FINAL DRAFT

Bay of Plenty Civil Defence Emergency Management Group Plan

2018/2023

BAY OF PLENTY EMERGENCY MANAGEMENT GROUP

Bay of Plenty Civil Defence Emergency Management Group Plan 2018-2023

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INTRODUCTION

About the Bay of Plenty Civil Defence Emergency Management Group

Who are the Bay of Plenty Civil Defence Emergency Management Group?

The Bay of Plenty Civil Defence Emergency Management Group (Bay of Plenty CDEM Group) is established under The Civil Defence Emergency Management Act 2002 (The CDEM Act 2002). The CDEM Act 2002 requires every regional council and every territorial authority within that region to unite to establish a Civil Defence Emergency Management Group (CDEM Group).

Members of the Bay of Plenty CDEM Group are:

- Bay of Plenty Regional Council
- Kawerau District Council
- Ōpōtiki District Council
- Rotorua Lakes Council (legally Rotorua District Council)
- Tauranga City Council
- Western Bay of Plenty District Council
- Whakatāne District Council

Bay of Plenty CDEM Group

The governance and management arrangements for the Bay of Plenty CDEM Group and Bay of Plenty CDEM Coordinating Executive Group are set out in Part Four, pg. 60 of this Plan.

The Bay of Plenty CDEM Group is governed by a Joint Committee of the Mayors of each member territorial authority and an elected member of the Bay of Plenty Regional Council. The CDEM Act 2002 also requires each CDEM Group to establish a Coordinating Executive Group. The Coordinating Executive Group oversees the delivery of CDEM activities for the Bay of Plenty CDEM Group.

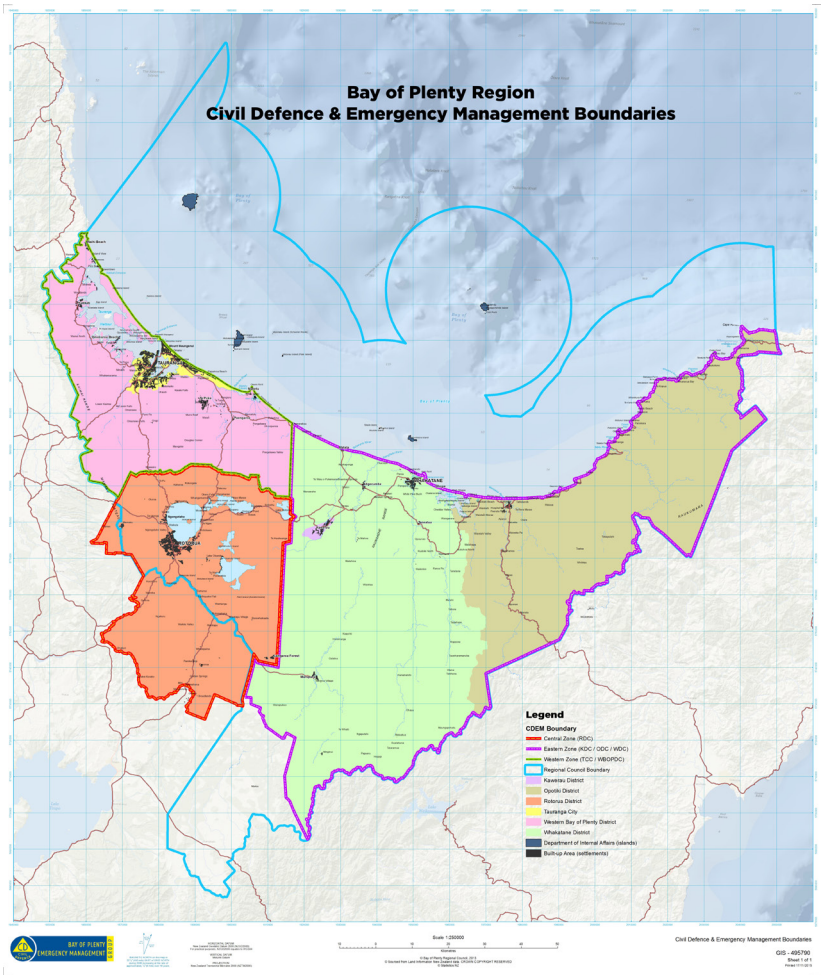


Figure 1: Bay of Plenty Civil Defence Emergency Management Boundaries

Why do we have Civil Defence Emergency Management?

As a country and region, we face events that impact on our communities. There are many examples such as flooding, earthquakes, plant and pest diseases, volcanic eruption, oil spills, infrastructure failures and pandemics that have had an impact on the Bay of Plenty in the last 50 years.

Individuals and members of the community are all responsible for their own safety and security. People need to make sure they are able to take care of themselves and each other, as much as possible, when lives are disrupted by emergency events. However, despite taking action to manage risks, individuals and communities can be overwhelmed by emergencies. The role of Civil Defence is to take an integrated approach to emergency management, based on Reduction, Readiness, Response and Recovery (known as the 4 Rs) (described in Table 3, pg. 22).

Bay of Plenty CDEM Group supports communities to:

- Identify and understand their risks, and take steps to eliminate or reduce those risks
- Develop capabilities and operational systems before an emergency happens so that communities are prepared – this includes developing personal, family/whanau, business and community preparedness
- Take action immediately before, during and directly after an event to save lives and protect property
- Put in place coordinated efforts and processes to assist with immediate, medium-term and long-term recovery following an emergency.

CDEM arrangements ensure coordination and communication happens, and that support is available when it's needed. Ultimately, the work of CDEM enables communities to be more resilient to the impacts of emergencies.

Figure 2: Components of the CDEM structure, taking a whole of society approach

What are Our Challenges over the Next Five Years?

Our key challenges are:

- The Bay of Plenty is subject to multiple hazards, some of which create a high risk to our communities. Significant earthquakes and tsunami in particular are two hazards with a low likelihood of occurring, but if they do occur they can have major impacts on our communities. Both are unpredictable, with impacts that occur immediately or very quickly after the event. Being prepared for these events is a significant challenge.
- CDEM is an integrated framework across the 4 Rs. Working in an integrated way with key stakeholders is a challenge. It can be easy for stakeholders to become 'siloed'. Maintaining focus across the 4 Rs is an ongoing challenge.
- Having a good understanding of our hazards and risks is critical, to enable the community to make informed decisions. How we develop an understanding of our risks and support communities to determine acceptable levels of risk is a challenge. People make choices based on a wide range of factors, of which risk is only one component.
- Encouraging acts of preparedness across all types of community including individuals, families, marae, community organisations, schools, businesses, lifeline utilities and other organisations is a challenge. In general, people are not concerned until something affects them directly. They have competing demands on their time and other priorities.
- Within the Bay of Plenty CDEM Group it is essential to have good capability and capacity to respond to emergencies. The Bay of Plenty CDEM Group needs to have strong relationships, systems and processes in place to be effective. There are competing demands for resources and time. How we deliver a good service that is integrated across the members of the Bay of Plenty CDEM Group and the 4 Rs is a challenge.

Eastern Bay of Plenty Landslip 2004

About the Bay of Plenty CDEM Group Plan

Purpose of the Bay of Plenty CDEM Group

The purpose of the Bay of Plenty CDEM Group Plan is:

- To set out how we will manage and respond to the challenges we have,
- To set out the operational arrangements of the Bay of Plenty CDEM Group.

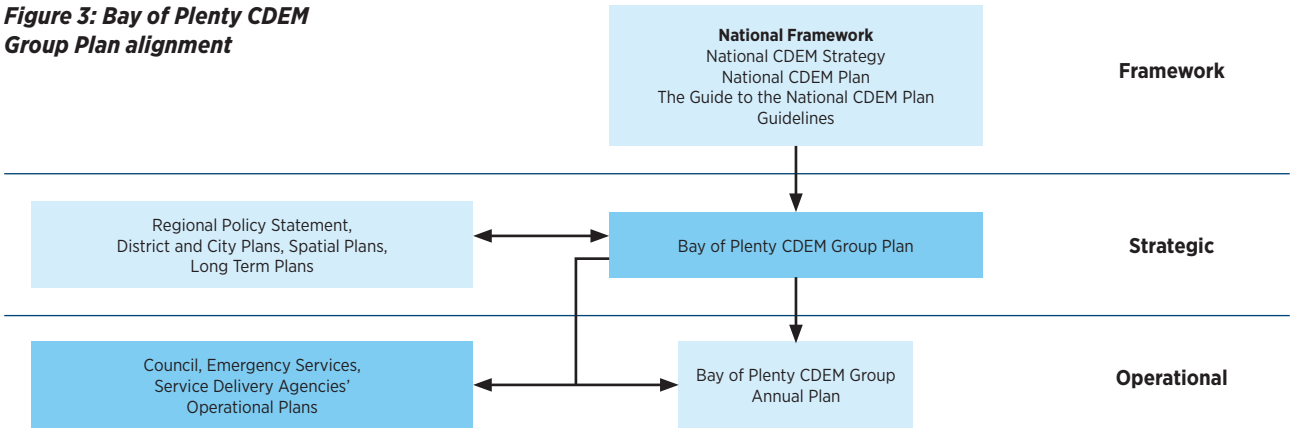
The Bay of Plenty CDEM Group Plan sets out the five-year outcomes that the Bay of Plenty CDEM Group wants to achieve and the actions we will take to achieve these outcomes.

The CDEM Act 2002 requires every Civil Defence Emergency Management Group to have a Group Plan. Sections 48-57[1] of The CDEM Act 2002 set out the requirements for Group Plans. The Plan must not be inconsistent with the National Civil Defence Emergency Management Strategy 2007 (National CDEM Strategy 2007) and must take account of the guidelines, codes and technical standards issued by the Director of Civil Defence Emergency Management.

Alignment of the Bay of Plenty CDEM Group Plan

CDEM activities are integrated with other local authority activities, so the Group Plan also aligns with local authority spatial plans, district and city plans, the Regional Policy Statement and local authority Long Term Plans.

Figure 3: Bay of Plenty CDEM Group Plan alignment



Implementation of the Bay of Plenty CDEM Group Plan

The Bay of Plenty CDEM Group Plan sets the strategic direction and objectives for the region to inform the coordinated delivery of comprehensive emergency management across the 4 Rs. This is delivered through a wide range of mechanisms for local authorities and supporting agencies. The Bay of Plenty CDEM Group ensures delivery of service through the Bay of Plenty CDEM Group Annual Plan. The Annual Plan aligns to local authorities' annual and long term plans. It details the activities that will be undertaken to achieve the objectives of the Bay of Plenty CDEM Group. Delivery of the Annual Plan activities is primarily the responsibilities of local authorities and Emergency Management Bay of Plenty.

Civil Defence Emergency Management involves everyone contributing where they can from individuals creating their household preparedness plans, to communities uniting to build their community response plan, businesses practicing their business continuity plans through to local authorities and emergency services doing their part. The Local Government Act 2002, the Building Act 2004 and the Resource Management Act 1991 require local authorities to manage risks and build strong and healthy communities in a wide range of ways, in addition to the delivering on the requirements of The CDEM Act 2002. Local authorities play a significant role in building

[1] Section 49 states the Group Plan must state and provide for – **(a)** the local authorities that have united to establish the Civil Defence Emergency Management Group: **(b)** the hazards and risks to be managed by the Group: **(c)** the civil defence emergency management necessary to manage the hazards and risks described under paragraph (b): **(d)** the objectives of the plan and the relationship of each objective to the national civil defence emergency management strategy: **(da)** the area of the Group: **(e)** the apportionment between local authorities of liability for the provision of financial and other resources for the activities of the Group, and the basis for that apportionment: **(f)** the arrangements for declaring a state of emergency: **(g)** the arrangements for co-operation and co-ordination with other Groups: **(h)** the period for which the plan remains in force.

strong and safe communities across all of the work they do. This all contributes to increasing the resilience of our region and reducing the impact of events when they occur.

Relationship to the Sendai Framework for Disaster Risk Reduction

The Sendai Framework for Disaster Risk Reduction (Sendai Framework) is a voluntary international agreement that aims to reduce disaster risk and loss of lives, livelihoods and health as a result of disasters. New Zealand is a signatory to the Framework. The Framework focusses on a better understanding of risk, strengthened disaster risk governance, more effective disaster preparedness in recovery, rehabilitation and reconstruction.

The Ministry of Civil Defence and Emergency Management are developing a National Disaster Resilience Strategy to be the blueprint for how New Zealand delivers on the priorities of the Sendai Framework. The current National CDEM Strategy 2007 will be replaced by the National Disaster Resilience Strategy from mid-2019.

The new Strategy and the relationship to the Sendai Framework have been considered through the development of the Bay of Plenty CDEM Group Plan. The Bay of Plenty CDEM Group has a focus on building resilience and on developing and enhancing our response capability and capacity.

Plan Structure

Part One: Understanding Our Region and Hazardscape

- Description of the Bay of Plenty, our trends and challenges
- Our hazardscape
- Risk profile

Part Two: Strategic Direction

- Vision and Principles
- Objectives across the 4 Rs:
  - Reduction
  - Readiness
  - Response
  - Recovery
- Monitoring and Evaluation

Part Three: Operational Arrangements

Part Four: Governance, Management and Financial Arrangements

Part Five: Tsunami: Case Study

Audience

The Bay of Plenty CDEM Group Plan has primarily been developed for agencies involved in CDEM (local authorities, emergency services, lifelines groups, other agencies/organisations with a role in CDEM). It also sets out how the Bay of Plenty CDEM Group will work with the community to build the Bay of Plenty's resilience.

Plan Development Process

The Bay of Plenty CDEM Group Plan was developed through the following process:

- Establishment of an internal project team and project steering group to contribute to and oversee the development of the draft Plan.
- Assessment of the current situation for the Bay of Plenty CDEM Group (strengths, weaknesses, and challenges), including identifying key areas for improvement from reviewing the Ministry of Civil Defence and Emergency Management 2015 National capability assessment for the Bay of Plenty CDEM Group, the Christchurch earthquake review, and from interviews with local CDEM staff.
- Engagement with key stakeholders to incorporate their perspective on the Bay of Plenty CDEM Group and ideas for the future. This included workshops with emergency services, welfare agencies, social service providers, tangata whenua and lifelines group members.
- Development of draft objectives for the Bay of Plenty CDEM Group across the 4 Rs.
- Approval of the draft plan for formal public consultation including review by Ministry of Civil Defence and Emergency Managment.
- Public consultation held over August 2017.
- Hearings held after the public consultation.
- Amended draft plan provided to the Minister of Civil Defence for comment.
- Final Bay of Plenty CDEM Group Plan approved by the Bay of Plenty CDEM Group Joint Committee.
- While the plan was developed prior to the April 2017 weather events in the Bay of Plenty, learnings identified from the debriefs and reviews following this event will be used to inform and improve ongoing practice.

Feedback and Key Themes from Stakeholder Engagement

There is a clear need for communities to be at the heart of all CDEM work. It is communities who are the 'first responders' to emergencies, who will act regardless of any processes or procedures in an emergency. It's important to be 'alongside' communities rather than creating barriers.

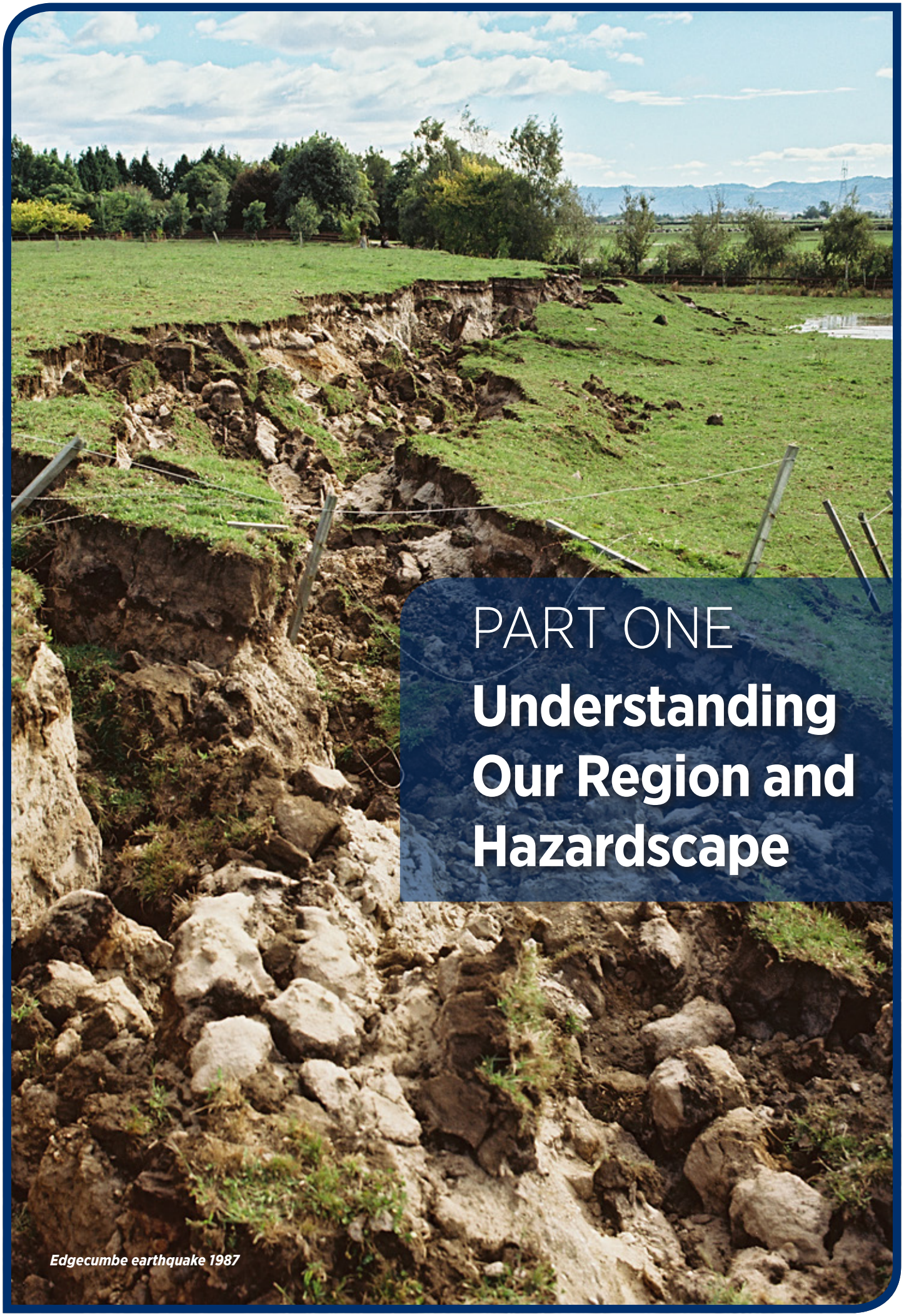
A key theme that emerged across the engagement in the development of this Plan was that communication is key. This includes providing the right information to communities at the right time, keeping them informed. They then know what to do, and also have a level of confidence. Communication is important even if there is nothing new to report. Communication is also key between agencies, to improve coordination and ensure everyone is 'working from the same page'. Being consistent with terminology, messages and processes is important.

Other key points are:

- Developing relationships and strong community support networks
- Communities having an understanding of their hazards and ways to be prepared.
- The need for ongoing support to communities after an event (in particular managing the social impacts).
- Recognising the strengths in our communities. For example older people have a lot to add to community understanding and preparedness.
- Training and exercising for all agencies with a role in CDEM, and expanding this to communities. Shared exercises with other agencies (e.g. District Health Boards).
- Development of resources that can be shared across agencies (e.g. Bay of Plenty Lifelines Group, emergency services) and have consistent messaging.

These points have been included in the objectives and key actions set out in the Bay of Plenty CDEM Group Plan.

2004 Edgecumbe flood



Edgecumbe earthquake 1987

PART ONE

Understanding Our Region and Hazardscape

PART ONE
Understanding Our Region and Hazardscape

Our Environment

Increasing the understanding of the potential impacts of our priority hazards across the Bay of Plenty is important to support better management of the hazards and reduction of their impacts.

Social Environment[2]

The Bay of Plenty Civil Defence Emergency Management region has a population of approximately 271,251. This makes the Bay of Plenty the fifth most populous region in New Zealand. The region has a high population density in the west and low population density in the east. Across the region, population projections show that the Bay of Plenty will be faced with a rapidly increasing and proportionally older population over the next 30 years. By 2031, 1 in 4 people will be over the age of 65.

Compared to the rest of New Zealand, the Bay of Plenty is less ethnically diverse, but there is a high Māori population. In 2013, 1 in 4 people in the region identified as Māori, compared to 13 percent for New Zealand. 1 in 10 identified as being part of an ethnic group other than Māori or NZ European, which is lower than the national average of 21 percent. The second-most spoken language in the Bay of Plenty is te reo Māori.

The Bay of Plenty region has approximately 104,000 occupied dwellings and 13,500 unoccupied dwellings. Overall in New Zealand, individual home ownership rates are declining, with significant percentage decreases for Māori and Pacific populations.

