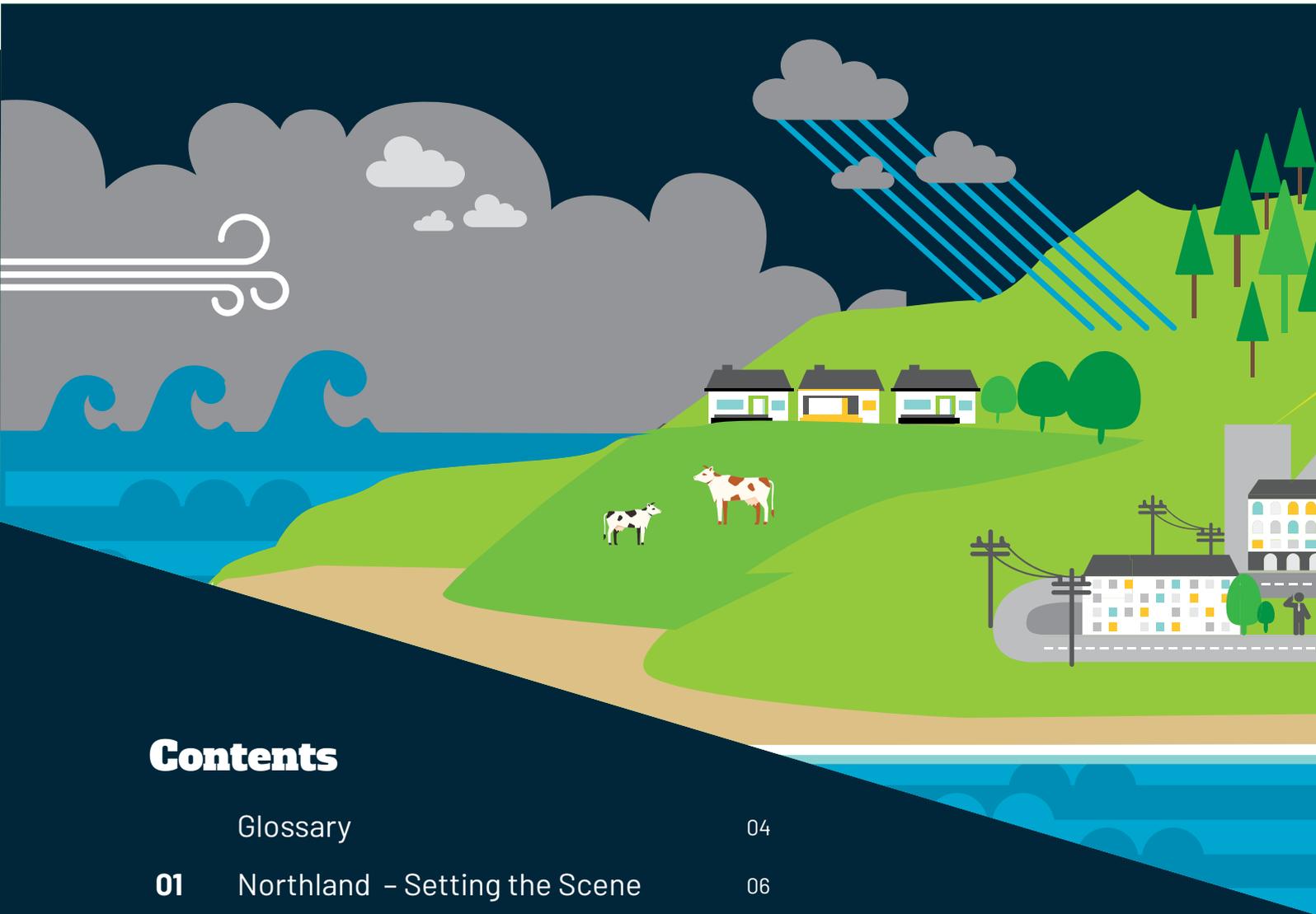


Northland Civil Defence Emergency Management Group Plan

2021 - 2026





Contents

	Glossary	04
01	Northland – Setting the Scene	06
02	Introduction to the Plan	09
03	Northland’s Risk Profile	13
04	Māori Engagement	17
05	Reduction of Northland’s Hazards	20
06	Readiness	25
07	Response	32
08	Recovery	41
09	Management and Governance	48
10	Monitoring and Evaluation	59
	Appendix	61

Kia mahi tahi, kia hangaia he pakaritanga ki roto i ngā rohe o Te Tai Tokerau

Working together to create resilient communities in Northland

Glossary of Terms

Commonly used terms and abbreviations used throughout the Plan include:

The Act: The Civil Defence Emergency Management Act 2002

CDEM: Civil Defence Emergency Management

CDEM Group: The collective of local authorities, lifeline utilities, emergency services and welfare organisations that comprise the collective Northland CDEM Group

CDEM Joint Standing Committee: A joint standing committee established under The Act, s. 12, with membership comprising the Mayors representatives from the Far North, Whangārei and Kaipara District Councils and Chairperson of the Northland Regional Council

CEG: Coordinating Executive Group established under The Act, s. 20, whose functions include providing advice to the CDEM Group and any sub-groups of the CDEM Group; coordinating and overseeing as appropriate the implementation of decisions of the Group by the Group CDEM Office or by individual members; and overseeing the implementation, development, maintenance, monitoring and evaluation of this Plan

CIMS: Coordinated Incident Management System. Establishes a framework to assist in effective, efficient and consistent response to an incident/emergency management

Emergency: As defined under The Act: (a) Is the result of any happening, whether natural or otherwise, including, without limitation, any explosion, earthquake, eruption, tsunami, land movement, flood, storm, tornado, cyclone, serious fire, leakage or spillage of any dangerous gas or substance, technological failure, infestation, plague, epidemic, failure of or disruption to an emergency service or a lifeline utility, or actual or imminent attack or warlike act; and (b) Causes or may cause loss of life or injury or illness or distress or in any way endangers the safety of the public or property in New Zealand or any part of New Zealand; and (c) Cannot be dealt with by emergency services, or otherwise requires a significant and coordinated response under The Act

Emergency Services: The New Zealand Police, Fire and Emergency New Zealand, St John Ambulance and providers of Health and Disability services

Capacity: the level of an organisation's capability to deliver services that meet the requirements of their role and responsibilities

Capability: people skills combined with an organisation's processes, systems, culture and structures to deliver their role and responsibilities

EOP: Emergency Operating Procedure refers to a document describing a formally established set of operational procedures that are the commonly accepted method for performing certain emergency management tasks

ECC/EOC: Group Emergency Coordination Centre/Emergency Operations Centre. An established facility where the response to an event may be managed and supported

ICP: Incident Control Point. A facility where site response to an incident is managed and controlled

Lead Agency: The organisation with the legislative authority; or because of its expertise and resources, agreed authority; primarily responsible for control of an incident or hazard

NEMA: National Emergency Management Agency - Government lead for Emergency Management in New Zealand

*This Karakia was written for the
Northland CDEM Group*

Arama Morunga
Kaupapa Māori Consultant
Ngāpuhi / Ngāti Wai



**E rū ana te whenua
Hikohiko te uira
Papā te whatitiri
Ko te mūmū, ko te āwha
Ka tau te hau o Tāwhiri**

Rumbling is the earth
Lightning strikes the sky
Thunder roars
Tis the storm
Let it settle the winds of Tāwhiri

**Haumie hui e
TĀIKI E!**

Bring forth unity
Tis Done!



Introduction to Northland

Nau mai ki Te Tai Tokerau
 Ki te kōhanga o Aotearoa
 Ki te Puna o te Ao Mārama,
 nā Kupe i tapa
 Arā ko te Hokianga

Ki te one roa, one tawhiti,
 one mamao
 Arā ko Te Oneroa a Tōhē

Ki te papakinga o ngā tai
 Ko Te Tai o Whitireia,
 ko Te Moana Tāpokopoko a Tāwhaki
 Arā ko Te Rerenga Wairua

Ki ngā ohu motu
 Ki Motukōkako tū te ao tū te pō
 Arā ko Te Pēowhairangi

Ki te moana nui, moana roa,
 moana kōpua
 Kaipara tahuri waka, Kaipara
 whakarere wahine, Kaipara taniwha
 Arā ko te Kaipara Moana

Ki te ngāherehere
 E tū pou mai ana a Tānemāhuta
 Arā ko te Waipoua

Nau mai ki Te Tai Tokerau

Welcome to Northland
 To the birthplace of Aotearoa
 To the Spring of Light, named by
 Polynesian Navigator Kupe
 That is the Hokianga

To the beach of immense vastness,
 great distances, extensive space
 That is Te Oneroa a Tōhē¹

To the place where two oceans collide
 Te Tai o Whitireia and Te Moana
 Tāpokopoko ā Tāwhaki²
 That is Te Rerenga Wairua³

To the bay of numerous islands
 To Motukōkako⁴ ever standing
 That is Te Pēowhairangi⁵

To the great harbour, vast harbour,
 deep harbour
 Kaipara turner of vessels, Kaipara
 widowed women, Kaipara guardians
 That is the Kaipara Moana

To the great forest
 Where Tānemāhuta himself resides
 That is the Waipoua⁶

Welcome to Northland

¹Ninety Mile Beach ²Pacific Ocean and Tasman sea

³Cape Rēinga

⁴Hole in the Rock ⁵The Bay of Islands ⁶Waipoua Forest

*This introduction was written for the
 Northland CDEM Group*

Arama Morunga
 Kaupapa Māori Consultant
 Ngāpuhi / Ngāti Wai

Challenges for the Northland CDEM Group Environment

REGIONAL



Northland has a mixture of short, steep river catchments and larger river systems which can flood quickly in intense rainfall

Land slips are a frequent consequence of rain in Northland due to the steep topography and the soil structure

The frequency and severity of hazards is increasing due to climate changes

Some remote communities can become isolated due to hazard impacts

Northland has over 3000km of coastline with many homes and businesses located on the coast

INFRASTRUCTURE



Alternate transport routes across the region are limited

The availability and access to technology, connectivity and mobile coverage is still limited for some communities

Rural and urban water supply infrastructure and supply is vulnerable during drought conditions

Population

Whangārei	91,400
Kaipara	23,200
Far North	64,400

Road River



PEOPLE



CDEM SECTOR



Meeting CDEM public education and information needs for a fast-growing population

Creating and maintaining strong relationships with CDEM stakeholders and partners across the region

Supporting the building of stakeholder and partners CDEM knowledge and CDEM capacity and capability

Public expectation of CDEM services and deliverables is increasing

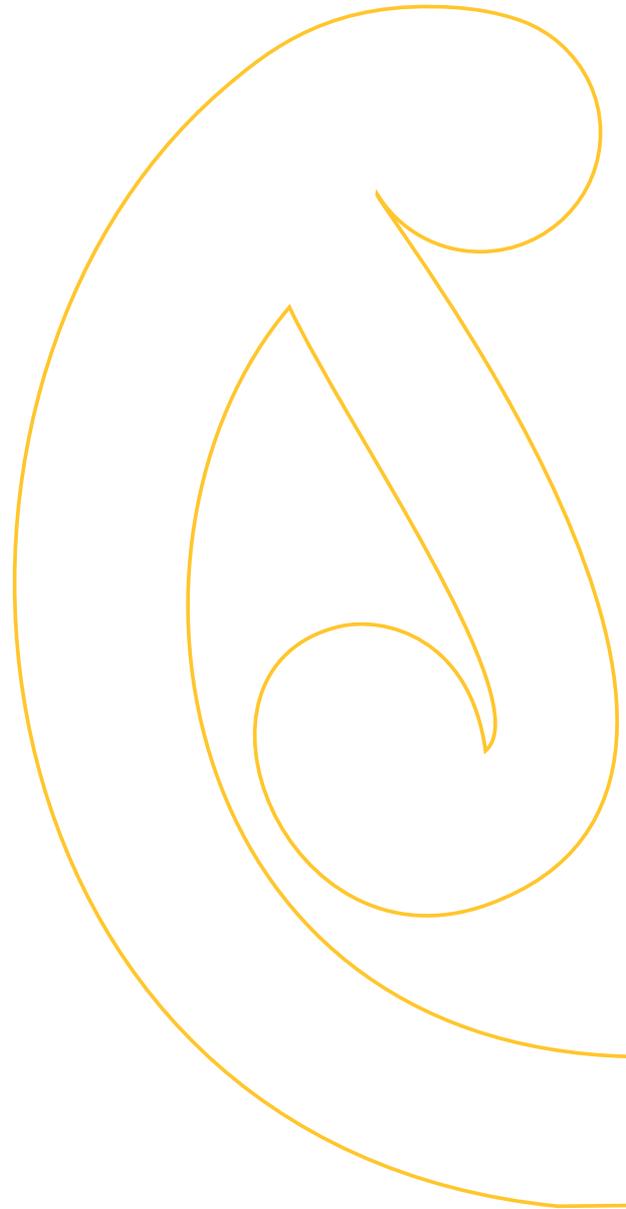
New Emergency Management Act to replace the CDEM Act 2002, and future local government reforms

Increased visitor numbers into the region can place extra demand on infrastructure, services and a CDEM emergency response

Varying levels of deprivation across the region can create vulnerability when exposed to the consequences of hazards. People with low socioeconomic status may have less access to transport, services and telecommunications which may affect their capacity to cope with the effects of an emergency

Northland communities are spread across both rural and urban settings which brings diversity across CDEM planning

Northland communities have dependence on agricultural and horticultural industries which can be affected by hazard impacts



This map shows the main road network, the region's rivers, council boundaries and where larger numbers of people are situated in the region.

Introduction to the Plan

This section introduces the plan purpose, intended audience, context of the Northland region and national CDEM direction. The Northland CDEM Group vision, goal, challenges and priorities are stated, which influence the Northland CDEM Group annual work programmes.

2.1 Setting the Scene

Civil Defence Emergency Management

The Civil Defence Emergency Management Act (CDEM) Act 2002 requires the establishment of CDEM Groups based on Regional Council boundaries. CDEM Groups are a consortium of councils working in partnership with stakeholders and partners¹ to deliver CDEM at a regional and local level.

This Plan is the statutory reference for the Northland CDEM Group and outlines the arrangements for CDEM within the Group's jurisdiction over a five-year period.

Plan Purpose

This plan outlines the strategic direction of CDEM engagement, participation, planning, collaboration, response coordination, recovery, CDEM management and governance and how CDEM provides resilience to the people of Northland.

Through Whakawhanaungatanga, Kaitiakitanga and Manaakitanga, we strengthen relationships and encourage collaborative planning and action to protect and support our people and our region.

Individuals, stakeholders and partners have roles and responsibilities in CDEM in Northland including:

Whakawhanaungatanga - process of establishing relationships, relating well to others

Manaakitanga - hospitality

Kaitiakitanga - guardianship, stewardship

- Regional Councils and Local Authorities - to coordinate and integrate all aspects of their hazards and emergency management functions and activities under The Act and other legislation
- Emergency services and community support agencies - in support of their readiness, response and recovery planning and delivery
- Lifeline utilities (including district council services) - to link their strategic risk reduction and operational planning for emergency readiness, response and recovery of services
- Government departments- to integrate national planning and service delivery in support of local CDEM arrangements
- Non-Government departments- to integrate national and local CDEM
- Whānau, Hapū, Iwi and Marae integrated in emergency management functions and activities including preparedness to build resilience to respond to and recover from emergencies
- Community preparedness to build resilience across communities to respond to and recover from emergencies

This plan has been developed in accordance with the CDEM Group Planning Director's Guidelines [DGL 09/18] and the National Disaster Resilience Strategy 2019, Rautaki ā-Motu Manawaroa Aituā to support national consistency of CDEM Group Plans and is a statutory requirement of The Act, s. 48.

