones.
  - The provision of tsunami advisories by the Pacific Tsunami Warning Centre to inform New Zealand decision making.
  - The provision of tsunami advisories (watches and warnings) by NEMA through the National Warning System.
  - The dissemination of tsunami advisories to the community using public alerting tools.



## Volcanic (ashfall only)



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Likely	Region	Very high			✓	Likely	Region	Very high

### BACKGROUND

The Waikato CDEM Group area is vulnerable to a volcanic ashfall hazard from various sources both within and outside the area. The primary source within the Waikato CDEM Group area is the Tongariro Volcanic Centre, which is the most active volcanic centre in New Zealand and includes the recently active Mount Ruapehu, Ngauruhoe and Tongariro. The primary source outside of the Waikato CDEM Group area is Mount Taranaki.

### SCENARIO

The eruption of Mount Ruapehu, Ngauruhoe or Tongariro, coupled with strong winds from the south, result in ashfall across parts of the Waikato CDEM Group area. Lifeline infrastructure (including electricity generation/transmission, roads and water supplies) are impacted, along with agriculture.

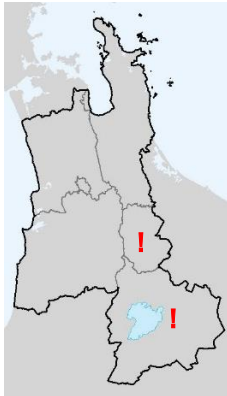
### HISTORICAL EXAMPLE

1995 eruption of Mount Ruapehu.

### REDUCTION

1. The likelihood of the HAZARD occurring cannot be reduced as this is a natural hazard.
2. The likelihood of EXPOSURE to the hazard is not currently reduced, and it would be difficult to do so given the widespread and uncertain nature of the hazard.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - Research and monitoring to improve the understanding of the volcanic ashfall hazard that affects the Waikato CDEM Group area.
  - Ashfall-specific public education and awareness.
  - Having infrastructure redundancies, where ashfall is expected to impact the level of service provided by that infrastructure.

## Volcanic (caldera unrest)



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Likely	Region	Very high			✓	Likely	Region	Very high

### BACKGROUND

There are a number of caldera volcanos within and adjacent to the Waikato CDEM Group area. These are:

- Taupō Volcanic Centre, which is a rhyolitic volcanic centre location in the south of the Waikato CDEM Group area and is partially occupied by Lake Taupō.
- Maroa Volcanic Centre, which is a rhyolitic volcanic centre located to the north of Lake Taupō.

Unrest episodes have been recorded periodically across both these areas over the past century.

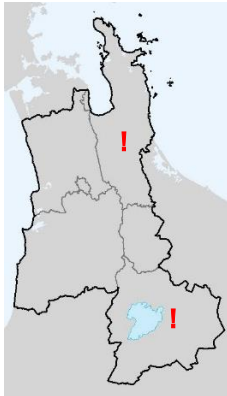
### SCENARIO

The Volcanic Alert Level of Lake Taupō is raised to 1 (minor volcanic unrest) or 2 (moderate to heightened volcanic unrest), resulting in unrest hazards such as steam eruptions, volcanic gases, earthquakes, landslides, uplift and subsidence. This unrest raises the possibility of a significant volcanic eruption.

### REDUCTION

1. The likelihood of the HAZARD occurring cannot be reduced as this is a natural hazard.
2. The likelihood of EXPOSURE to the hazard is not currently reduced, and it would be difficult to do so given the widespread and uncertain nature of the hazard.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - Monitoring of volcanic activity by Geonet to detect caldera unrest, along with the use of this information to provide early warning information using the system of Volcanic Alert Levels.
  - Research targeted at caldera volcanos to understand caldera unrest.
  - Research to understand the broader implications of caldera unrest on the community so that it can be better planned for and managed.
  - A coordinated approach to managing this risk, supported by the Caldera Advisory Group.

# Earthquake



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Possible	Region	High			✓	Possible	Region	High

### BACKGROUND

New Zealand straddles the boundary between two tectonic plates; the Pacific Plate and the Australian Plate which move towards each other by about 50 mm per year. The Waikato region includes some of the most seismically active parts of New Zealand with four large active faults:

- The Kerepehi Fault within the Thames Valley
- The Ngangiho/Rangipo Faults in the southern part of the region
- The Wairoa North Fault in the northern part of the Waikato Valley
- The Taupō Fault Belt which extends between Taupō and Rotorua across the region's boundary.

The area between Taupō and Rotorua is the most vulnerable part of the region for earthquakes. It contains many active fault lines running in a north-east direction. Small earthquakes occur on a daily basis, though there are longer gaps between larger earthquakes.

### SCENARIO

A magnitude 6-7 earthquake, centered on either the Kerepehi, Ngangiho/Rangipo or Wairoa North fault lines, or within the Taupō Fault Belt. Damage is sustained across the Waikato CDEM Group area.

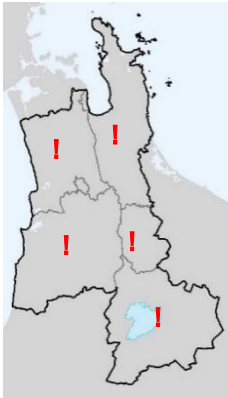
### HISTORICAL EXAMPLE

1987 Edgecumbe earthquake that was of a magnitude similar to what can expected from the Kerepehi Fault (as was also caused by a similar faulting mechanism).

**REDUCTION**

1. The likelihood of the HAZARD occurring cannot be reduced as this is a natural hazard.
2. The likelihood of EXPOSURE to the hazard is not currently reduced, and it would be difficult to do so given the widespread and uncertain nature of the hazard.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - Research and monitoring to improve the understanding of the seismic hazard that affects the Waikato CDEM Group area.
  - The development and implementation of standards and regulations that relate to the seismic performance of buildings and infrastructure.
  - The monitoring, reporting and analysis of seismic activity by Geonet (while this does not provide an earthquake warning, it does provide information that informs decisions after a major event, such as the expected nature of aftershocks).

## Infrastructure failure



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Almost certain	Region	Extreme	✓	✓	✓	Possible	Region	High

### BACKGROUND

Modern life is reliant on a range of services, including:

- Potable water supply, waste water treatment/disposal, and storm water management.
- Electricity generation and supply.
- Telecommunications (including internet connectivity).
- Local and state highway road networks.