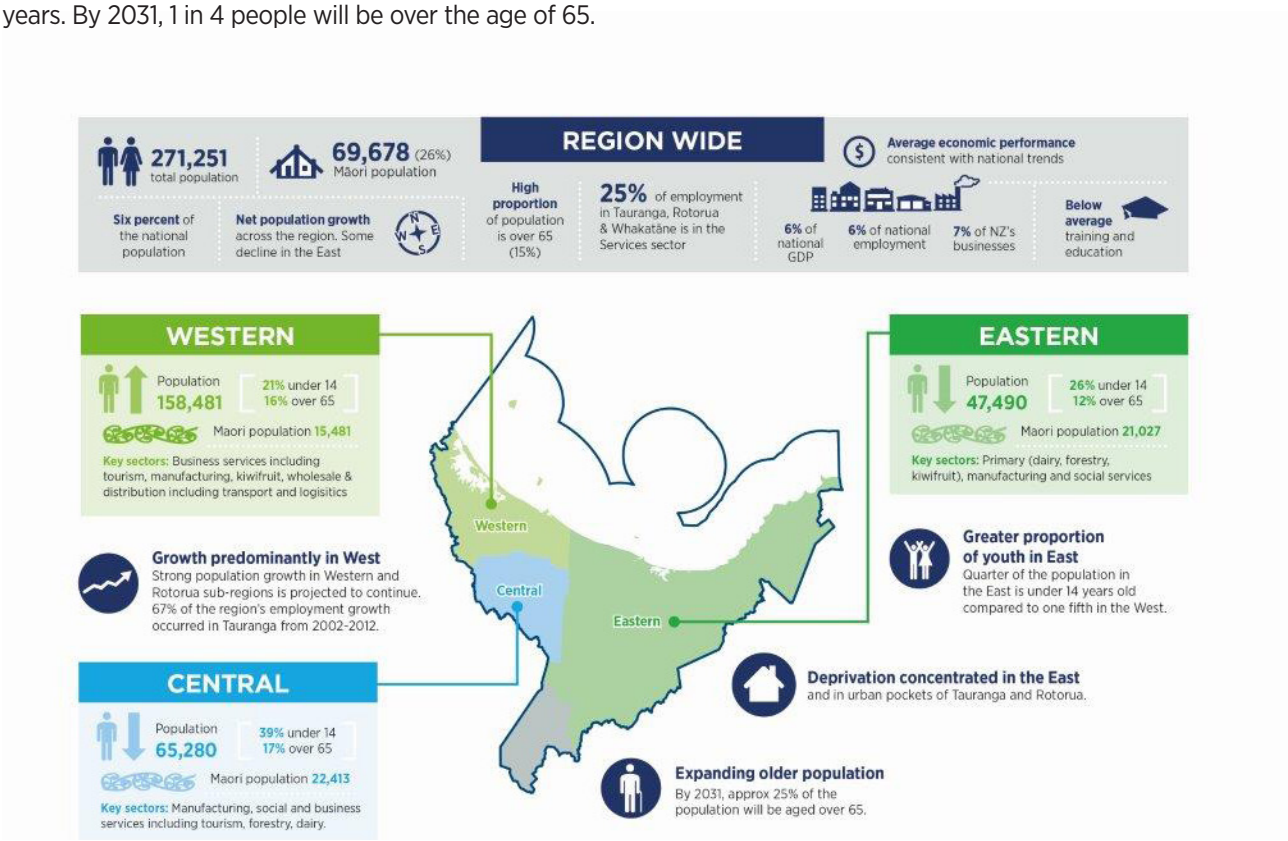


Figure 4: Key statistics for the Bay of Plenty CDEM Region

[2] Statistics NZ, 2013 Census QuickStats: Bay of Plenty Region, www.stats.govt.nz

Māori

Bay of Plenty's Māori landscape is culturally rich and dynamic. The region's population is 26 percent Māori. Of the regions land area, 38 percent is in Māori ownership, with 1800 Māori Land Trusts managing these assets. There are 35 iwi, 260 hapū and 224 marae located across the region. Te Arawa, Mataatua, Nukutere, Takitimu, Horouta and Tainui are the waka grouping.

Within te Ao Māori, the Māori environmental resource management system recognises the association of several atua with natural occurrences that can lead to natural hazards. As well as Ranginui and Papatūānuku, these include Rūaumoko, atua of earthquakes and volcanoes, Tangaroa, atua of the fish in the sea and sea life, and Tāwhirimatea, atua of the winds and storms.

It is evident from oral histories that Māori have long observed, recorded, monitored and forecast changes in the physical environment. These forms of local knowledge contribute to hazard avoidance and mitigation. Appropriate sharing of these local understandings can inform and raise community awareness of past hazard events and the potential for them to occur again[3].

The Bay of Plenty CDEM Group recognises Māori as a key partner to work collaboratively with, recognising co-governance arrangements and aspirations set out in iwi/hapū management plans.

Each local authority has their own model for engagement with Māori. The Bay of Plenty CDEM Group works to individual local authority's models.

Tangata whenua come together quickly in a response, supporting communities and mobilising necessary resources. Recent events including the Bay of Plenty April 2017 weather event and the Canterbury 2011 and Kaikoura 2016 earthquakes have demonstrated the value of this capability. Tangata whenua in the Bay of Plenty also played a pivotal role in the response and recovery operations for the grounding of the Rena in 2011. Consulting Māori on matters of importance and supporting tribal autonomy consistent with the principles of the Treaty of Waitangi guides the actions of the Bay of Plenty CDEM Group.

Rural

The Bay of Plenty has a lower population density in the Eastern Bay of Plenty. Rural communities in the east also have a high Māori population. Marae emergency preparedness and community response and recovery planning are important for rural communities who may be isolated in emergencies.

Smaller community centres in the Bay of Plenty (such as Waihī Beach, Matata and Ōmokoroa) have community response plans in place. Marae emergency preparedness planning has been commenced across the Bay of Plenty.

This work will continue across the Bay of Plenty over the next five years, to enable the community to support themselves in an event.

The Bay of Plenty economy is dependent on the primary sector. Rural communities and the primary sector have unique challenges in emergency management, especially with communication and business continuity; however, they can also provide opportunities, particularly with readiness and reduction planning.

Diverse Populations

The region has a higher than average percentage of people over the age of 65, particularly in the Western Bay of Plenty. In Tauranga City over 17 percent of the population are over the age of 65. Ensuring older people are prepared for an emergency is an important component of work for the Bay of Plenty CDEM Group.

Other populations with specific challenges during an emergency include:

- Tourists to the Bay of Plenty. The challenges with this population include language barriers, lack of awareness of existing regional hazards and safe zones to move to in case of emergencies, and access to emergency messaging and alerting.
- Seasonal workers who pose challenges in how we connect with them due to language barriers and their transient nature.
- The significant number of disabled people (73,000[4]) living in the Bay of Plenty. This is a higher than average number per head of population compared to the rest of the country.

Working with diverse populations is an important focus for the Bay of Plenty CDEM Group.

Economic Environment[5]

Key industries for the Bay of Plenty are forestry, agriculture, horticulture and tourism.

[3] Regional Policy Statement for the Bay of Plenty, 2014, pg 107

[4] 2013 New Zealand Disability Survey

[5] Ministry for Primary Industries & Ministry of Business, Innovation and Employment, Toi Moana Bay of Plenty Growth Study – Opportunities Report, May 2015, www.bayofconnections.com

The Central North Island forest area, which includes the Bay of Plenty, is the centre for forestry and related processing in New Zealand. This is New Zealand's largest forest resource, with good transport infrastructure in place to service the industry.

Dairy and livestock sectors have a strong presence in the Bay of Plenty, with a favourable climate and good logistics infrastructure.

The Bay of Plenty has a well-established horticultural sector. Kiwifruit is the major product, with over 80 percent of national kiwifruit production occurring in the region. The Bay of Plenty is also a major producer of avocados, accounting for about 60 percent of New Zealand's output.

Apiculture is an industry with significant potential for the region. The Bay of Plenty is at the forefront of mānuka honey exports and the region is home to key companies such as Comvita. One quarter of all beekeeping jobs in New Zealand are based in the Bay of Plenty.

The Bay of Plenty includes some of New Zealand's most well-established tourism destinations. Rotorua is part of the North Island's international tourist 'triangle' (Auckland, Rotorua, and Waitomo). Sixty percent of tourist expenditure in the Bay of Plenty occurs in the central area of the region.

Aquaculture and specialised manufacturing are two areas with identified potential for economic growth. A number of small niche manufacturing sectors exist, supported by research and tertiary organisation initiatives and access to international markets via the Port of Tauranga. Sea-based aquaculture has been identified as having significant potential for the region. Development of the Ōpōtiki sea-based mussel farm will continue over the next few years and is expected to contribute significantly to the Eastern Bay of Plenty economy.

Key Infrastructure

The Bay of Plenty hosts diverse industries and key infrastructure for example:

- The Port of Tauranga is the largest port (by volume) in New Zealand, and a major international link. It provides important transport infrastructure, is less than 150 kilometres from the main forestry area, and provides access for industries in the region.
- Rotorua, Tauranga and Whakatāne Regional Airports provide direct access for visitors to the region.
- There are a significant number of horticulture pack and storage houses across the region.
- There are a number of hydroelectric power schemes across the region, most notably the Matahina and Kaimai schemes operated by Trustpower Limited.
- Kiwi Rail operates a freight rail network across the Bay of Plenty from Murupara to Kawerau through to the Port of Tauranga at Mt Maunganui. The rail network provides an important connection for the Port of Tauanga to Hamilton and Auckland via the Kaimai tunnel.
- There are two Fonterra plants in the region, in Edgecumbe and Reporoa. There is one major meat processor in the region – AFFCO at Rangiuru.
- Three large pulp and paper mills provide key infrastructure for Kawerau township.
- There are public hospitals located at Tauranga, Rotorua and Whakatāne.

Natural Environment

The Taupō Volcanic Zone is the major geological structure in the Bay of Plenty. It links the volcanic cones of the Tongariro National Park with Whakaari/ White Island. This zone has been active for about 2 million years, and hosts many active volcanic centres. The most visible centres are the geothermal features in Rotorua and Kawerau.

The tectonic plate boundary is responsible for the region's fracturing and faulting. The smaller faults are collectively called the Taupō Fault Belt. Land in this belt is being steadily pulled apart at an average rate of 5-10mm a year, producing an earthquake hazard. A good example is the 1987 magnitude 6.5 Edgecumbe earthquake which caused widespread damage.

The Bay of Plenty also has a large coastline and several harbours and estuaries, making the region vulnerable to tsunami.

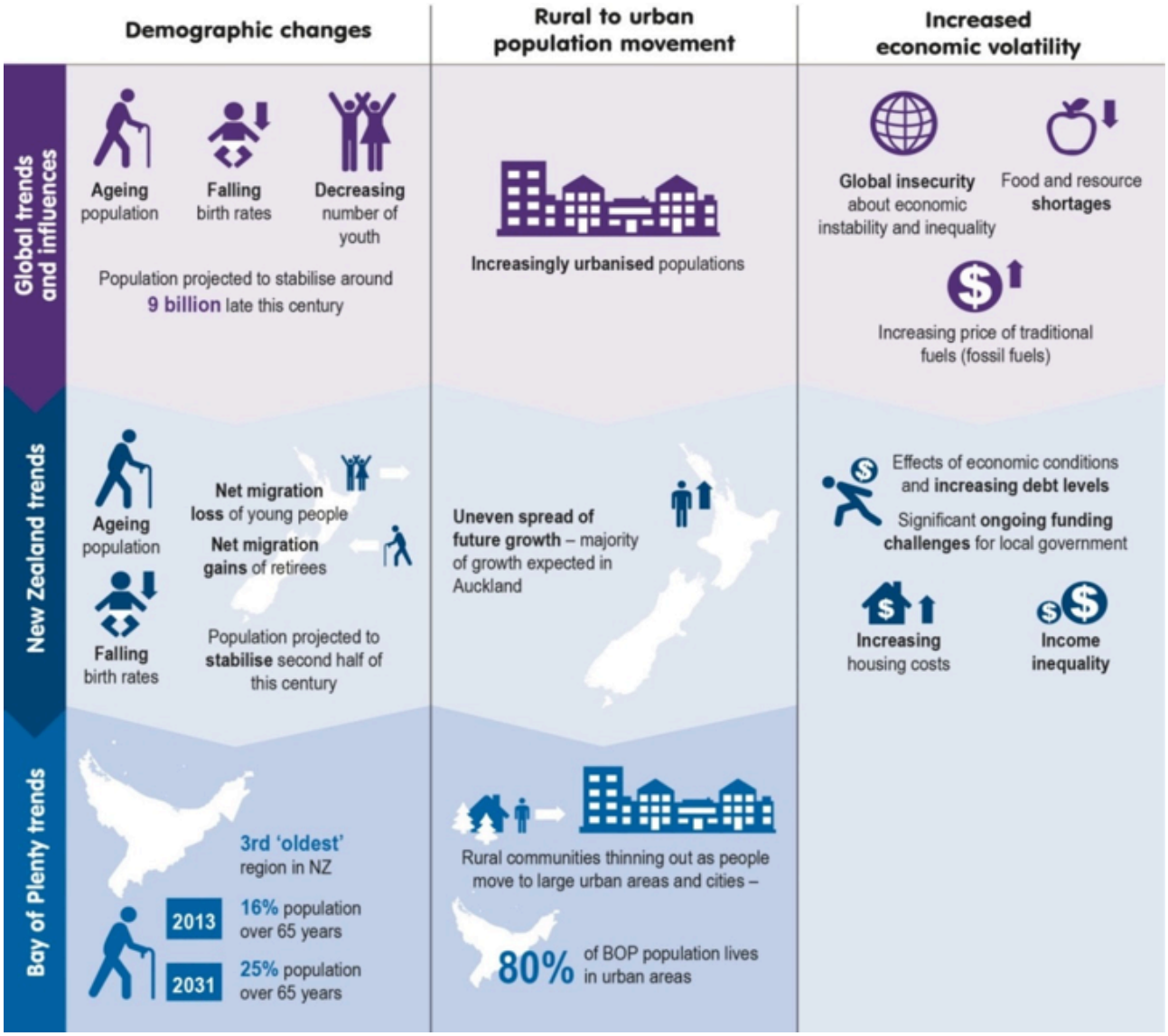
The region has extensive river catchments, sourced from steep bush catchments that flow out through productive farmland. Settlements particularly in the Eastern Bay of Plenty that are located within the river catchment areas are at risk from flooding. Flood protection schemes are in place in some areas to protect productive land. Flood protections schemes are managed by the Bay of Plenty Regional Council, while flooding issues within the Bay of Plenty's towns and cities are managed by the local District or City Councils.

Trends Affecting CDEM in the Bay of Plenty[6]

Globally, the world's population is aging and becoming more urban, and economic activity is becoming more volatile. The Bay of Plenty region faces these same trends. The Bay of Plenty region's population aged over 65 is the third largest grouping in New Zealand. The aging population in particular has significant impacts for the Bay of Plenty providing challenges and opportunities with emergency planning and events. Increasing knowledge of the diversity of communities across the Bay of Plenty and their specific vulnerabilities will support the Bay of Plenty CDEM Group to create a safer and stronger Bay of Plenty.

Figure 5. highlights global, national and local population and economic trends that the Bay of Plenty CDEM Group need to be aware of and understand.

Figure 5: Bay of Plenty Economic Trends[7]



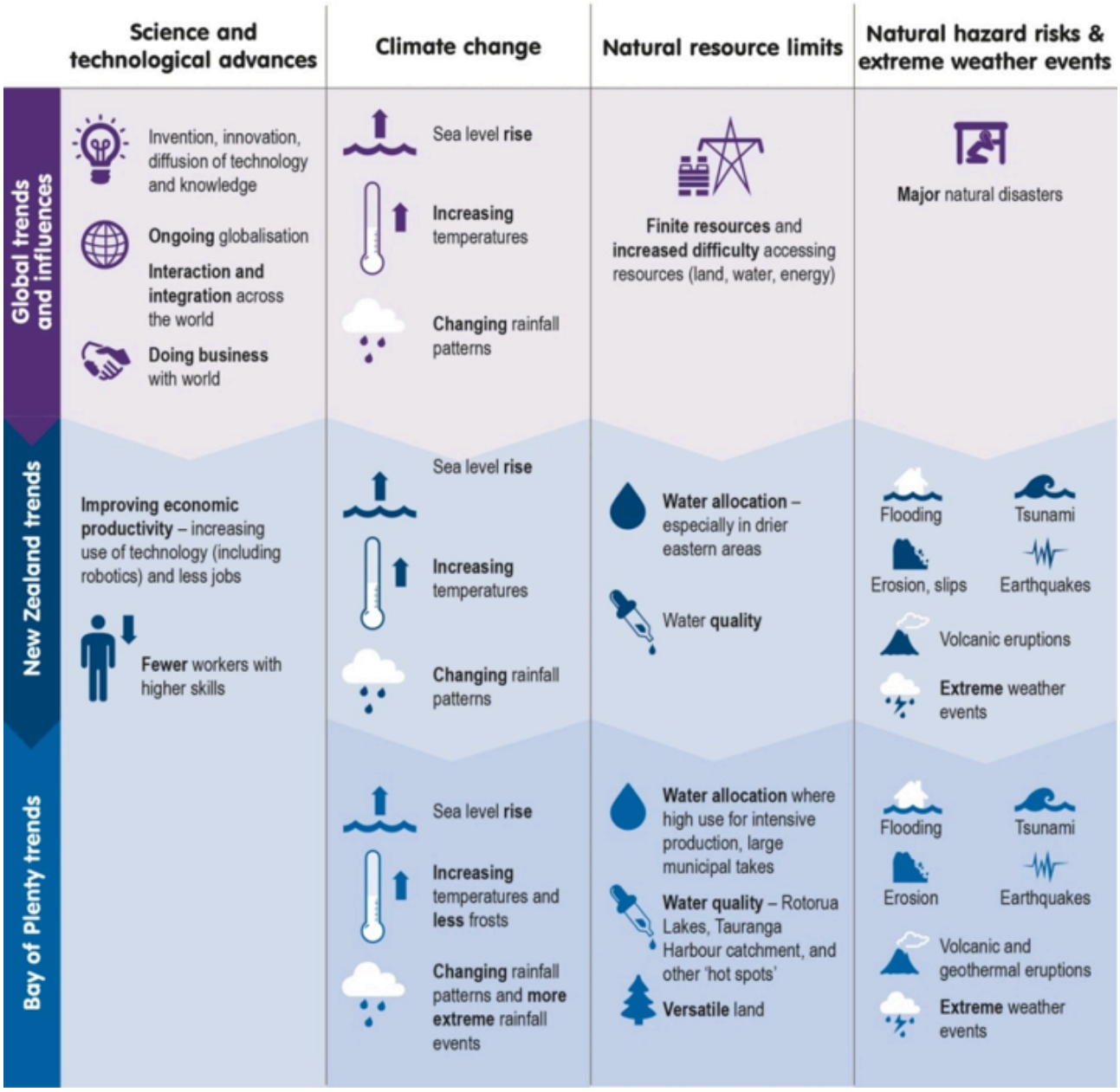
[6] This data is based on the Bay of Plenty Regional boundary.
The trends are projected beyond the 5 years of the Group Plan.
[7] Invest Bay of Plenty – Our Place in the World (technical summary reports)

There are also global technological and environmental trends that impact on the work of the Bay of Plenty CDEM Group. Climate change and natural hazard risks are of obvious importance. The science and knowledge of the impact of climate change is evolving. For some hazards such as storms and drought it is anticipated climate change will increase the frequency and/or intensity of these events. Additionally, as our population continues to grow the consequences of some hazards will increase as a result of climate change. For example as sea levels continue to rise larger numbers of our population will be exposed to storm surge and coastal erosion hazards. The impacts of climate change are considered across all 4 Rs when managing the region's hazards.

The natural hazard risks and extreme weather events column in Figure 6 identifies that climate change, sea level rise and population growth will potentially increase the likelihood or consequences of these natural events in the long term. This information informs the work undertaken with communities on addressing particular vulnerabilities they face.

Figure 6. highlights global, national and regional technological and environmental trends.

Figure 6: Bay of Plenty Technological and environmental trends[8]



[8] Invest Bay of Plenty – Our Place in the World (technical summary reports)

Risk Profile

Our Hazardscape

The Bay of Plenty is exposed to a wide range of hazards. The Taupō Volcanic Zone crosses the region from Lake Taupō to Whakaari (White Island). The major features of this zone are active volcanoes, an extensive geothermal area and a number of active fault lines. The region is therefore susceptible to earthquakes and volcanic eruptions. The 1987 Edgecumbe earthquake was the largest event in the Bay of Plenty in recent times, and caused over $311 million in insurance claims, the largest claim being for damage to the dairy processing plant in Edgecumbe.

The Bay of Plenty has strong farming, horticultural and forestry industries. The region is therefore susceptible to the effects of drought and plant and pest diseases. A recent example is the outbreak of PSA and its effects on the kiwifruit industry.

The region also has some major industrial facilities such as the Port of Tauranga and the pulp and paper mill in Kawerau. These industries are exposed to existing hazards and they also have the ability to create hazards, potentially making emergency events more complex.

The Taupō Volcanic Zone is extremely active on a world scale: it includes 3 frequently active cone volcanoes (Ruapehu, Tongariro/Ngauruhoe, White Island) and 2 of the most productive caldera in the world (Okatina and Taupō). The Taupō Volcanic Zone marks the subduction zone's resulting volcanic and earthquake activity.

With a large coastline that is crossed by many rivers and streams, flooding is a reasonably frequent occurrence, with major flood events hitting the Bay of Plenty in 2004, 2005 and 2017. Tsunami is also a low probability but high risk threat in coastal areas, particularly for those areas where the population is increasing such as Mt Maunganui and Pāpāmoa.

Human communicable diseases (pandemics) are of national concern, and also pose a threat for the Bay of Plenty region.

A detailed analysis of the Bay of Plenty's hazards was undertaken in 2014[9]. The analysis involved gathering the most current information on the region's hazards, assessing the likelihood of them occurring and the expected consequences and impacts on the Bay of Plenty region. The ability to mitigate the likelihood or consequence of each hazard was considered alongside the implications of population growth and climate change. The process followed the recommended practice as outlined in CDEM Group Plan Review Director's Guidelines for CDEM Management Groups (DGL 09/09).

Table 1. in Appendix One provides details of the scores and ratings for each hazard. The assessment of consequence was based against Table 2. in Appendix One which was amended and included in the Regional Policy Statement for assessing risk. More detail on the risk assessment process can be found in the Review of the regional hazard risk profile for the Bay of Plenty Region 2014.