1. Northland CDEM stakeholders and partners are identified in Appendix A



Plan Status and Change

This is the fourth Northland CDEM Group plan with final approval by the Northland CDEM Group joint standing committee. This plan will remain in effect for five years from the date of approval until reviewed by the Group and either amended, revoked, replaced or left unchanged. The Act (ss. 56–57) sets out a public process by which amendments can be made to the plan and, other than those deemed to be “minor”, any amendments to the plan are required to be publicly notified to allow affected parties to lodge submissions.

2.2 The Northland Context

The Region

The area covered by the CDEM Group and this plan is shown on the map in Section 1. It includes the Far North, Whangārei and Kaipara Districts and the coastal marine area to the seaward boundary of 12 nautical miles.

Northland covers around 5% of the country’s total land area. It is a 260-kilometre-long narrow peninsula, 80 km across at its widest point and just 10 km wide at its narrowest point with over 3000km of coastline made up of rugged cliffs, sandy beaches and sheltered harbours.

Northland is New Zealand’s least urbanised region, with around 50% of the population living in urban areas and an average density much lower than the NZ average (the total population was estimated at 194,600 in June 2020). Due to this dispersed and

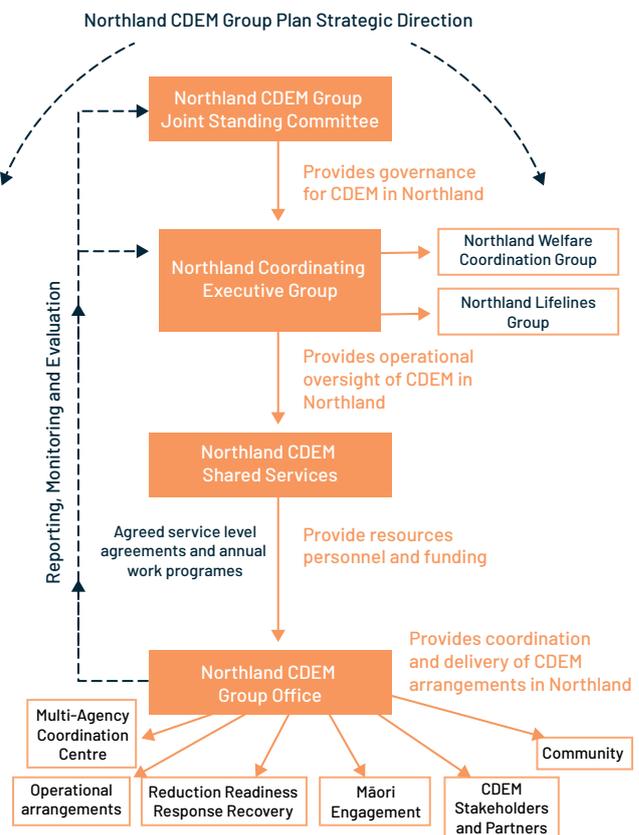
often isolated population, the approach to CDEM in Northland is one of centralised coordination through CDEM Shared Service Agreements between councils which includes localised CDEM delivery.

Northland CDEM Group environment is explained in **Section 3 - Northland’s Risk Profile**

2.2.1 The Northland CDEM Group Structure

The Northland CDEM Group structure is detailed in **Section 9 - Management and Governance**

The structure is outlined in the diagram below:



Members of the public will gain an overview of how CDEM stakeholders and partners are planning to manage hazards and risks in Northland. However specific information on local hazard management, emergency procedures and self-preparedness are available within relevant public policies and plans of local councils, Government departments and local community organisations and on the Northland Regional Council website. View the civil defence, environment river flooding, coastal hazards, natural hazards and tsunami evacuation map pages at www.nrc.govt.nz.

2.3 National Context

This Plan is a requirement under The Act and the National CDEM Plan Order 2015 which are the legislation and regulations for Emergency Management in New Zealand.

The National CDEM Plan Order 2015 outlines the guiding principles, rules and responsibilities across the 4 R's of Emergency Management.

It also enables CDEM Groups to understand hazards and risks, work to reduce hazards and build resilience in respect of those hazards, and build capability and capacity to provide coordinated, integrated, and effective response and recovery from emergencies.

The Northland CDEM Plan sets out how the requirements of legislation will be achieved in the region.

The National Disaster Resilience Strategy 2019 identifies three priorities to improve New Zealand's resilience to disasters:

1. **Managing Risks:** what we can do to minimise the risks we face and limit the impacts to be managed if hazards occur;
2. **Effective response to and recovery from emergencies:** building our capacity and capability to manage emergencies when they do happen; and
3. **Enabling, empowering, and supporting community resilience:** building a culture of resilience in New Zealand so that everyone can participate in and contribute to communities' – and the nation's – resilience.

2.4 CDEM Vision and Mission

The Northland CDEM Group's strategic direction, as described in this section, supports the national goal and priorities with the aim to achieve national consistency.

The Vision of the Northland CDEM Group reflects the importance of an integrated effort; one of partnerships and cooperation, working together for the benefit of all

The Mission sets out the broad criteria against which the CDEM Group Plan will be measured and monitored. The goal of the CDEM Group is directly aligned to the National Disaster Resilience Strategy 2019

Vision

Kia mahi tahi, kia hangaia he pakaritanga ki roto i ngā rohe o Te Tai Tokerau

Working together to create resilient communities in Northland

Mission

To strengthen the **resilience** of Northland by **managing risks**, being **ready to respond** to and **recover** from emergencies, and by **enabling, empowering** and **supporting** individuals, organisations and communities to act for themselves and others, for the safety and wellbeing of all



Challenges

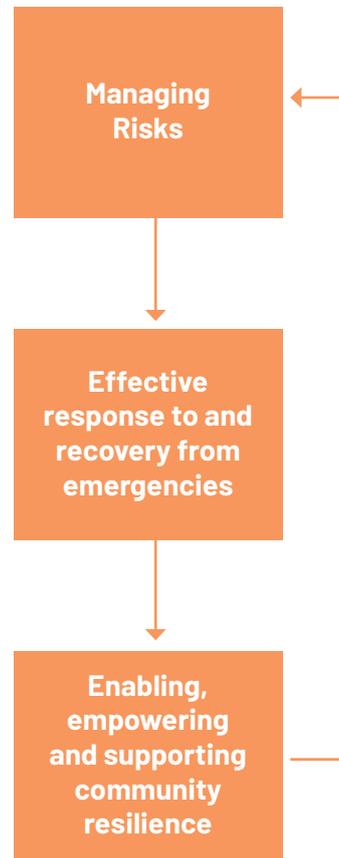
The Northland CDEM Group, stakeholders and partners face challenges delivering CDEM in Northland (these are identified on the map in Section 1). These challenges are considered and managed when the plan objectives and work programmes for the region are developed.

Areas of Focus

The Northland CDEM Group strategic areas of focus influence the development of Group and Local CDEM work programmes and partnerships. The Northland CDEM Group is committed to the following areas of focus incorporating them into the five-year strategic plan objectives and actions:

- Build resilience and partnerships across the region
- Improve our capability and capacity to manage risk and respond and recover from emergencies
- Build a multi-agency Emergency Coordination Centre (ECC) for the region
- Improve and maintain tsunami readiness and response

The Vision and Mission of the Northland CDEM Group will be achieved through:



Northland's Risk Profile

This section introduces the regions natural, social, built and economic environment context, the hazards potentially affecting Northland and their likelihood and consequence.



Population

194,600

as at June 2020

forecast to grow to **217,000** by 2031



Population growth since 2013

+18%

compared to 14% nationally

Approx

36%

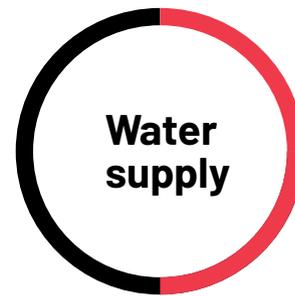
identify as Māori



compared to 17% nationally

About half of households are connected to council-operated water supplies

council-operated water 50%



New Zealand's least urbanised region

50% of Northlanders live rurally

compared to just over 16% nationally



Median annual household income

\$67,600

in 2020

with the **highest rate** of



self-employment

in New Zealand (one in four positions)

and third **highest rate** of

4.7%

unemployment

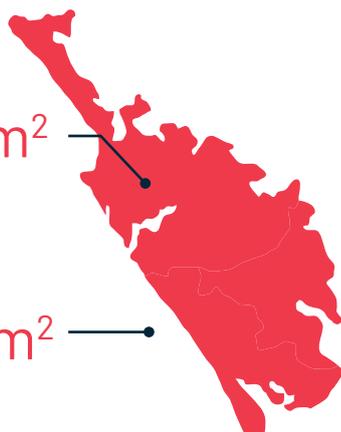
in 2020 (Its lowest level since 2007)

Land area

13,940 km²

Coastal marine area (CMA)

12,000 km²



Northland GDP

Whangārei District



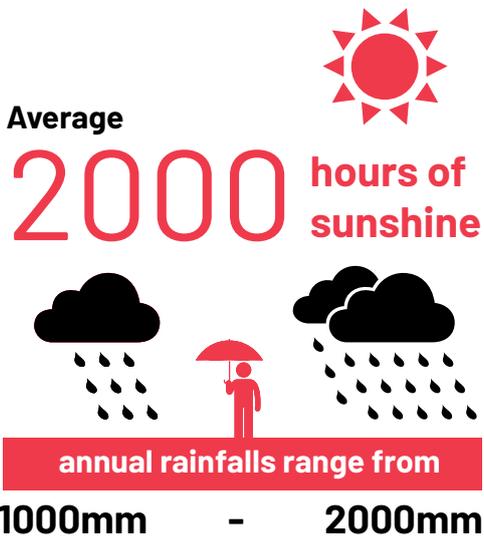
Far North



Kaipara



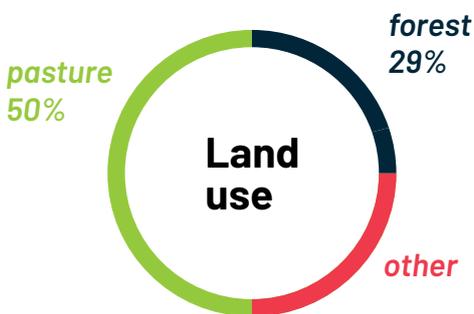
In preparing this Plan, Northland CDEM Group has sought to obtain updated statistics on the proportion of people within Northland who have disabilities. At a national level, the advice is that the most authoritative source is the post-census 2013 disability survey (used in the previous Group Plan). The next intended update is expected to take place post-2023. Northland CDEM Group acknowledges the limitations of these statistics given the time period between updates (which are shared throughout the country) and continues to maintain direct contact with organisations who work with people with disabilities.



Climate: Sub-tropical climate characterised by mild, humid and often windy weather

Ex-tropical systems in summer can bring strong north-easterly winds and heavy rainfall

Nearly half of Northland’s land is in pasture, with natural forest accounting for a further 29%



Key industries: manufacturing, agriculture, forestry, fishing, health, social assistance, construction, tourism and retail

3.1 CDEM Group Hazardscape

Analysing the Level of Hazard Risk

The combination of all hazards within an area such as Northland is commonly referred to as the hazardscape. The Northland region is subject to a wide range of significant natural, human-made and biological hazards.

3.2 Hazard Risk Priorities

Northland’s hazards¹ have been divided into four bands – very high, high, medium and low priority hazards for CDEM planning purposes. An all hazard approach to planning is used by the Northland CDEM Group. (See the Hazards table page 16)

The flow on effects on the social, cultural, economic, natural and built environment from the occurrence of any of the hazards identified in the table on page 16 is varying.

The risk posed by each hazard was evaluated using a risk management process². The evaluation was carried out through a combination of a facilitated workshop with CDEM stakeholders and partners and analysis of available scientific hazard and historical event data.

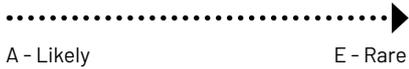
Flooding caused by localised heavy rain and coastal inundation provides the highest risk to the Northland region so flooding has been, and will continue to be, a high priority for Northland.

¹Specific hazard information is explained in Appendix C

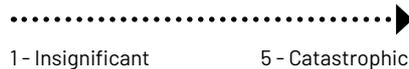
²The risk management process is explained in Appendix B

Hazardscape	Likelihood	Consequence	Risk Rating	
Localised Heavy Rain/Flooding	A	3	VH	
Severe Widespread Storm	B	4		
Human Pandemic	B	4		
Transport / Supply Chain Disruption	B	3	H	
Cyber Attack	B	3		
Electricity Failure	B	3		
Regional / Distal Tsunami	B	3		
Local Tsunami	E	5		
Drought (Agricultural)	B	3		
Drought (Water Supply)	B	2		M
Fuel Supply Disruption	C	3		
Telecommunications Failure	C	2		
Wildfire	C	2		
Distal Volcano	C	2		
Animal Epidemic	C	2		
Plant & Animal Pests	C	2		
Criminal Act / Terrorism	C	2		
Tornado	C	2		
Major Industrial Accident	D	3		
Major Industrial Accident - Marine	D	3		
Hazardous Substance Spill	D	3		
Local Volcano	E	4		
Urban Fire	D	2	L	
Earthquake	E	3		

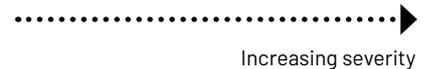
Likelihood score



Consequence score



Risk Rating L M H VH



Māori Engagement

The Northland CDEM Group is committed to growing meaningful partnerships with Iwi through considered collaborative engagement befitting a true partner.



4.1 Overview and Principles

This is an opportunity for CDEM and Māori to strengthen and enrich networks, support and facilitate partnerships in an enhanced approach to emergency management, working to support and facilitate engagement across Whānau, Hapū, Iwi and Marae.

Māori play an important role in stewardship of the natural, social, cultural and economic environments. The culture of Whakawhanaungatanga and Manaakitanga complements processes with a number of capability and capacity building characteristics.

Inclusion of Māori across all levels will inform and enrich work in the emergency management sector leading to better outcomes for all of our communities by promoting inclusive engagement that supports decision making.

Provide greater recognition, understanding and integration of Iwi / Māori perspectives and tikanga in emergency management, before, during and after a civil defence emergency.

Areas of Focus

- Develop stronger alignment, support, connections and understanding between the CDEM Group and Māori across the region
- Engage and support Whānau, Hapū, Iwi and Marae and businesses to build resilience
- Maintain and improve effective communication networks and processes
- Support Iwi and Hapū to develop community response plans and Marae preparedness
- Raise cultural competency of CDEM staff in regard to Te Ao Māori

Whakawhanaungatanga - process of establishing relationships, relating well to others

Manaakitanga - hospitality

Te Ao Māori - Māori world view

4.2 Māori Engagement Action plan

Objectives	Actions
Māori and CDEM have strong alignment, support, connections and understanding	<ul style="list-style-type: none"> • A focus on Whakawhanaungatanga with Iwi to establish strong bonds between Iwi and the Northland CDEM Group • Networks at operational level developed through training, forums and collaborative planning opportunities • Effective organisational structures in place that support and result in improved engagement • Understanding of one another's expectations and practices • Efficient use of resources and Kaitiaki responsibilities across all levels of the CDEM sector • Effective and genuine engagement supports relationships that are based on trust and confidence
Whānau, Hapū, Iwi, Marae and businesses are resilient and able to respond to and recover from emergencies	<ul style="list-style-type: none"> • Support and engage with Māori in promoting emergency management understanding • Assist communities/Marae in the development of response plans and preparedness plans • Link businesses into support networks and promote business continuity planning • Sites of cultural significance, wāhi tapu, taonga, specific community values and priorities are included in CDEM planning
Communication networks and processes are robust	<ul style="list-style-type: none"> • Develop protocols for reporting and engagement during an emergency event • Improve communication and learn from past events • Where possible meet kanohi ki te kanohi (face to face) • Understand and use methods of communication that work for communities
Cultural competency of CDEM staff is improved	<ul style="list-style-type: none"> • Our people develop increased awareness of tangata whenua values and are respectful of tikanga and Te Reo Māori • Our people understand how Māori respond to and recover from emergencies and how to provide support

Whakawhanaungatanga - process of establishing relationships, relating well to others

Kaitiaki - custodian, trustee

Wāhi tapu- sacred place

Taonga- treasure

Tikanga- correct customary values and practices

Tangata whenua - indigenous people

Te Reo Māori - Māori language

Reduction of Northland's Hazard Impacts

This section provides an overview of hazard risk reduction in Northland. Hazard risk reduction challenges and priorities for the Northland CDEM Group are identified and the hazard risk reduction objectives and actions for the region are outlined.