The infrastructure that provides these services is vulnerable to failure for a number of reasons, including the physical limitations of the infrastructure, and a number of environmental factors that affect the infrastructure (e.g. natural hazards).

### SCENARIO

An interruption in a service provided by lifeline infrastructure (e.g. roading, electricity, water or telecommunications), impacting multiple districts for a period of days or weeks.

### REDUCTION

1. The likelihood of the HAZARD occurring is reduced by:
  - Lifeline utilities understanding the hazards their infrastructure is exposed to, the risks associated with that exposure, and the implementation of measures to reduce that risk. This work is supported by the collective effort of the Waikato Lifeline Utilities Group
2. The likelihood of EXPOSURE to the hazard reduced by
  - Lifeline utilities understanding the extent of impact in the event of an interruption of service, and providing service redundancies and/or contingencies. This work is also supported by the collective effort of the Waikato Lifeline Utilities Group.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - Public education targeted at individuals and communities have contingencies in the event of an interruption of service.

## Land instability (long-term deformation)



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Almost certain	Community	High			✓	Almost certain	Community	High

### BACKGROUND

New Zealand is located on the boundary of the Pacific and Australian plates. The movement at this plate boundary causes slow, ongoing and permanent changes to natural ground levels (both rising and falling). The southern extent of the Waikato CDEM Group area is affected by this hazard.

### SCENARIO

Slow, ongoing, generally localized but permanent changes to natural ground levels due to tectonic plate movements, particularly to the south of the Waikato CDEM Group area.

### HISTORICAL EXAMPLE

Ongoing deformation currently being observed to the south-east of the Waikato CDEM Group area.

### REDUCTION

1. The likelihood of the HAZARD occurring cannot be reduced as this is a natural hazard.
2. The likelihood of EXPOSURE to the hazard is not currently reduced, and it would be difficult to do so given the widespread nature of the hazard.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - Research and monitoring to improve the understanding of the land deformation hazard that affects the Waikato CDEM Group area.

## Marine oil spill



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Likely	Nation	Extreme	✓	✓	✓	Possible	Region	High

### BACKGROUND

Numerous activities that occur both adjacent to and on the water have the potential to result in the discharge of hydrocarbons (e.g. diesel, hydraulic oil and fuel oil) into the marine environment. This hazard is managed by Marine New Zealand, regional councils and the operators of vessels through the Maritime Transport Act.

### SCENARIO

The discharge of heavy fuel oil into the marine environment and the potential for further discharges, requiring a Tier 3 (national) response to be initiated.

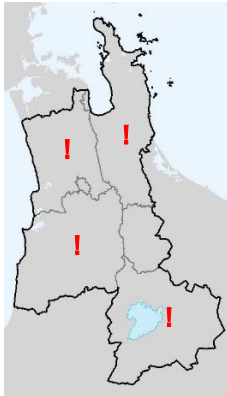
### HISTORICAL EXAMPLE

2011 grounding of the MV Rena and subsequent oil spill.

### REDUCTION

1. The likelihood of the HAZARD occurring is reduced by:
  - The requirements of the Maritime Transport Act, particularly the control of maritime operations to ensure the safe passage of vessels and their cargo.
  - The requirements of the Resource Management Act, including the regulation of activities that have the potential to cause a discharge to the marine environment (e.g. shoreline refueling facilities).
2. The likelihood of EXPOSURE to the hazard is reduced by:
  - The requirements of the Maritime Transport Act, including the need contingency planning to minimize the impact of a spill by containment and recovery.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - The requirements of the Maritime Transport Act, including the need contingency planning to minimize the impact of a spill by containment and recovery.

## River flooding



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Likely	Region	Very high		✓	✓	Possible	Region	High

### BACKGROUND

Frequent, heavy rain and the steep gradient of many rivers means the region is prone to flooding from severe weather patterns, especially tropical cyclones and depressions. River flooding is therefore the most frequent and widespread natural hazard within the region.

The Kaimai/Coromandel Ranges and the catchments to the east of Lake Taupō typically have short, steep catchments, and rivers and streams that have a high sediment load and are highly active and unpredictable with typically short warning times. The lower reaches of the major river systems, the Waikato/Waipā, Waihou and Piako Rivers, have a lower gradient and are more predictable during flood events.

The main areas subject to a river flood hazard within the Waikato CDEM Group area are:

- The Coromandel rivers and streams
- The Waihou and Piako river systems
- The Lower Waikato River (from Ngaruawahia north)
- The Waipā River
- Lake Taupō and tributaries.

### SCENARIO

Repeated widespread and heavy rainfall across saturated catchments during winter, leading to river flows that have a 1 % AEP in both the Waikato River and Hauraki Plains systems. Peak river levels persist for a number of weeks, restricting the operational of land drainage systems and placing flood protection infrastructure (stopbanks, ponding areas and pump stations) under operational pressure.

### HISTORICAL EXAMPLE

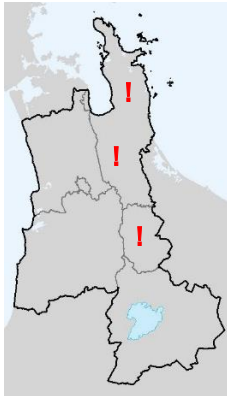
1998 flood event in the Waikato River and Hauraki Plains.



**REDUCTION**

1. The likelihood of the HAZARD occurring cannot be reduced as this is a natural hazard.
2. The likelihood of EXPOSURE to the hazard is reduced by:
  - Research and monitoring to improve the understanding of the river flood hazard that affects the Waikato CDEM Group area.
  - The use of district plans to restrict the use of land affected by a river hazard (e.g. by not allowing dwellings to be constructed).
  - The provision of flood protection infrastructure to contain flood waters.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - The use of the Building Act to ensure building floor levels are raised appropriately.
  - The use of district plans to restrict the use of land affected by a river hazard (e.g. by placing requirements on land use where exposure to the hazard cannot be avoided).
  - The provision of land drainage infrastructure to expedite the drainage of flood waters in order to reduce damage.
  - The provision of rainfall forecasting by the MetService.
  - The provision of real-time river level and rainfall information by the Waikato Regional Council and MetService.
  - The provision of flood forecasting by the Waikato Regional Council.

## Severe storm



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Likely	Region	Very high		✓	✓	Likely	District	High

### BACKGROUND

The Waikato CDEM Group area is vulnerable to severe storms due to its northern geographical location (meaning that it is vulnerable to storms of tropical origin). The future effects of climate change is also likely to exacerbate its effects.