[9] Review of the regional hazard risk profile for the Bay of Plenty Region 2014

Understanding Hazards and Risk

Hazards, on their own may not equal a high risk. For example, a large earthquake might occur on an active fault line in the middle of Fiordland National Park, but because of the low population and lack of infrastructure in the area the impacts are a lot less than the same size earthquake occurring in an urban environment.

The risk rating matrix (Table 1) sets out how we think about risk. Almost certain likelihood has a 5% annual exceedance probability (AEP), meaning there is a 5% chance this could occur in any year. Over a 50 year time frame there is a 92% chance of this event occurring. This is further explained in Appendix Three.

Table 1: Risk rating matrix

Rating			**Consequence**		
Likelihood	**1 Insignificant**	**2 Minor**	**3 Moderate**	**4 Major**	**5 Catastrophic**
Almost Certain (5% AEP)	Moderate	High	Very High	Extreme	Extreme
Likely (2% AEP)	Low	Moderate	High	Very High	Extreme
Possible (1% AEP)	Low	Moderate	Moderate	High	Very High
Unlikely (0.2% AEP)	Very Low	Low	Moderate	High	Very High
Rare (0.04% AEP)	Very Low	Very Low	Low	Moderate	High

Adapted from CDEM Group Plan Review Director's Guidelines for CDEM Groups [DGL 09/09]

Steps can be taken to reduce the likelihood and/or the impacts of events, thus reducing the overall risk. Some examples are:

- A city with a high number of buildings that have been earthquake strengthened will experience less impact from an earthquake than a city where the buildings are not designed to withstand the shaking.
- Flood protection works such as stop banks reduce the likelihood of a river topping its banks and flooding nearby land.

For the Bay of Plenty region, hazards that have a higher likelihood of occurring include:

- Regional deformation
- Slope instability
- Storm surge
- Wind storm
- Flooding (urban/rural)
- Drought
- Hazardous substance release
- Lifeline Utility Failure

Some of these hazards have low consequences (such as regional deformation) or are hazards where significant mitigation work has been undertaken to reduce either the likelihood or impacts of the events (such as urban flooding). As a result, the risk from these hazards is not high.

Conversely, the following hazards have a lower likelihood of occurring:

- Geothermal event
- Urban fire
- Civil unrest/Terrorism
- Earthquake
- Tsunami
- Dam failure

But the consequences of some of these events are great. This means their overall risk level is high, even though the likelihood of the events occurring is low. Appendix One sets out the risk of various hazards in the Bay of Plenty.

Hazard Priorities

While the risk from some hazards may be high, work has been undertaken to manage the hazard and therefore reduce either the likelihood or the consequences of the event. This is called manageability.

The high priority hazards for the Bay of Plenty CDEM Group are assessed based not only on their risk, but also what steps have been taken to manage the risk.

To identify the hazards that are of the highest priority to the region for management, we used a methodology that considers the likelihood of the event, the consequences of that event (without any mitigation in place) and the manageability of the event (e.g. are there plans and processes in place that reduce the consequences, such as a Pandemic Plan and procedures).[10]

The Bay of Plenty CDEM Group also prioritises risks for which the Bay of Plenty CDEM Group is the lead agency to manage the response to that event. For example, the Bay of Plenty CDEM Group is the lead agency for managing a response to flooding, so these events are a high priority for the Group.

The Bay of Plenty CDEM Group is committed to all hazards management approach. The priority list sets out a structure where the group can align its work to ensure the best value gained. Where resources are constrained the focus is on addressing the higher priority hazards.

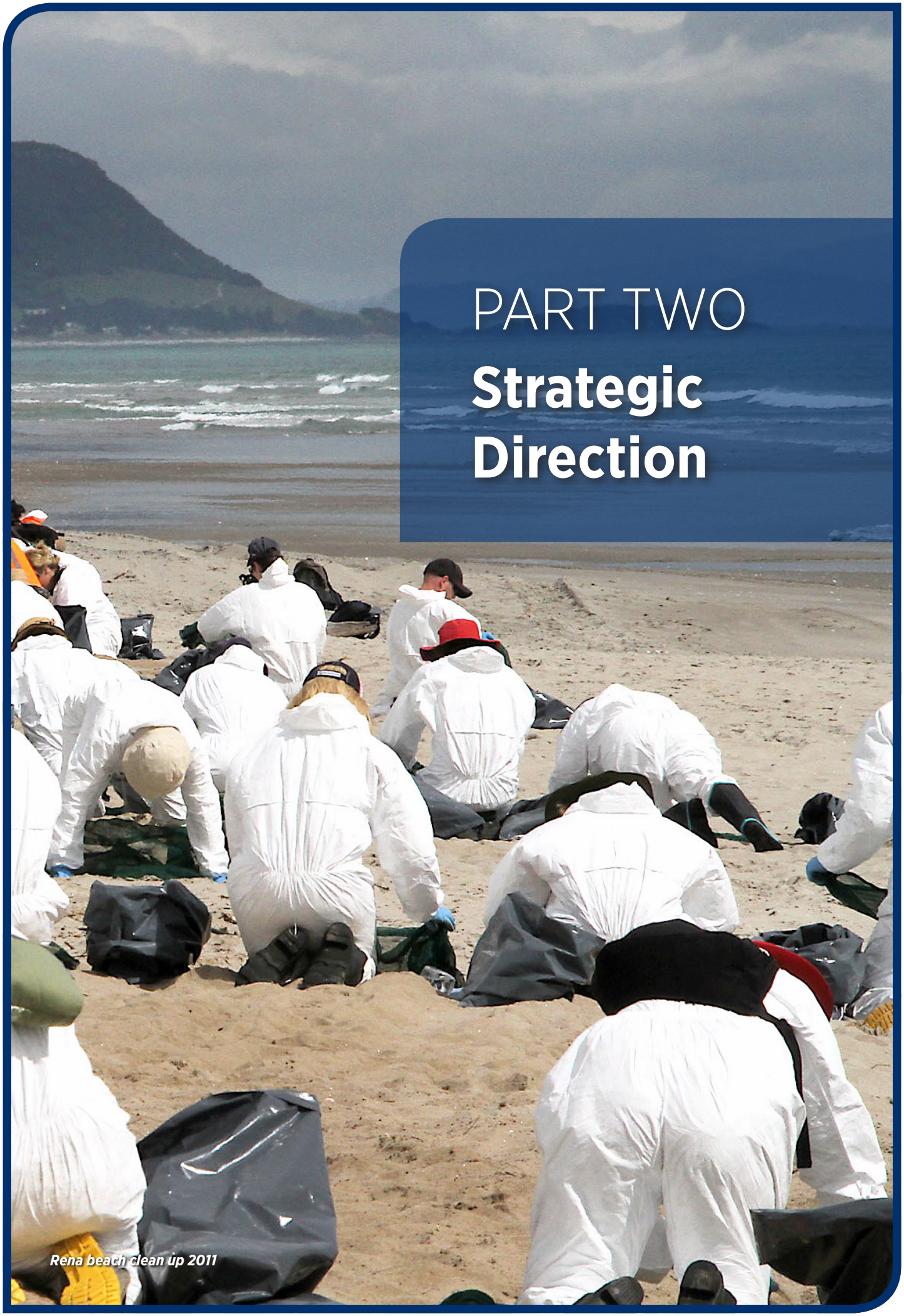
Table 2: Hazards and their priority for the Bay of Plenty.

Hazard
Higher Priority Hazard
Tsunami – Local*
Human Pandemic
Tsunami – Distal*
Volcanic – Local*
Dam Failure*
Major Accident (Marine/Port)
Earthquake – Severe*
Plant & Animal Pests & Diseases
Drought
Wind storm (including tornado)*
Storm Surge*
Flooding - River/Stream*
Medium Priority Hazards
Coastal Erosion*
Lifeline Utility Failure*
Hazardous Substances Release
Slope Instability (Landslide, Debris Flow, Slumping)*
Civil Unrest/Terrorism
Major Transport Accident (Air, Road, Rail)
Flooding - Urban/Rural Ponding*
Volcanic – Distal*
Rural Fire
Volcanic - Caldera Unrest*
Low Priority Hazards
Geothermal*
Urban Fire
Regional Deformation (long-term)*

* Denotes hazards that may create an event that the Bay of Plenty CDEM Group would be the lead agency to manage a response.

From the higher priority hazards, the Bay of Plenty CDEM Group leads the response to tsunami, volcanic eruptions, earthquakes, wind storm (including tornado), storm surge and flooding. As such these are the hazards that are the highest priority to the Bay of Plenty CDEM Group.

[10] The risk assessment and evaluation process was carried out in accordance with the Director's Guidelines for CDEM Group Planning and the guidelines in the Regional Policy Statement for the Bay of Plenty.



PART TWO
Strategic Direction

Rena beach clean up 2011

PART TWO
Strategic Direction

Vision

A safe, strong Bay of Plenty, together.

Mission

Enabling our community to manage risks, cope with and move forward from emergencies.

Principles: The Way We Work

The principles are important as they set out the way the Bay of Plenty CDEM Group and its partners will work. The principles drive how the Bay of Plenty CDEM Group delivers its work, sets priorities and allocates resources.

Through all our work, we focus on:

1 Communication and sharing information.

2 Keeping the local community at the heart of what we do.

3 Supporting communities to be connected, stronger and healthier.

4 Recognising and appreciating the ability of our communities to respond to and recover from emergencies, and working to support that.

5 Keeping up to date with and sharing best practice across the sector.

6 Advocating for risk reduction across all available avenues and processes.

7 CDEM as a collective responsibility – while roles and responsibilities are defined, we step up when we need to.

8 Providing leadership, direction and coordination during emergency responses and recovery.

9 Building and maintaining relationships with key stakeholders, including community response teams, tangata whenua, and other volunteer organisations that have an emergency management role.

10 Maintaining good governance and management practices.

11 Continually learning from exercises and from emergency events.

12 Building strong relationships and engaging with tangata whenua consistent with the principles of the Treaty of Waitangi to achieve our objectives together.

Objectives Across the 4 Rs

The CDEM Group Planning Director's Guideline for CDEM Groups [DGL 09/15] requires CDEM Groups to set objectives and key actions for each of the 4 Rs, and for monitoring and evaluation of Group Plans.

The underlying focus for the Bay of Plenty CDEM Group is to respond to our challenges, and consider how the objectives across the 4 Rs contribute to building community resilience.

NAVA Edgecumbe clean up 2017

Relationship to National CDEM Strategy 2007

The National CDEM Strategy 2007 sets out The CDEM Act 2002 requirement that a risk management approach be taken when dealing with hazards. New Zealand's integrated approach to CDEM is described in the National CDEM Strategy 2007 by four areas of activity being Reduction, Readiness, Response and Recovery.

The Bay of Plenty CDEM Group Plan sets objectives under each of the 4 Rs, these align with the activity areas as set out in the National CDEM Strategy 2007.

Table 3: Alignment of 4 Rs

The 4 Rs		Bay of Plenty CDEM Group Objectives
Reduction: Identifying and analysing long-term risks from hazards; taking steps to eliminate these risks if practicable and if not, reducing the magnitude of their impact and the likelihood of their occurring.	ALIGNS WITH	**Reduction:** 1 Build the community's knowledge and understanding of their hazards and risks so they can make informed decisions. 2 Manage natural hazards through a risk based approach. 3 Increase the region's environmental and infrastructure resilience.
Readiness: Developing operational systems and capabilities before a civil defence emergency occurs; including self-help programmes for the general public and specific programmes for emergency services, lifeline utilities and other agencies.		**Readiness:** 1 Build and improve knowledge and skills within communities and businesses to prepare for, get through and recover from emergencies. 2 Enhance cooperation among key CDEM partners and the community including working with volunteers.
Response: Actions taken immediately before, during or directly after a civil defence emergency to save lives and protect property, and to help communities recover.		**Response:** 1 Grow the capacity and capability of the Bay of Plenty CDEM Group to respond to emergencies. 2 Integrate response planning across CDEM partners. 3 Enable the community and CDEM partners to take action by providing good communication networks.
Recovery: The coordinated efforts and processes to bring about the immediate, medium-term and long-term holistic regeneration of a community following a civil defence emergency.		**Recovery:** 1 Grow recovery capability and capacity within local authorities. 2 Foster community networks from response to recovery to ensure communities can establish routines, organise themselves and support each other. 3 Support communities and CDEM partners with their recovery by providing ongoing relevant and timely information. 4 Strategically plan for recovery.

Reduction

"Reduction involves identifying and analysing risks to life and property from hazards; taking steps to eliminate these risks if practicable, and, if not, reducing the magnitude of their impact and the likelihood of their occurrence to an acceptable level.[11]"

Objectives

1 Build the community's knowledge and understanding of their hazards and risks so they can make informed decisions.

2 Manage natural hazards through a risk-based approach.

3 Increase the region's environmental and infrastructure resilience.

Where are we now?

Just over half of residents strongly agree that they have a good understanding of the types of disasters that could occur in their area, and have a good understanding of the effects if disaster struck their area.[12]

Hazard information is not easily accessible in the Bay of Plenty. Different organisations hold information in different forms and locations. There are no specific programmes aimed at increasing the community's knowledge and understanding of their hazards.

The Regional Policy Statement for the Bay of Plenty has set in place a risk based framework for managing natural hazards that local authorities have to apply when controlling land use.

Lifeline utilities have benchmarked their organisational resilience. The electricity, telecommunications, and gas networks were the most resilient group. Local authorities as a lifeline agency were the least resilient. There is room for improvement across all lifeline utilities, particularly with stress testing plans, breaking silos and innovation and creativity.[13]

Lifeline utilities have interdependencies. For example, all lifeline utilities are highly dependent on electricity, data and phone networks. In general there is a low level of preparedness for disruption to these services.[14]

[11] National Civil Defence Emergency Managment Plan. Pg. 66
[12] Key Research, BOPRC Civil Defence Survey, May 2013
[13] Resilient Organisations, BOP Lifelines Group Resilience Benchmark Tool, September 2014
[14] ibid

Where do we want to be?

In five years' time:

1 Bay of Plenty communities have better access to information about hazards in the region. Their knowledge of the types of disasters that could affect the region has improved.

2 Research has been carried out about the region's hazards and risks. The research is accessible to the community and is used to engage the community in risk management.

3 Key planning documents take a risk management approach to natural hazards and infrastructure development.

4 The Bay of Plenty Lifelines Group members have improved their organisational resilience. They are managing their interdependencies to reduce service disruption.

How do we get there?

- Bay of Plenty Civil Defence Emergency Management Group members will partner together with research institutions, lifelines and key stakeholders in risk research projects. The Bay of Plenty Natural Hazards Programme provides an opportunity to align work and carry out projects that have benefits for land use, asset management, CDEM planning and community education initiatives.
- Collaborate with partners to deliver programmes that engage communities in learning about their hazards and risks. In the short-term we will focus on earthquake, tsunami, and flooding. Understanding the impacts of climate change and sea level rise as these are important for future decision-making.
- Taking an integrated approach to implement the natural hazard provisions in the Regional Policy Statement. Working collectively, managing natural hazard risk through regional, city and district plans, asset management, emergency management and community resilience building.
- Ensure hazard and risk information is easy to understand and accessible. Communicating with the community and stakeholders in ways that achieve a sound understanding of hazards and risks.
- Advocate for risk reduction through local, regional and national planning frameworks.

- Support the work of the Bay of Plenty Lifelines Group, in particular the outcomes of the vulnerability study and continued work to identify infrastructure interdependencies.
- Work with the Bay of Plenty Lifelines Group to promote resilience within asset planning and Business Continuity Planning.
- Work with Bay of Plenty Civil Defence Emergency Management Group members to improve their organisational resilience by supporting delivery of key actions from the organisational resilience benchmarking report.
- Actively encourage CDEM stakeholders to improve their resilience and resourcing in delivering their CDEM role across the 4 Rs.
- Utilise hazard and risk information to inform recovery planning.

Readiness

"Readiness involves developing operational systems and capabilities before an emergency happens; including making arrangements with emergency services, lifeline utilities, and other agencies, and developing self-help and response programmes for the general public.[15]"

Objectives

1 Build and improve knowledge and skills within communities and businesses to prepare for, get through and move forward from emergencies.

2 Enhance cooperation among key CDEM partners and the community including working with volunteers.

Where are we now?

In 2013 the Bay of Plenty CDEM Group commissioned a Bay of Plenty-wide survey to gain a snapshot of the region's emergency preparedness levels.

The resulting report[16] highlighted levels of preparedness.

Table 4: Bay of Plenty Preparedness Levels

	%
People who have an emergency kit (stored food, water, a radio, batteries and a torch)	64%
People who have an emergency plan	55%
Have at least three litres of water stored per person, per day for three days	51%
People who are fully prepared (prepared for emergencies that happen when they are at home and when they are not at home, and regularly update their emergency items)	16%

This compares with national statistics. The current levels of readiness show there is considerable work to do to improve the region's preparedness.

83% of people in the Bay of Plenty strongly agree that it is their responsibility to look after themselves and their family in a disaster.

97% feel it's very or quite important that they are prepared for a disaster. These statistics mean preparedness messages should be well received.

The findings highlighted that those aged 15-29 years are less likely to be prepared for emergencies than those aged over 30.

Māori are less likely to be prepared than NZ Europeans.

43% of people who own their own business have a business continuity plan that allows for continuing operations under adverse conditions such as a civil defence emergency.

Where do we want to be?

In five years' time:

1 The key messages "Drop, Cover, Hold" and "Long or Strong, Get Gone" are widely promoted and used consistently across the Bay of Plenty.

2 All staff involved in an emergency response know their role in an emergency.

3 All staff are personally prepared, so they are in a position to respond to emergency events.

4 Bay of Plenty CDEM Group partners and volunteers are engaged in CDEM activities. They regularly attend meetings and exercises, and take part in response and recovery planning.

5 Community response and marae emergency preparedness planning has improved the capacity of local communities to support themselves during, and after, an emergency.

6 Preparedness campaigns are targeted to meet the needs of communities. These may include older people, schools and people with disabilities.

7 There is a programme in place that supports business continuity planning for CDEM partners including planning for their agreed role in CDEM.

8 Campaigns to promote resilience for businesses have been run with support from local business networks.

9 Coordination and communication between CDEM agencies including CDEM stakeholders has improved through regular joint exercises, training and networking. These exercises and events have provided key lessons to learn and improve from.

10 Communication is clear, timely, relevant and trusted. We have established lines of communication with our communities and key stakeholders.

[15] National Civil Defence Emergency Managment Plan. Pg. 69
[16] Bay of Plenty Regional Council Civil Defence Survey May, 2013

How will we get there?

- Implement the Bay of Plenty CDEM Group Community Resilience Strategy, with a focus on:
    - Developing public education strategies with communities about being prepared, with an initial focus on tsunami/earthquake.
    - Facilitating community response and recovery plans that communities own and are responsible for.
    - Promoting and using resources to support businesses to be resilient and to build their social capital.
    - Facilitate the development of marae emergency preparedness planning in Māori communities.
- Use benchmarking surveys and resources to develop resilience in Lifelines utilities and CDEM partner organisations.
- Engage with community groups and organisations that participate, or could play a role in response and recovery activities. This includes rural and primary sector organisations, neighbourhood support, Fire and Emergency New Zealand and others.
- Develop a programme to engage Bay of Plenty CDEM Group staff in emergency preparedness and recovery.
- Identify opportunities to support and resource preparedness and recovery activities.
- Use CDEM forums and committees to build relationships and make connections within communities (such as local welfare committees, Local Recovery Manager's forums).
- Provide greater clarity for the community during a response on what funding is available and how to access it.
- Establish relationships and networks that support and facilitate two-way communications before, during and after emergency events.

Response

"Response involves actions taken immediately before, during or directly after an emergency to save lives and property, and to help communities begin to recover.[17]"

Objectives

1 Grow the capacity and capability of the Bay of Plenty CDEM Group to respond to emergencies.

2 Integrate response planning across CDEM stakeholders.

3 Enable the community and CDEM partners to take action by providing good communication networks.

Where are we now?

Local authorities have KPIs for staff trained to operate an Emergency Operations Centre (EOC)/ Group Emergency Coordination Centre (GECC), and for the percentage of those staff who are trained in functional roles in the EOC/GECC.

The KPIs have been met for the last two years (to 30 June 2017). The Bay of Plenty CDEM Group members have worked to define what 'trained' means, and have established a consistent approach across the region. Training pathways for functional roles are defined in the Bay of Plenty CDEM Group Training and Exercise Plan. The Bay of Plenty CDEM Group Training and Exercise Plan also sets out what exercises will be conducted each year.

The National Exercise Tangaroa (carried out in 2016) highlighted key areas where further training and capacity building is required. This work is being used to refine the Bay of Plenty CDEM Group Training and Exercise Plan.

The Regional Emergency Management Coordination Committee (REMCC) provides a forum for discussion between key response agencies.

The Welfare function and arrangements for responsible agencies for the nine welfare sub-functions are being progressed through the Welfare Coordination Group (WCG)'s annual work programme.

The Bay of Plenty CDEM Group has taken part in exercises with Maritime NZ and NZ Police, and are working to identify further opportunities for joint exercises.

The Bay of Plenty CDEM Group's public alerting systems are being accessed by more residents. Numbers of Facebook followers and the number of residents registered for public text alerts have increased. A programme to test the full suite of public alerting systems twice a year has been established. The testing involves public engagement, and feedback from the public is sought following the tests.

The radio-telephony network is a key asset to give resilience to our communications capability. The group will continue to maintain and operate a regional radio network.

Community response teams and marae are continuing to develop their plans. Further work is needed to understand the capacity and capability of community response teams and marae. Once this is understood, ways to support them to increase their capacity and capability can be identified.

The Bay of Plenty CDEM Group has a 24/7 Duty Manager, Duty Group Controller and Duty Public Information Manager (PIM) who provide first response to emergency events and operate to agreed protocols.

The Group Welfare Plan is under review with a focus on improving the way agencies work together, promoting better coordination to ensure welfare services are available and delivered where they are needed.