5.1 Overview and Principles

Hazard risk reduction is aimed at preventing new risks, reducing existing disaster risks and managing residual risk, all of which contribute to strengthening resilience. The Northland CDEM Group is committed to hazard risk reduction in alignment with the National Disaster Resilience Strategy 2019, s. 5, Managing Risks.

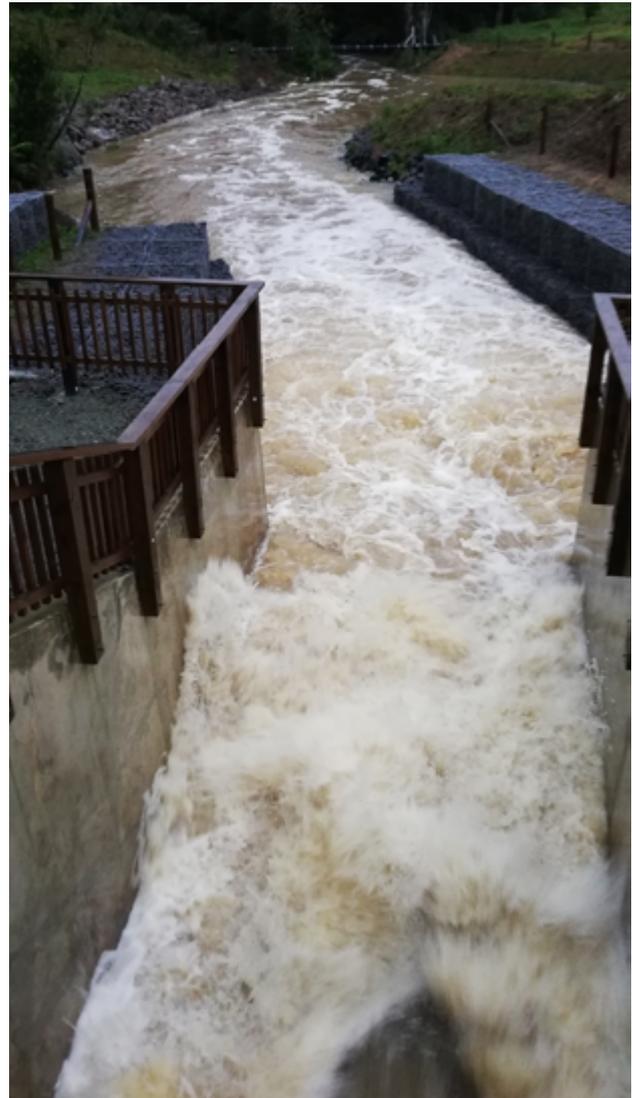
The Northland CDEM Group priorities and objectives for hazard risk reduction focus on understanding and improving knowledge of hazard risk in the region to inform decision making, supporting the community to take appropriate actions and reduce the impacts of hazards on the region's social, built, natural and economic environments. There are several hazard risk reduction challenges to be considered across planning and reduction activities, as set out below:

Challenges

- Hazard risk reduction is often perceived as being a high-cost option
- Political and economic influence in land use planning and development
- Hazard risk reduction measures are incorporated into land use and development planning
- The frequency and severity of hazards is increasing due to climate changes and response procedures have to adapt accordingly

Areas of Focus

- Collaborate across Northland CDEM stakeholders and partners for a coordinated approach to hazard risk reduction planning and activities
- Ensure hazard risk reduction and hazard awareness information is available to the public
- Engage with national and regional hazard risk reduction activities and research to improve regional hazard knowledge



Case Study 1: Flood protection, page 22

5.2 Current Arrangements

A strength in Northland hazard risk reduction is the level of awareness by CDEM stakeholders, partners and the wider community of potential impacts. The Northland CDEM Group is engaged in, provides support, emergency management advice, information and guidance to CDEM stakeholders, partners and communities to improve knowledge and assist risk reduction planning and activities.

Case Studies

1: Flood protection

Unlike a storage dam, as a detention dam Hopua te Nihotetea holds no water most of the time – its purpose is to retain floodwaters during major storms, releasing them gradually over several days and designed for a 1:100 year flood plus climate change. This can potentially cut flood depths in the Whangārei CBD by up to half a metre. Along with the depth of floodwaters, the speed at which they are travelling also contributes to the resulting damage.

At the time of preparing this Plan, the dam had experienced two major tests: in June 2018 and again in July 2020. On the second occasion it held back about 400,000 cubic metres of floodwaters that otherwise would have swept through the city's CBD and parts of neighbouring suburbs.

Meanwhile, in the Far North, a seven-year, \$15 million flood scheme upgrade is underway to improve flood protection in and around Kaitiāia.

The project, which will become the regional council's largest construction project so far, involves a combination of stop bank stabilisation and spillway work and is designed to protect urban Kaitiāia from a 1:100-year flood and surrounding rural areas from a 1:20 year event. Scheduled for completion in 2022/2023, it is being funded through a combination of local and regional targeted rates and central Government funding.

See page 20 and 21 for Flood protection images

2: Drainage Scheme

The township of Ruawai was once a swamp and sits below sea level where the Northern Wairoa River meets the Kaipara Harbour – hence its name denoting the two waters. The Ruawai community is protected by a complex system of 3.5-metre-high stop banks, flood gates and drains and is the oldest drainage scheme in Northland (approx. 1920). Originally the reclamation of the land, and associated drainage and flood protection infrastructure, was to provide 'protection' for the development of agricultural production mainly in the dairy and kumara sectors. As the townships developed it now also provides, by default, protection to the communities and infrastructure. The locally-elected Raupo Drainage Board managed the engineering and maintenance of the drainage system until the 1989 local government amalgamation, at which point the stand-alone board became a joint committee of Kaipara District Council, comprising local elected Raupo ratepayers and councillors.

8200 hectares of rural land and properties are protected by the drainage scheme comprising of 130 kilometres of drains, 70 kilometres of stopbanks, 52 saltwater floodgates, three flood retention dams, and one pumping station as the scheme works primarily by gravity.



3: Electricity network resilience

Northland’s two electricity providers: Northpower and Top Energy, and national grid operator, Transpower, collectively invest tens of millions of dollars annually to improve the reliability of power supply. Key projects to reduce the number of outages and allow power to be restored more quickly include the installation of new transmission lines, substations and backup generation options. In late 2020 following a three-year construction project, Top Energy commissioned the \$185 million Ngāwhā geothermal power station. The total output will supply the Far North’s electricity demand 95% of the year, with excess power exported through the National Grid.



5.3 Hazard Risk Reduction Action Plan

To achieve the Northland CDEM Group hazard risk reduction priorities, three objectives are identified with associated actions as outlined below:

Objectives	Actions
Northland CDEM Stakeholders and partners are engaged in long-term hazard risk reduction planning and activities	<ul style="list-style-type: none"> • Maintain engagement with national, regional and local hazard advisors and the development of disaster resilience strategies, guidelines and plans • Inform and guide all Northland's councils to consider hazard risk reduction in their planning, policies, standards, consents, developments and infrastructure • Support hazard risk reduction activities amongst Northland CDEM stakeholders and partners • Support District Councils through Long-term Plans to upgrade infrastructure to improve resilience during drought conditions
The community is informed on hazard risk	<ul style="list-style-type: none"> • Improve and promote region wide hazard information across multiple platforms • Leverage CDEM stakeholder and partner capacity to distribute hazard risk information to communities
The knowledge and understanding of Northland's hazard risk profile is increased	<ul style="list-style-type: none"> • Support new hazard research, analysis and modelling in Northland

Readiness

This section introduces how the Northland CDEM Group will work with communities and CDEM stakeholders and partners prepare for an emergency.



PLAN YOUR ROUTE Tsunami Evacuation Information

WARNINGS | Get to know

NATURAL WARNINGS

For a local source tsunami, which could arrive in minutes, there won't be time for an official warning. It is important to recognise the natural warning signs and act quickly.

Tsunami – Natural signs

In the case of:

- Out of the ordinary sea behaviour, such as sudden sea level rise or fall and/or unusual noise
- A strong earthquake that is hard to stand up in
- An earthquake lasting longer than a minute.

If you experience any of these natural signs, you should evacuate ALL zones – a wave may arrive within minutes. Wait in a safe area for the official all clear.

OFFICIAL WARNINGS



UNOFFICIAL WARNINGS Family, friends & international media.

EVACUATION | Where to go

- **RED ZONE** is the coastline, this zone must be evacuated in response to a 0.2-1 metre wave height. Flooding of land near the shore is not expected.
- **ORANGE ZONE** matches the 1.5 metre wave height. A threat of coastal flooding near the shoreline exists. For this threat, BOTH red and orange zones must be evacuated.
- **YELLOW ZONE** is the worst case scenario. For this threat, ALL zones (red, orange and yellow) must be evacuated.
- **SAFE AREA** if driving, keep going once out of the evacuation zones to allow room for others.

BE PREPARED BEFORE A TSUNAMI

- Know the risk
- Have a plan of how you will respond
- Have a getaway kit
- Identify your route to higher ground
- Practise your evacuation route to the safe area

Visit www.civildefence.govt.nz/cdem and www.get.govt.nz/cdem

6.1 Overview and Principles

People need to be prepared to look after themselves and others during and after an emergency. The Northland CDEM Group will support preparedness through community engagement, community response planning, Marae preparedness and public education.

The CDEM Group, stakeholders and partners will undertake readiness arrangements to have a clear understanding of their roles and responsibilities in responding to and recovering from an emergency.

Challenges

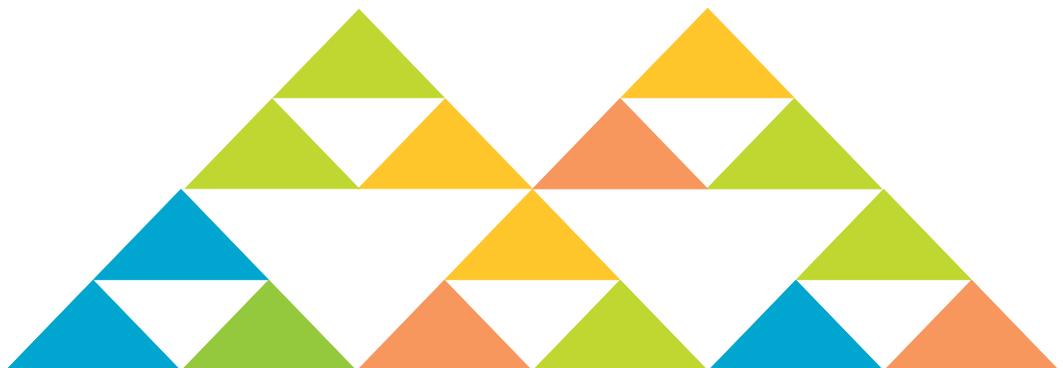
There are several challenges in collaborating and delivering readiness activities in Northland identified below:

- Maintaining community and business engagement consistently over time so people are prepared to respond to an emergency
- Increased diversity of Northland's communities requiring information about preparedness
- The turnover of trained CDEM staff within councils impacts on the capacity and capability during an emergency

Areas of Focus

Northland CDEM Group will maintain a high level of preparedness to respond to emergencies through:

- Professional development, duty rosters, plans, processes, procedures
- Maintain and strengthen relationships with stakeholders and partners
- Maintain and improve warning platforms and public information
- Maintaining business and community awareness and participation through community-based planning
- Coordinated public education and engagement
- Provision of professional development opportunities for all emergency management personnel
- Support the Northland CDEM Group stakeholders and partners planning and preparedness to maintain a high level of coordination and cooperation responding to emergencies
- Key CDEM appointments are filled by trained personnel



6.2 Current Arrangements

6.2.1 Community and business readiness

The level of preparedness of communities has a direct impact on the ability to respond to and recover from an emergency. Therefore, community and business preparedness are a strong focus of the Northland CDEM Group. The Northland CDEM Group work with local communities to create Community Response Plans which aim to:

- Help the community understand and manage hazards
- Promote personal and community resilience
- Assist communities to prepare for an initial emergency response when outside assistance takes time to arrive
- Connect communities to the Northland CDEM Group

→ Further information and community response plans in Northland can be found at www.nrc.govt.nz/communityresponseplans

Business continuity planning helps to better understand what disruptions might occur and how the business will identify the essential functions required to continue to operate. The Northland CDEM Group supports business continuity planning through stakeholders and partners.

The Northland CDEM Group member councils under The Act, s. 64(2) are required to function to their fullest extent during and after an emergency, even though this may be at a reduced level, so business continuity planning is essential.

6.2.2 Public Education

The Northland CDEM Group provides public education as a foundation for building community preparedness. This is provided through a variety of ways including community meetings, digital platforms, tsunami information boards and through engagement with CDEM stakeholders, partners and communities.

→ More information on CDEM community education messages can be found at www.nrc.govt.nz/civildefence/how-to-get-ready/



6.3 Operational Arrangements

The Northland CDEM Group must ensure it has the capacity and capability of staff, equipment and facilities to ensure an effective response to and recover from emergencies. The Group Emergency Coordination Centre (GECC) coordinates the overall response in an emergency and is activated when required whether an emergency has been declared or not. Local EOCs provide a local co-ordination for delivering a response to specific communities in affected areas. Each district council can set up an EOC when and where required.

6.3.1 Key staff appointments

Key appointments are allocated to staff in the Emergency Centres. Staff with key appointments are appropriately trained as part of preparedness.

Roles and functions of the ECC are explained in *Section 7 - Response*

Key appointments are explained in *Section 9 - Management and Governance*

6.4 Operational Planning

Collaboration at the regional and local level is particularly important to ensure alignment of plans where multi-agency responses are required. The establishment of groups provides a mechanism for multi-agency planning, communication, awareness and relationship building. In Northland, the Emergency Services Coordinating Group (ESCG), Northland Lifelines Group (NLG), Welfare Coordination Group (WCG), Rural Support Trust (RST) and the Network of Networks Advisory Group provide a forum for this collaboration.

There are many operational plans and procedures that support this plan and CDEM operations.

6.4.1 Multi-agency Collaboration Groups

Social Wellbeing Governance Group (SWGG)

The Northland SWGG provides a high-level coordination/liaison forum which supports situational awareness and response coordination across health, welfare, law and order, government agencies, local government, Iwi, CDEM and the economy. Northland has an expanded SWGG which includes membership from local government chief executives, Iwi (through Te Kahu o Taonui chair) Northland DHB), government agency regional leads (Ministry of Social Development, Ministry of Education, Ministry of Health, Oranga Tamariki, Te Puni Kokiri, Police, Corrections), NorthTec, Northland Inc., Northland CDEM Group and Sport Northland.

Regional Leadership Group (RLG)

The Northland RLG was developed from the All of Government response to the COVID-19 pandemic. The RLG supports social and economic recovery and were key in the development of the national Caring for Communities All of Government work in response and recovery from the pandemic. The RLG has no decision-making powers but collectively agrees on priorities and supporting actions. The Northland RLG role was incorporated into the existing expanded SWGG, their role during COVID-19 response and recovery was to convene leadership and ensure a regional strategy plan caters for different communities, connect local government, Iwi, Pasifika, ethnic communities and key central government personnel and support the distribution of key messages to aid community networks.