Severe storm events occur across the Waikato CDEM Group area, but tend to severely impact the Thames Valley area and low-lying areas in other parts of the region. However, other severe weather events, including wind, tornados, thunder cells and snowfall, can impact any part of the Waikato CDEM Group area, with severe wind events particularly common in the north-east area.

### SCENARIO

Rapidly deepening low pressure system moves across the Waikato CDEM Group area from the north west, bringing intense rainfall, strong winds and a storm surge due to a combination of low atmospheric pressure and strong on-shore winds.

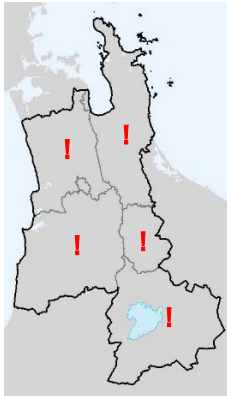
### HISTORICAL EXAMPLE

2002 “weather bomb” that affected the Coromandel Peninsula, Hauraki Plains and South Waikato.

### REDUCTION

1. The likelihood of the HAZARD occurring cannot be reduced as this is a natural hazard.
2. The likelihood of EXPOSURE to the hazard is reduced by:
  - Those measures referred to for “river flooding” and “coastal”.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - Those measures referred to for “river flooding” and “coastal”.
  - Building standards for other environmental factors (e.g. high winds).
  - The provision of severe weather forecasting by the MetService before and during an event (e.g. wind speed, atmospheric pressure and tide level).
  - The provision of real-time environmental information by the Waikato Regional Council and the MetService (e.g. wind speed, atmospheric pressure and tide level).

## Volcanic (caldera eruption)



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Rare	Nation	High			✓	Rare	Nation	High

### BACKGROUND

There are a number of caldera volcanos within and adjacent to the Waikato CDEM Group area. These are:

- Taupō Volcanic Centre, which is a rhyolitic volcanic centre location in the south of the Waikato CDEM Group area and is partially occupied by Lake Taupō.
- Maroa Volcanic Centre, which is a rhyolitic volcanic centre located to the north of Lake Taupō.

While eruptions from these types of volcano are infrequent (millennia apart), their magnitude make them nationally (and even internationally) significant.

### SCENARIO

Eruption of Lake Taupō.

### HISTORICAL EXAMPLE

The historically significant 180AD eruption of Lake Taupō.

### REDUCTION

1. The likelihood of the HAZARD occurring cannot be reduced as this is a natural hazard.
2. The likelihood of EXPOSURE to the hazard cannot be reduced given the widespread nature of this hazard.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - Monitoring of volcanic activity by Geonet, along with the use of this information to provide early warning information using the system of Volcanic Alert Levels.

## Volcanic (eruption)



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Likely	Region	Very high		✓	✓	Likely	District	High

### BACKGROUND

The Waikato CDEM Group area is vulnerable to a number of volcanic hazards from various sources both within and outside the area. The most widespread, frequent and likely volcanic hazard is ashfall, and this is covered separately in this document. This information relates to near source volcanic hazards such as ballistic projectiles, lahars, lava flows, pyroclastic flows and surges and debris avalanches.

The primary source of volcanic threat from within the Waikato CDEM Group area is the Tongariro Volcanic Centre (the most active volcanic centre in New Zealand includes the recently active Mount Ruapehu, Mount Ngauruhoe and Mount Tongariro). The primary sources of volcanic threat from outside the Waikato CDEM Group area are:

- Mount Taranaki: situated within the Taranaki region to the south-west of the group.
- Okataina Volcanic Centre: situated within the Bay of Plenty region to the east of the group.
- Mayor island: located offshore from the east coast of the Coromandel Peninsula.
- Auckland Volcanic Centre: located within the Auckland region to the north of the group.

### SCENARIO

Eruption of either Mount Ruapehu, Tongariro or Ngauruhoe.

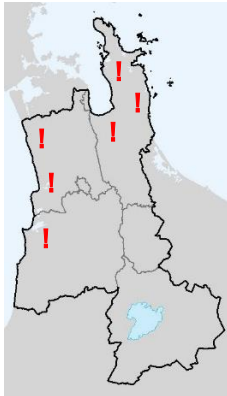
### HISTORICAL EXAMPLE

The most eruptions of Mt Ruapehu (1995), Tongariro (2012) and Ngauruhoe (1974).

**REDUCTION**

1. The likelihood of the HAZARD occurring cannot be reduced as this is a natural hazard.
2. The likelihood of EXPOSURE to the hazard is reduced by:
  - Restricting land uses in the immediate vicinity of active volcanoes (noting that these are located entirely within the Tongariro National Park).
  - Restricting the use of facilities within the Tongariro National Park where elevated unrest is detected.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - Monitoring of volcanic activity by Geonet, along with the use of this information to provide early warning information using the system of Volcanic Alert Levels.
  - The provision of eruption detection systems.
  - The provision of early warning systems and evacuation procedures for the Whakapapa and Turoa ski fields.
  - Restricting the use of facilities within the Tongariro National Park where a volcanic eruption is in progress.
  - A coordinated approach to the management of this risk, implemented through the Central Plateau Volcanic Advisory Group.

## Coastal (surge/flood/erosion)



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Possible	District	High		✓	✓	Possible	Community	Moderate

### BACKGROUND

The Waikato CDEM Group area includes coastline on both the east coast and west coast of the North Island. Both coastlines are varied (sandy beaches, rocky shorelines, sheltered harbours and tidal estuaries) and are also very dynamic.

From a short-term perspective, the coastlines are subject to changing weather and coastal marine conditions that can rapidly lead to the erosion of the coastline, along with the inundation of low lying coastal land.

From a longer-term perspective, the coastlines are subject to a range of coastal processes that result in gradual erosion or aggradation that is either progressive or cyclic.

### SCENARIO

An ex-tropical cyclone moves in over the Waikato CDEM Group area from the north of New Zealand, leading to heavy seas and a storm surge with a 1% AEP due to the combination on strong on-shore winds, low atmospheric pressure and a king tide.

### HISTORICAL EXAMPLE

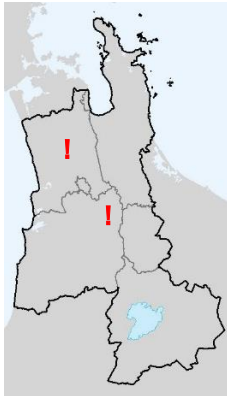
1938 coastal flooding event in the Firth of Thames that impacted the Hauraki Plains (before the existing coastal defences were constructed).