Where do we want to be?

In five years' time:

1 Planning for major events has been undertaken by the Bay of Plenty CDEM Group and CDEM partners.

2 There is consistent use of terminology and a clear understanding of roles and responsibilities in emergency events.

3 When emergencies have occurred, they have been managed according to the operational arrangements set out in the Bay of Plenty CDEM Group Plan with the response principles of the Bay of Plenty CDEM Group being adhered to.

4 CDEM Partners and stakeholders have planned for processes and procedures to be effective.

[17] National Civil Defence Emergency Managment Plan. Pg. 76

They are resourced, have trained staff, and ideally have established relationships.

5 The Bay of Plenty CDEM Group and other agencies that are responsible for the welfare services sub-functions have defined processes and procedures for leading the welfare response to emergencies that are regularly tested.

6 The Bay of Plenty CDEM Group and the agencies that are responsible for the delivery of the Coordinated Information Management System (CIMS) welfare sub-functions as outlined in the National Civil Defence Emergency Management Plan Order 2015 (National CDEM Plan Order 2015), have the capability and capacity to respond.

7 Community response teams, marae and CDEM volunteers are an integral part of CDEM arrangements in the Bay of Plenty.

8 Māori response frameworks are understood, integrated and supported by the Bay of Plenty CDEM Group.

9 The public has knowledge of the public alerting tools used to issue warnings. More residents are likely to receive public alerts.

10 Public Information Managers are active across the 4 Rs. They provide and coordinate timely and up-to-date information to CDEM partners and the wider community.

How will we get there?

Implement the Bay of Plenty CDEM Group Training and Exercise Plan. This includes:

- Training pathways for key functional areas.
- Training opportunities for the Welfare Coordination Group and Bay of Plenty Lifelines Group.
- Training opportunities for community response teams and marae communities.
- Exercises ranging from desktop to national scale, involving CDEM partners and volunteers and including evaluation.
- Working with Māori to ensure our respective response frameworks support each other.
- Using a shared information management system for the GECC and EOC's during a response.
- Maintaining and developing a response planning framework that includes scenario-based plans and standard operating procedures.
- Developing standard operating procedures in partnership with CDEM partners where necessary, through forums such as the REMCC, WCG and others.
- Providing a network of Public Information Managers across the region (through local authorities) that are trained to agreed standards.
- Developing and utilising a range of communication tools ensuring that the community is being communicated with in the best way possible.
- Maintaining existing and adopting new public alerting systems to extend the range and coverage of the region.
- Working collaboratively with existing iwi networks to enhance the capacity and participation of Māori in response.
- Improving the GIS response capability enabling immediate access to historic natural hazard datasets to add value to decision making.
- Working with volunteer organisations to support the Bay of Plenty CDEM Group capability and capacity in response.

Recovery

"Recovery involves the co-ordinated efforts and processes used to bring about the immediate, medium-term and long-term holistic regeneration and enhancement of a community following an emergency[18]".

Objectives

1 Grow recovery capability and capacity within local authorities.

2 Foster community networks from response to recovery to ensure communities can establish routines, organise themselves and support each other and develop community response plans.

3 Support communities with their recovery by providing ongoing relevant and timely information and support.

4 Support CDEM partners with their recovery by providing ongoing relevant and timely communication.

5 Integrate recovery planning across CDEM stakeholders.

Where are we now?

The local authorities that make up the Bay of Plenty CDEM Group have appointed a Group Recovery Manager and Local Recovery Managers.

A training and development programme for Recovery Managers is under development.

The Bay of Plenty CDEM Group has appointed a Group Recovery Manager and alternative Group Recovery Managers as required under The CDEM Act 2002.

The Bay of Plenty CDEM Group has a Bay of Plenty CDEM Group Recovery Plan that sets out the processes and procedures that will apply in recovery.

Further work is required on how to measure and build the capability, capacity and greater collaboration across all CDEM partners and stakeholders.

Where do we want to be?

In five years' time:

1 There is toolbox of resources developed to assist a Recovery Office for future events.

2 The Bay of Plenty CDEM has a Group Recovery Office.

3 Training and systems are in place for Recovery Managers and networks working in response and recovery.

4 The structures for recovery are established based on the individual communities affected. Generally the four environments used to structure recovery will be social/community, built, natural/rural, and economic, with cultural support as a component of each environment.

5 The key principles on how community are involved in the recovery process are integrated into emergency planning.

6 Conversations with community go further than response and cover all aspects of emergency planning.

7 The Recovery Manager is working together with CDEM partners and stakeholders in the development of recovery structures and frameworks.

How will we get there?

- Continue to undertake strategic recovery planning for all hazards.
- We will use opportunities from debriefs and reviews to identify and implement the lessons learnt.
- Continue to train Recovery Managers and involve them in CDEM exercises.
- Ensure Public Information Management and community engagement staff are trained and have capacity during the recovery phase of an event.
- Develop a programme to support CDEM partners with their business continuity planning frameworks.
- Involve existing networks such as Welfare Coordinating Group and local welfare committees in training and exercises that span response and recovery.
- Review the Recovery Plan to provide an understanding of hazards and risks to inform recovery planning.

[18] National Civil Defence Emergency Managment Plan. Pg. 91

Monitoring and Evaluation

Monitoring

The Bay of Plenty CDEM Group (through Emergency Management Bay of Plenty) prepares an Annual Plan that includes a work programme.

The Bay of Plenty CDEM Annual Plan and work programme are aligned with the objectives and key actions set out in the Bay of Plenty CDEM Group Plan.

Progress against the work programme is reported on quarterly to Bay of Plenty CDEM Coordinating Executive Group and Bay of Plenty CDEM Group Joint Committee.

An Annual Report is also prepared.

The Annual Report assesses progress against the Key Performance Indicators (KPIs) set out in the Bay of Plenty CDEM Group Plan.

Evaluation

There are three key tools that are used to evaluate the overall capability and resilience of the Bay of Plenty CDEM Group and its members. They are:

- The National Capability Assessment tool[19].
- Resilience benchmarking tools[20].
- Basic evaluation processes to measure progress against actions that are outlined in the Bay of Plenty CDEM Group Annual Plan.

Where are we now?

In 2014 the Bay of Plenty CDEM Group took part in the National Capability Assessment. The Bay of Plenty CDEM Group achieved an overall score of 66.2. This is a rating of 'advancing' which is described as "organisational commitment attained or considerable progress made, but achievements are not yet comprehensive of needs or requirements".

Additionally, 'informal' and/or untested arrangements are in place, but with a high degree of confidence they will be effective or formal, and/or tested arrangements are in place, but with further work identified.

The Bay of Plenty Lifelines Group Resilience Benchmarking Tool 2014 scored the organisational resilience of the 18 Lifelines utility organisations that are members of the Bay of Plenty Lifelines Group (including all the region's local authorities), against 13 resilience indicators.

The 18 organisations scored well for effective partnerships, decision making and planning strategies. The results showed further work is required on stress testing plans and breaking down silos.

The electricity, telecommunications, and gas network providers were the most resilient group. Local authorities were the least resilient group.

Where do we want to be?

In five years' time:

- The Bay of Plenty CDEM Group is a 'mature'[21] CDEM Group.
- Lifeline utilities (including local authorities) have increased their organisational resilience.
- Meeting KPI targets identified for the 4 Rs in the Bay of Plenty CDEM Group Annual Plan are met.
- Measurable progress is being made to achieve the objectives set out in the Bay of Plenty CDEM Group Plan.

How will we get there?

Conduct a Bay of Plenty CDEM Group-wide capability assessment at least once every three years. The next assessment will be carried out in 2018/2019.

Conduct an organisational resilience assessment for Lifeline utilities at least once every three years. The next organisational resilience assessment will be carried out in 2019/2020.

Key Performance Indicators Monitoring Evaluation

Two capability indicators will be applied to the overall monitoring and evaluation of the Bay of Plenty CDEM Group's activities:

[19] CDEM National Capability Assessment Report
[20] Used by Lifeline Utilities including Local authorities. In 2014 and 2017 the Resilience Benchmarking Tool from Resilient Organisations has been used to assess organisational resilience

[21] See table 5

1. Capability Assessment rating of the Bay of Plenty CDEM Group National Capability Assessment Tool
    - The Bay of Plenty CDEM Group 2015 assessment was 66.2%. The target is to increase this to 80% (maturing) of the CDEM National Capability Assessment Report 2015.
2. Organisational resilience rating of Lifeline Utilities including local authorities.
    - Organisational resilience assessment tools 2014 assessment rating was set at 74%. 2017 assessment figures are currently unavailable.

Capability Indicators

The CDEM National Capability Assessment Tool 2015 will be used to track the delivery of the Bay of Plenty CDEM Group Plan.

While the capability assessment tool does not directly align to the objectives listed in the Reduction, Readiness, Response and Recovery sections of Bay of Plenty CDEM Group Plan, it does provide a measure for progress against the 4 Rs.

Goal one: Increasing community awareness, understanding, preparedness and participation in CDEM - this aligns to the reduction and readiness objectives. The Bay of Plenty CDEM Group 2015 assessment was 60.8%, the target is to increase this to 80% (maturing) of the CDEM National Capability Assessment Report 2015.

The focus of goal one of the assessment tool is on:

- Public education, awareness and preparedness
- Public information management
- Community resilience
- Investing in communities and developing social capital
- Volunteer programmes
- Circulation of hazard risk information to communities

Goal two: Reducing the risks from hazards directly aligns to the Bay of Plenty CDEM Group's reduction objectives. The Bay of Plenty CDEM Group 2015 assessment was 64%, the target is to increase this to 80% (maturing) of the CDEM National Capability Assessment Report 2015.

The focus of goal two of the assessment tool is on:

- Emergency management research
- Hazard risk research and analysis
- Risk assessment
- Risk reduction programmes
- Hazard risk monitoring

Goal Three: Enhancing capability to manage emergencies directly aligns to the Bay of Plenty CDEM Group's readiness objectives. The Bay of Plenty CDEM Group 2015 assessment was 70.2%, the target is to increase this to 80% (maturing) of the CDEM National Capability Assessment Report 2015.

The focus of goal three of the assessment tool is on:

- Capability development and exercising
- CDEM planning
- Collaboration and cooperation
- Emergency Operation Centres
- Warning systems
- Multi-agency communications
- Controllers
- Critical resources and logistics
- Group and local welfare
- Coordination of Lifelines

Goal Four: Enhancing capability to recover from emergencies directly aligns to the Bay of Plenty CDEM Group's recovery objectives. The Bay of Plenty CDEM Group 2015 assessment was 48%, the target is to increase this to 80% (maturing) of the CDEM National Capability Assessment Report 2015.

The focus of goal four of the assessment tool is on:

- Recovery structures
- Recovery planning (and integration with other planning processes)
- Transition from response to recovery
- Impact assessment
- Recovery centres
- Integration of the community with the recovery process
- Information management
- Debriefing/learning from past events

Enablers

There are two enabler components of the CDEM National Capability Assessment 2015 that assess the Bay of Plenty CDEM Group's organisational arrangement / capability.

Enabler One: The governance and management arrangements align to the operation of the Bay of Plenty CDEM Group. The Bay of Plenty CDEM Group 2015 assessment was 80.2% (mature). The target is to maintain this level of the CDEM National Capability Assessment Report 2015.

The focus of enabler one of the assessment tool is on:

- The Bay of Plenty CDEM Group Plan
- Coordinating Executive Group and the Joint Committee
- Work planning
- CDEM leadership
- CDEM Group identity
- CDEM Culture
- Funding

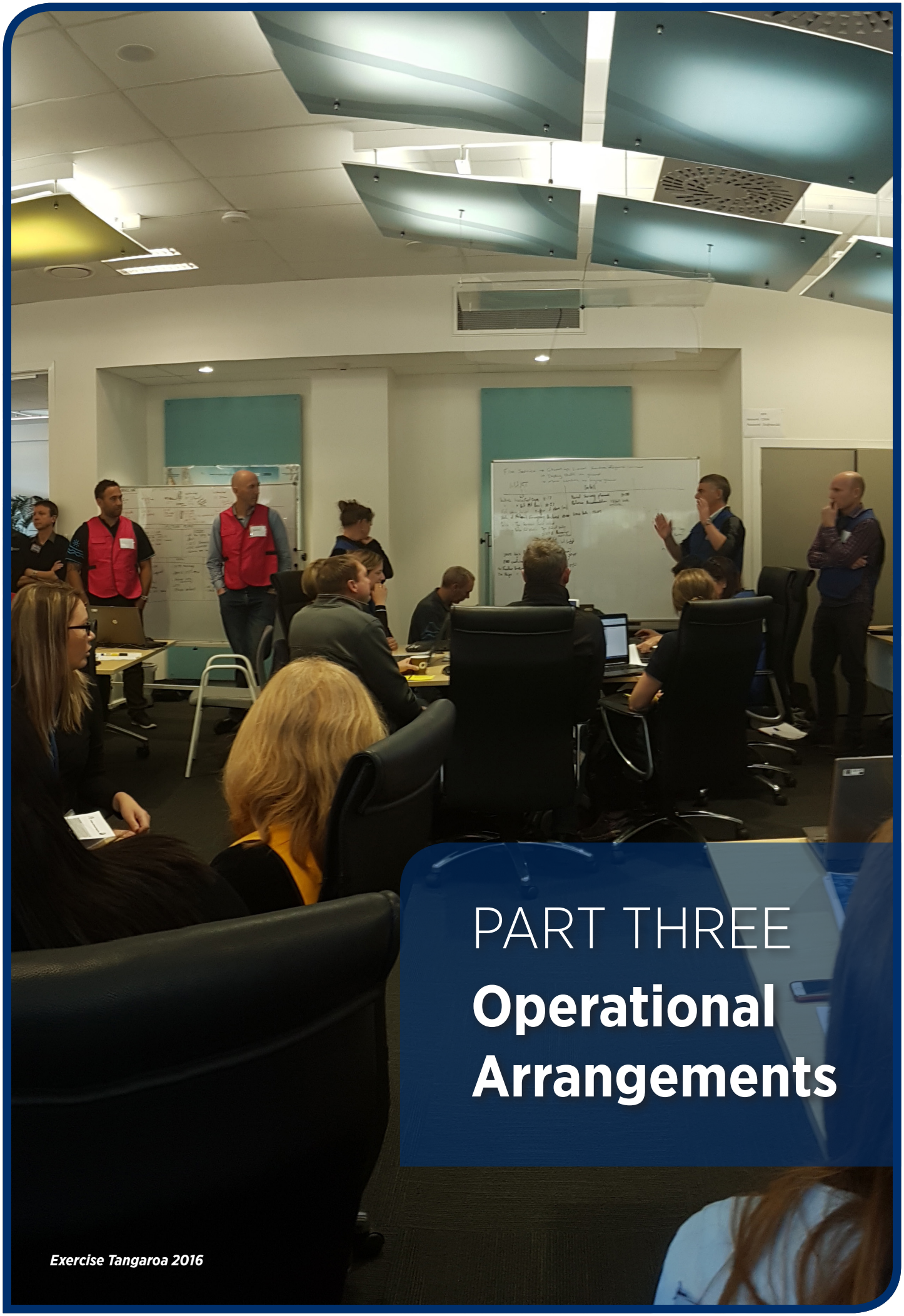
Enabler Two: Organisational resilience aligns to the functioning of the Group. The Bay of Plenty CDEM Group 2015 assessment was 60.5%, the target is to increase this to 80 % (mature) of the CDEM National Capability Assessment Report 2015.

The focus of enabler two of the assessment tool is on:

- Risk management
- Business continuity framework
- Critical functions
- Leadership and culture
- Relationships and networks
- Business continuity planning
- Adaptive capacity

Table 5: Maturity matrix scoring from the CDEM National Capability Assessment Report: December 2015

Developing	Advancing		Mature	
40-59%	60-69%	70-79%	80-89%	90-100%



PART THREE

Operational Arrangements

Exercise Tangaroa 2016

PART THREE
Operational Arrangements

Operational arrangements cover:

- The roles and responsibilities of the Bay of Plenty CDEM Group under the National CDEM Plan Order 2015.
- The roles and responsibilities of the Bay of Plenty CDEM Group partner agencies.
- Processes and systems for responding to emergencies.
- Key operational roles that are provided by the Bay of Plenty CDEM Group in accordance with the National CDEM Plan Order 2015.
- The delegations and authorisations of the Bay of Plenty CDEM Group.
- Process for declarations and notice of transition periods.
- Process for transitioning from response to recovery, and
- Processes and structures that apply in recovery.

Lead Agency for Emergency Events

The National CDEM Plan Order 2015 sets out the lead agency for emergency events. The table below is adapted from Appendix One of the National CDEM Plan Order 2015. It provides a useful reference for emergency events. It also sets out The CDEM Act 2002 that gives each agency the legislative powers required to manage these emergency events.

Where the Bay of Plenty CDEM Group is the lead agency, powers are conferred through The CDEM Act 2002.

Support Agency for Emergency Events

When a partner agency is leading the response the nature, scale and complexity of the event will determine the scope of support required from the Bay of Plenty CDEM Group.

Under The CDEM Act 2002 the Bay of Plenty CDEM Group is responsible for leading the delivery of welfare services to support a response where CDEM is not the lead agency. For example providing emergency accommodation to people evacuated as a result of a large industrial fire. The Bay of Plenty CDEM Group is committed to providing whatever support is available within its means to assist achieving the objectives of the lead agency's Incident Controller, providing it aligns with the mission and objectives of the Bay of Plenty CDEM Group Plan. Some examples of how this is delivered include:

- Provision of the Emergency Operations Centre and staff in support of a Maritime Oil Spill response
- Leveraging on existing relationships and communications channels to resolve issues
- Provision of trained staff to support various aspects of the response
- Utilisation of the Bay of Plenty CDEM Group's warning systems to alert the community

Table 6: Lead Agencies (adapted from National Civil Defence Emergency Management Plan Order 2015-Appendix 1)

Hazard	Lead Agency (Regional level)	Legislative Powers
Geological (earthquakes, volcanic hazards, landslides, tsunami)	Bay of Plenty CDEM Group	CDEM Act 2002
Meteorological (coastal hazards, coastal erosion, storm surges, large swells, floods, severe winds and snow)	Bay of Plenty CDEM Group	CDEM Act 2002
Infrastructure Failure	Bay of Plenty CDEM Group	CDEM Act 2002
Drought (affecting rural sector)	Ministry for Primary Industries	Government Policy
Animal and plant pests and diseases (biosecurity)	Ministry for Primary Industries	Biosecurity Act 1993 Hazardous Substances and New Organisms Act 1996

Hazard	Lead Agency (Regional level)	Legislative Powers
Food Safety	Ministry for Primary Industries	Food Act 2014
Infectious human diseases (Pandemic)	Bay of Plenty and Lakes District Health Boards	Epidemic Preparedness Act 2006 Health Act 1956
Wild Fire	Fire and Emergency New Zealand Department of Conservation (for conservation estate) New Zealand Defence Force (on defence force land)	Fire and Emergency New Zealand Act 2017 Conservation Act 1987 Defence Act 1990
Urban Fire	Fire and Emergency New Zealand	Fire and Emergency New Zealand Act 2017
Hazardous Substance incidents	Fire and Emergency New Zealand	Fire and Emergency New Zealand Act 2017 Hazardous Substances and New Organisms Act 1996
Major Transport Accident[22]	At the national level, the lead agency may depend on the type and nature of the transport accident.	Various
Terrorism	New Zealand Police	Crimes Act 1961 International Terrorism (Emergency Powers) Act 1987 Terrorism Suppression Act 2002
Marine Oil Spill	Regional Council	Maritime Transport Act 1994
Radiation Incident	Fire and Emergency New Zealand	Radiation Protection Act 1965 Fire and Emergency New Zealand Act 2017

Agency Roles and Responsibilities

The following agencies or clusters have roles and responsibilities set out in the National CDEM Plan 2015 or the Guide to the National CDEM Plan 2002. They are either mandated to fulfil these functions or are voluntary commitments to national CDEM arrangements.

Table 7: CDEM agencies and responsibilities.

Agency	Function
Local Authorities (LA's)	Unite with regional neighbours and emergency services to form a CDEM Group. Each territorial authority to plan and provide for CDEM in its district. Coordinate response at local level.
Emergency Management Bay of Plenty (as Group Emergency Management Office)	Coordinates and facilitates the day to day planning and project work on behalf of the Bay of Plenty CDEM Group to ensure the Bay of Plenty CDEM Group is able to respond effectively to any emergency event. Supports the Bay of Plenty CDEM Group ECC and local EOC's in effectively responding to emergency events.

[22] Note – Plan clause Appendix 1,"Major transport accident at the national level, the lead agency may depend on the type and nature of the transport accident." CDEM Guide to the National Plan.