Te Kahu o Taonui (TKoT)

Formed in 2006/7, Iwi chairs collective Te Kahu o Taonui has representation from eleven Iwi across Te Tai Tokerau including Ngāti Kuri, Te Aupōuri, Te Rarawa, Ngāi Takoto, Ngāti Kahu, Kahukuraariki, Whaingaroa, Ngāpuhi, Ngāti Wai, Te Roroa and Ngāti Whātua.

Te Kahu o Taonui and Northland CDEM Group worked together during the 2020 Northland drought and COVID-19 responses and two representatives of Te Kahu o Taonui were appointed by co-option to the CEG in April 2020.

Lifelines Group (NLG)

The Northland Lifelines Group (NLG) is a collective of lifeline utility organisations that help the CDEM Group to prepare for, respond to and recover from emergencies. The lifeline utility organisations provide important services to the community such as telecommunications, transport, water and energy services. Following an emergency, the restoration of lifeline services is critical to a community's ability to recover. The collaboration between lifelines organisations enhances the understanding of regional risks and an understanding of each other's networks and operations, improving coordination across the sector to respond and recover to emergencies.

The lifelines group shared work programme of activities aims to improve the resilience of Northland's lifeline infrastructure to hazards. The NLG has several plans to support their response which are reviewed and updated as required. The NLG is linked to and supported by the Northland CDEM Group with a member of the NLG reporting to CEG on activities and plan updates during readiness.

Welfare Coordination Group (WCG)

The Northland Welfare Coordination Group (WCG) is a collective of welfare service agencies that provide welfare to affected people and animals during an emergency. The WCG plans, coordinates and supports the arrangements and delivery of welfare services by district councils and welfare agencies prior to and during an emergency.

The WCG has a shared work programme and progress on activities and other planning arrangements are reported quarterly to CEG. District councils appoint staff as local welfare managers, to work alongside the Northland Group Welfare Manager to ensure welfare arrangements and activities are consistent and coordinated across the region in readiness, response

and recovery. Welfare responsibilities and operational arrangements of district councils include the planning of Civil Defence Centres (CDCs) if required, to support people during an emergency and provide a portal for welfare agencies to engage with affected people. Training and development of district council staff, local welfare arrangements, plans and processes are developed as part of the ongoing readiness in the region.

Northland Emergency Services Coordinating Group (ESCG)

The Northland CDEM Group is a member of the Northland Emergency Services Coordinating Group (ESCG) which is led by the NZ Police. This group coordinates planning and is a forum for building relationships between emergency services and allied response organisations.



Northland Rural Support Trust (RST)

The Rural Support Trust (RST) is part of a national network of trusts that aim to ensure rural communities are well prepared, supported and able to recover quickly from emergencies that particularly affect the rural environment. The RST has developed response and recovery plans which identify roles and responsibilities and the types of assistance that is, or can be, made available to rural communities. The RST also aims to strengthen the network of rural landowners, managers, professionals and other industry organisations. The RST is a member of the Northland WCG.

Network of Networks Advisory Group (network of networks)

The network of networks was established to ensure that priority groups were reached and being supported during the All of Government COVID-19 response. These groups are:

- Older persons
- People with mental health issues
- Iwi
- Migrant communities
- People with disabilities
- Children and Youth
- People without permanent housing
- Community Voluntary Sector

The value of reaching priority communities during any response where the needs of priority groups are to be identified, assessed and delivered upon has been recognised with continuation of the network of networks beyond the COVID 19 response. The network of networks is represented on the WCG by the chair and is coordinated by the Ministry of Social Development.

6.5 Professional Development

The Northland CDEM Group provides and coordinates ongoing Coordinated Incident Management System (CIMS) professional development.

A controllers' development programme is established offering a wide range of professional development opportunities to enhance the capability of controllers.

Exercises play an important role in assessing preparedness, allowing plans and processes to be tested, improvements to be identified and staff to become more confident with their roles.

The Northland CDEM Group participates in the National CDEM exercise programme and facilitates its own exercise schedule.



6.6 Readiness Action Plan

Objectives	Actions
Communities and businesses understand their risks and are prepared	<ul style="list-style-type: none"> • Support and provide tools to enhance community response and Marae preparedness planning • Work with priority groups to assist them with preparedness planning • Link businesses to support networks and promote business continuity planning • Engage and coordinate with stakeholders and partners delivering community preparedness education messages • Promote public education and information to build preparedness • At risk populations are informed and prepared to respond appropriately to tsunami • Maintain a programme of installing, inspecting and updating tsunami information boards across the region
Northland CDEM sector preparedness arrangements enable response	<ul style="list-style-type: none"> • Continue to provide emergency management professional development opportunities for the region • Attend professional development opportunities at the local, regional, national and international levels • Engage with and support emergency services, lifelines and the welfare coordination group • Maintain existing plans and operating procedures • Ensure capability and capacity of ECCs and EOCs across the region • Design and build a multi-agency emergency coordination centre for the region • Invest in technology to deliver improved response outcomes
Northland operates a reliable and effective warning and alert system	<ul style="list-style-type: none"> • Maintain and test CDEM warning and alerting systems which can be activated 24/7 to warn people of CDEM hazards which may pose a threat to life • Ensure the Northland tsunami siren network meets the required national standards • Use new technology to enhance warning dissemination

Response

This section introduces Northland CDEM group response arrangements and framework including, roles, responsibilities, relationships (locally, regionally and nationally) and processes for emergency escalation and declaration.



7.1 Overview and Principles

Response describes the actions taken immediately before, during or directly after an emergency to save lives, protect property and support communities to recover. Response ends when the response objectives have been met, or a transition to recovery has occurred. Agencies will respond to an emergency by coordinating with the lead agency and activating their own plans and procedures in alignment with their roles and responsibilities. The CDEM Group is the mechanism through which resources and support for emergency services agencies and welfare is coordinated (it is not a primary care or emergency service agency). To ensure an effective response, agencies will use the Coordinated Incident Management System (CIMS) framework with enhancements and adjustments to reflect the response requirements.



Challenges

- Managing varying expectations of the community, CDEM stakeholders and partners, as well as the political and governance environments
- The lack of depth in CDEM trained personnel who respond to emergencies across the region will impact on the ability to establish and maintain the coordination of a large response, for an extended duration
- Utilising technology during a response and the heavy reliance on continuous and successful operation
- Communicating accurate information rapidly within communities and to stakeholders and partners while balancing social media and political influences
- Meeting the response needs of Northlanders while simultaneously implementing national directives from NEMA

Areas of Focus

- Provide leadership to achieve an affective, comprehensive response to emergency events
- Aid our communities including public alerting, information and emergency welfare services
- Work collaboratively with our communities and partner agencies to reduce the impact of emergency events and assist those in need
- Create and maintain an accurate and widely understood common operating picture
- Coordinate the response though accurate hazard analysis and response planning, and to set the basis for a transition to recovery

7.2 Response Levels

The scale, complexity and/or consequences of an incident will determine which levels of response are required. When higher response levels are activated, they may either assume overall control of the incident, or act in support of other agencies in a response.

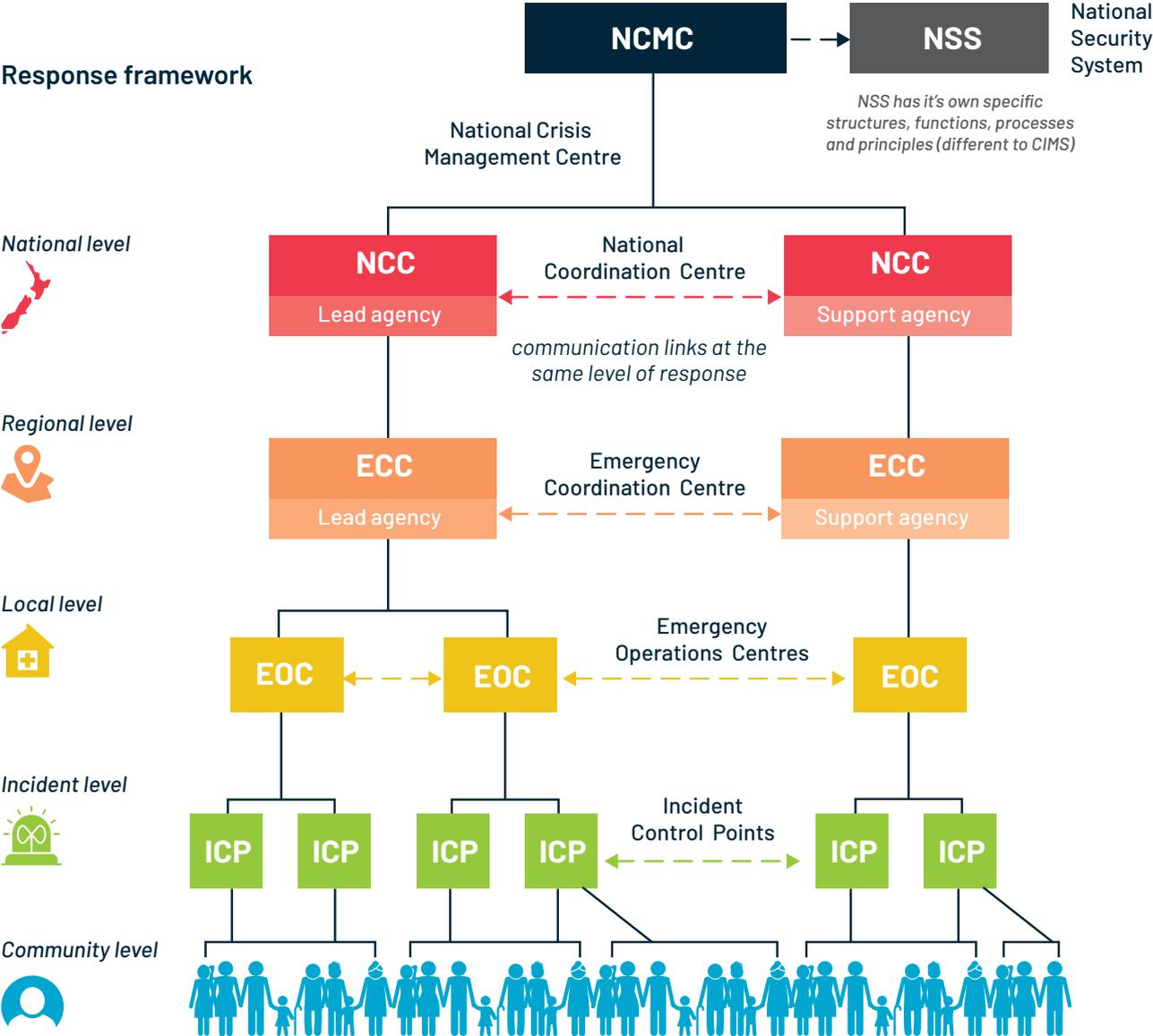
The National CDEM Plan describes the following response levels:

Response Level	Description	Examples:
National 	Includes agency coordination centres and national level sector coordinating entities, and all-of-government coordination across national agencies. Coordinated from National Coordination Centres (NCC)	A large tsunami impact will require a response from all levels
Regional 	Includes CDEM Groups stakeholders and partners. Coordinated from Emergency Coordination Centres (ECC) or Emergency Operations Centres (EOC)	Wide scale flooding across the region will require a regional, local, incident and community response
Local 	Includes district councils, stakeholders and partners at the local (district/city) level. Coordinated from ECCs or EOCs	A major gas leak which removes people from their homes for an extended period of time. Support may be required from a local, incident and community level
Incident 	The first official level of agency response. It includes first responders. Coordinated from Incident Control Points (ICP)	A road traffic accident will require an incident level response
Community 	The general public including individuals, families/whānau, community groups and businesses	

There may be a national and regional response to a tsunami threat assessment following an earthquake, where a local, incident or community response is not required as the outcome of an assessment is there is no threat to land.

Response Level Relationships

In a response with multiple response levels activated, each level may consider the same activities in varying levels of detail and have differing timeframes to meet. Each response level must establish and maintain a direct connection with the response levels above and below to ensure an appropriate line of communication and, where applicable, control. Community level response can be supported from local, regional and national levels. Agencies may support a response using business-as-usual structures.



The Coordinated Incident Management System (CIMS) is used as the internal structure at each level. Appendix D outlines the CIMS functions.

Classification and Coordination of Emergencies in Northland

The Northland CDEM Group have a 24/7 on-call duty roster which includes both a Duty Officer and a duty Group Controller.

Should an emergency occur, the Duty Officer will perform the necessary initial actions and liaise with the duty Group Controller and the wider Northland CDEM staff to ascertain and put into place the required response level.

Emergencies are given an incident classification and is determined by the Controller, supported by the incident management team (IMT) to ensure consistent understanding. The categories and descriptors are applicable across all response levels, although they may not be relevant across all incidents or responses.

If a response involves multiple Coordination Centres, a classification should be determined by the Controller for each centre where a Controller is present.

If an emergency is minor or moderate, the Northland CDEM staff will likely monitor, coordinate and deliver the response, involving the relevant stakeholders and partners as required. Should the emergency be considered major or severe, local EOCs will be activated and the Group ECC will coordinate the response.

A local or regional level response is typically activated when one or more of the following conditions are met:

- There is community impact that requires the delivery of CDEM support services
- It is requested by emergency services as the level of coordination or resources required is best managed from a higher level than the incident level
- There are several incident-level responses at different sites and local/regional coordination is necessary
- A state of emergency has been declared

The incident classification levels of an emergency are explained in **Appendix E**, and CIMS roles and responsibilities in **Appendix D**.



7.2.1 CDEM Emergency Coordination Centres

The below diagram shows the relationship between the various ECCs.

The focus at the GECC level is coordination of the event through tactical and strategic management, whereas at the local EOC level the focus is on the immediate operational tasks and activities. The GECC collects, collates and assesses information, issues warnings, public statements and advice, coordinates the response, and maintain records.

Each district council in the Group maintains a local EOC within its area. The role of the EOC is to coordinate the response of local stakeholders and partners within the area. Once activated, the local EOCs report to the GECC.

Other emergency management response key locations include individual stakeholder and partner ECCs (where they are either operating as lead or support agency) and Civil Defence Centres if opened (which provide the point of contact for many agencies to interact with impacted communities).

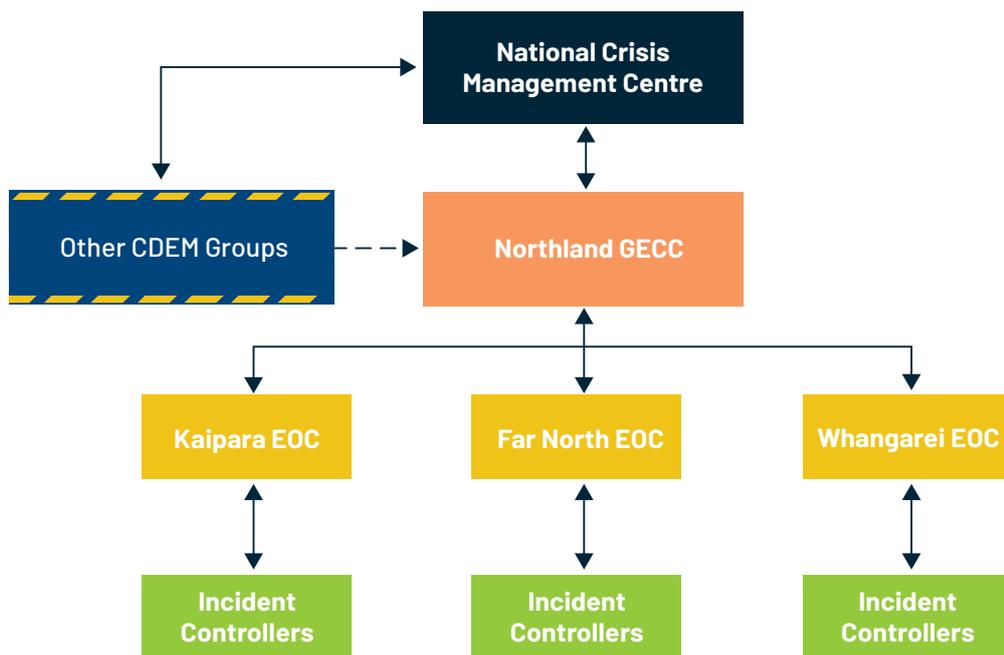
Emergency Communications

The ability to effectively communicate in the lead up to, during and after an emergency is a critical component of Northland’s operational capability. It is the Group’s expectation of all responding stakeholders and partners that they can always effectively communicate.