2018 storm surge event on Firth of Thames and Kaiaua.

**REDUCTION**

1. The likelihood of the HAZARD occurring cannot be reduced as this is a natural hazard.
2. The likelihood of EXPOSURE to the hazard is reduced by:
  - Research and monitoring to improve the understanding of the coastal hazard that affects the Waikato CDEM Group area.
  - The use of district plans to implement coastal setback lines as a basis for the control of land use (e.g. a requirement for structures to be set back from the coastline).
  - The provision of coastal protection infrastructure to either contain coastal flooding or reduce erosion.
  - The provision of other solutions to increase the resilience of the coastline to erosion (e.g. coastal planting and the rehabilitation of dune systems).
3. The VULNERABILITY of the community to the hazard is reduced by:
  - The use of district plans and the Building Act to require minimum floor levels for dwellings based on coastal flood levels.
  - The forecasting of marine and coastal conditions by the MetService and other organisations.
  - The provision of real-time tide gauge information by the Waikato Regional Council and other organisations.

## Dam break



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Possible	Region	High	✓		✓	Rare	Region	Moderate

### BACKGROUND

The Waikato CDEM Group area includes a number of large hydro-electric dams on the Waikato River that are operated by Mercury. These dams are located upstream of several urban areas that are located adjacent to the Waikato River, including Cambridge, Hamilton, Ngaruawahia and Huntly.

### SCENARIO

The structural failure of the Karapiro Dam, causing a flood wave to travel down the Waikato River, with the resulting peak river levels causing inundation in parts of Cambridge, Hamilton, Ngaruawahia and Huntly.

### HISTORICAL EXAMPLE

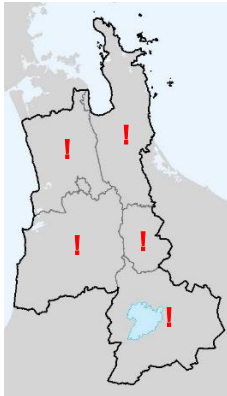
No relevant historical event identified.

### REDUCTION

1. The likelihood of the HAZARD occurring is reduced by:
  - Ensuring the Karapiro Dam (and the other dams in the Waikato Hydro Scheme) meet relevant engineering standards.
2. The likelihood of EXPOSURE to the hazard is not reduced.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - The undertaking of dam break research to improve the understanding of this hazard and inform the management of associated risk.

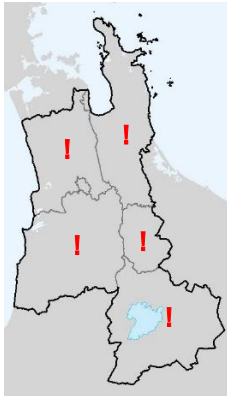


## Fire (structure)



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Almost certain	Community	High	✓	✓	✓	Likely	Community	Moderate
<p><b>BACKGROUND</b></p> <p>The Waikato CDEM Group area includes a number of urban areas that include a range of residential, commercial and industrial land uses.</p> <p><b>SCENARIO</b></p> <p>A large structure fire in an urban area that requires the widespread evacuation due to the spreading of the fire or the involvement of hazardous materials.</p> <p><b>HISTORICAL EXAMPLE</b></p> <p>No relevant historical event identified.</p> <p><b>REDUCTION</b></p> <ol style="list-style-type: none"> <li>The likelihood of the HAZARD occurring is reduced by: <ul style="list-style-type: none"> <li>Ensuring the compliance of various land and building uses with requirements that relate to fire safety (e.g. the control of potential sources of ignition and the use of hazardous substances).</li> <li>Public education (e.g. raising awareness of potential sources of ignition).</li> </ul> </li> <li>The likelihood of EXPOSURE to the hazard is reduced by: <ul style="list-style-type: none"> <li>The emergency response service provided by Fire and Emergency New Zealand.</li> <li>Public education (e.g. the promotion of sprinkler systems, smoke alarms and evacuation planning).</li> </ul> </li> <li>The VULNERABILITY of the community to the hazard is reduced by: <ul style="list-style-type: none"> <li>The emergency response service provided by Fire and Emergency New Zealand.</li> <li>Public education (e.g. the promotion of sprinkler systems, smoke alarms and evacuation planning).</li> </ul> </li> </ol>								

## Fire (vegetation)



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Almost certain	District	Very high	✓	✓	✓	Likely	Community	Moderate

### BACKGROUND

The Waikato CDEM Group area includes a number of large forested areas, both indigenous forests and plantations (e.g. pine)

### SCENARIO

A large vegetation fire in that threatens an urban area and requires the widespread evacuation.

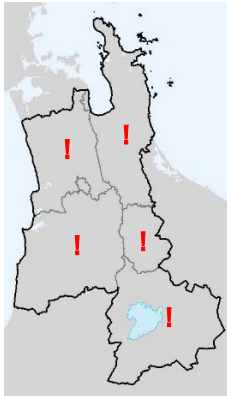
### HISTORICAL EXAMPLE

No relevant historical event identified.

### REDUCTION

- The likelihood of the HAZARD occurring is reduced by:
  - Public education (e.g. raising awareness regarding the potential for ignition from certain activities).
  - Controlling the intentional setting of fires through the issuing of permits and enforcing fire bans.
- The likelihood of EXPOSURE to the hazard is reduced by:
  - The emergency response service provided by Fire and Emergency New Zealand.
- The VULNERABILITY of the community to the hazard is reduced by:
  - The emergency response service provided by Fire and Emergency New Zealand.

## Hazardous substance incident



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Almost certain	District	Very high	✓	✓	✓	Likely	Community	Moderate

### BACKGROUND

The Waikato CDEM Group area includes a variety of industries that require the storage and use of hazardous substances for day-to-day operations. The area also includes a number of significant transport routes that connect Auckland with Tauranga, New Plymouth and further south to Wellington, and as a result involve the transportation of hazardous substances.

### SCENARIO

A large release of a hazardous substance that requires the widespread evacuation of an urban area.

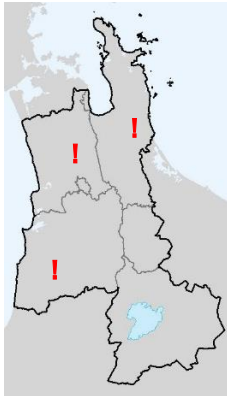
### HISTORICAL EXAMPLE

No relevant historical event identified.