Agency	Function
Ministry of Civil Defence and Emergency Management	Lead Agency responsible for coordinating emergencies resulting from various hazards using the arrangements in the National CDEM Plan Order 2015. Support agency, coordinating the CDEM response to any emergency managed by another lead agency.
NZ Police	Maintenance of law and order during an emergency. Protect life and property and assist the movement of rescue, medical, fire and other essential services, assist with disseminating public warnings, conduct search and rescue activities, carry out disaster victim identification, control access to affected areas, assist with evacuation, and coordinate inquiries to assist family/whānau to make contact and to trace missing persons. NZ Police often accept the initial responsibility for coordination of an emergency, and will hand over to the appropriate lead agency once that agency is ready. Depending on the nature of the event, NZ Police may also carry out investigation activities during a response. NZ Police are responsible for the welfare services Inquiry sub-function.
Te Puni Kokiri	The principal role is working with local Iwi and iwi providers regarding welfare support and services and engaging with Māori communities to ensure that their needs are met. Bay of Plenty CDEM Group has co-opted Te Puni Kokiri onto the Coordinating Executive Group where their role is to provide a Maori perspective.
Fire and Emergency New Zealand	From 1 July 2017, NZ Fire Services and Rural Fire Authorities were unified under Fire and Emergency New Zealand (FENZ). The FENZ Act 2017 replaces the Fire Services Act 1975 and Forest and Rural Fires Act 1977. In relation to CDEM activities, FENZ has the following functions: Providing fire prevention, response and suppression services, stabilising and rendering safe incidents that involve hazardous substances, rescuing trapped persons, providing urban search and rescue services, performing technical rescues. FENZ are also tasked specifically with responding to severe weather related events, natural hazard events and disasters. Investigation of the cause of an event may also be carried out.
District Health Board (Bay of Plenty and Lakes)	Provide services to minimise the consequences of the emergency for the health of individuals and the community. Coordinate the local health sector response to emergencies, ensuring appropriate coordination and liaison with CDEM Group and local authorities. Utilise the powers of the Medical Officer of Health.
Government departments and other agencies	Be capable of managing their response to emergencies. Plan for, and be able to ensure continuity of service, particularly in support of critical CDEM activities.
NZ Defence Force	Provide appropriate support to government authorities during an emergency, while maintaining operational outputs and missions. Support Agency.

Agency	Function
Lifeline Utilities	Continue to deliver the infrastructure services to the community they normally provide to the fullest possible extent through using business continuity, response and recovery plans.
Welfare agencies	Support individuals, family and whānau through the delivery of welfare services, sub-functions of registration, needs assessment, inquiry, care and protection services for children and young persons, psychosocial support, household goods and services, shelter and accommodation, financial assistance and animal welfare. Operational arrangements for each of the welfare services sub-functions are set out in the Bay of Plenty CDEM Group Welfare Plan.
Building Consenting Authorities (Territorial Authorities)	Lead management of buildings during a response, including leading rapid impact assessments and managing the safety of people in or near a building through cordoning, stabilisation and barricading work, carrying out demolitions and setting up partial demolition cordoning. Regional Authorities are responsible for the above aspects in relation to dams.
Science and Research Organisations	Provide evidence-based advice to support lead agencies, including definitive scientific advice or to communicate risk.
Ambulance Providers	Maintaining services and managing increased demand, and responding to emergencies involving risk to public health.

Table 8: Other significant roles and relationships for Bay of Plenty CDEM Group:

Agency	Function
Maritime New Zealand	Investigate and analyse the causes of maritime accidents including health and safety responsibilities. Provide a national land, sea and air search and rescue coordination service. Manage New Zealand's national maritime incident and oil spill response capability. Lead responses to significant maritime incidents and emergencies (including oil spills).
Coastguard New Zealand	Provides the primary maritime search and rescue service for New Zealand.
Bay of Plenty Regional Harbourmaster (& Bay of Plenty Regional Council Maritime Team)	Maintain navigation aids, lights and beacons. Can close a port or harbour and can order vessels in or out of port or to move. Respond to oil spill events.
Toi Te Ora Public Health	Promote, protect and improve population health, prevent ill health and minimise the risk of disease and injury through population based interventions.

Structures for Working with Others

There are several groups and committees that support coordination and communication across the CDEM sector. These groups are either led by the Bay of Plenty CDEM Group, or operate with support from the Bay of Plenty CDEM Group.

There are also a number of volunteer groups that have the capacity and capability to support a response, the Bay of Plenty CDEM Group works with these groups as appropriate.

The Welfare Coordination Group (WCG) is a specific requirement of the National CDEM Plan Order 2015. The Bay of Plenty CDEM Group is required to establish a WCG, to be chaired by the Group Welfare Manager.

Table 9: Bay of Plenty CDEM Group and Committees, their functions and how they align to roles and responsibilities set out in the Guide to the National Guide to the CDEM Plan 2015.

Group/Committee	Function	Section in the National CDEM Plan Order 2015	Responsible Agency
Bay of Plenty Lifelines Group	The Bay of Plenty Lifelines Group consists of Lifelines utilities entities operating in the Bay of Plenty. The mission of the Bay of Plenty Lifelines Group is "To reduce the vulnerability of Bay of Plenty region's Lifeline Utilities to local, regional and national emergency events."	Section 13 – Lifeline Utilities	Bay of Plenty Lifelines Group
Welfare Coordination Group (WCG)	The WCG is a collective of welfare services agencies that are active at the Group and local level. It provides a mechanism for agencies to work together to plan for and establish arrangements for the effective delivery of welfare services.	Section 14 – Welfare Services	Bay of Plenty CDEM Group
Regional Emergency Management Coordinating Committee (REMCC)	The REMCC is made up of emergency services and agencies with a lead or support role in response. Its purpose is to establish strategic relationships to support connected response planning.	Section 8 – Emergency Services	Bay of Plenty CDEM Group
Local Welfare Committees	Local Welfare Committees are collectives of welfare services agencies that operate at the local level, and are supported by the WCG.	Section 14 – Welfare Services	Local authorities
Local Emergency Services Committees	Local Emergency Services Committees are a collective of emergency services operating at the local level.	Section 8 – Emergency Services	New Zealand Police

Emergency Coordination Arrangements in Response

Coordinated Incident Management System (CIMS)

New Zealand agencies with responsibilities for emergency response use the Coordinated Incident Management System (CIMS) to manage responses to emergencies. CIMS is a framework that enables agencies to coordinate and cooperate effectively. It provides common structures, functions and terminology across agencies, within a framework that is flexible and scalable so that it can be used in any level or type of event.

While CIMS can be used for non-emergency events (such as major sporting events), it is most often applied during emergencies.

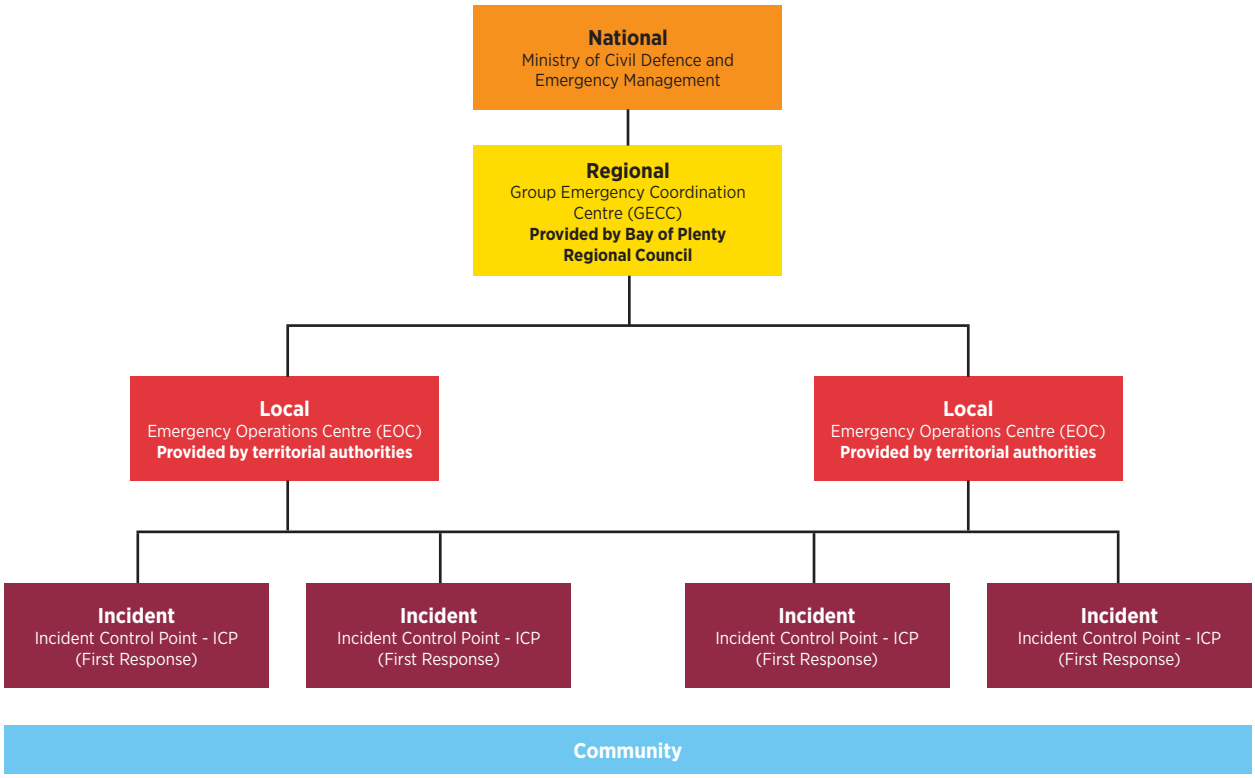
For a CDEM-led response, CIMS provides the structure used within the Emergency Operations Centre (local level) and the CDEM Group Emergency Coordination Centre (regional level).

CDEM Response Principles

Our response principles are:

- Coordinated Incident Management System (CIMS) will be used to achieve effective coordinated management of emergencies by establishing common structures, functions and terminology whilst enabling agencies to develop their own processes, procedures and training.
- Coordination and communication of effort. CIMS provides the ability to take a common approach to a shared problem – common terminology.
- Our response is modular and scalable.
- Each CDEM partner organisation and welfare service agency is individually responsible for planning its own continuity in respect of emergencies.
- CDEM partners will coordinate and integrate their response planning to ensure an effective response.
- CDEM partners will undertake initial assessments of the consequences of an emergency, will coordinate the local efforts of their agency and will communicate assessments and actions to the appropriate lead agency.
- Welfare services agencies work together to plan for and coordinate arrangements for the delivery of welfare services during an emergency to minimise the consequences for individuals, families and whānau, and communities.
- Lifeline utility entities and the Bay of Plenty CDEM Group work together to share best practice and cooperatively plan, working on joint planning opportunities and creating an easier flow of information during an emergency.
- Emergency management responses can be undertaken without a state of emergency being declared.
- The Emergency Operations Centre (EOCs)/Emergency Coordination Centres (ECCs) will coordinate resources and support. These will be flexible and able to be established as appropriate for each emergency.
- Support is provided to leaders and community.
- Recovery measures should be planned for and implemented from the first day of the response.

Figure 7: The response levels and where the response is managed from, depending on the size of the event:



Community

The community will always respond. Community includes: individuals, family, community groups and businesses. This level of response has no 'official' response structure and no response agencies are directly involved.

Incident Control Point (ICP)

The Incident Control Point is set up at the 'incident' level. This is the first official level of response. The Incident Control Point is generally set up and managed by first responders. The majority of events occur at this level.

CDEM Emergency Operating Centres (EOCs)

The EOC manages the response to local events within their boundary.

EOCs are operated and staffed by territorial authorities. For the Bay of Plenty CDEM Group Rotorua Lakes Council, Kawerau District Council, Whakatāne District Council and Ōpōtiki District Council have their own EOCs. Tauranga City Council and Western Bay of Plenty District Council have agreed to operate and staff a shared EOC. This is based at Western Bay of Plenty District Council.

The EOC provides a base for the Local Controller and acts as a liaison point for all agencies for local-scale events. The EOC operates under the CIMS structure and is responsible for all CIMS functions including activating civil defence centres to provide welfare support to affected communities.

Emergency Management staff support EOCs with their operations.

CDEM Group Emergency Coordination Centre (GECC)

The GECC coordinates the response to regional events (that span territorial boundaries).

The GECC is operated and staffed by Bay of Plenty Regional Council. The GECC provides a base for the Group Controller, and a coordination and liaison point for all agencies. The GECC operates under the CIMS structure and is responsible for all CIMS functions. The Group Welfare Manager, Group Recovery Manager and Lifeline Utilities Coordinator are all based at the GECC.

Liaison with the National Crisis Management Centre (NCMC) is maintained by the GECC.

The GECC may be utilised by a lead agency responding to an emergency event that is not CDEM.

An example of this is the Bay of Plenty Regional Council responding to a tier 2 oil spill response[23].

National Crisis Management Centre (NCMC)

The NCMC is an all-of-government facility. Its day to day operations are managed by the Ministry of Civil Defence and Emergency Management. The NCMC manages a national-level response to events that require all-of-government coordination.

Where an event is CDEM-led, MCDEM uses the NCMC to support the National Controller and to coordinate an all-of-government response.

24/7 Duty Systems

Emergency Management Bay of Plenty maintain a 24/7 duty standby system which has staff rostered on to maintain monitoring of potential threats to the Bay of Plenty.

These duty arrangements remain in place until such time as an EOC is activated (or GECC for a regional scale event).

Duty Manager

Emergency Management Bay of Plenty staff provide a 24/7 Duty Manager function. The Duty Manager is the first port of call for notification of local, regional or national threats and emergencies. The Duty Manager is responsible for disseminating initial warnings and alerts both internally and to the public, and providing direct liaison with Controllers to inform them and receive information from them of threats or emergencies, and possible escalations or implications.

Duty Public Information Management (PIM) Manager

The Bay of Plenty CDEM Group has a 24/7 Duty Public Information Manager. The role of the Duty Public Information Manager is to lead public information management, in liaison with the Duty Manager and Controllers.

Activation of Emergency Arrangements

Modes of Operation

There are four conceptual modes of operation that EOCs/GECC/NCMC operates under. The scale and nature of the event will determine the mode of operation. Table 10 sets out the modes of operation in detail.

The activation of one centre will likely result in the activation of the next higher centre. For example, if an EOC is activated and directing a response, the GECC is also likely to be activated and working in an Engage or Assist capacity.

[23] Bay of Plenty Marine Oil Spill Contingency Plan (Tier 2 Plan) 2017

Table 10: Modes of operation.

	Mode	EOC Roles	GECC Roles
1	Monitor	Monitor and assess threats and incidents that may lead to a local emergency. Local Controller and key staff on standby. Maintain situational awareness. Public information management as required.	Monitor and assess threats and incidents that may lead to a local / regional emergency. Group Controller and key staff on standby. Maintain situational awareness. Public information management as required.
2	Engage	In addition to monitoring activities: collect, analyse and disseminate information on emergencies. Report to or advise stakeholders. Local Controller reports to Group Controller. Public information management.	Dependant on the event, in addition to monitoring activities: collect, analyse and disseminate information on emergencies. Group Controller reports to National Controller. Public information management.
3	Assist	In addition to engagement activities, process or coordinate requests for support, and advice from communities, emergency services responders, incident control points, civil defence centres and local elected officials. Report to Group Controller, Mayor and elected officials. Public Information Management.	In addition to engagement activities, process or coordinate requests for support and advice from communities, local emergency operations centres and regional /national emergency services/agencies. Report to the National Controller and CDEM Group Joint Committee. Public information management
4	Direct	In addition to assisting activities: control and direct the overall local response.	In addition to assisting activities: control and direct the overall regional response.

Public Alerting and Warning Procedures

Public Alerting

Public alerts are sent when the Bay of Plenty CDEM Group receives hazard alerts or warnings from key agencies such as MetService, NZ Police, New Zealand Transport Authority, Bay of Plenty Regional Council and the District Health Boards. For any emergency of national significance the lead agency for the type of hazard (see Appendix 1 of the National CDEM Plan Order 2015) is required to coordinate the dissemination of public information (see 14(1) (d) of the National CDEM Plan Order 2015.

The Bay of Plenty CDEM Group uses a range of platforms to alert the public to emergency events. These are largely managed by the Duty Manager under instruction from the Group Controller

The main alerting systems used are Emergency Mobile Alerting and the Red Cross Hazard App. These are supported by:

- Facebook posts
- Text alert system
- Twitter
- Other localised warnings such as sirens and mobile siren systems
- Television, radio and print media

Bay of Plenty CDEM Group Alerting

The Duty Manager is also responsible for notifying other relevant agencies under instruction from the Group Controller.

Declaring a State of Local Emergency

Local Declaration

In accordance with Section 25(5) of The CDEM Act 2002, the mayor of a territorial authority, or an elected member designated to act on behalf of the mayor if the mayor is absent, may declare a state of local emergency that covers the district of that territorial authority.

Regional Declaration

In accordance with Section 25 (1)(a) of The CDEM Act 2002, The Bay of Plenty CDEM Group authorises the Chairperson of the Bay of Plenty CDEM Group Joint Committee to declare a state of local emergency for the region, or for one or more districts or wards within the region, including Whakaari/White Island.

In the absence of the Chairperson, the authority to declare passes to the Deputy Chairperson of the Bay of Plenty CDEM Group Joint Committee.

In accordance with Section 25(4) of The CDEM Act 2002, if the Chairperson or Deputy Chairperson are unable to exercise the authority to declare, then any representative member of the Bay of Plenty CDEM Group may exercise the power to declare a state of local emergency.

Declarations where a Shared Service Arrangement Exists

Territorial authorities may choose to set up shared service arrangements for their EOC's and response capability.

Where a shared service agreement is in place, the authority to declare a state of local emergency for one or more of the districts covered by the shared service arrangement is as follows:

- Under Section 25 (1) (a) of The CDEM Act 2002.
- The mayor of either territorial authority or,
- If the mayor is absent, any representative designated to act on behalf of the mayor or,
- The Chairperson of the Bay of Plenty CDEM Group Joint Committee.

Declarations During Local Government Elections

During the period from the official announcement of the election results to the date of the first meeting of the local authority when elected members are sworn in, a state of local emergency will only be able to be declared by the Minister of Civil Defence. This is in accordance with the directive from MCDEM issued to CDEM Groups in September 2016.

Specifics of Declarations

Sections 68-73 of The CDEM Act 2002

- A state of emergency must be publicly notified and gazetted.
- A state of emergency expires 7 days after the time and date on which it came into force, unless extended or terminated.
- Before a state of local emergency expires it can be extended for a further 7 days. An extension of a state of emergency comes into force immediately.
- The termination of a state of emergency takes effect immediately once the declaration terminating it is made.

Key Roles in an Emergency Response

CIMS sets out the structure and functional roles that may be activated in the EOCs/GECC. The diagram below sets out the functional areas and the key tasks undertaken by each function. The structure can be scaled up or down depending on the size of the emergency. For example, some emergencies may involve only the Controller, Duty Manager and Operations Manager.

The Bay of Plenty CDEM Group ensures sufficient staff are trained to operate in the various functions in all EOCs and the GECC.

Figure 8: Functional areas and roles.

There are some key roles that are appointed by the Bay of Plenty CDEM Group on a permanent basis, as these roles operate in business as usual and recovery as well as during an emergency. These roles are Group and Local Controllers, Group Welfare Manager, Group Public Information Manager and Group and Local Recovery Managers.

Other key roles include Lifelines Utility Coordinator, Volunteer Coordination and Liaison. Details of these roles and their responsibilities are set out below:

Controller

The role of the Controller is to lead, direct and coordinate all resources necessary to respond effectively to the impact of a disaster.

The Controller primarily does this by following the four stages of the response process, as set out in the Response Management: Director's Guidelines for CDEM Group and Local Controllers [DGL 06/08].

The four stages are:

1 Activation of the GECC/EOC.

2 Initial assessment and action planning.

3 Implementation cycle.

4 Transition to recovery and evaluation of the response.

Core Competencies for a Controller

- Leadership - credible response leader from response to recovery, defines strategic vision, manages and leads teams and copes under pressure.
- Communication – communicates clearly with partners and community, competent with public information management.
- Relationship management – proficient in developing relationships, practiced with multi agency teams, credible influencer and negotiator.

Under Section 26 of The CDEM Act 2002, the Bay of Plenty CDEM Group has designated the Director of Emergency Management Bay of Plenty as the Group Controller. Alternate Group Controllers have also been appointed.

Under Section 27 of The CDEM Act 2002, the Bay of Plenty CDEM Group also has Local Controllers and alternates appointed across the local authorities. All Local Controllers are appointed and authorised to act as a Local Controller in any district or city within the Bay of Plenty CDEM Group.

A list of the Bay of Plenty CDEM Groups' Group and Local Controllers and alternates is provided on the Bay of Plenty CDEM Group Website www.bopcivildefence.govt.nz

Role of Controller during a State of Local Emergency

Group Controller

Under The CDEM Act 2002 the Bay of Plenty CDEM Group and the Group Controller have specific powers where a state of emergency is in force.

Section 85 of The CDEM Act 2002 defines emergency powers of CDEM Groups. These are listed in more detail in Table 11.

The Bay of Plenty CDEM Group delegates its powers under Section 85 of The CDEM Act 2002 to the Group Controller.

As outlined in Table 11, the Group Controller also has specific powers conferred on them by The CDEM Act 2002 during a state of emergency. These powers are set out in Section 86 to 92, and Section 94. They include evacuation of premises and places, entry onto premises, closing roads and public places, removal of aircraft, vessels, vehicles etc, requisitioning powers, power to give directions to stop activities or to take actions to prevent or limit the extent of the emergency, the power to carry out inspections, the power to enter into contracts.

The Bay of Plenty CDEM Group must not act inconsistently with any directions given by the Minister of Civil Defence or the Director of Civil Defence Emergency Management.

Local Controller

Under Section 27(1) of The CDEM Act 2002, the Bay of Plenty CDEM Group can direct Local Controllers to carry out any of the functions and duties of, or delegated to the Group Controller.

The table below sets out the delegations, powers conferred by The CDEM Act 2002, and the authorisations of the Bay of Plenty CDEM Group for Group Controllers and Local Controllers.

Table 11: Conferred and delegated powers of Group and Local Controllers[24].