Mobile phones, landlines and email are the usual means of communication and are utilised first in an emergency. As a backup, satellite phones and VHF radios operate throughout the area with HF Radio also available.

Teleconference facilities and online meeting platforms are also utilised during a response.

Relationship between ECCs



7.2.2 Response Roles and Responsibilities

The primary roles of the Controller during response are to assess impacts, prioritise response measures, monitor agencies and coordinate and allocate resources where required. Northland CDEM Group has appointed Group Controllers in accordance with The Act, ss. 26-27.

During activation of the GECC, the Controller will implement a CIMS structure that is scalable and modular, appointing staff to key roles that need to be performed.

The CIMS roles and responsibilities are explained in **Appendix D**

Lead and Support Agencies

The lead agency is the agency with the primary mandate for managing the response to that emergency e.g. Health is the lead agency in a pandemic, CDEM is the lead agency in a tsunami.

Support agencies are any agencies or organisations (other the lead agency) that have a role or responsibilities during a response and support the lead agency in the response.

If an emergency declaration is made, the lead

agency may change, either by existing mandate or by direction from the Controller.

The Act and the National CDEM Plan Order 2015 state the roles and responsibilities of agencies, including definitions and details, and expectations of the capacity and capability during a response.

Declaration

Declaring a state of emergency gives the Controller and others access to statutory powers under The Act to protect life and property in extraordinary emergency events.

If there is potentially a need to declare a state of local emergency, the Group Controller will contact the first available CDEM Group representative in the following order:

- 1) Chairperson, Northland CDEM Group
- 2) Deputy Chairperson, Northland CDEM Group
- 3) Any other available member of the CDEM Group.

Further information on Declarations and powers is explained in **Section 9 - Management and Governance**



Volunteers

Volunteers can play a significant role in any response and recovery, particularly during large-scale emergencies. A community-led response and recovery displays Whakawhanaungatanga and Manaakitanga which demonstrates the resilience of Northland communities. CDEM guidance and support is available to community-led response and recovery activities if required.

There are three groups of volunteers in the CDEM context:

- Volunteers who have connected with CDEM training, provided or facilitated by CDEM
- Affiliated Volunteer Organisations
- Spontaneous Volunteers who are members of the general public or community groups who respond spontaneously to emergencies



“Community-led response and recovery activities demonstrate the resilience of Northland Communities”

Evacuation

If possible, the preference is for people to shelter-in-place (in the location that they are already occupying – generally their homes), unless it is considered that the mandatory evacuation provides less risk to the public’s health and safety and will potentially save more lives. The evacuation of an area is necessary when a hazard threatens the safety of those within the area or following the impact of a hazard which has subsequently rendered the area uninhabitable. Mandatory evacuation places a great demand on resources and a duty or responsibility on authorities.

Debriefs

Debriefs are held at the end of any response to identify learnings and agree any opportunities for improvement. Debrief outcomes are communicated to all relevant stakeholders and partners and opportunities for improvement are communicated to stakeholders, partners and communities involved in the event.

Support from outside the Group

An emergency in Northland may require resources from other CDEM Groups, stakeholders and partners. Staff from other CDEM groups may be deployed into Northland to assist as required. The national NZ Emergency Management Assistance Team (EMAT) can be deployed into Northland to assist with an emergency response at short notice.

A major emergency in New Zealand may generate offers of international assistance or necessitate requests for international support from New Zealand. International agencies responding to emergencies in New Zealand will be coordinated by the National Controller through the National Crisis Management Centre (NCMC).

7.3 Response Action Plan

Objectives	Actions
Emergency responses are led and coordinated effectively	<ul style="list-style-type: none"> • Stakeholders and partners are adequately engaged during a response where CDEM is the lead agency • Technical and scientific experts are involved to ensure decision making in an emergency is supported appropriately for accurate hazard analysis • ECCs and EOCs operate effectively between stakeholders and partners across the region • Use CIMS to deliver a coordinated across agency response • Provide the appropriate response for the scale of the event
Northland communities are assisted during an emergency	<ul style="list-style-type: none"> • Community response groups are engaged and supported during response • Warnings are issued in a timely manner • Collaborate with the Network of Networks Advisory Group
An accurate and widely understood common operating picture is developed and maintained	<ul style="list-style-type: none"> • Robust protocols are used to facilitate the sharing of information during an emergency using a variety of communications platforms • GIS and other technology are utilised to enhance the level of situational awareness during a response
Recovery arrangements are implemented as soon as practicable following an emergency	<ul style="list-style-type: none"> • Monitor response actions to help predetermine recovery outcomes and to assist with the development of the recovery plan • Include recovery in response action planning • Identify the recovery team and structure during the response phase of an emergency



Recovery

This section introduces the planning arrangements, frameworks, structures and processes for helping people and communities recover from an emergency.



8.1 Overview and Principles

Recovery is defined as the coordinated efforts and processes used to bring about the immediate, medium and long-term holistic regeneration and enhancement of a community following an emergency. The Recovery process is about supporting people to rebuild their lives, restoring their emotional, social, economic and physical wellbeing as quickly as possible to assist with the functioning of the wider community.

Recovery is coordinated and planned to minimise the escalation of the impacts of an emergency and is more than simply building back infrastructure. In practice, recovery from emergencies is comprehensive, scalable, flexible, participatory and inclusive to meet the needs of the affected community.

Recovery from the impacts of an emergency may take days, weeks or months, or in some cases, continue over many years.

Challenges

Northland CDEM has identified the following challenges in relation to recovery planning:

- The need to build and seek continual improvement of capacity, capability, leadership and collaboration across partners, local government, agencies and communities
- To develop community understanding of recovery and the likely consequences from emergencies
- Identifying agency, partner and stakeholder roles and responsibilities, and the move to enhanced business as usual as quickly as possible in the recovery phase

Areas of Focus

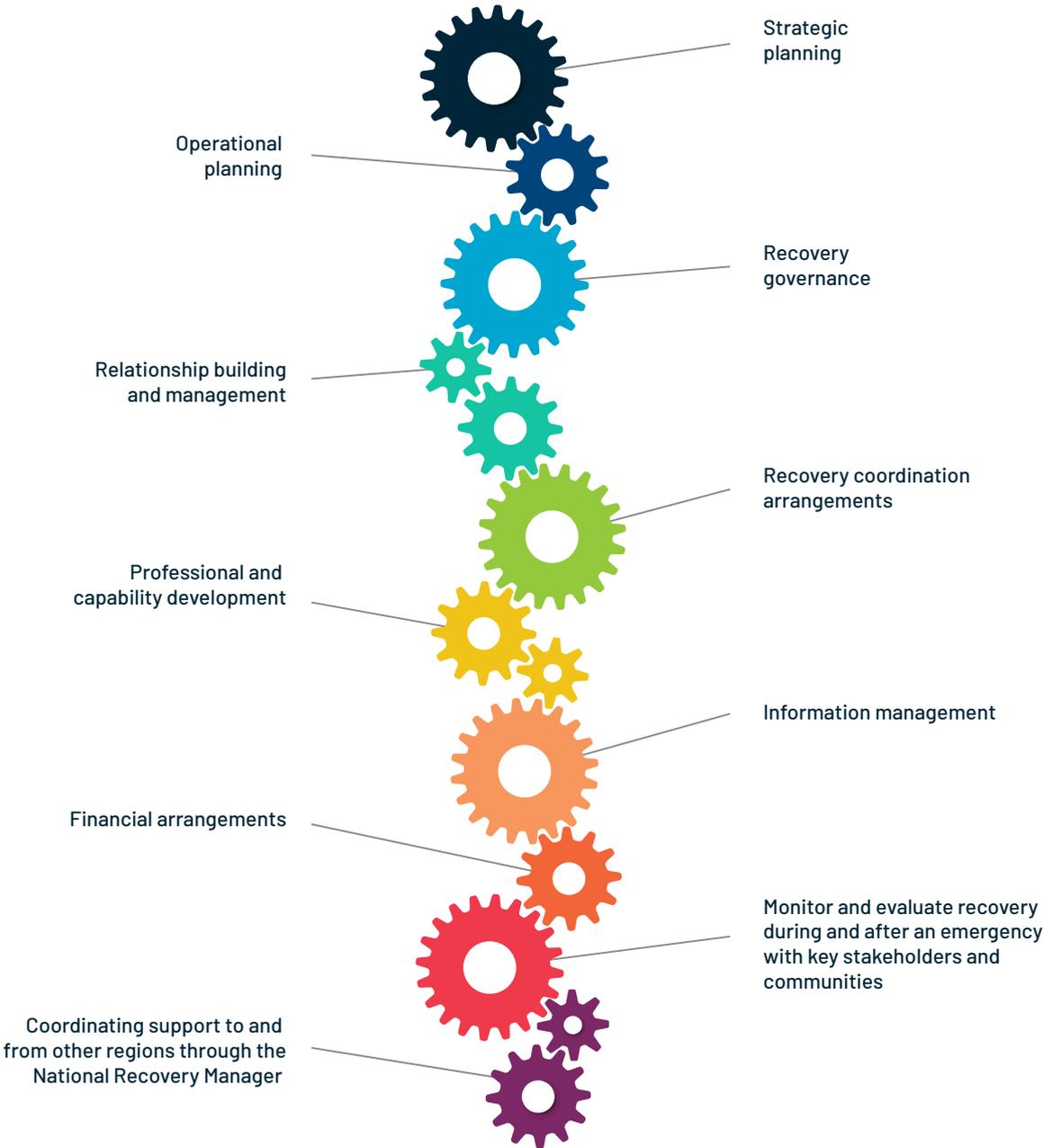
- Enhance collaboration among key partners and empower communities to grow capability and capacity to recovery from an emergency
- Foster community networks to ensure communities are well placed with recovery planning and awareness with comprehensive Marae preparedness and community response plans
- Support CDEM partners, stakeholders, agencies and communities through recovery to ensure recovery is understood, well managed and coordinated
- Promote resilience and support the growth of capacity and capability to enable strengthened recovery in the economic sector across Northland

8.2 Current Arrangements

8.2.1 Recovery Planning, Functions and Resourcing

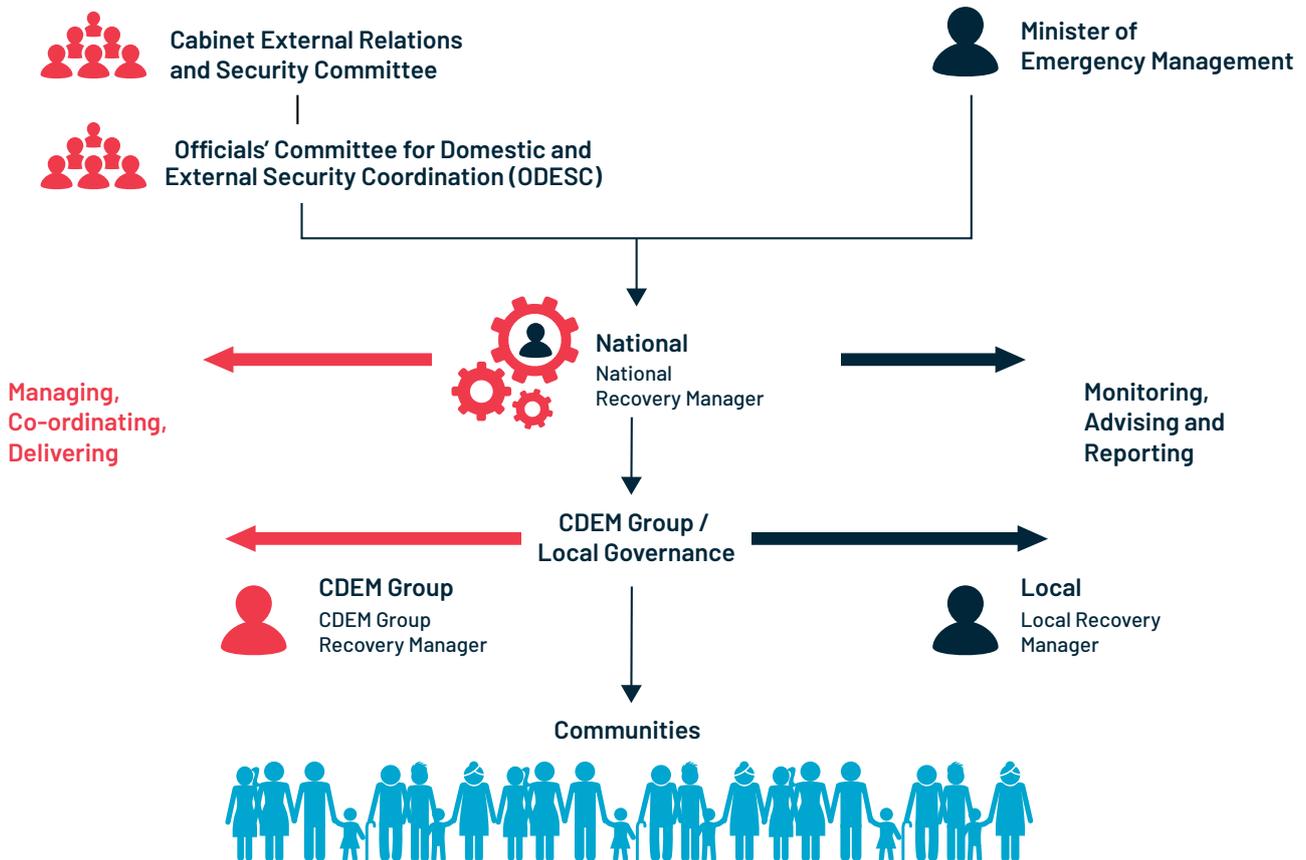
The Group Recovery Plan has been developed in alignment with the Recovery Preparedness and Management Director’s Guideline [DGL 24/20]. The recovery from emergencies and is supported by the appointment of Group Recovery staff.