### REDUCTION

1. The likelihood of the HAZARD occurring is reduced by:
  - Ensuring the transport, storage and use of hazardous substances complies with relevant regulations and standards.
2. The likelihood of EXPOSURE to the hazard is reduced by:
  - The emergency response service provided by various emergency services.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - The emergency response service provided by various emergency services.

## Land instability (subsidence)



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Likely	Community	Moderate	✓	✓		Likely	Community	Moderate

### BACKGROUND

The Waikato CDEM Group area includes several areas that are vulnerable to subsidence due to the natural environment (e.g. the karst landscape in the south-west of the area) and the built environment (e.g. underground mine operations in Waihi and Huntly).

### SCENARIO

The localized collapse of an abandoned mine operation, impacting one or two homes.

### HISTORICAL EXAMPLE

2001 collapse of old gold mining tunnels in Waihi that impacted existing residential land use.

### REDUCTION

1. The likelihood of the HAZARD occurring is reduced by:
  - Ensuring that potential sources of subsidence are identified and stabilized (the built environment only).
2. The likelihood of EXPOSURE to the hazard is reduced by:
  - The undertaking of research to improve the understanding of this hazard and inform the management of associated risk.
  - Avoiding vulnerable land uses on land that may be affected by subsidence (and, where appropriate, retiring existing land uses that are found to be vulnerable).
3. Other than general work undertaken to provide organizational readiness and community resilience, the VULNERABILITY of the community to the hazard is not reduced.

## Land instability (landslide)



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Possible	Community	Moderate			✓	Possible	Community	Moderate

### BACKGROUND

The Waikato CDEM Group area includes several areas that are vulnerable to landslides due to the natural environment. Examples include:

- The Coromandel and Kaimai ranges, which are vulnerable to landslides and debris flows during periods of heavy rainfall.
- The active Hipaua landslide to the south of Lake Taupō, which is driven by a combination of geothermal activity, seismic activity and heavy rainfall.

### SCENARIO

The mobilization of the Hipaua landslide due to a combination of seismic activity and heavy rainfall, impacting the community of Little Waihi, leading to casualties, damage to buildings and infrastructure.

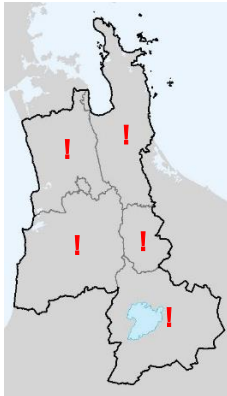
### HISTORICAL EXAMPLE

Previous landslides in 1780, 1846 and 1910 that impacted Waihi Village.

### REDUCTION

1. The likelihood of the HAZARD occurring cannot be reduced as this is a natural hazard.
2. The likelihood of EXPOSURE to the hazard is not reduced.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - The ongoing monitoring and analysis of this active landslide feature (e.g. ground levels and thermal imaging) and providing the community with this information.
  - Public education and preparedness with a focus on this particular hazard.
  - Monitoring of the broader environment and the incorporation of that information in the management of the risk (e.g. rainfall forecasts and observations by MetService, seismic activity by Geonet, and the combination of that information to help inform when the likelihood of movement may be higher).

## Mass casualty incident (land/air/sea)



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Likely	Community	Moderate	✓	✓	✓	Possible	Community	Moderate

### BACKGROUND

The mass transportation of people occurs within or adjacent to the Waikato CDEM Group area, including on land, air and sea.

### SCENARIO

A transport accident, resulting in mass casualties.

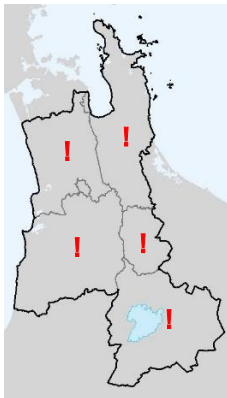
### HISTORICAL EXAMPLE

No relevant historical event identified.

### REDUCTION

1. The likelihood of the HAZARD occurring is reduced by:
  - Enforcing relevant transport safety regulations and standards (for land, air and sea).
  - Improving the safety of transport corridors.
  - Public education with a focus on transport safety.
2. The likelihood of EXPOSURE to the hazard is reduced by:
  - Controlling other uses around transport corridors.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - The emergency response services provided by the New Zealand Police, Fire and Emergency New Zealand and St John.

# Terrorism



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Rare	Region	Moderate	✓	✓	✓	Rare	Region	Moderate

**BACKGROUND**

The Waikato CDEM Group area (as with the rest of New Zealand) may be impacted by a domestic or international terrorism incident.

**SCENARIO**

A domestic or international terrorism incident.

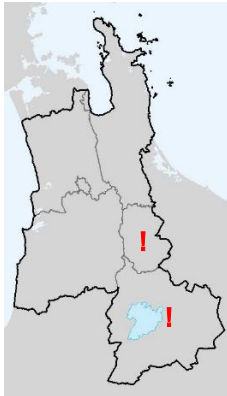
**HISTORICAL EXAMPLE**

No relevant historical event identified.

**REDUCTION**

1. The likelihood of the HAZARD occurring is reduced by:
  - Various pieces of legislation.
2. The likelihood of EXPOSURE to the hazard is not reduced:
  - Various pieces of legislation.
3. The VULNERABILITY of the community to the hazard is reduced by:
  - The emergency response services provided by the New Zealand Police, Fire and Emergency New Zealand and St John.

## Geothermal ground activity



Risk assessment (BEFORE reduction)			Risk reduction focuses on...			Risk assessment (AFTER reduction)		
Likelihood	Consequence	Risk	Hazard	Exposure	Vulnerability	Likelihood	Consequence	Risk
Likely	Individual	Low		✓		Likely	Individual	Low

### BACKGROUND

The Waikato CDEM Group area includes several areas of geothermal ground activity.

### SCENARIO

A geothermal eruption, impacting a localized and undeveloped area.

### HISTORICAL EXAMPLE

2005 geothermal eruption near Reporoa.

### REDUCTION

1. The likelihood of the HAZARD occurring cannot be reduced as this is a natural hazard.
2. The likelihood of EXPOSURE to the hazard is reduced by:
  - Research and monitoring to improve the understanding of the geothermal ground activity hazard that may affect the Waikato CDEM Group area.
  - The use of district plans to restrict the use of land affected by geothermal ground activity (e.g. by not allowing dwellings to be constructed).
3. Other than general work undertaken to provide organizational readiness and community resilience, the VULNERABILITY of the community to the hazard is not reduced.