GROUP CONTROLLER	
Delegation	**Description**
Section 76	In accordance with Section 76 (1) of The CDEM Act 2002, the Bay of Plenty CDEM Group authorises the Group Controller to carry out the powers conferred by Section 76 of The CDEM Act 2002. That is, the power to require information that in their opinion is necessary for the exercise of civil defence emergency management.
Section 85	In accordance with Section 18 (1) of The CDEM Act 2002, the Bay of Plenty CDEM Group delegates its functions under Section 85 of The CDEM Act 2002 to the Group Controller. That is, the Emergency Powers of Civil Defence Emergency Management Groups: while a state of emergency is in force, carry out or require to be carried out works, clearing roads and other public places, removing or disposing of dangerous structures and materials, provide for the rescue of endangered people, set up first aid posts and provide for first aid, provide for the relief of distress including emergency food, shelter and clothing, provide for the conservation of food, fuel and other essential supplies, prohibit or regulate land air and water traffic, undertake measures for the disposal of dead persons or animals, disseminate information and advice to the public, enter into arrangements with any person for the purpose of carrying out civil defence emergency management, and provide equipment, accommodation and facilities for the exercise of any of the power conferred by the emergency powers.
Powers conferred by The CDEM Act 2002	**Description**
Section 78 Sections 86 to 92 and Section 94	The Group Controller also has specific powers conferred on them by The CDEM Act 2002 during a state of emergency that do not require a delegation by the Bay of Plenty CDEM Group. These include evacuation of premises and places, entry on premises, closing roads and public places, removal of aircraft, vessels, vehicles etc., requisitioning powers, power to give directions to stop activities or to take actions to prevent or limit the extent of the emergency, the power to carry out inspections, the power to enter into contracts.
LOCAL CONTROLLER	
Delegation	**Description**
Section 27(1)	Bay of Plenty CDEM Group may appoint 1 or more persons to be a Local Controller, and direct that person or persons to carry out any of the functions and duties of, or delegated to, the Group Controller of the Group and to exercise the powers of Controllers in the area for which the Group Controller is appointed (note: all Controllers are appointed and authorised to act as a Local Controller in any district or city within the Bay of Plenty CDEM Group).
Limitation	
Section 27 (2)	Despite anything in Subsection (1), a Local Controller must follow any directions given by the Group Controller during an emergency. (Note: An emergency as defined in Section 4 of The CDEM Act 2002 is not necessarily a declared emergency).
Authorisation	
Section 76	In accordance with Section 76 (1) of The CDEM Act 2002, the Bay of Plenty CDEM Group authorises the Local Controller to carry out the powers conferred by Section 76 of the CDEM Act. That is, the power to require information that in their opinion is necessary for the exercise of civil defence emergency management.
Section 88	In accordance with Section 88 of The CDEM Act 2002, the Bay of Plenty CDEM Group authorises local Controllers to close roads and public places in areas where a state of emergency is in force.

[24] The Sections of The CDEM Act 2002 referred to apply in both a state of local and national emergency

Power to replace a Group Controller During a State of Emergency

Under Section 26(4) of The CDEM Act 2002, a Group may delegate the authority to replace the Group Controller during a state of emergency with an alternate Group Controller, and may place limitations on the circumstances under which this delegation can be exercised.

The Bay of Plenty CDEM Group authorises the Bay of Plenty CDEM Group Joint Committee Chairperson (or Deputy Chairperson in the Chairperson's absence) in consultation with two or more members of the Bay of Plenty CDEM Group Joint Committee, to replace the Group Controller if they consider, on reasonable grounds, that the Group Controller is not adequately discharging their duties.

Public Information Management (PIM) Team

The Bay of Plenty CDEM Group PIM team includes the 24/7 Duty Public Information Manager, the Group Public Information Manager, Local Public Information Managers and other communications staff from around the region. Currently (2018) the Group Public Information Manager is the Bay of Plenty Regional Council Communications Manager. It is important to note that the role of public information management applies across all four Rs and not just Response. The Public Information team are responsible for:

- Working with and managing the media, including preparing and leading media conferences.
- Issuing public information to the community.
- Ensuring call centres, helplines and reception personnel have current public information and key messages.
- Ensuring information points such as a room or area within a Civil Defence Centre or community meeting place provide current public information and key messages.
- Managing community relations and meetings.
- Advising the Controller and attending meetings.
- Liaising with the Mayor/Regional Council Chair.
- Working with CDEM spokespeople.
- Liaising with people managing site visits for VIPs and media.

Providing the public with information before, during and after an event is an essential part of the CDEM response. It enables people to understand what is happening and to take appropriate actions. The information must be coordinated, relevant, timely, accurate, clear and appropriate for the recipient(s) across the 4 Rs. It is important that the various agencies are providing consistent messages to the public to avoid confusion.

The way public information is managed can have a big impact on the outcomes of the event. Public information will influence the way the public reacts, and can have longer term implications for how the community responds during response, recovery and beyond.

Public Information Management is also important for the Controller, as information coming in from the public can highlight an issue that has not otherwise been identified within the GECC or EOC.

The Bay of Plenty CDEM Group PIM Plan provides specific information on the forms of communication used, key messages, coordination between the GECC and EOC, and how information points will be managed.

Welfare

The role of welfare services is to provide for the needs of people affected by an emergency, and to minimise the consequences of the emergency.

The Bay of Plenty CDEM Group is the agency responsible for the overall coordination of welfare services for any emergency when:

- The Bay of Plenty CDEM Group are the lead agency (as per the lead agency table).
- The Bay of Plenty CDEM Group are specifically requested to provide welfare support by another lead agency.

Group Welfare Manager

Under the National CDEM Plan Order 2015 the Bay of Plenty CDEM Group is required to appoint a Group Welfare Manager, and to establish a Welfare Coordination Group (WCG). For the Bay of Plenty CDEM Group, the Manager: Community Resilience Emergency Management Bay of Plenty is designated as the Group Welfare Manager. Under the National CDEM Plan Order 2015 CDEM Groups may also have local welfare committees and local Welfare Managers. For the Bay of Plenty CDEM Group, local Welfare Managers and committees are in place across the Bay of Plenty Region.

The Group Welfare Manager coordinates the agencies responsible for welfare services during response and recovery, and coordinates with local Welfare Managers at local EOCs.

The Bay of Plenty CDEM Group Welfare Plan aims at improving the way agencies work together, enabling better coordination and ensuring that welfare services are available and delivered when and where they are needed.

Having robust arrangements in place for the provision of welfare service delivery means communities will have timely access to the services they need.

Work will be undertaken to:

- Elevate and strengthen the arrangements for welfare services in an emergency,
- Achieve greater integration of roles, responsibilities and processes encompassing the whole system and all stakeholders, and
- Build capacity and capability.

Welfare Coordination Group (WCG)

Table 12: Members of the Bay of Plenty CDEM Group Welfare Coordinating Group and Welfare sub-functions.

Agency	Responsibility for welfare services sub-function
Bay of Plenty CDEM Group	Registration Needs assessment Household goods and services Shelter and accommodation (shelter and emergency accommodation)
Bay of Plenty, and Lakes DHBs	Psychosocial support
Ministry of Business, Innovation & Employment	Shelter and accommodation (temporary accommodation)
Ministry of Social Development: - Work and Income NZ	Financial Assistance
Oranga Tamariki Ministry for Vulnerable Children	Care and protection services for children and young people

The Group Welfare Manager is required to chair the WCG. WCG have defined roles in readiness and recovery as well as in an emergency. In an emergency, the role of WCG is to ensure that each member agency operates as a coordinated collective, to deliver effective welfare services. They do this by:

- Reporting on progress in coordinating the specific sub-function they are responsible for.
- Receiving information from other agencies to ensure coordination.
- Receiving information on the wider response (via the Group Welfare Manager), to assist with setting targets and directing activities as the emergency progresses.

Lifeline Utilities Coordination

Lifeline utilities are required to ensure they are able to deliver the services they normally provide, to the fullest possible extent, during and after an emergency.

Lifeline Utilities Coordinator (LUC)

Under the National CDEM Plan Order 2015, the Bay of Plenty CDEM Group must appoint Lifeline Utilities Coordinators (LUCs) to perform lifeline coordination functions, and ensure relationships and sector planning arrangements are in place during readiness and recovery.

The LUC is a non-statutory position responsible for coordinating lifelines utilities on behalf of the Controller during emergency response and the Recovery Manager throughout recovery activities.

LUCs are non-statutory appointments. Appointment of LUCs are made by the Director of Emergency Management Bay of Plenty under delegated authority.

For the Bay of Plenty CDEM Group, an Emergency Management Bay of Plenty staff member is designated as the LUC. They are based in the GECC, and act as a liaison between the Controller and lifeline utilities.

Bay of Plenty Lifelines Group (BOPLG)

The BOPLG was established to provide a forum to share best practice approaches and undertake work of mutual benefit to the members. The focus of the BOPLG is on reducing vulnerability. While they do not have a specific function to play as a collective in an emergency, any member of a lifeline will attend the GECC if requested to support the liaison role of the Lifeline Utilities Coordinator or to serve as a technical advisor.

Volunteer Coordination

Volunteers are an integral part of an emergency response. They may be managed and coordinated by the Bay of Plenty CDEM Group.

There are many volunteer groups that can support the Bay of Plenty CDEM Group. Rather than specifically listing all organisations they are considered under the wider umbrella of volunteers.

There are three categories of volunteers. They are:

- CDEM volunteers - who are registered and have had official training facilitated or provided by CDEM organisations.
- Spontaneous volunteers – who respond spontaneously to emergencies.
- Affiliated volunteers – who are aligned to organisations other than CDEM.

A national framework of New Zealand Response Teams that are registered with MCDEM exist across the country. There are three response teams based in the Bay of Plenty:

- Rotorua (NZ-RT15)
- Tauranga (NZ-RT16)
- Whakatāne (NZ-RT17)

In an emergency, volunteer coordination is organised by the Volunteer Coordinator and managed by the Operations Manager.

The Bay of Plenty CDEM Group uses the Volunteer Coordination in CDEM Director's Guideline for CDEM Groups [DGL 15/13] to guide volunteer coordination in an emergency.

Liaison

Liaison officers play a key role in passing information between the GECC/EOCs and their respective agencies. This allows for more accurate and timely information sharing. Liaison officers may also liaise with each other, which can aid coordination of activities. They can provide advice on their agency's capabilities and intentions, and help resolve problems.

Liaison personnel within the GECC /EOCs are managed by the Operations Manager. Contact may be made in the initial phase of an emergency. If the GECC or EOCs are activated, liaison staff may attend.

The Bay of Plenty CDEM Group expects CDEM partner agencies to provide a liaison to the GECC/ EOCs, on the request of the Controller. The identified partners who will provide a liaison are:

- New Zealand Police.
- Fire and Emergency New Zealand.
- Bay of Plenty District Health Board and Lakes District Health Board.
- St John Ambulance Service.
- Toi Te Ora Public Health.
- Te Puni Kōkiri.
- Bay of Plenty Lifelines Group.

Other organisations may be requested to provide a liaison, depending on the emergency.

Operational Arrangements with Māori and Community Response Teams

The way CDEM communicates with and supports iwi/ hapū and marae and community response teams requires clear operational arrangements to be in place.

Several marae in the region have developed or are developing marae emergency preparedness plans. Iwi/hapū have their own unique response frameworks that activate when emergencies occur. In the local context, the Rena and other oil spills are key events where iwi/hapū have responded in force, and have developed a clear response framework.

Several communities in the Bay of Plenty have community response plans, and community response teams that will activate in an emergency.

The Bay of Plenty CDEM Group will facilitate the development of protocols and processes to enable communication and support to be provided to iwi/ hapū/marae and community response teams.

Eastern Bay Flood 2004

Transition to Recovery

Transition to recovery is the process of ending the response phase and formally moving into the recovery phase. The process is led by the Group Controller in consultation with the Group Recovery Manager. Reasons to transition to recovery may include:

- Focus of activities moving from response to recovery.
- The immediate threat to people and property has passed.
- The focus has shifted to restoration.
- Declaration powers are no longer required.
- Response agencies are moving towards meeting their requirements in their business as usual roles.

Notice of Transition Period

The CDEM Act 2002 provides powers to facilitate recovery by establishing a formal Transition Period. A Transition Period is activated by a Notice, to aid recovery by providing powers to Recovery Managers to manage, coordinate and direct recovery activities.

Particular powers are provided in a transition period that recognises the nature of the circumstances following an emergency, and allow actions to be taken that are in the public's interest. It allows for that period of time when the immediate response is over, but management, coordination and direction of recovery activities is needed.

Not every emergency will require a notice of Transition Period, however after any emergency response requiring a recovery phase there will be some form of transition where a handover occurs from the Controller to the Recovery Manager.

Controller Handover to Recovery Manager

After any emergency response requiring a recovery phase, the Controller and Recovery Manager will follow the process outlined below:

1 Transition Briefing

The Controller will chair a transition briefing. At the end of the briefing the Recovery Manager is accountable for the coordination for transition and recovery related activities. Ultimately, the interests of the community are of primary importance.

2 Response Transition Report

The Controller will prepare a transition report, comprising:

- The response action plan in place at the time of transition, noting actions that are incomplete
- The type and status of all assigned resources
- Actions taken to finalise the calculation of emergency response expenditure
- A summary of the type and extent of damage in the district at the time of transition – categorised as social, economic, built, and natural environments

3 Involvement in Critical Response Briefings

The Recovery Manager will be involved in all critical response briefings, to ensure they have a good understanding of the process and actions taken and the context for those actions.

Recovery Manager Initial Actions

During the response phase the Recovery Manager will carry out the following actions:

- Ensure that any response activities that carry across to the recovery phase are included in the Recovery Action Plan e.g. Welfare
- Work with the PIM to prepare a communications plan for recovery
- Develop and begin implementing any recovery action plans
- Initiate key recovery arrangements, including establishing a recovery office if appropriate
- Begin to address the impacts from the emergency and put in place inter-agency processes, meetings and reporting arrangements to ensure recovery needs are met and coordinated

Notifying a Transition Period

The CDEM Act 2002 allows notice of a transition period to be given:

- Where a state of emergency has been declared, notice of a transition period may be given by authorised persons, or
- Where a state of local emergency has not been declared, notice of a transition period may be given by authorised persons, with the approval of the Minister of Civil Defence.

A Transition Period lasts for 28 days. It may be extended for a further 28 days, and it can be extended more than once.

For the Bay of Plenty CDEM Group, the persons authorised to give notice of a local Transition Period are the same persons authorised to declare a state of local emergency. That is:

Local:

- In accordance with Section 25(5) of The CDEM Act 2002, the mayor of a territorial authority, or an elected member designated to act on behalf of the mayor if the mayor is absent, may give notice of a local transition period that covers the district of that territorial authority.

Regional:

- In accordance with Section 25 (1)(b) of The CDEM Act 2002, the Bay of Plenty CDEM Group authorises the Chairperson of the Bay of Plenty CDEM Group Joint Committee to give notice of a local transition period for the Bay of Plenty CDEM Group, or for one or more districts within the Bay of Plenty CDEM Group.
- In the absence of the Chairperson, the authority to give notice passes to the Deputy Chairperson of the Bay of Plenty CDEM Group Joint Committee.
- In accordance with Section 25(4) of The CDEM Act 2002, if the Chairperson or Deputy Chairperson are unable to exercise the authority to give notice, then a representative member of the Bay of Plenty CDEM Group Joint Committee may exercise the power to give notice of a local transition period.
- Others should be involved or consulted when deciding whether a notice of transition period is needed i.e. Emergency Management Office, Controller, Police, Fire, Health and MCDEM.

Before giving notice of a transition period, authorised persons must be satisfied that invoking the powers to manage, coordinate or direct recovery activities is:

- In the public interest; and
- Necessary or desirable to ensure timely and effective recovery; and
- Proportionate in the circumstances

Notice of a Transition Period where a Shared Service Arrangement Exists

Some local authorities may choose to set up shared service arrangements for the management of recovery.

Where a shared service agreement is in place, the authority to give notice of a local transition period for one or more of the districts covered by the shared service arrangement is as follows:

Under Section 25 (1)(b) of The CDEM Act 2002, the Bay of Plenty CDEM Group authorises the following persons to give notice of a local transition period:

- The Mayor of either territorial authority or,
- If the mayor is absent, any representative designated to act on behalf of the mayor, or
- The Chairperson of the Bay of Plenty CDEM Group Joint Committee.

Role of Recovery Manager in a Transition Period

Under The CDEM Act 2002 the Group Recovery Manager may use specific powers during transition periods. During a local Transition Period, under Section 30A of The CDEM Act 2002 the Group Recovery Manager must direct and coordinate the use of personnel, material, information, services and other resources for the purposes of carrying out recovery activities.

Local Recovery Managers are directed to carry out all functions and duties of the Group Recovery Manager in the area for which the Group Recovery Manager is appointed. This includes the powers in Part 5B of The CDEM Act 2002 – Powers in relation to transition periods.

Table 13: Conferred powers of Recovery Managers.

Powers conferred by The CDEM Act 2002	Description
Section 94H – General Transition Powers	Carry out or require to be carried out: • Works • Clearing of roads • Examining and marking any property • Removing or disposing of dangerous structures and materials • Provide for the conservation and supply of food, fuel and other essential services • Disseminate information and advice to the public
Section 94I – power to require information	Require any person to provide information. The powers of Section 76, 77, 82 and 83 in relation to information are also conferred on Recovery Managers.
Section 94K – evacuation of premises and places	Require evacuation of premises or place, including public places and exclude persons or vehicles from the premises or place.
Section 94L – entry on premises and places	May enter and if necessary break into any premises or places if it is on reasonable grounds for saving life, preventing injury or rescuing and removing injured persons, permitting or facilitating the carrying out of any urgent measures.
Section 94M – closing roads and public places	May totally or partially prohibit or restrict access to any road or public place.
Section 94N – power to give directions	May direct any person to stop an activity that may have adverse consequences or hinder the recovery.
Section 94P - reporting	If exercising a power under Part 5A of the CDEM Amendment Bill, the Recovery Manager must give a written report to the Director, and a copy of that report to the CDEM Group.

Recovery

Recovery is about ensuring communities can return to the everyday functions of life following an emergency. The sooner a community can return to their homes, re-open businesses, children can return to school, and develop new routines, the better they will recover from an emergency.

The aim is to enable communities to create a new sense of normal through the recovery process. Recovery often lasts much longer and is more complex than the response phase of an event; it can involve a far greater level of planning and management.

Recovery is a developmental and remedial process that aims to:

- Minimise the escalation of the consequences of a disaster.
- Support the wellbeing of individuals, families and communities across the social, economic, built, and natural environments.
- Identify opportunities to adapt to meet the changing needs of the community.
- Reduce the risk of existing hazards.

Recovery can be defined as "the co-ordinated efforts and processes used to bring about the immediate, medium-term, and long-term holistic regeneration and enhancement of a community following an emergency[25]".

More detail on functions, roles and responsibilities in recovery can be found in the Bay of Plenty Civil Defence Emergency Management Group Recovery Plan 2015.

CDEM Recovery Principles

- Recovery will aim to minimise the escalation of the consequences of an event
- Bay of Plenty CDEM Group recovery is founded at the territorial authority level and builds upon local recovery capability and capacity
- Taking opportunities to adapt to meet the physical, environmental, economic and psychosocial needs
- Recovery will work to reduce the future exposure to hazards and their associated risks
- Taking an inclusive approach to community participation, recognising the roles of individuals, families and communities and recognising the diversity of communities and the importance of taking local knowledge into account
- Begin the recovery process at the beginning of the response phase, providing advice to the Controller on actions that would facilitate a speedy and effective recovery
- Make recovery management a part of everyday work of the Bay of Plenty CDEM Group, and integrate the work with existing organisational systems wherever possible
- Ensure that recovery management is comprehensive by linking recovery activities to the other emergency management processes i.e. Reduction, Readiness and Response

[25] CDEM Act 2002, Section 4, Interpretation

Group Recovery Structure

Recovery is led by the Bay of Plenty CDEM Group Joint Committee, which determines the priorities and policy. This is supported at the strategic level by the Coordinating Executive Group. Operationally the Group Recovery Manager coordinates the recovery efforts between agencies and local authorities and ensures the directives and priorities set by the Bay of Plenty CDEM Group Joint Committee and Coordinating Executive Group are implemented. A Group Recovery Office may be set up, depending on the size and complexity of the event.

Group Recovery Manager

The role of the Group Recovery Manager is to:

- Provide leadership to the Group on pre-event recovery planning, assistance and advice to Local Recovery Managers.
- Coordinate recovery activities across the Group as required.
- Liaise primarily with the Local Recovery Managers, the National Recovery Manager (if appointed) and the Recovery Management Team.
- Coordinate and collaborate with other government and non-government agencies.
- Advise the Recovery Team, Coordinating Executive Group and Bay of Plenty CDEM Group Joint Committee on the application of The CDEM Act 2002 and ensure that recovery activities, including the use of powers, are carried out in accordance with The CDEM Act 2002.
- Monitor and report on progress and achievement of outcomes.

The Group Recovery Manager role commences during the response phase and ceases upon completion of the exit strategy.