Recovery functions coordinated by the Northland CDEM Group are pictured in the diagram below:



8.2.2 Recovery Structure

The national recovery management structure is demonstrated below, which includes the Northland CDEM Group:



The recovery management structure comprises the following:

- Recovery personnel at the local, group and national levels
- Recovery environments and task groups are established as required
- Recovery efforts are often coordinated regionally (or nationally) and delivered locally

The local, group and Recovery Managers operate as follows:

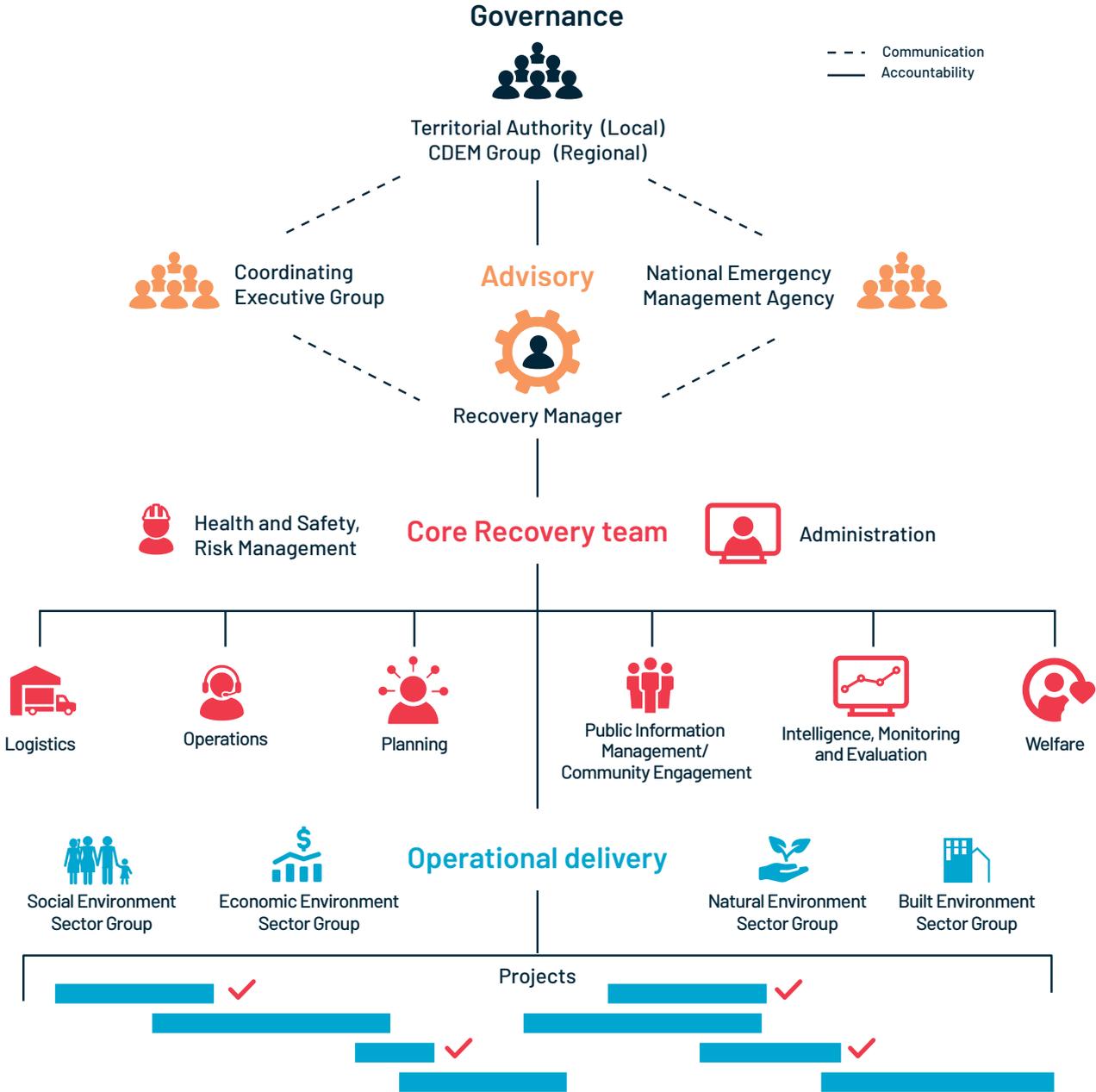
- The Local Recovery Manager reports to the Group Recovery Manager and sometimes directly to the National Recovery Manager

- The Group Recovery Manager liaises with Local and National Recovery Managers. The appointed Group Recovery Manager gives effect to Group coordination of recovery during and following an emergency to align with The Act, ss. 29-30A, and during business as usual aligning with Group requirements and the Recovery Preparedness and Management Director's Guideline [DGL 24/20]
- The Director of NEMA is responsible for coordinating the recovery process at a national level and reporting to Government. The Director fulfils this responsibility by appointment of the National Recovery Manager and where necessary the establishment of the National Recovery Office

The recovery arrangements will need to support administration, information management, public information, resource and financial management and coordination of government initiatives such as Enhanced Task Force Green through the Ministry of Social Development. The arrangements need to be flexible enough to allow the recovery arrangements to rapidly adjust to the specific nature and duration of the recovery from the emergency.

The Sector Groups (also known as Task Groups) provide support for specific sectors and play an important role in ensuring coordination of activities at local, group and national level. These are the four key task groups as shown, with Culture and Community overarching and not treated as a separate environment but embedded throughout each of the established environments. Projects may be required within the sector groups to facilitate specific recovery activities as shown:

Fundamental local and regional recovery management arrangements



8.2.3 Transition from Response to Recovery

Notice of a Transition Period

The Act allows for a notice of transition period to be given by authorised persons to assist with the recovery phase following an emergency event. The notice provides the Recovery Manager with access to specific emergency powers during a defined period in order to support the recovery.

The Recovery Manager commences recovery activities on the first day of the response phase to become familiar with the situation, liaise with the Controller as required, and make the necessary preparations to execute a smooth transfer from the response to the recovery phase of the emergency. During this time, the Controller continues to exercise the statutory power to direct and coordinate all resources provided, with the Recovery Manager focusing on preparation for the recovery task.

The transition to recovery is the process of ending the response phase and incorporates:

- The preparation of a response transition report by the Controller immediately prior to the termination of the response phase
- A transition briefing from the Controller to the Recovery Manager
- Public notification that the transition to recovery has commenced
- Consideration of the need to give notice of a transition period, and an authorised person giving notice if necessary
- Development of Recovery Action Plan(s) and exit strategy
- Provide situational updates as required

The Notice of Transition Period and Recovery Manager powers are explained in *Section 9 - Management and Governance*

“A Notice of Transition provides the Recovery Manager with access to statutory powers.”

8.2.4 Exit Strategy

An exit strategy is the planned withdrawal of formal recovery arrangements and incorporates long-term recovery back to business as usual functions for agencies, organisations and businesses. Careful consideration must be given to the continuation of services and support to the affected individuals, communities, businesses and responders. Developed early in recovery, an exit strategy encourages community empowerment and self-determination and allow for the recovery team to monitor and evaluate the recovery, identifying the appropriate time to formally exit the recovery arrangements.

8.2.5 Review and improvement

Debriefs and reviews of all phases of the recovery process are essential to capture lessons learnt and identify improvements with findings being widely shared as appropriate. Done both internally and with partners, stakeholders and agencies, the ability to review and improve is a high priority following an exit from recovery.



8.3 Recovery Action Plan

Objectives	Actions
Stakeholders and partners grow capability and capacity to recover from an emergency	<ul style="list-style-type: none"> • Participate in relevant working groups, forums and networks • Support district councils to engage local recovery managers • Support district councils to strengthen their knowledge of recovery to achieve best possible outcomes across the natural, built, economic and social/cultural environments • Roles and responsibilities are clearly identified • Stakeholders and partners plan to enable an enhanced level of business as usual
Communities and Marae undertake recovery planning	<ul style="list-style-type: none"> • Work with Whānau, Hapū, Iwi, Marae and the wider community to promote recovery awareness through local level planning
The economic sector across the region has capacity and capability to recover	<ul style="list-style-type: none"> • Foster the development of recovery understanding and awareness through engagement with key contacts • Maintain liaison and engagement with the economic sector • Provide recovery information, links to services and support to the economic sector

Management and Governance

This section introduces the management and governance arrangements for CDEM in Northland. It includes how CDEM will be delivered, key appointments, roles and responsibilities of CDEM Group, CEG members, the Group Emergency Management Office and funding arrangements.



9.1 Overview and Principles

In 2016, in response to the Minister of CDEM's request for the Emergency Management sector arrangements to be reviewed, a Technical Advisory Group (TAG) was formed. The formal findings and recommendations from the TAG review were released in 2017. The findings highlighted the management and governance of CDEM Groups in New Zealand to be a sound model as explicitly required under The Act but required strengthening. The evaluation highlighted the clear need to take a regional approach to CDEM, provide adequate funding and resourcing and Groups to be subject to stronger governance and accountability expectations of their performance. The Northland CDEM Group operates in a shared service model across all four councils in Northland.

The Northland CDEM Group Joint Standing Committee owns this Group Plan and holds accountability for CDEM in the region. The CEG oversees the implementation of this Group Plan via the Group Emergency Management Office and local CDEM Shared Services.

The Group Emergency Management Office is accountable to the CEG and maintains annual Group and Local work programmes which deliver the Group Plan objectives and goal in a consistent and coordinated manner.

The Northland CDEM Group Funding and financial management is transparent and equitable across its members. The members of the Northland CDEM Group and CEG are recorded in the agendas at each of the quarterly meetings.

Challenges

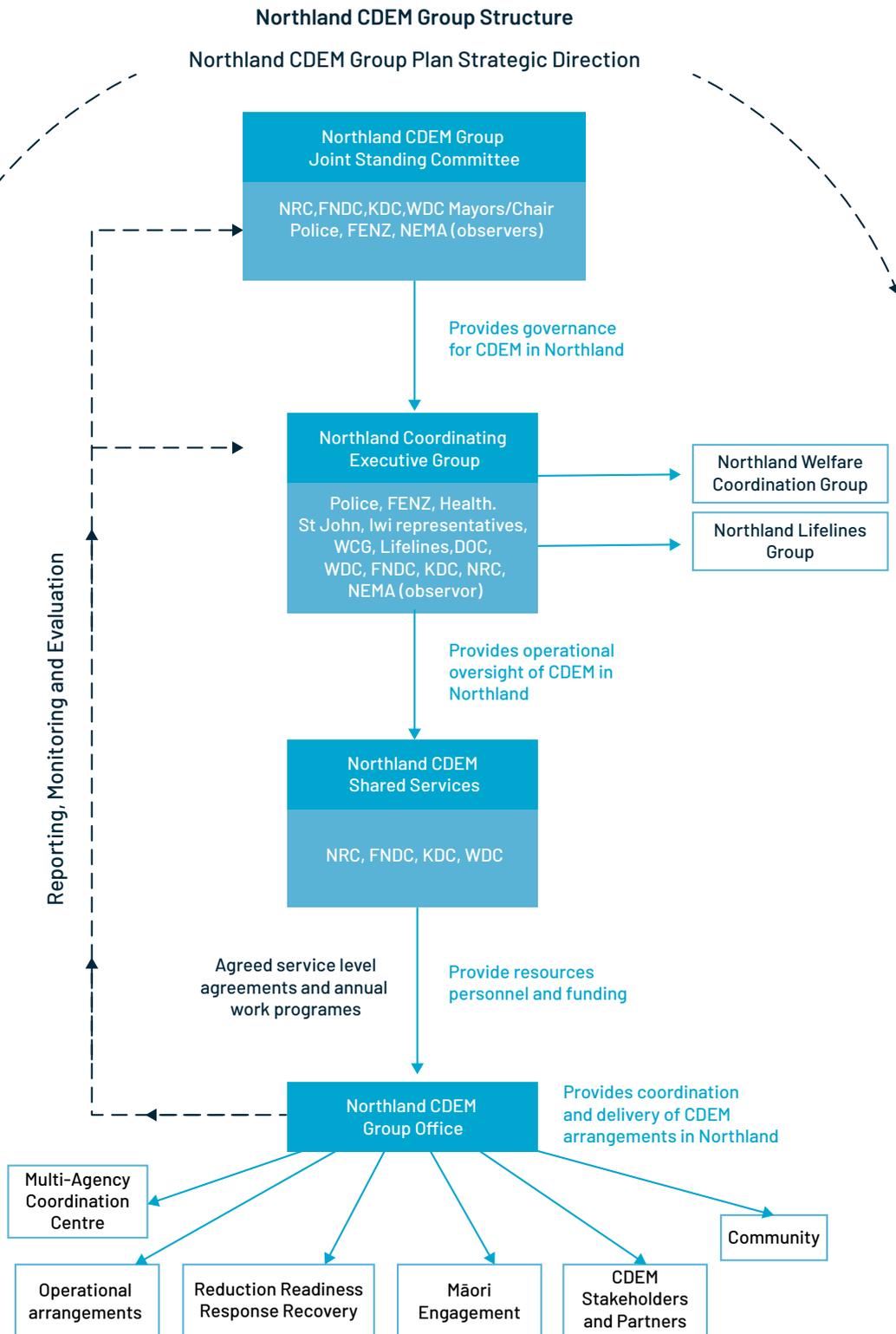
- Reliance on council long term plan priorities for CDEM funding allocations
- Maintaining the current engagement with Mayors and Chairs of local authorities on the Northland CDEM Group Joint Committee on future committees
- Accessing opportunities to contribute to shaping the establishment of the National Emergency Management Agency

Areas of Focus

- Maintain and strengthen CDEM Shared Services across the region
- Maintain engagement with governance representatives of local authorities and the quarterly meeting Joint Committee quorum
- Ensure a suitable level of representation is maintained within the CEG
- Develop and maintain engagement with Iwi partners

9.2 Current Arrangements

The structure of the Northland CDEM Group is shown below. The CDEM Group includes all CDEM stakeholders and partners, as identified in Appendix A.



9.2.1 CDEM Group

The Northland CDEM Group was constituted in March 2002 under The Act, s.12, as a Joint Standing Committee. This Committee comprises the Mayor or Chairperson (or their delegated representative) of the Group's three district councils and regional council. Each member also appoints an alternate representative to act in the absence of the appointed representative. All representatives have authority to vote and make decisions for their respective organisation without having to seek further approval. Representatives from Fire and Emergency New Zealand, NZ Police and NEMA are represented on the CDEM Group in an observer capacity.

The powers and obligations of members of the CDEM Group are covered in The Act, s.16. The Group has all the powers that are reasonably necessary advantageous to enable it to perform its functions, including the power to delegate any of its functions to members, the Group Controller, or any other person.

The functions of the Group are detailed in The Act, s. 17, and include risk management, CDEM planning, CDEM delivery, aiding other CDEM Groups and promoting and monitoring CDEM in the region.

The Northland CDEM Group is responsible for the conduct of the CDEM business in the Group. The CDEM Group will:

- Set the strategic direction of the Group via the Northland CDEM Group Plan
- Approve annual work programmes
- Monitor and report on the progress in implementing the work programmes
- Amend and approve the Northland CDEM Group Plan as required
- Appoint Controllers and Recovery Managers and delegate powers

9.2.2 Coordinating Executive Group (CEG)

The CEG is responsible to the CDEM Group for delivering CDEM arrangements. The CEG is made up of the statutory appointments of:

- The Chief Executive Officer, or their representative, from each member local authority
- A senior member of the the New Zealand Police
- A senior member of Fire and Emergency New Zealand
- The Chief Executive, or their representative, from the Northland District Health Board
- The Medical Officer of Health

In addition, the CDEM Group has appointed the following non-statutory members as full members and specialist advisors of the CEG:

- St John representative
- Welfare Coordination Group chairperson
- Northland Lifelines Group representative
- Department of Conservation representative
- Iwi partner representatives

The CEG has the following prescribed functions in The Act, s. 20(2):

- Providing advice to the CDEM Group and any subgroups or subcommittees
- Implementing, as appropriate, the decisions of the CDEM Group
- Overseeing the implementation, development, maintenance, monitoring, and evaluation of the CDEM Group Plan

Individual CEG members' responsibilities include:

- Ensuring effective liaison and communication on CDEM matters with their respective elected representative on the CDEM Group (where applicable)
- Facilitating the implementation of the Northland CDEM Group Plan within their respective organisations

9.2.3 Administrating authority

The Northland Regional Council is the administering authority for the Northland CDEM Group (The Act, s.23) and CEG.