## Attachment 2: Action Plan

The delivery of this Action Plan will require the coordinated efforts of all Group Members and Partners. Annual work plans are expected to be established showing how each Member/Partner will contribute to the following Action Plan with annual reporting to CEG / Joint Committee on achievements. The actions below indicate where primary responsibility for the actions will rest with the GEMO (G), local CDEM work programmes (L) or a combination (C).

CDEM Plan Section	Actions	Classification – project or annual	
		P	A
<b>All</b>	0. C: Develop a project plan for delivery of major projects, including scope, deliverables, and resources/costs.		
<b>Section 2: Understanding and Communicating Risks</b>	1. C: Collation of hazard and risk information, gap analysis and data improvement programme.		
	2. G: Ongoing development of the regional multi-hazard lifeline utilities vulnerability assessment project.		
	3. C: Ongoing implementation of the hazard and risk data improvement programme.		
	4. C Identify the implications for recovery from the agreed priority hazards.		
	5. G: Develop a platform for collection, collation and sharing of hazard and risk information (Waikato Hazards Database).		
	6. C: Promote the availability of hazard and risk information to CDEM Partners, stakeholders and the community.		
	7. L: Local authorities to utilise risk consequence information to communicate with local communities to assist them to understand the possible consequences on their community and identify their risk tolerance level		
	8. L: Local authorities to develop strategic planning for recovery processes to better inform reduction, readiness, response and recovery (immediate, medium and long term)		
<b>Section 3: Coordination of risk reduction initiatives.</b>	9. G: Audit the hazard risks identified in the Waikato Regional Policy Statement, Regional Plans, District Plans and Long Term Plans and report their effectiveness as a CDEM mechanism for risk reduction and identifying prioritisation and implementation of strategic recovery actions.		
	10. G: Review risk reduction reporting requirements to CEG to support a more coordinated approach across all agencies.		
	11. G: Implement the risk reduction framework to facilitate a consistent approach to risk reduction across the Group.		
	12. C: Review processes for integrating local authority planning with other CDEM resilience building activities.		
	13. G: During the next review periods, review the effectiveness of the Waikato Regional Policy Statement, Regional Plans, District Plan and Long Term Plans as a CDEM mechanism for defining acceptable risk.		

CDEM Plan Section	Actions	Classification – project or annual	
		P	A
	<p>14. G: Collate data from local authority preparation for recovery with local communities to:</p> <ul style="list-style-type: none"> <li>• understand risk tolerance;</li> <li>• minimise the escalation of the consequences of emergencies;</li> <li>• reduce future exposure to hazards and their associated risk to build resilience;</li> <li>• identify opportunities to regenerate and enhance communities that will meet future needs (across the built, economic, natural and social environments), and;</li> <li>• Support the cultural, emotional and physical wellbeing of individuals and communities.</li> </ul>		
<b>Section 4: Being Ready – Our Communities</b>	15. L: Incorporate hazard and risks (including infrastructure risks) as part of community response and recovery planning.		
	16. C: Use Waikato Hazard and Risk database to prioritise community response and recovery planning and vice versa.		
	17. G: Develop and implement a community engagement strategy with a focus on coordinating initiatives amongst key partner agencies.		
	18. G: Engage with other CDEM groups to identify their approaches to strategic planning for recovery.		
	19. L: Develop a prioritised programme for development and updates of CRPs.		
	20. L: Test, review and maintain community resilience plans.		
	21. G: Review the CRP framework post the pilots for recovery planning and assess 'the fit' of combining response and recovery planning with local communities.		
	22. G: Develop a programme to measure community resilience outcomes.		
	23. L: Establish and sustain communication processes between communities and CDEM.		
	24. L: Complete a stock take of CDC facilities and plan for removal / development.		
	25. L: Implementation of CDC plan.		
	26. G: Establish standardised arrangements for CDC administration and communication arrangements.		
	27. C: Implementation of CDC arrangements Group-wide.		
	28. L: Promote CDC locations appropriate to community requirements.		
	29. G: Establish and sustain protocols with volunteer groups for the oversight, mobilisation and coordination of community volunteer capability (including aspects identified in the Volunteer Plan).		
	30. C: Develop and deliver a programme for CDEM trained volunteers in partnership with our preferred volunteer coordination partner.		
	31. G: Establish CDEM relationships with large scale businesses.		
	32. G: Establish CDEM relationships with professional bodies and institutions.		
	33. C: Promote and build business engagement with CDEM (e.g.: Waikato Hazard and Risk Information).		
	34. G: Establish and sustain protocols with businesses for the oversight and mobilisation of skills and assets during an emergency response and recovery		
35. C: Develop evaluation framework to measure the effectiveness of regional and local business engagement by CDEM.			
	36. C: Develop situational awareness processes.		

CDEM Plan Section	Actions	Classification – project or annual	
		P	A
<b>Section 5: Being Ready – The Group</b>	37. C: Implementation and exercising of EMI and other ICT solutions.		
	38. C: Improve and align all Group operational documents based on an agreed minimum requirement.		
	39. G: Identify and implement a plan addressing the accommodation arrangements for the GEMO/GECC.		
	40. C: Support the development of the Integrated Training Framework (ITF). Include training for Recovery Managers.		
	41. C: Develop and implement a training exercise programme to improve CDEM capability development.		
	42. C: Develop the professional capability of professional CDEM staff through goal setting, reviews and training opportunities.		
	43. G: Develop protocols for sharing of CDEM staff resources across the Group and maintaining key positions during a prolonged activation, including recovery.		
	44. G: Establish a Group business continuity forum for members to review organisational resilience and identify collective areas for improvement. As a first step in the establishment of this forum, members are to provide a copy of their current business continuity arrangements/plans in order to establish a baseline for future improvements.		
	45. C: Implement the Warning Systems Strategy		
	46. C: Improve and sustain interagency operational communications protocols (including the principles of consistent messaging).		
	47. G: Establish and sustain the coordination of interagency public information and social media management.		
	48. C: Review resource requirements for a major Group response.		
	49. C: Develop a Group Logistics Plan for use of the resources.		
<b>Section 7: Recovery Arrangements</b>	50. C: Educate the Group in respect of the requirements of the 2016 amendments to the CDEM Act 2002 and the 'Strategic Planning for Recovery' Director's Guideline which require local authorities to prepare communities for recovery.		
	51. G: Complete an audit of the Group Recovery arrangements against the legislative requirements and relevant recovery related Director's Guidelines and information.		
	52. L: Update Local Recovery Plans in line with the legislation and Group Plan. A work programme for strategic planning for recovery activity must be set.		
	53. L: Report on achievements against Recovery Plan actions.		
	54. G: Develop protocol for Controllers and Recovery Managers to transition from response to recovery.		
	55. C: Review Group and local authority capacity to staff and sustain recovery over an extended timeframe and document reciprocal arrangements.		
	56. C: Train Local Recovery Managers in their role and responsibilities.		
	57. C: Promote the inclusion of strategic planning for recovery as a key aspect of an integrated approach to community engagement across all aspects of council business.		
	58. G: Develop guidelines that support local authorities to document their local recovery arrangements.		
<b>Section 8: Partnerships</b>	59. G: Develop a Terms of Reference for the Emergency Services Advisory Group.		
	60. G: Develop a Welfare Coordination Group (WCG) business plan and report on progress to CEG.		