Local Recovery Manager

The role of Local Recovery Managers is to:

- Coordinate recovery activities within the local authority, and to manage Local Recovery Offices

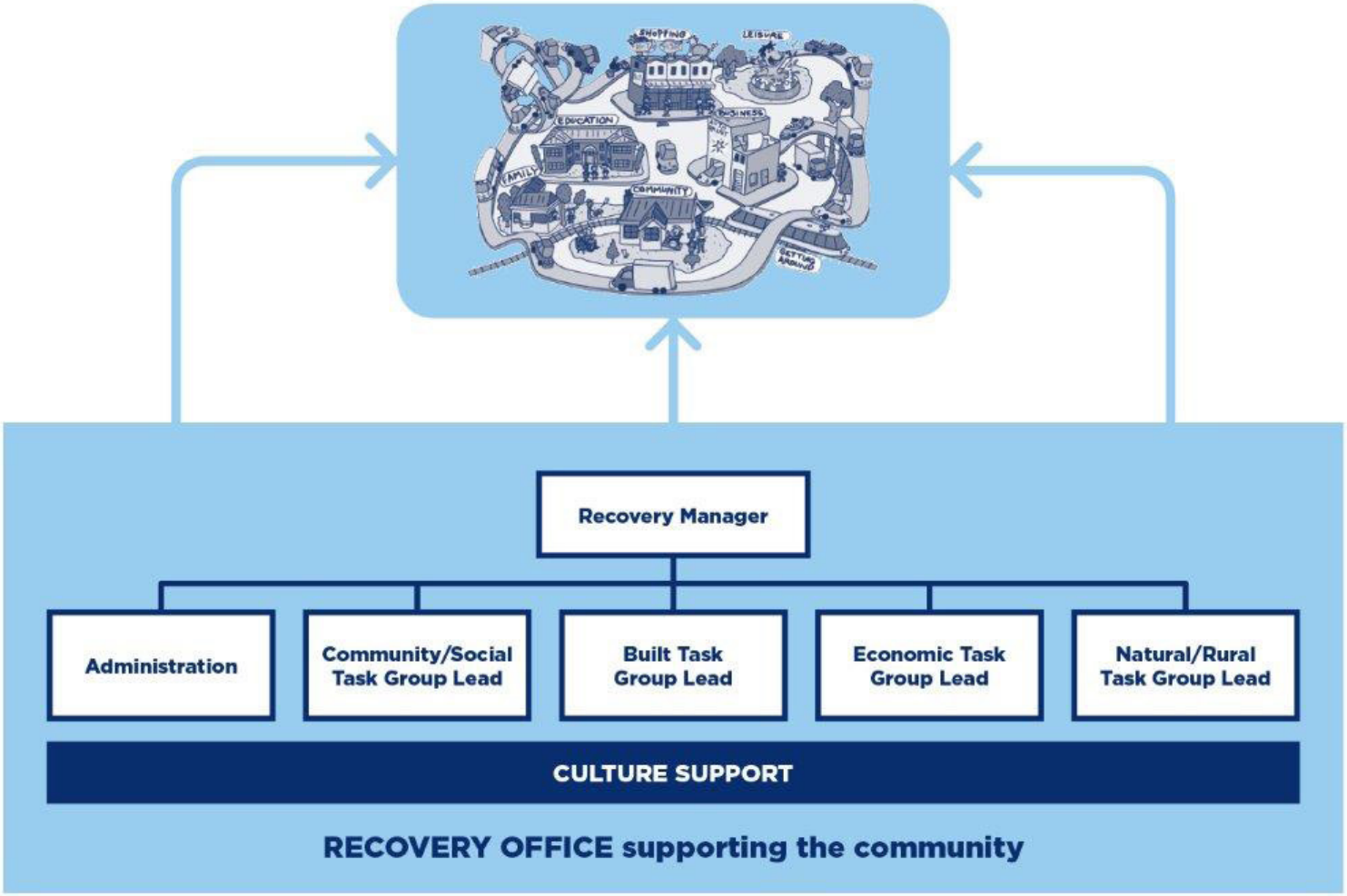
The Local Recovery Manager primarily liaises with:

- Communities affected by the emergency,
- The Group and/or National Recovery Managers, and
- Local sector groups

Group/Local Recovery Office

A Group or Local Recovery Office may be set up, depending on the size and complexity of the event. The purpose of the Recovery Office is to bring together subject matter experts and project leads to provide a coordinated structure for recovery operations. The size of the office may vary and may include all or only some of the roles.

Figure 9: Recovery Office structure.



A Recovery Office is likely to carry out the following tasks:

- Impact assessment to gain knowledge of the impacts of the event and to use this to prioritise needs and resources.
- Information management, ensuring the collection, storage and dissemination of information to enable an accurate understanding of recovery issues and requirements, and facilitation of good decision making.
- Public information management, to ensure communities understand what is happening and can take appropriate actions.
- Community engagement – to build social networks to enable the community and iwi to work together, share resources and information.
- The focus of the Recovery Office is on the recovery of the community.
- Reporting to stakeholders, to maintain accountability and transparency, gain support and assistance, and to keep a record of the recovery efforts including lessons learnt.
- Planning, monitoring and reporting on recovery outcomes - noting the importance of providing clear objectives, measures and milestones to evaluate recovery progress.

Exit Strategy

Towards the end of the recovery phase, councils and the community will be advised of the proposed ending of the CDEM recovery phase. That advice will include a detailed report from the Group or Local Recovery Manager to the relevant council Chief Executive, and Bay of Plenty CDEM Group Joint Committee. It is important to note that although the recovery phase of a CDEM event may end, actual physical and psychosocial reconstruction may continue for a considerable period of time. Following the development and implementation of an exit strategy it is essential to conduct a debrief and review.

An exit strategy is a systematic plan to achieve coordinated withdrawal from a formal recovery process. It is developed to ensure a smooth passage from the end of the formal recovery phase to the new "business as usual" – where local authorities and other agencies will continue to support the community through their normal activities.

The Recovery Manager is responsible for developing the exit strategy, and making sure that all agencies participating in recovery are aware of the implications, roles and responsibilities following the end of the formal recovery process.

The exit strategy should contain the following information[26]:

"**Who**": identification of which agencies are responsible for on-going actions;

"**Why**": the rationale for ending formal recovery;

"**When**": the date of the end of the formal recovery process;

"**Where**": public notification of the change of leadership from CDEM to Local Government(s), and what will happen in the future; and

"**What**": achievements during the formal recovery phase, handover arrangements and on-going issues.

For a local recovery, the exit strategy is approved by the territorial authority. In the case of a region wide recovery the exit strategy is approved by the Civil Defence Emergence Management Joint Committee.

[26] Refer to National Civil Defence Emergency Management Plan Order 2015, Section 158, Exit Strategy.

PART FOUR

Governance, Management and Financial Arrangements

PART FOUR
Governance, Management and Financial Arrangements

Governance and Management Structures

Bay of Plenty CDEM Group

Each local authority in the Bay of Plenty region is a member of the Bay of Plenty CDEM Group. The Group's functions, duties and powers are set out in The CDEM Act 2002. The Group is established in accordance with Section 12 of The CDEM Act 2002 as a Bay of Plenty CDEM Group Joint Committee under the Local Government Act 2002 and operates under a Constitution. The Joint Committee has the powers that are reasonably necessary to enable it to perform its functions, including the power to delegate functions to members, the Group Controller or any other person.

Members of the Bay of Plenty CDEM Group are:

- Bay of Plenty Regional Council
- Kawerau District Council
- Ōpōtiki District Council
- Rotorua Lakes Council (legally Rotorua District Council)
- Tauranga City Council
- Western Bay of Plenty District Council
- Whakatāne District Council

The Joint Committee oversees the delivery of the functions, duties and power of the CDEM Group, under The CDEM Act 2002. The Joint Committee has a Constitution that guides how the Group operates, how decisions are made and its functions and roles.

Under the Bay of Plenty CDEM Group Joint Committee's Constitution, each member's representative has full delegated authority to exercise the functions, powers and duties of members under The CDEM Act 2002. Each member's representative has delegated authority to vote and make decisions on the behalf of the member.

Coordinating Executive Group

The Coordinating Executive Group (CEG) is established under The CDEM Act 2002, essentially to provide management support to the Bay of Plenty CDEM Group Joint Committee. The Coordinating Executive Group (CEG) operates under a Terms of Reference, with all members having equal voting rights and is responsible for:

- Providing advice to the CDEM Group
- Implementing as appropriate, the decisions of the Group
- Overseeing the implementation, development, maintenance, monitoring and evaluation of the Bay of Plenty CDEM Group Plan.

Coordinating Executive Group Membership

Each local authority member is represented on CEG by its Chief Executive (or an alternate representative who has been given delegated authority to act for the Chief Executive).

- Bay of Plenty Regional Council
- Kawerau District Council
- Ōpōtiki District Council
- Rotorua Lakes Council
- Western Bay of Plenty District Council
- Whakatāne District Council
- Tauranga City Council

All other members are senior representatives of their organisation. This ensures members have a strategic overview, can implement decisions within their organisations and are able to commit resources

- New Zealand Police
- Fire and Emergency New Zealand
- Bay of Plenty District Health Board
- Lakes District Health Board

Co-Opted Members

- Welfare Coordination Group (WCG) chairperson
- Bay of Plenty Lifelines Group (BOPLG) chairperson
- Group Controller
- Group Recovery Manager

- Medical Officer of Health
- Te Puni Kōkiri
- St John Ambulance Service

Co-opted members have the same voting rights as other members.

Non-Voting Advisors

- Senior Regional Emergency Management Advisors of the Ministry of Civil Defence and Emergency Management.

Administering Authority

In accordance with The CDEM Act 2002, the Administering Authority for the CDEM Group is Bay of Plenty Regional Council. The administering authority:

- Provides administrative and related services to the Group, such as preparing agendas, arranging meetings, and taking and disseminating minutes from meetings.
- Provides financial management for the CDEM Group, including budgeting and reporting.

Emergency Management Bay of Plenty

Established in 2015, the role of Emergency Management Bay of Plenty is to deliver the operational responsibilities for CDEM under The CDEM Act 2002, as a combined service that sits within the Bay of Plenty Regional Council.[27]

Emergency Management Bay of Plenty:

- Carries out the functions of the Group Emergency Management Office
- Coordinates the development, implementation, monitoring and review of the Bay of Plenty CDEM Group Plan
- Provides professional advice and services to the Bay of Plenty CDEM Group and Coordinating Executive Group
- Carries out specific functions for the partner Councils, as set out in the Service Level Agreement
- Coordinates reporting of CDEM Group work programmes, including Emergency Management Bay of Plenty, Welfare Coordination Group and the Bay of Plenty Lifelines Group
- Coordinates and builds the region's response capability, through staff training and exercising, the Group ECC and Local EOC facilities, systems and infrastructure
- Coordination of the Bay of Plenty Lifelines Group
- Delivers training for the Bay of Plenty Lifelines Group

Delegated Authorities and Authorisations

Under Section 18 (1) of The CDEM Act 2002, the CDEM Group is able to delegate any of its functions under The CDEM Act 2002 to members of the Group, the Group Controller, or other persons. In addition certain Sections of The CDEM Act 2002 allow for the authorisation of persons to carry out specific powers to be given through the Group Plan. The information below sets out the general delegations and authorisations of the Bay of Plenty CDEM Group. For details of powers conferred on Controllers during a declared state of emergency, or on Recovery Managers during a notice of transition period, refer to Part Three: Operational Arrangements.

Controllers

Group Controller

Section 18(2) of The CDEM Act 2002 outlines the general powers of The CDEM Group. These general powers are delegated to the Group Controller. They include recruiting and training volunteers, conducting training exercises, issuing and controlling the use of signs, badges, insignia and identified passes, providing and operating warning systems, providing communications, equipment, accommodation and facilities, and any other powers necessary to give effect to an emergency management plan.

Section 76 of The CDEM Act 2002 outlines the power to require information that in their opinion is necessary for the exercise of civil defence emergency management.

The Group Controller also has specific powers in a declared State of Emergency. Refer to Part Three: Operational Arrangements for details.

Local Controller

Local Controllers are also delegated the general powers set out in Section 18 (2) of The CDEM Act 2002, and powers under Sections 76, and 85. These are the same as for the Group Controller. Local Controllers are required under Section 27 (2) to follow directions given by the Group Controller during an emergency.

Unlike the Group Controller, Local Controllers do not have the powers of Sections 86 – 92 and 94 conferred on them by The CDEM Act 2002.

[27] agreed by Bay of Plenty CDEM Group Joint Committee at its meeting 20 March 2015

The Group must direct Local Controllers to carry out these powers through their appointment.

In accordance with Section 88 of The CDEM Act 2002, the Bay of Plenty CDEM Group authorises Local Controllers to close roads and public places in areas where a state of emergency is in force. Refer to Part Three: Operational Arrangement for details.

Financial Arrangements

The activities of the Bay of Plenty CDEM Group can be broken into two main areas:

Programmed Activities:

- Administrative and related services under Section 24 of The CDEM Act 2002 (including Bay of Plenty CDEM Group services such as the CDEM Office and appointments such as the Group Controller, Group Recovery Manager and Group Welfare Manager), and
- the annual Bay of Plenty CDEM Group work programme.

Emergency Expenditure:

- Expenditure incurred by the Bay of Plenty CDEM Group in the lead up to, during and immediately after a declared state of emergency (for example, the cost of obtaining specialist advice and operating the Group ECC).

The following section outlines the financial arrangements for programmed and emergency expenditure.

Programmed Expenditure

The CDEM Group is responsible for funding the activities of the Group Emergency Management Office. These activities are carried out by Emergency Management Bay of Plenty. The Bay of Plenty CDEM Annual Group Plan and budget is agreed by the Bay of Plenty CDEM Group Joint Committee.

The Bay of Plenty Regional Council provides funding for:

- The Group Recovery Manager.
- The Group Welfare Manager.
- Capital and operational costs of the GECC.
- Governance support for the Bay of Plenty CDEM Group Joint Committee.
- The 24/7 Group Duty Public Information Manager and Group Public Information Manager across all 4 Rs (Reduction, Readiness, Response and Recovery).

Emergency Management Bay of Plenty also carries out specific activities for the partner councils, as set out in the Service Level Agreement. These activities are set out in the annual work programme, with the programme and budget approved by the Bay of Plenty CDEM Group Joint Committee.

All Bay of Plenty CDEM Group members are expected to cover their own organisations' costs associated with the implementation of the Bay of Plenty CDEM Group Plan and associated work programmes, including operation and maintenance of EOC's.

The Bay of Plenty Lifelines Group develop and fund a separate annual work programme. The budget is administered by Bay of Plenty Regional Council and monitored by Coordinating Executive Group.

Expenditure in a Civil Defence Emergency

Each local authority must ensure appropriate delegations are made to the Group and Local Controllers to meet start-up costs to respond to an emergency. It is essential that for all emergency expenses there are clear authorisations and details for the expenditure. Emergency Management Bay of Plenty will work with councils to develop cost recovery rules in the event that one or more councils provide support to another council in responding to an emergency within its jurisdiction.

In the lead up to a declared event, the Bay of Plenty CDEM Group is responsible for funding:

- All reasonable direct expenses incurred by the Group Controller.
- All reasonable direct expenses (such as travel, meals and accommodation) incurred by recognised technical advisors when they are requested to provide specialist technical advice to the Group Controller.
- Costs associated with the use of resources and services under the direction of the Group Controller.

The Bay of Plenty Regional Council is responsible for funding:

- All costs associated with the resourcing, activation and operation of the GECC.

Local authorities are responsible for funding:

- All costs associated with their own CDEM personnel, facilities and resources.
- Territorial authorities are responsible for all emergency expenditure incurred within their jurisdictional areas, under the direction of the Local Controller.

The Bay of Plenty CDEM Group is responsible for funding all reasonable direct expenses incurred by the Group Controller in acting in support of an EOC.

A clear record of who authorises any expenditure and its purpose must be kept.

Expenditure in Transition and Recovery

A notice of transition period may take place from the response phase to the recovery phase, with expenditure incurred during the response closed off. Recovery expenditure must be authorised by the Recovery Manager and a clear record of any expenditure must be kept by the Recovery Office.

Group Recovery Manager and Office

Upon activation on the first day of response, all costs associated with the Group Recovery role will be borne by the Bay of Plenty CDEM Group. This applies to activation of Group Recovery in support of a single territorial authority or activation as the result of a significant event (more than one territorial authority area).

Local Recovery Manager and Office

All recovery costs will initially be borne by the local authority, regardless of whether the costs are associated with readiness, response or recovery activation actions.

Claims for government assistance are to be made by the local authority incurring the expenditure, or where they are agreed as Bay of Plenty CDEM Group costs, claims are to be made by the Bay of Plenty CDEM Group. Approval of claims rests with the Ministry of Civil Defence and Emergency Management.

If it becomes apparent that there will be a significant number of people suffering financial hardship and more immediate relief is required, the Bay of Plenty CDEM Group may establish a Regional Relief Fund or a local authority may establish a Mayoral Relief Fund depending on the circumstances.

Government Financial Support During Response

Access to response expenses from central government is available for non-declared emergency events. Section 33 of The Guide to the National Civil Defence Emergency Management Plan 2015 (The Guide to the National CDEM Plan 2015) has detailed criteria for access to these funds.

Caring for the Displaced

Central government will fully reimburse local authorities for costs incurred in caring for displaced people. Eligible costs include the full direct costs of accommodating, transporting, feeding and clothing people who cannot continue to live in their usual place of residence as a result of an emergency.

This applies while people are en-route to, or in emergency accommodation such as halls or marae. Marae and other organisations which provide such accommodation can invoice local authorities, who can then claim reimbursement. If a marae considers it culturally inappropriate to invoice a local authority, the local authority may provide a koha to the marae, and then seek reimbursement of the koha.

The cost of helicopter drops of essential items to people isolated in their homes where evacuation is not possible, may also be reimbursed.

Costs that are ineligible for reimbursement include local authority overheads and indirect costs such as staff time, EOC activation costs, office space and the use of vehicles.

Other Response Costs

Other costs may be partially reimbursed by government. The eligibility for reimbursement is determined by whether the goods or services purchased contributed to the precautions or preventive actions described in clause 162 (b) and (c) of the National CDEM Plan Order 2015, and include actions that reduce immediate danger to human life, and taken immediately before or during the emergency.

Following an emergency, the Group Controller will recommend to the Bay of Plenty CDEM Group which costs should reasonably be met by the Bay of Plenty CDEM Group. There may be circumstances where shared Bay of Plenty CDEM Group funding could be applied where there are widespread adverse regional, environmental, social or economic impacts, and consequential regional benefits from localised response efforts to mitigate these impacts.

Claims for government assistance are made by the local authority incurring the expenditure. For States of Emergency that involve the whole Bay of Plenty CDEM Group, the Bay of Plenty CDEM Group Controller, through the Bay of Plenty CDEM Group Emergency Management Office, will coordinate and check respective local authority claims, independently prepare a claim for agreed Bay of Plenty CDEM Group costs, and submit the consolidated application. The procedure for this is outlined in Section 33 of The Guide to the National CDEM Plan 2015.

Government Financial Support During Recovery

Government recovery assistance may be provided where the scale of the emergency means recovery will be significantly hindered without that assistance.

Section 33 of the Guide to the National CDEM Plan 2015 provides detailed criteria for assistance in recovery.

Infrastructure Recovery Repairs

Essential infrastructure recovery repairs may be claimed. This includes:

- Water, stormwater, electrical, sewerage and gas facilities, and for other structures such as retaining walls and tunnels that the essential infrastructure depends on.
- River management systems where there is major community disruption or continuing risk to life.
- Other community assets damaged as a consequence of the failure of the flood protection schemes.

Disaster Relief Funds

Central government may contribute to any disaster relief fund that is established.

Road and Bridge Repair Subsidies

Central government is responsible for state highway restoration through New Zealand Transport Agency (NZTA).

NZTA may also provide financial support to local authorities towards the costs of road and bridge repair after a weather event or other natural disaster.

Apportionment of Bay of Plenty CDEM Group Costs

For non-emergency operating costs for the Bay of Plenty CDEM Group, a methodology has been defined that allocates costs between the local authorities. The methodology is based on the Bay of Plenty Regional Council (as a regionally funded organisation) contributing 50% of the funding costs for services. The Bay of Plenty territorial authorities pay the remaining 50%, with each territorial authority contributing a share in accordance with their district's population figures[28].

The funding arrangement for Bay of Plenty CDEM Group costs is under review. Any changes will be implemented through local authority long term planning processes (2018-2028). The Bay of Plenty CDEM Group Plan will be amended accordingly.

Table 14: Cost sharing allocation

Local Authority	Population[29]	% Apportionment[30]
Tauranga City Council	114,789	21.2
Rotorua Lakes Council	65,280	12.0
Western Bay District Council	43,692	8.1
Whakatāne District Council	32,691	6.0
Ōpōtiki District Council	8,436	1.5
Kawerau District Council	6,363	1.2
Bay of Plenty Regional Council		50.0
Total		**100.0**

Disputes

The Bay of Plenty CDEM Group is unable to bind members in terms of funding Bay of Plenty CDEM Group activities. Such decisions remain the responsibility of each local authority through their respective Long Term Plan or Annual Plan processes.

While it is the intention of the Bay of Plenty CDEM Group to negotiate in good faith, if the Group is unable to reach agreement on funding matters, a disputes resolution process is provided for in the Constitution.

[28] Budget figures rounded to nearest complete hundred.
[29] Population based on Statistics New Zealand 2013 revised figures.
[30] The percentage apportionment will change when census data is updated.

PART FIVE
Tsunami Case Study

PART FIVE
Tsunami Case Study

Putting it into Action: Tsunami as a Case Study

This part of the Bay of Plenty CDEM Group Plan uses tsunami as an example to demonstrate how the comprehensive emergency management approach comes together to support the vision of a **safe and strong Bay of Plenty together.**

Reduction

The Bay of Plenty CDEM Group have taken a staged approach to reducing the risks of tsunami hazard:

1. Knowing and understanding the hazard
2. Assessing the risk
3. Identifying and implementing opportunities to reduce the risk

These three steps are supported with an ongoing process of communication to ensure everyone is informed when new information comes to hand. Assessment and implementation is constantly reviewed and refined to ensure we are up-to-date with best practice, latest technologies and changing science.

Research over the past 10 years has increased our knowledge of the tsunami threat facing the Bay of Plenty. We now know:

- While the Bay of Plenty is vulnerable to tsunami generated around the Pacific Ocean, from Tonga to Peru, the biggest threat to the Bay of Plenty is from a large earthquake on the Kermadec Trench.
- A magnitude 9 earthquake generated by the Kermadec Trench is the worst case scenario and could generate a tsunami with wave heights of up to 14 metres across parts of the Bay of Plenty coastline.
- A tsunami generated from this earthquake would take less than an hour to reach the Eastern Bay of Plenty coast, leaving no time for an official warning.
- Tsunami Evacuation maps have identified where we expect tsunami to impact along the coastline.