The administrative and related services the Northland Regional Council provides include:

- Secretariat for the Northland CDEM Group and CEG (e.g. convening meetings, providing venues, organising agendas, providing minutes and catering)
- Accountant for CDEM Group finances and budgets
- Publishing the CDEM Group's work programme, budget and performance (once adopted)
- Entering contracts with service providers on behalf of the Group, including Shared Services and Service Level Agreements

9.2.4 CDEM Group Emergency Management Office

The CDEM Office coordinates and facilitates the 'day-to-day' planning and project work on behalf of the Northland CDEM Group and CEG and is responsible to the CEG. The functions of the Northland Group CDEM Office include:

- Advice and technical support to the CEG and the Northland CDEM Group
- Project coordination and management, including the ongoing development, implementation, monitoring and review of the Northland CDEM Group Plan and supporting documentation
- Delivery of CDEM Shared Service arrangements in respective local authorities
- Management of contracts entered on behalf of the Northland CDEM Group or CEG
- Management and administration of the Northland CDEM Group staff on behalf of the Group
- Providing emergency management training opportunities for CDEM Group members, CEG members, key stakeholders including the Northland Lifeline Utilities Group, Northland Welfare

Coordination Group, Iwi Partners, Emergency Services and the community

- Monitoring and responding to, the adverse effects of emergencies on behalf of the Northland CDEM Group and disseminating warnings to key stakeholders and the wider Northland community
- Maintaining the Group Emergency Coordination Centre (ECC) and supporting local authority Emergency Operations Centres (EOC) through agreed service level agreements
- Leading recovery operations on behalf of the Northland CDEM Group
- External liaison with the CDEM sector
- Representing the Northland CDEM Group on national bodies and projects
- The Northland CDEM Group Manager will coordinate Emergency Management personnel overseeing CDEM arrangements and are supported from within member councils by the relevant CEG representative to ensure that implementation of the annual work programme and objectives of the Group Plan are being achieved with best effect



9.2.5 CDEM Shared Services

In 2017 the Northland CDEM Group undertook a review of the Northland CDEM services. The Northland CDEM Group Joint Standing Committee resolved that the structure and delivery of CDEM services across each of the four Northland councils be through a fully integrated, strengthened shared service model, since this model provides the ability to deliver consistent, coordinated, effective and efficient CDEM services for Northland.

Each district council has a signed CDEM service level agreement with the Northland CDEM Group and the Northland Regional Council which documents which CDEM services, actions and responsibilities are agreed between the parties.

9.2.6 Delegated Authorities, Functions and Powers

Key Appointments

Although the Northland CDEM Group retains the responsibility for CDEM in the region there are several authorities, functions and powers that need to be delegated (The Act, ss. 18, 25-27, 29-30) to persons and/or positions as key appointments. Key appointments with delegated powers include Group Controllers/Local Controllers and a Group Recovery Manager.

Group Controller / Local Controller

The following details the powers of the Controller that are delegated to the Controller by the Northland CDEM Group under The Act:

- **General powers:** The Controller is delegated the authority to coordinate the activities (as are required to perform his/her duties) detailed in ss. 27-28 under the direction of the Controller
- **Power to require information:** The Controller is delegated the authority to require information to be provided under s. 76
- **Information to obtain a warrant:** The Controller is delegated the authority to provide the necessary information under oath for a warrant to be issued under s. 78

- **Receipt of information:** The Controller is delegated the authority to receive information seized under s. 81
- **Emergency Powers:** The Controller is delegated the authority to exercise all the emergency powers conferred on the Group by s. 85 and shall make reports on the actions undertaken at such intervals as are directed by the Chairperson of the Group. For the avoidance of doubt, the Controller has the specific emergency powers conferred on Controllers in ss. 86-92, 94

Recovery Manager

In accordance with The Act s. 29 the Northland CDEM Group has appointed a Group Recovery Manager.

The Group Recovery Manager must, during a local transition period, direct and coordinate activities (as detailed in The Act, s. 30A).

Powers are available to Recovery Managers during a notice of transition period (detailed in The Act, pt 5B). These powers can only be used if they meet three legal tests (as detailed in The Act, s. 94G(3)).

The action must, in the Recovery Manager's opinion, be:

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

Reporting: s. 94P covers reporting requirements in relation to any powers exercised under The Act.

Declarations and Powers of CDEM Groups

When an emergency happens, or has the potential to occur, a local State of Emergency may be declared under The Act, s. 68.

In accordance with The Act, s. 25(1) the CDEM Group must appoint at least one person as a person authorised to declare a state of local emergency for its area.

The Northland CDEM Group appoints the Chairperson of the CDEM Group as that person. In their absence, the

Deputy Chairperson or any other available member of the Northland CDEM Group can declare.

Other persons authorised to declare a state of local emergency are identified as per The Act, s. 25 as being:

- The Mayor of the territorial authority
- Or an elected member of that territorial authority designated to act on behalf of the Mayor

Any person authorised to declare a state of local emergency may also make a declaration to extend or terminate a state of emergency in accordance with The Act, ss. 71-73.

A state of emergency comes into force at the time and date that a declaration is made and expires seven days after coming into force unless terminated prior.

The powers of the CDEM Group during a local State of Emergency as stated in the The Act, ss. 85-91:

(1) While a state of emergency is in force in its area, a Civil Defence Emergency Management Group may—

a) carry out or require to be carried out all or any of the following:

- (i) works:
- (ii) clearing roads and other public places:
- (iii) removing or disposing of, or securing or otherwise making safe, dangerous structures and materials wherever they may be:

(b) provide for the rescue of endangered persons and their removal to areas of safety:

(c) set up first aid posts, and provide for first aid to be given to casualties and for their movement to hospital, other place of treatment, or areas of safety:

(d) provide for the relief of distress, including emergency food, clothing, and shelter:

(e) provide for the conservation and supply of food, fuel, and other essential supplies:

(f) prohibit or regulate land, air, and water traffic within

the area or district to the extent necessary to conduct civil defence emergency management:

(g) undertake emergency measures for the disposal of dead persons or animals if it is satisfied that the measures are urgently necessary in the interests of public health:

(h) disseminate information and advice to the public:

(i) Enter into arrangements, including employment arrangements, with any person for the purpose of carrying out civil defence emergency management as may be agreed:

(j) provide equipment, accommodation, and facilities for the exercise of any of the powers conferred by this subsection.

(2) A Civil Defence Emergency Management Group must not act inconsistently with any directions given by the Minister or the Director.

Section 86 – Evacuation of premises and places

Section 87 Entry on premises

Section 88 Closing roads and public places

Section 89 Removal of aircraft, vessels and vehicles etc.

Section 90 Requisitioning powers

Section 91 Power to give directions

Notice of Transition Period and Recovery Powers

In accordance with The Act, s. 25(1)(b), the CDEM Group must appoint at least one person as a person authorised to give notice of a local transition period for its area.

The Northland CDEM Group appoints the Chairperson of the CDEM Group as that person. In their absence, the Deputy Chairperson or any other available member of the Northland CDEM Group can give notice of a local transition period.

Other persons authorised to give notice of a local transition period are identified as per The Act, s. 25 as being:

- The Mayor of the territorial authority
- Or an elected member of that territorial authority designated to act on behalf of the Mayor

Any person authorised to declare a notice of local transition may also extend or terminate a transition period in accordance with The Act, pt 5A ss. 94D-94F

The powers of the Recovery Manager during transition as stated in **The Act, s. 94H General transition period powers**

A Recovery Manager may—

- a) carry out or require to be carried out all or any of the following:
 - (i) works:
 - (ii) clearing roads and other public places:
 - (iii) examining and marking any property, animal, or any other thing:
 - (iv) removing or disposing of, or securing or otherwise making safe, dangerous structures and materials wherever they may be:
- (b) provide for the conservation and supply of food, fuel, and other essential supplies:
- (c) disseminate information and advice to the public.

Other Key Appointments

In accordance with the requirements of the National CDEM Plan Order 2015 pt 5 s. 62(6)(b) the appointment of a suitably senior and experienced Group Welfare Manager should be made by CDEM Groups.

Group Welfare Manager

The Group Welfare Manager is responsible for leading the management of CDEM welfare programmes, operational arrangements and activities across the region including oversight of the Welfare Coordinating Group and associated networks.

9.3 Financial Arrangements

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

Programmed Activities: Administrative and related services under The Act s. 24 and annual work programmes

Emergency Expenditure: Expenditure incurred by the Group in the lead up to, during and immediately after a CDEM emergency response (e.g. reimbursement for cost of specialist advice)

“Four Northland councils provide funding for CDEM arrangements through shared service agreements.”

Programmed Activities

The Group is responsible for funding:

- Administrative and related services under The Act, s. 24
- Agreed annual work programmes

Apart from any agreed direct contribution as its share of Group costs, each district council member of the Group will be responsible for:

- Funding the reduction, readiness, response and recovery arrangements required in its district
- Funding and resourcing the implementation of Local CDEM Work Programmes
- Meeting the costs of its representation on the Northland CDEM Group and CEG

All funds allocated by the Northland Regional Council and three district councils to CDEM work programmes are held and managed by the Northland Regional Council through the shared service arrangements.

Unless agreed otherwise, the costs of completing any specific agency actions as outlined in the annual work plan will be met by the district council, stakeholder or partner concerned.

Funding amounts allocated to the Northland CDEM Group to deliver CDEM projects, activities and work programmes can be found in the regional and district council long-term and annual plans.

9.3.1 Expenditure during a Civil Defence Emergency

In the lead up to, during and immediately after a CDEM emergency response (not a declared emergency) the Northland CDEM Group incur costs relating to its activities. Under the National CDEM Plan Order 2015 s. 162, certain costs can be reimbursed through NEMA, other costs will be covered by the Northland CDEM Group funds.

The Northland CDEM Group can access special central Government financial appropriations to support CDEM Group responses when available.

In the lead up to a declared emergency

The Group is responsible for funding:

- All costs associated with the resourcing, activation and operation of the Northland Group ECC
- 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 attend meetings to provide specialist technical advice

Local authorities are responsible for meeting all costs associated with their emergency response operations, including staff, facilities and resources.

During a declared emergency

The Group is responsible for funding as per the lead up to a declared emergency.

Local authorities take full first line responsibility for dealing with the impact of disaster in their geographic and functional areas of responsibility. This includes the prior provision of the necessary physical and financial resources needed for response and recovery.

Each local authority is to be responsible for meeting all emergency expenditure incurred in its district or under its jurisdiction, and arising out of the use of its resources and services under the control of either a local Controller (directed to carry out any of the functions or duties of, or delegated to by, the Group Controller), or the Group Controller.

A clear record of who authorises any expenditure, its purpose etc. is required to be kept.

The Group Controller will ensure all costs are properly accounted for.



9.3.2 Recovering Costs in a Civil Defence Emergency

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

Claims for Government assistance are to be made by the organisation incurring the expenditure. When a response involves more than one district, the CDEM Group will coordinate and check respective local authority claims, independently prepare a claim for agreed Group costs, and submit the consolidated application. Any reimbursement by central Government will be distributed to the respective local authority.

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

9.3.3 Recovery Financial Arrangements

During the transition from response to recovery from any emergency, response expenditure is finalised. Under the control of the recovery manager, recovery expenditure tracking is commenced.

A clear record of who authorises any expenditure, its purpose etc. is required to be kept to support claims for Government subsidies and repayments. The Recovery Manager will ensure all costs are properly accounted for.

The Recovery Manager will recommend to the CDEM Group which recovery costs could reasonably be met by the Group, and which costs could be recovered from the Government. Claims for Government assistance are to be made by the organisation incurring the expenditure, or in the case where there are agreed Group costs, by the CDEM Group. Any central Government involvement will be in accordance with the principles and conditions set out the National CDEM Plan Order 2015, pt 10 and the Guide to the

National CDEM Plan, s. 33.

If it becomes apparent that there will be a substantial number of people suffering financial hardship and more immediate relief is required, Emergency Relief Funds may be established and administered by the Northland CDEM Group by agreement.

9.3.4 Cost Apportionment

For those costs agreed to be met by the Group, the cost will be apportioned equally between the four local authorities (3 District Councils and Regional Council).

In an emergency, in the interim, costs will lie where they fall, or where a territorial authority requests a resource, the cost will lie with the relevant territorial authority or where the Group Controller directs a resource, the cost will be apportioned by agreed negotiation.

9.3.5 Cooperation with other CDEM Groups

Flexible support agreements

The Northland CDEM Group will support other CDEM Groups in New Zealand.

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

The Group agrees to consult on priorities for resources, which includes without limitation, equipment, material, services and personnel. Competing demands for resources are always likely to be evident, particularly where the emergency affects both parties, and active consultation to resolve competing demands and achieve optimum resources allocation will have precedence over all other mutual support.

9.3.6 Collaborative Planning

The Northland CDEM Group will take all opportunities to share and coordinate planning and other activities for mutual benefit, and will maintain contact with other CDEM Groups, share plans, data and arrangements to facilitate a common approach.

9.4 Management and Governance Action Plan

Objectives	Actions
Transparent and equitable funding arrangements are in place to deliver CDEM work programmes	<ul style="list-style-type: none"> • Allocate appropriate funds to relevant work programme priorities • Long-Term Plan funded projects are delivered on-time
Northland CDEM Group Plans, shared services and work programmes are nationally, regionally and locally aligned, agreed and supported	<ul style="list-style-type: none"> • Northland CDEM Group Office work programme is aligned with National objectives and CDEM Group Plan objectives and priorities • Share Service level agreements are reviewed annually, and local CDEM work programmes aligned with the CDEM Group work programme • CDEM funding agreements are reviewed and updated annually
Strong leadership and commitment to CDEM is demonstrated	<ul style="list-style-type: none"> • Continued engagement of District Council Mayors and Regional Council Chair in governance on the Northland CDEM Group Joint Standing Committee • Strengthen engagement and support for CDEM arrangements from Senior Management across all four Northland councils and on the Northland CEG • Political and executive attendance to CDEM professional development opportunities are encouraged
Effective CDEM organisational structures are in place	<ul style="list-style-type: none"> • CDEM Group structures are aligned with requirements of The Act, the National CDEM Plan Order 2015 and best practice guidelines • The CDEM Group Office reports quarterly to CEG and CDEM Group meetings • Ensure appropriate seniority level of attendance at both the Northland Lifelines and Northland Welfare Coordination Group meetings • Induct newly appointed elected members into their role within CDEM

Monitoring and Evaluation

This section gives an overview of monitoring and evaluation of the CDEM Group activities. It sets out the criteria and methods for measuring achievement of plan objectives and a process for plan reviews. The means of monitoring legislative compliance is also outlined.

10.1 Overview and Principles

Monitoring and evaluation allows comparisons between actual and desired states and ongoing analysis and improvement of processes and outcomes. Monitoring involves tracking progress against a plan or performance against standards, generally using quantitative data. Evaluation is about measuring effectiveness; it compares what is happening against what was intended by the plan (the goal, objectives and actions) and interprets the reasons for any differences.

The Act requirements of CDEM Groups for monitoring and evaluation are:

- Section 17(1)(h)

Monitor and report on compliance within its area with this Act and legislative provisions relevant to the purpose of this Act

- Section 37(1)

A CDEM Group must ensure that its actions in exercising or performing its functions, duties, and powers under this Act are not inconsistent with any national CDEM strategy that is for the time being in force

The CDEM Group's member activities are planned, monitored and effective in achieving its objectives, taking a continuous improvement approach and encouraging reviews, debriefs and corrective action plans. Regular monitoring and reporting of compliance with The Act are carried out.

Challenges

- Establishing a simple and efficient reporting tool and programme
- Time required to monitor and evaluate progress and the achievement of objectives
- Skills required to enable accurate evaluations

Areas of Focus

- Group and local work programmes are aligned with this CDEM Plan and regularly monitored and reviewed
- CDEM performance outcomes will be established, monitored and reported
- Development of a group level reporting mechanism that enables a pragmatic overview of the plan deliverables is a desirable outcome
- Post emergency response debriefs will be carried out to identify opportunities for improvement and successes
(See Section 7 – Response for more information)

10.2 Current Arrangements

CDEM Plan Monitoring

Annual Group and Local work programmes are developed to support the objectives of this Plan. The work programme is developed in consultation with CEG and is approved by the CDEM Group. Work programmes are also included in CDEM Service Level Agreements with each of the member councils.