CDEM Plan Section	Actions	Classification – project or annual	
		P	A
	61. G: Review the WCG Plan.		
	62. L: Develop annual local welfare business plans and report on progress to WCG.		
	63. C: Report on iwi engagement across the Group on CDEM matters.		
	64. G: Support capability development of lifeline utilities.		
	65. G: Maintain and review the WLUG Charter and business plan and report progress to CEG.		
<b>Section 9: Our Structure</b>	66. G: Establish CDEM Group-wide work programmes, including securing funding.		
	67. C: Agree financial delegations between the Group Controllers, Local Controllers and the Joint Committee		
	68. C: Review the CDEM delivery model to achieve greater coordination of work programmes.		
	69. G: Consider the establishment of a Group Relief Fund.		
<b>Section 10: Monitoring and Evaluation</b>	70. C: KPIs established and reported on by each Member. Evaluation and reporting of achievement against all work programmes.		
	71. C: MCDEM Capability Assessment Review (including moderated assessments for each Waikato CDEM Group member)		
	72. C: Waikato CDEM Group Plan review.		
	73. C: Evaluation and reporting of achievement against all work programmes (aligned to actions and objectives in this Plan).		
	74. G: Develop a performance framework to measure and monitor progress towards strategic planning for recovery.		
	75. G: Establish reporting programme to provide oversight that CDEM Partners are meeting their responsibilities under the National CDEM Plan.		

## Attachment 3: Glossary

Term	Definition
<b>4R's</b>	The four parts of emergency management, being reduction, readiness, response and recovery: <ol style="list-style-type: none"> <li>a. <b>Reduction:</b> identifying and analysing long-term risks to human life and property from natural or non-natural hazards; taking steps to eliminate these risks if practicable, and, if not, reducing the magnitude of their impact and/or the likelihood of their occurring.</li> <li>b. <b>Readiness:</b> developing operational systems and capabilities before a civil defence emergency happens, including self-help and response programmes for the general public, and specific programmes for emergency services, lifeline utilities, and other agencies.</li> <li>c. <b>Response:</b> actions taken immediately before, during, or directly after a civil defence emergency to save lives and property, and to help communities recover.</li> <li>d. <b>Recovery:</b> the coordinated efforts and processes used to bring about the immediate, medium-term, and long-term holistic regeneration and enhancement of a community following an emergency.</li> </ol>
<b>(the) Act</b>	Civil Defence Emergency Management Act 2002.
<b>Administering authority</b>	Means, in relation to the CDEM Group, the administering authority appointed under section 23 of the CDEM Act (refer section 8).
<b>Area</b>	In relation to a Civil Defence Emergency Management Group. – <ol style="list-style-type: none"> <li>a. means all the districts of the local authorities that are members of the Group; and</li> <li>b. extends to –               <ol style="list-style-type: none"> <li>a. the landward boundary of the territorial authorities in the Group; and</li> <li>b. the seaward boundary of the regions of regional councils for unitary authorities in the Group</li> </ol> </li> </ol>
<b>Capability</b>	<ol style="list-style-type: none"> <li>a. An organisation's ability to undertake functions, such as provide a service or fulfil a task; and</li> <li>b. The effectiveness of co-operation and coordination arrangements across agencies for the delivery of resources in the event of an emergency.</li> </ol>
<b>Capacity</b>	The adequacy of resources in terms of quantity and suitability of personnel, equipment, facilities and finances.
<b>CDEM Group (the Group):</b>	The consortia of local authorities, emergency services, lifeline utilities, welfare services organisations, Government departments and non-government organisations with a role in CDEM in the region.
<b>CDEM Group Members</b>	The local authorities within the Waikato area.
<b>CDEM Partners</b>	Those organisations that are part of the wider 'CDEM Group' as defined above, excluding CDEM Group Members.
<b>Civil Defence Emergency Management (CDEM)</b>	Civil Defence Emergency Management (cf. s.4). <ol style="list-style-type: none"> <li>a. The application of knowledge, measures, and practices that:               <ol style="list-style-type: none"> <li>i. Are necessary or desirable for the safety of the public or property; and</li> <li>ii. Are designed to guard against, prevent, reduce, or overcome any hazard or harm or loss that may be associated with any emergency; and</li> </ol> </li> <li>b. Includes, without limitation, the planning, organisation, coordination, and implementation of those measure, knowledge and practices.</li> </ol>
<b>Civil Defence Centre (CDC)</b>	The CDEM Group's local centres for direct involvement with the public for:

	<ul style="list-style-type: none"> <li>• The provision of advice and information about an emergency;</li> <li>• Temporary shelter for evacuees;</li> <li>• Registration of evacuees and relocation to accommodation; and</li> <li>• The provision of aid to affected communities.</li> </ul> <p><i>NB the Guide makes reference to Reception Centres, Evacuation Centres and Assembly Areas. The general trend of CDEM Group and the Ministry now is to refer to Civil defence centres.</i></p>
<b>Controller – Group</b>	A person appointed under s. 26 of the Act to exercise the functions and powers of the Group Controller or those functions and powers delegated by the CDEM Group during a state of local emergency within the Group for which they are appointed.
<b>Controller – Incident</b>	Usually the senior first responder to an incident. Incident control may transfer based on statutory or agreed responsibilities for control at particular incidents.
<b>Controller – Local</b>	A person or persons appointed under s. 27 who may exercise the powers of a Controller or the functions and powers of the Group Controller if so delegated during a state of local emergency within the Group for which they are appointed.
<b>Coordinated Incident Management System (CIMS)</b>	The New Zealand Coordinated Incident Management System. An agreed method of incident management to be employed by emergency responders for efficient incident management.
<b>Coordinating Executive Group (CEG)</b>	Coordinating Executive Group established under s. 20 of the Act, comprising representatives from the Joint Committee Member local authorities, Police, Fire and Emergency New Zealand, Ambulance, District Health Boards and the Ministry of Civil Defence Emergency Management.
<b>Distal</b>	Far from the area, i.e., distal tsunamis are typically generated from America and have a travel time > 8-10 hours. Distal volcanos are typically > 50km from the referenced area.
<b>Emergency</b>	Means a situation that: <ul style="list-style-type: none"> <li>a. Is the result of a happening, whether natural or otherwise, including without limitation, any explosion, earthquake, eruption, tsunami, land movement, flood, storm, tornado, cyclone, serious fire, leakage or spillage of any dangerous gas or substance, technological failure, infestation, plague, epidemic, failure of or disruption to an emergency service or lifeline utility, or actual or imminent attack or warlike act; and</li> <li>b. Causes or may cause loss of life or injury or illness or distress or in any way endangers the safety of the public or property in New Zealand or any part of New Zealand; and</li> <li>c. Cannot be dealt with by emergency services, or otherwise requires a significant and coordinated response under the Act.</li> </ul> <p><i>National CDEM Act 2002.</i></p>
<b>Emergency Management Office (EMO)</b>	Offices established at local and Group level to coordinate CDEM activities (see also GEMO).
<b>Emergency Operations Centre (EOC)</b>	The CDEM Group's local <b>Emergency Operations Centres</b> in local authorities, for the coordination of local response activities, the management of local civil defence centres, and the care of local communities.
<b>Emergency services</b>	The New Zealand Police, Fire and Emergency New Zealand and hospital and health services, (i.e. District Health Boards). <i>National CDEM Act 2002.</i>

<b>Evacuation</b>	The temporary relocation (either spontaneous or organised) of all or part of a particular population or geographical region from a location that has been or is about to be affected by an emergency, to a place considered to be safe.
<b>Evacuee</b>	A person unable or unwilling to stay in their usual place of residence as a result of an incident or emergency.
<b>Geographic Information System (GIS)</b>	A <b>Geographic Information System</b> (GIS), or geographical information system, captures, stores, analyses, manages, and presents data that is linked to location.
<b>Group Emergency Coordination Centre (GECC)</b>	The CDEM Group's Emergency Coordination Centre for the coordination of regionally significant events and/or the management of critical resources during a local emergency.
<b>Group Emergency Management Office (GEMO)</b>	An office established to coordinate CDEM activities on behalf of the Joint Committee.
<b>Hazard</b>	Has the same meaning as in section 4 of the CDEM Act and <i>means something that may cause, or contribute substantially to the cause of, an emergency.</i>
<b>Joint Committee</b>	Means a joint standing committee established under section 12 of the CDEM Act comprising the Regional Council and Territorial Authorities within the Waikato region. The joint standing committee is formed under clause 30(1)(b) of Schedule 7 of the Local Government Act 2002.
<b>Lead agency</b>	The organisation with current responsibility for managing an emergency.
<b>Lifeline utility</b>	An entity named or described in Schedule 1 of the Act. These include Radio New Zealand, Television New Zealand, Auckland, Wellington and Christchurch International Airports, specific provincial airports, specific port companies, gas industry, electricity industry, water industry, waste water and sewerage industry, telecommunications industry, roads industry, fuel industry and rail industry.
<b>Local authority (LA)</b>	Means a Regional Council or Territorial Authority (TA).
<b>Local emergency</b>	A state of local emergency declared under section 68 or 69 of the Act.
<b>Local Transition Period</b>	Means a local transition period notified under section 94B of the Act.
<b>National significance</b>	Includes, without limitation, any case where the Minister of Civil Defence or the Director of Civil Defence Emergency Management considers that: <ul style="list-style-type: none"> <li>a. There is widespread public concern or interest; or</li> <li>b. There is likely to be significant use of resources; or</li> <li>c. It is likely that the area of more than one CDEM Group will be affected; or</li> <li>d. It affects or is likely to affect or is relevant to New Zealand's international obligations; or</li> <li>e. It involves or is likely to involve technology, processes, or methods that are new to New Zealand; or</li> <li>f. It results or is likely to result in or contribute to significant or irreversible changes to the environment (including global).</li> </ul>
<b>National Transition Period</b>	Means a national transition period notified under section 94A of the Act.
<b>Recovery Manager - Group</b>	Appointed by the CDEM Group to give effect to Group coordination of recovery during and following an emergency.
<b>Recovery Manager - Local</b>	Appointed by a Territorial Authority or Emergency Operating Area to give effect to local coordination of recovery during and following an emergency.
<b>Regional significance</b>	Due to the magnitude or geographic spread of the incident, one or more EOCs have been activated to manage the emergency, which now requires ECC coordination of critical resources; or

	A warning of a significant event that will have a regional impact has been received; or Coordinated assistance is required to support an adjoining CDEM Group.
<b>Response</b>	The actions taken immediately before, during, or directly after a civil defence emergency to save lives, protect property and to support communities in the transition to recovery. Response starts prior to an emergency being declared and lasts until the immediate threats to lives, safety and property are over, and systems and processes are in place to manage the recovery process.
<b>Resilience</b>	The capacity to survive a crisis and thrive in an uncertain world.
<b>Risk</b>	The uncertainty relating to achievement of objectives, measured in terms of the combination of likelihood and consequences of a risk event occurring.
<b>SoP</b>	Standard Operating Procedure.
<b>State of emergency</b>	Has the same meaning as in section 4 of the CDEM Act and <i>means a state of national emergency or a state of local emergency.</i>
<b>State of local emergency</b>	Has the same meaning as in section 4 of the CDEM Act and <i>means a state of local emergency declared under section 68 or section 69.</i>
<b>State of national emergency</b>	Has the same meaning as in section 4 of the CDEM Act and <i>means a state of national emergency declared under section 66.</i>
<b>Territorial Authority (TA):</b>	A City Council or District Council.
<b>WCG</b>	Welfare Coordination Group.