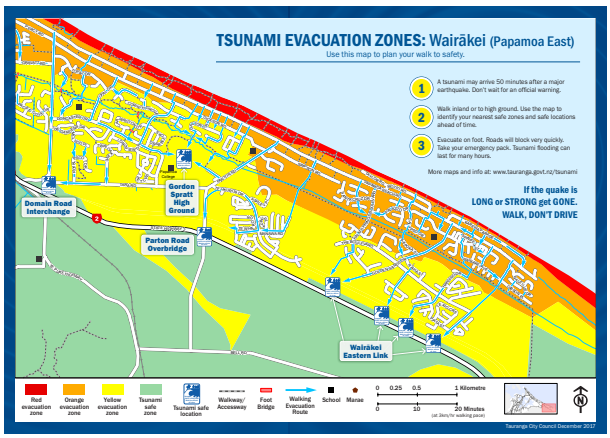
Using this worst case scenario, Tauranga City Council has worked with Tonkin + Taylor to model the flow and depth of water as the tsunami inundated the coastline. They also modelled evacuation times for residents to reach safe areas. This work identified that for some parts of the Bay of Plenty coastline, people were unable to reach a safe area in time.

More than 46,000 people live on the Tauranga coastal plain - spanning from Mount Maunganui to Pāpāmoa. Over the past four years, Tauranga City Council has focussed on building resilience to tsunamis. In 2014, work began with GNS Science undertaking research to quantify the size of a tsunami that could result from a large local source earthquake.

The work by Tonkin + Taylor that simulated the flow of a potential tsunami and identified areas above or outside the inundation zone was able to determine how long it would take residents to reach safe areas, how many would use the evacuations routes, and how many would arrive at the various safe areas.

A pedestrian-based evacuation network has been developed which leads people to sixteen safe assembly points. Some of these points are located outside the inundation zone, while Vertical Evacuation Structures (or high ground) such as Gordon Spratt Reserve in Papamoa use raised land to protect lives. These are the first to be constructed outside of Japan and the Pacific North-West of America. Prominent signage across the Tauranga coastal plain reminds people of the risk of tsunami and outlines the likely extent of the inundation size.

Figure 10: Tsunami Evacuation Zones: Wairakei.



Public education about tsunami risks has been critical; there have been a number of open days held, with positive feedback. Further work is planned, including three more Vertical Evacuation Structures in Wairakei, further signage, and additional bridges and evacuation routes. Tauranga City Council and Tonkin + Taylor won the Ministry of Civil Defence and Emergency Management Innovation Award in 2017 in recognition of this work.

This latest tsunami hazard information is being used to inform the shape and structure of new development areas in Wairakei and Te Tumu. This ensures that new development occurs in a way that considers and responds to the tsunami risk to the area.

Readiness

Public education and awareness building is critical, ensuring communities know when and how to respond when a tsunami threat occurs. In the event of a large earthquake on the Kermadec Trench it is unlikely there will be an official warning. It is critical the community know and understand natural warning signs for tsunami. **Long, or Strong, Get Gone** is the key message for tsunami preparedness. This teaches people that if they feel an earthquake (and it could be weak) that lasts for longer than a minute or it is strong enough that it makes it difficult to stand up, they should evacuate immediately to their nearest safe location.

Driven by the Ōmokoroa Community Board and key members of the Ōmokoroa community, the community have come together to develop a Community Guide to Emergencies. At the centre of the Community Guide is the tsunami evacuation map which identifies the areas at threat from tsunami, reinforces the natural warning signs, identifies where the safe areas are, and provides information on when, where and how to evacuate. The Community Guide is one of the results of the community coming together to plan for how they will look after themselves in an emergency.

The Ōpeke Marae near Ōpōtiki has developed their preparedness measures and now have a Marae Emergency Preparedness Plan in place. Through the development of the Plan Ngāti Ira hapu and Ōpōtiki District Council have identified the role Marae will play in supporting the community in the event of an emergency. The marae is located outside of the tsunami inundation zone and has been identified as a safe location that the community can go to for support. The Marae has identified that they will not be affected by the actual tsunami but will need to prepare for the 'tsunami' of people seeking help. The next step of this process is to integrate the Marae Emergency Preparedness Plan with the wider Ōpōtiki Community Response Plan, identifying opportunities to support preparedness activities with hapū. During the April 2017 weather events the Ōpeke marae self-activated and provided support to a number of the community impacted by the weather event.

Practicing response arrangements in an exercise that enables arrangements and relationships to be tested in a safe environment, identifying what works well and areas that need improvement. Exercise Tangaroa 2016 was a national tsunami exercise that tested the national response to and recovery from a tsunami. It ran over three separate days in August and September 2016 and involved 298 council and partner agency staff. Post-exercise debriefing and exercise evaluations were collated and identified a number of corrective actions that the Bay of Plenty CDEM Group has focussed on implementing to improve response capability.

Response

Two days after the first day of Exercise Tangaroa the theory was put into practice with a real event.

At 4:37 am on Friday, 2 September 2016 a magnitude 7.1 earthquake struck off the coast of Te Araroa on the East Cape. The earthquake was felt along the Bay of Plenty coast and in other parts of New Zealand, and caused some East Cape communities to self-evacuate due to the tsunami threat.

As the event was regional in nature, due to the tsunami threat, the Group Emergency Coordination Centre activated at Mode 2 – Engage. Emergency Management staff were activated. The Duty Public Information Manager was activated. The Whakatāne Emergency Operation Centre also activated at Mode 2 – Engage. The National Crisis Management Centre activated at Engage mode and officially broadcasted there was a potential risk of a tsunami.

A tsunami threat was identified at 5:33 am, and subsequent national tsunami warnings were notified by the National Crisis Management Centre. A confirmed tsunami threat was officially validated at 5.59 am. The Group Emergency Coordination Centre managed public alerting and public information via Bay of Plenty-wide alerting and public information platforms (text alerting, email alerting, website updates, Facebook and Twitter).

The Whakatāne Emergency Operation Centre maintained coordination of local information, which revolved around minor damage to roading networks, power outages and damage to water treatment plants.

Physical actions that were managed by response personnel and Whakatāne District Council staff included checking roads for damage, restoring power, inspecting water treatment plants and issuing a 'boil water' notice.

Local Controllers from around the region were kept informed; however no other Emergency Operation Centre's activated. Responses in other areas were managed according to the level of impact. Some districts were not required to take any action while others managed it within their day to day council business.

This was an example of a regional response (as more than one part of the district was affected), that didn't escalate to a state of local emergency being declared, but nevertheless required coordination and information flow between councils, agencies and the public. All response activities could be managed within the capacity of response personnel, so no escalation was needed.

Recovery

Recovery starts before an event occurs. Any gains that can be achieved in Reduction, Readiness and Response actions lead to a reduced impact of an emergency event on the community which lessens the scale of recovery that the community can be faced with.

The Bay of Plenty Civil Defence Emergency Management Group Recovery Plan 2015 provides a strategic framework for recovery management across the Bay of Plenty. At the heart of the framework is the community. Recovery Managers coordinate recovery across the social, natural, economic and built environments focussing on the needs of the community, including cultural considerations.

Bay of Plenty CDEM Group and Local Recovery Managers have been appointed across the Bay of Plenty region. Their job is to build on the recovery framework and establish key relationships prior to an event, so when an emergency happens the recovery process begins immediately.

In recent history, tsunami have not had a significant impact in the Bay of Plenty requiring a recovery effort. Exercise Tangaroa 2016 saw the introduction of recovery exercise scenarios based on a tsunami event. Exercises will continue to be utilised to plan and prepare for an actual emergency.

Lessons learned from other recovery events locally and nationally have helped to identify actions that can be taken before an event, to support a timely and effective recovery for the community. A toolbox of resources is being created from the April 2017 weather event and other recent recovery events. This will be a valuable resource, available for Recovery Managers to use to plan, test and apply when they need to lead a recovery process in their area. By utilising what has been developed and proven in the past, the recovery effort will have a head start on establishing a process with the community. Recent recovery processes have focussed on providing a wraparound service to support the impacted community. This focuses on providing support for all of the communities' needs, whether it is working with Government agencies to ensure access to available support, insurance companies to attempt to streamline the claims process or working with the community and volunteer organisations to rebuild essential services. Supporting community led initiatives that work to build back the culture and heart of the community is important.

Actions that individuals, communities and businesses can take to prepare for a recovery from emergency events include:

- Knowing and understanding the hazards and risks they face
- Planning for disruptions to happen
- Having appropriate insurance cover
- Identifying key people, businesses, providers and ensuring they can be contacted in an emergency
- Developing and testing business continuity plans
- Backing up essential records and key documents

PART SIX
Appendices

Disaster Preparedness for people with disabilities

Appendix One - Abbreviations

The following abbreviations are used in this Plan.

4 Rs	Reduction, Readiness, Response, Recovery
CDEM	Civil Defence Emergency Management
CDEM Act	Civil Defence Emergency Management Act 2002
CDEM Group	Civil Defence Emergency Management Group
CEG	Coordinating Executive Group
CIMS	Coordinated Incident Management System
DHB	District Health Board
DPMC	Department of Prime Minister and Cabinet
DGL	Director's Guideline
EOC	Emergency Operations Centre
GECC	Group Emergency Coordination Centre
ICP	Incident Control Point
JC	Joint Committee
KPIs	Key Performance Indicators
LA	Local Authorities
LTP	Long Term Plan
LUC	Lifeline Utilities Coordinator
BOPLG	Bay of Plenty Lifelines Group
MCDEM	Ministry of Civil Defence and Emergency Management
NCMC	National Crisis Management Centre
NZTA	New Zealand Transport Agency
PIM	Public Information Manager
REMCC	Regional Emergency Management Coordination Committee
WCG	Welfare Coordination Group

Appendix Two - Links to Documents

- **Bay of Plenty Civil Defence Emergency Management Group Plan**
  www.bopcivildefence.govt.nz
- **Bay of Plenty Civil Defence Emergency Management Group Recovery Plan 2015**
  www.bopcivildefence.govt.nz
- **Bay of Plenty Lifelines Group Resilience Benchmark Tool, September 2014**
  www.boplifelines.co.nz
- **Bay of Plenty Marine Oil Spill Contingency Plan (Tier II Plan)**
  www.boprc.govt.nz
- **Bay of Plenty Regional Council Civil Defence Survey May 2013**
  www.bopcivildefence.govt.nz
- **Bay of Plenty Regional Councils 2015 -2025**
  www.boprc.govt.nz
- **Bay of Plenty Regional Council Spatial Plan 2014**
  www.boprc.govt.nz
- **Biosecurity Act 1993**
  www.legislation.govt.nz
- **Conservation Act 1987**
  www.legislation.govt.nz
- **Crimes Act 1961**
  www.legislation.govt.nz
- **CDEM Act 2002**
  www.legislation.govt.nz
- **CDEM National Capability Assessment Report 2015**
  www.civildefence.govt.nz
- **CDEM Group Plan Review Director's Guideline for Civil Defence Emergency Management Groups (DGL 09/09)**
  www.civildefence.govt.nz
- **CDEM Group Planning Director's Guideline for CDEM Groups [DGL 09/15]**
  www.civildefence.govt.nz
- **Defence Act 1990**
  www.legislation.govt.nz
- **Epidemic Preparedness Act 2006**
  www.legislation.govt.nz
- **Fire and Emergency New Zealand Act 2017**
  www.legislation.govt.nz
- **Food Act 2014**
  www.legislation.govt.nz
- **Hazardous Substances and New Organisms Act 1996**
  www.legislation.govt.nz
- **Health Act 1956**
  www.legislation.govt.nz
- **International Terrorism (Emergency Powers) Act 1987**
  www.legislation.govt.nz

- **Invest Bay of Plenty – Our Place in the World (technical summary reports)**
  Source Bay of Plenty Regional Council Technical Reports
- **Maritime Transport Act 1994**
  www.legislation.govt.nz
- **National Civil Defence Emergency Management Plan Order 2015**
  www.legislation.govt.nz
- **National CDEM Strategy 2007**
  www.civildefence.govt.nz
- **Radiation Protection Act 1965**
  www.legislation.govt.nz
- **Recovery Management Director's Guidelines for CDEM Groups [DGL 4/05]**
  www.civildefence.govt.nz
- **Regional Policy Statement for the Bay of Plenty**
  www.boprc.govt.nz
- **Response Management Director's Guidelines for CDEM Group and Local Controllers [DGL 06/08]**
  www.civildefence.govt.nz
- **Review of the Civil Defence Emergency Management response to the 22 February Christchurch Earthquake June 2012**
  www.civildefence.govt.nz
- **Review of the regional hazard risk profile for the Bay of Plenty Region 2014**
  www.boprc.govt.nz
- **The Guide to the National Civil Defence Emergency Management Plan 2015**
  www.civildefence.govt.nz
- **Volunteer Coordination in CDEM Director's Guideline for CDEM Groups [DGL 15/13]**
  www.civildefence.govt.nz

Appendix Three – Risk Assessment

The *Review of the regional hazard risk profile for the Bay of Plenty Region 2014* followed the process identified in the CDEM Group Plan Review Director's Guidelines for CDEM Groups [DGL 09/09] by reassessing the hazards identified, collating information on the hazard and assessing the likelihood, consequence, seriousness, manageability and growth of each hazard. This work was undertaken through a collaborative process where the project team led the collection of information and facilitated a stakeholder workshop to assess the likelihood and consequence of each hazard. The project methodology worked through the following steps:

1. Identify and describe the relevant hazards
2. Collect the existing information on each hazard
3. Assess the risk and seriousness of each hazard
4. Apply manageability and growth ratings
5. Present final hazard risk profile.

Table 15 below shows the final results of the risk assessment process. It identifies all of the scores for likelihood, consequence, manageability and growth ratings.

Table 16 provides detail on the likelihood timeframes used for the risk assessment and Table 17 details the consequence table used in the assessment process. More detail on the whole process can be found in the Review of the regional hazard risk profile for the Bay of Plenty Region 2014 report.

Table 15: Complete Risk Profile Table of Bay of Plenty Hazards[31]

Hazard Identification	Risk Analysis 2014 (Verification)			Risk Evaluation											
Bay of Plenty Hazards	Likelihood	Consequence	Rating	Seriousness					Manageability					Growth	Total
				H&S	Built	Economic	Natural	Score	Reduction	Readiness	Response	Recovery	Score	Score	
Higher Priority															
Tsunami - Local	Unlikely	Catastrophic	Very High	5	4	5	3	9.1	4	3	3	4	3.5	2	14.6
Human Pandemic	Likely	Catastrophic	Extreme	5	1	5	1	7.2	2	2	2	2	2	3	12.2
Tsunami - Distal	Unlikely	Major	High	4	3	4	2	7.1	4	1	1	4	2.5	2	11.6
Volcanic - Local	Rare	Catastrophic	High	3	4	5	4	7.3	1	1	1	4	1.75	2	11.1
Dam Failure	Rare	Catastrophic	High	5	2	4	2	7.6	1	3	3	2	2.25	1	10.9
Major Accident (Marine/Port)	Possible	Moderate	Moderate	3	2	4	4	6	2	2	1	2	1.75	3	10.8
Earthquake - Severe	Possible	Major	High	3	4	4	2	6.6	1	1	1	4	1.75	2	10.4
Plant & Animal Pests & Diseases	Likely	Catastrophic	Extreme	3	1	5	2	5.4	3	2	2	3	2.5	2	9.9
Drought	Almost Certain	Moderate	Very High	2	1	3	2	3.8	1	2	2	2	1.75	4	9.6
Wind storm (including tornado)	Almost Certain	Moderate	Very High	3	2	3	1	5.1	1	1	1	2	1.25	3	9.4
Storm surge	Almost Certain	Minor	High	1	3	3	1	3.6	2	1	1	2	1.5	4	9.1
Flooding - River/Stream	Possible	Major	High	2	3	3	2	4.8	1	1	1	2	1.25	3	9.1
Medium Priority															
Coastal erosion	Possible	Major	High	1	2	4	2	3.6	1	1	1	2	1.25	4	8.9
Lifeline Utility Failure	Likely	Moderate	High	2	3	3	1	4.6	2	2	1	3	2	2	8.6
Hazardous Substances Release	Likely	Moderate	High	3	2	3	2	5.3	3	2	1	3	2.25	1	8.6
Slope Instability (Landslide, Debris Flow, Slumping)	Almost Certain	Minor	High	2	2	2	1	3.8	3	2	3	3	2.75	2	8.6
Civil Unrest/Terrorism	Unlikely	Moderate	Moderate	2	2	2	1	3.8	3	3	3	2	2.75	2	8.6
Major Transport Accident (Air, Road, Rail)	Possible	Moderate	Moderate	4	1	1	1	5	1	2	1	2	1.5	2	8.5
Flooding - Urban/Rural Ponding	Almost Certain	Moderate	Very high	1	2	3	1	3.1	1	1	1	2	1.25	4	8.4
Volcanic - Distal	Likely	Moderate	High	2	3	3	2	4.8	2	1	1	2	1.5	2	8.3
Rural Fire	Possible	Moderate	Moderate	2	2	3	3	4.5	1	1	1	2	1.25	2	7.8
Volcanic - Caldera Unrest	Likely	Moderate	High	2	1	3	1	3.6	2	2	1	2	1.75	2	7.4
Low Priority															
Geothermal	Unlikely	Moderate	Low	2	2	2	1	3.8	2	2	1	2	1.75	1	6.6
Urban Fire	Unlikely	Moderate	Moderate	2	2	3	1	4.1	1	1	1	2	1.25	1	6.4
Regional Deformation (Long Term)	Almost Certain	Insignificant	Moderate	1	1	1	1	2	2	2	2	2	2	1	5.0

[31] Review of the regional hazard risk profile for the Bay of Plenty Region 2014

Table 16: Measure of Likelihood – Likelihood of an Occurrence over 50 years[32]

AEP	Return Period (Years)	Probability within 50 Years	Qualitative Description
1 in 2500 (5%)	2500	0.02 or 2%	1 Rare
1 in 500 (2%)	500	0.1 or 10%	2 Unlikely
1 in 100 (1%)	100	0.39 or 39%	3 Possible
1 in 50 (0.2%)	50	0.63 or 63%	4 Likely
1 in 20 (0.04%)	20	0.92 or 92%	5 Almost Certain

Consequence Measures:

Table 17: Hazard consequence table[33]

Consequence Level	Built			Lifelines Utility	Economic Regional GDP = $11.2b	Health & Safety
	Social/Cultural	Buildings	Critical Buildings			
5 Catastrophic	≥25% of buildings of social/cultural significance within hazard zone have functionality compromised	≥50% of affected buildings within hazard zone have functionality compromised	≥25% of critical facilities within hazard zone have functionality compromised	Lifeline out of service for > 1 month (affecting ≥ 20% of the town/city population) OR out of service for > 6 months (affecting < 20% of the town/city population)	>10% of regional GDP (>$1.1 b)	>101 dead and/or >1001 injured
4 Major	11-24% of buildings of social/cultural significance within hazard zone have functionality compromised	21-49% of buildings within hazard zone have functionality compromised	11-24% of buildings within hazard zone have functionality compromised	Lifeline out of service for 1 week – 1 month (affecting ≥ 20% of the town/city population) OR out of service for 6 weeks to 6 months (affecting < 20% of the town/city population)	1-9.99% of regional GDP ($110 mill - $1.1b)	11-100 dead and/or 101-1000 injured
3 Moderate	6-10% of buildings of social/cultural significance within hazard zone have functionality compromised	11-20% of buildings within hazard zone have functionality compromised	6-10% of buildings within hazard zone have functionality compromised	Lifeline out of service for 1 day to 1 week (affecting ≥ 20% of the town/city population) OR out of service for 1 week to 6 weeks (affecting < 20% of the town/city population)	0.1-0.99% of regional GDP ($11.2 mill - $110 mil)	2-10 dead and/or 11-100 injured
2 Minor	1-5% of buildings of social/cultural significance within hazard zone have functionality compromised	2-10% of buildings within hazard zone have functionality compromised	1-5% of buildings within hazard zone have functionality compromised	Lifeline out of service for 2 hours to 1 day (affecting ≥ 20% of the town/city population) OR out of service for 1 day to 1 week (affecting < 20% of the town/city population)	0.01-0.09% of regional GDP ($1.1 mill - $10 mill)	<or = 1 dead and/or 1-10 injured
1 Insignificant	No buildings of social/cultural significance within hazard zone have functionality compromised	<1% of affected buildings within hazard zone have functionality compromised	No damage within hazard zone, fully functional	Lifeline out of service for up to 2 hours (affecting ≥ 20% of the town/city population) OR out of service for up to 1 day (affecting < 20% of the town/city population).	<0.01% of regional GDP (< $1.1 mill)	No dead No injured

[32] Wright, K.C.; Johnston, D.M.; Dellow, G.D.2010. Hazard and risk in the Hawke's Bay: an update of the 2001 assessment. GNS Science Report 2010/06.
[33] Adapted from Saunders, W. S. A.; Beban. J.G.; Kilvington, M. 2013. Risk-based approach to land use planning. GNS Science Miscellaneous Series 67.

Apply Manageability and Growth Rating

The manageability rating is based on the combination of management difficulty across the 4 Rs and the current effort being applied. Using the criteria listed in Table 18, the assessment of manageability was undertaken using the information provided in the hazard assessment reports and verified through the project team.

Table 18: Management Assessment Table

Difficulty	Current Effort	Rating
Low	High	1
Low	Medium	2
Medium	High	2
Medium	Medium	3
High	High	3
Low	Low	4
Medium	Low	4
High	Medium	4
High	Low	5

The growth rating is developed based on the probability of the likelihood increasing and the changes in community exposure or consequences. Using the criteria listed in Table 19, the assessment of growth was undertaken using the information provided in the hazard assessment reports and verified through the project team.

Table 19: Growth Assessment Table

Increase in likelihood	Increase in Consequence	Rating
Low	Low	1
Low	Medium	2
Medium	Low	2
Medium	Medium	3
Low	High	3
Medium	High	4
High	Low	4
High	Medium	4
High	High	5

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