Quarterly reports to CEG and the CDEM Group are provided on progress against the Annual Work Programme. This provides executive oversight for CEG members and ensures public accountability through the elected representatives respectively. An annual report will be provided to the CDEM Group and CEG on progress against these detailed work programmes. Northland CDEM office staff will monitor progress monthly and provide additional reports to CEG if progress issues need to be addressed.

A review carried out in 2017, in accordance with the Local Government Act 2002, s. 17A, highlighted opportunities for improvement for CDEM in Northland.

Northland CDEM will undertake these reviews as required to ensure best practice is being maintained.

The Long-term plan funding arrangements for Northland CDEM across the member councils and the careful management of associated activities is also a mechanism to monitor and evaluate CDEM.

10.2.1 External Monitoring/Evaluation Processes

Under The Act, s. 8, the Director of Civil Defence Emergency Management has a function to “monitor the performance of CDEM Groups and persons who have responsibilities under this legislation”. This will be undertaken primarily via NEMA.

10.3 Monitoring and Evaluation Action Plan

Objectives	Actions
CDEM delivery aligns with the Northland CDEM Group Plan	<ul style="list-style-type: none"> Local annual work programmes are developed in consultation with local councils Group and Local annual work programmes are approved by the Northland CEG each year Reporting on work programmes progress is undertaken at each CEG and CDEM Group quarterly meeting



Appendix A: CDEM Stakeholders and Partners

This Plan has primarily been developed for the CDEM sector, key stakeholders and partners as defined below:

- Local authorities in Northland – to coordinate and integrate all aspects of their hazards and emergency management functions and activities under The Act and other legislation. Including works and services providers which have a local authority emergency management role
- Emergency services and community welfare organisations and services – in support of their readiness, response and recovery planning and delivery
- Lifeline utilities (including local authority services) – to link with their strategic risk reduction and operational planning for emergency readiness, response and recovery of services
- Government departments – to integrate national planning and service delivery in support of local CDEM management

Other Stakeholders and Partners

Iwi organisations and groups
 Whānau, Hapū, Iwi and Marae
 Volunteer organisations
 Media agencies
 Insurance sector
 Business sector
 Neighbouring CDEM Groups
 Scientific/Technical associations and advisors
 Professional associations
 Private hospitals and healthcare
 Education sector
 Tourism sector
 Residents groups
 Community boards
 Banking sector
 Food/retail sector

Appendix B: Risk Assessment Process

Risk Analysis

Northland's hazards have been assessed using the risk assessment matrix below.

Risk Assessment Matrix

Likelihood (that the risk will occur in next ten years)	Consequence of the risk occurring (see consequence table below)				
	1	2	3	4	5
	Insignificant	Minor	Moderate	Major	Catastrophic
A: Almost Certain (more than 1:10 year probability)	M	H	VH	E	E
B: Likely (probability between 10-90 year occurrence)	L	M	H	VH	E
C: Possible (probability between 100-500 year occurrence)	L	M	M	H	VH
D: Unlikely (probability between 500-2000 year occurrence)	VL	L	M	H	VH
E: Rare (>2000 year event probability)	VL	VL	L	M	H

Consequence (Seriousness) Rating System

Level	Descriptor	Detail description
1	Insignificant	No injuries, little or no damage, low financial loss.
2	Minor	First aid treatment, minor building damage, medium financial loss.
3	Moderate	Medical treatment required, moderate building and infrastructure damage, high financial loss.
4	Major	Extensive injuries, high level of building and infrastructure damage, major financial loss.
5	Catastrophic	Deaths, most buildings extensively damaged and major infrastructural failure, huge financial loss.

For further details regarding the Risk Assessment process refer to **AS/NZS ISO 31000:2009**

Note: There are two versions of the risk analysis template referred to in the CDEM Group Planning Director's Guideline [DGL 09/18] Appendix C i.e. simplified and detailed. The simplified risk analysis has been used in this plan.

Appendix C: Hazard Summaries



Localised heavy rain/ flooding

River flooding as a result of sustained or short duration, high-intensity rainfall is the most frequent and widespread hazard throughout the region. Thunderstorms generally have their worst impact in a localised area less than 100sqkm. They are less predictable than larger weather fronts.

The high flood risk in Northland arises from exposure to intense weather system and a topography which sees rapid run-off from a steep terrain draining to flat areas where flood waters recede slowly, exacerbated by tidal lower reaches. Flooding damage is often worsened by large amounts of silt and debris in the floodwaters and land slips are also a frequent consequence of rain in Northland.



Severe Widespread Heavy Storm

Large storm systems can pass over Northland in both summer and winter months. In summer months, tropical cyclones track south from their origin in the tropics. They generally lose some of their ferocity and are down-graded to tropical depressions or mid-latitude storms by the time they reach New Zealand waters. Longer duration sustained rainfall tends to produce larger floods in the region's bigger catchments. The hourly rainfall intensities associated with these events are generally lower than from localised thunderstorm events.

These weather systems often cause flooding, land slips, wind damage to housing, orchards and forestry plantations, coastal erosion with elevated tides and storm surge and damage to Northland's infrastructure with widespread power and phone outages, road closures, bridge damage and water and sewage disruptions.

Storms can be accompanied by temporary elevation in sea level of up to 1 m above the tide level which presents a significant risk to low lying coastal areas. Storm surges are particularly damaging when they combine with high tides (especially a high spring tide), storm waves and elevated river levels. Coastal storm surge has the potential to cause damage along most of Northland's east and west coasts.



Tsunami

Tsunami are typically generated as a result of displacement of ocean water due to landslides, earthquakes, volcanic eruptions and bolide impacts. Tsunami can be categorised as:

- Distant source; > 3 hours travel time to NZ from sources such as South America and, to a lesser extent, Cascadia (North America) and the Aleutian Islands
- Regional source; 1-3 hours travel time to NZ from sources such as the Solomon Islands, New Hebrides and the Tonga-Kermadec trench
- Local Source; < 60 minutes travel time to the nearest NZ coast. Activity on the southern end of the Tonga-Kermadec trench can cause tsunami to reach the Northland coast within 1 hour. Other sources can include submarine landslides or a slump in the continental shelf north of Northland



Earthquake

Earthquakes are described by both their magnitude and their intensity:

- Earthquake magnitude is a measure of the energy released during an earthquake, or its 'size' and is measured using the Richter scale
- Earthquake intensity describes how much ground shaking occurred at a location; in NZ measured by the Modified Mercalli (MM) intensity scale which is a descriptive scale from 1 to 12 based on the effects of the earthquake on the ground, humans, objects of nature and man-made structures

As well as ground-shaking, earthquakes can result in fault rupture, liquefaction, landslides and tsunamis. Northland has the lowest earthquake risk in NZ – earthquakes are generally small in magnitude and are seldom felt.



Volcano

Most of New Zealand's volcanic activity is associated with the subduction of the Pacific Plate under the Australian Plate which produces many small volcanoes (0.1-1.0km³), which erupt only once, every hundreds to thousands of years apart.

Although there are no currently active volcanoes in Northland, there has been volcanic activity in Northland's geological past with the most recent being at the Puhipuhi-Whangārei and Kaikohe-Bay of Islands volcanic fields.

Northland could be affected by either local or distant volcanic activity.



Wildfire

Wildfires are typically started by people either deliberately or unintentionally, such as by land clearing burn-off or back yard rubbish disposal which gets out of control. Fire is of higher risk in dry-condition summer months when there are also more people visiting the region.

Some areas of Northland are more susceptible to wildfire because of hilly terrain with steep slopes contributing to fire spread, low rainfall and an abundance of combustible vegetation and forestry. Special risk areas include but are not limited to DOC Estate, Ngāwhā, Ahipara, Ōpua, Paihia, Kaimaumau, Poutō, Karikari, Te Aupōuri Forest, Inner Islands Bay of Islands, Outer Islands (Three Kings) and Cape Rēinga. The reason these areas are considered special risk are due to high fuel loading, large urban rural interface and high economic and biodiversity values.



Droughts

A drought can be defined as an:

- 'agricultural drought' where there is soil moisture deficit which impacts on agricultural and horticultural industries, and/or
- 'water supply' drought which results in a water supply shortage and water supplies for fire suppression in both the urban and rural sectors requires Fire and Emergency New Zealand to consider tactical responses during restricted and prohibited fire seasons

Dry periods in Northland normally occur for 3-4 months from November/December to March/April and are influenced by El Niño cycles and the Interdecadal Pacific Oscillation (IPO).

Northland experiences two types of drought, regional and localised drought.

Predicted increase in drought risk is highest for the East and West coasts and Southern inland areas of Northland. During drought conditions fuels for wildfires, such as grasses and pine plantations, dry out and become more flammable, particularly in areas of urban and rural interface which has implications for Fire and Emergency New Zealand and other emergency responders.

 <p>Infrastructure failure</p>	<p>Many of the potential causes of failure to infrastructure are caused by natural hazards. However, there is also the risk of some type of internal system failure, such as technology failure, fire at a critical facility, human operational error. The electricity and fuel sectors are most vulnerable to single points of failure that could potentially affect the whole region. By contrast, the water supply networks are more dispersed and internal system failures are likely to have only localised impacts on individual town water supply systems.</p>
 <p>Hazardous substance spill</p>	<p>Many hazardous substances are stored, transported and to a lesser extent manufactured in Northland. This creates the potential for an unplanned or uncontrolled release of a hazardous substance resulting in large explosions or toxic gas plumes.</p> <p>Most incidents are dealt with by Fire and Emergency New Zealand and Regional Council staff. Of potential relevance to CDEM would be a major hazardous substance release. Refining New Zealand stores, refines and transports New Zealand's largest volumes of hazardous chemicals, including fuel through a 170km pipeline from Marsden Point to Auckland.</p>
 <p>Major transport accident - marine</p>	<p>Most transport accidents can be routinely dealt with by emergency services.</p> <p>The types of event requiring CDEM involvement could possibly be a major marine incident. There are many cruise ships in Northland coastal waters.</p>
 <p>Criminal Act/terrorism</p>	<p>Acts of terrorism can result in death, injury, damage to property and infrastructure. In Northland the most significant act of terrorism would be an attack on a key infrastructure asset such as Refining NZ or a substation.</p> <p>A large-scale terrorism act, such as the introduction of a disease-bearing organism could result in an epidemic or pandemic and devastate the New Zealand economy.</p>
 <p>Human pandemic</p>	<p>Infectious disease pandemics are characterised by the global spread of a new type of virus that can cause unusually high rates of illness and mortality for an extended period. The 2019 Coronavirus has demonstrated how quickly modern transportation can facilitate the spread of a disease.</p> <p>Pandemics have the potential to manifest as a loss of human capability. They affect the ability of society and the economy to function normally and can indirectly lead to a subsequent deterioration of all services. The impacts occur at a local, regional, national and international level with assistance unlikely to be available outside affected areas. A Pandemic will require an All of Government response.</p> <p>An epidemic can severely affect one or more regions but would possibly not require an all of Government response but may require the assistance of the CDEM Group.</p> <p>A large-scale terrorism act, such as the introduction of a disease-bearing organism could result in an epidemic or pandemic and devastate the New Zealand economy.</p>



Animal/Plant disease and Pests

Animal and plant diseases and pests pose several threats to New Zealand as they can lead to a reduction in primary economic productivity, an increase in pest control cost and exposure for animal handlers. Northland is particularly vulnerable because of its dependence on agriculture.

Animal/plant diseases and pest outbreaks may require an All of Government response and potentially supported by CDEM Groups.



Cyber attack

New Zealand organisations and businesses are facing increasing threat of cyber attack.

Recent cyber attacks in New Zealand has included breaches of security to the Metservice, Westpac, Radio New Zealand, New Zealand Stock Exchange, Waikato DHB and the Reserve Bank of New Zealand.

Ransomware appears to be an emerging threat, used by criminals to lock up systems and data and then demand a ransom in return for their release.

The most common causes of data breaches are weak or stolen credentials which requires all users to protect their digital systems and use two-factor authentication when logging into an online account.

Cyber attack appears to be for financial gain but in some instances could have downstream affects (i.e. a cyberattack on a hospital could directly affect the health of patients).



Supply chain disruption

During an emergency, transport links must be maintained to connect communities.

COVID-19 has exposed that both New Zealand and global supply chains including both imports and exports and supply of goods to the end user are vulnerable and at potential risk when New Zealand's connectivity has been affected.

The connections provided by the aviation and maritime sectors are also an important enabler of New Zealand's economic and social wellbeing. These connections underpin the country's international trade in goods and services and link New Zealanders to the world.

Appendix D: CIMS Roles and Responsibilities

The New Zealand Coordinated Incident Management System (CIMS) roles and responsibilities:

Function	Colour	Responsibilities
Control	White	Controls and coordinates the response
	Red	Controller's Support
Safety	Green	Advises on measures to minimise risks to response personnel
Intelligence	Dark Blue	Collects and analyses information and produces intelligence related to context, impacts, consequences and forecasts
Planning	Pink	Plans for response activities and resource needs
Operations	Orange	Tasks, coordinates and tracks execution of the Action Plan
Logistics	Yellow	Provides personnel, equipment, supplies, facilities and services to support response activities
Public Information Management	Purple	Provides and delivers messages to the public and liaises with the impacted community. Develops messaging for Governance when Strategic Communications is not activated
Welfare	Light Blue	Ensures planned, coordinated and effective delivery of welfare services to affect individuals, families/whānau and communities, including animals
Recovery	Grey	Starts the recovery management process during the initial response phase and ensures the recovery process is integrated with the response

Appendix E: Emergency Classifications

The Coordinated Incident Management System identifies four incident classifications that apply at any response level. Below are the categories and descriptors for each level.

		Severity			
		1 Minor	2 Moderate	3 Major	4 Severe
Response Level	National (N)	N1 A minor national level response	N2 A moderate national level response	N3 A major national level response	N4 A severe national level response
	Regional (R)	R1 A minor regional level response	R2 A moderate regional level response	R3 A major regional level response	R4 A severe regional level response
	Local (L)	L1 A minor local level response	L2 A moderate local level response	L3 A major local level response	L4 A severe local level response
	Incident (In)	In1 A minor Incident level response	In2 A moderate Incident level response	In3 A major Incident level response	In4 A severe Incident level response

		Severity				
		Examples of aspects to be considered	1 Minor	2 Moderate	3 Major	4 Severe
Category	Consequences/ impacts	Health and life, infrastructure, culture, community, Treaty obligations, reputation, trade, economy, environment, shelter and accommodations, recovery.	A small number of population in the area are / would be / could be impacted	Some of the population in the area are / would be / could be impacted	Many of the population in the area are / would be / could be impacted	A majority of the population in the area are / would be / could be impacted
	Resources	Capacity and capability to manage (e.g. availability of technical expertise and resources, responders) and finances available.	Manageable within available resource and capacity	Requires some allocation of resource	Resource limits and capacity are full	Resource limits and capacity are exceeded
	Public, political and media interest	Degree of expected public, political and media interest (i.e. local interest only, through to global interest), and at what level it should be managed.	Minimal to no interest Routinely managed	Some degree of interest Senior leadership and executives are engaged	Significant degree of interest Elected officials and ministers are engaged	Global interest Elected officials and ministers are engaged
	Response and recovery characteristics	Containment, stability, location, spread, number of entities involved, urgency, novelty (e.g. a new event, agencies working with unfamiliar partners etc.), disruption, decision required, timeframe / expected duration, cost.	Familiar/routine/predictable Known solutions to familiar/routine/predictable problems	Mostly familiar/routine/predictable with some degree of irregularity Known solutions to known but irregular problems	Mostly irregular with some degree of familiarity and predictability Mostly known solutions to irregular and possibly unknown problems	Unfamiliar/unprecedented/unpredictable/ Unknown solutions to unknown problems



