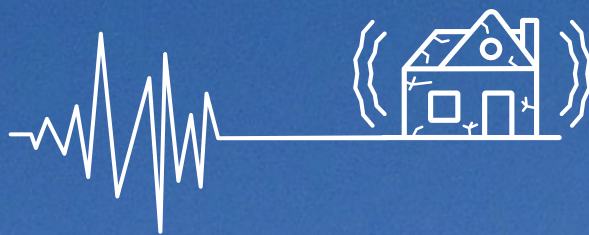


OTAGO CIVIL DEFENCE  
& EMERGENCY MANAGEMENT

# GROUP PLAN



2018 - 2028



**Emergency  
Management Otago**

Te Rākau Whakamarumarū Ōtākou



# OTAGO CDEM GROUP:

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Otago is a region of outstanding scenery with a diverse and a variable climate. It is proudly called home by approximately 229,200 people who enjoy the many opportunities available for work and recreation. We also host a large number of visitors to our wonderful region every year.

However, our diverse landscapes have many natural hazards that we need to be aware of and prepared for. Recent earthquakes, fires and floods have reminded us how devastating natural hazards can be.

Otago CDEM Group will ensure emergency management is planned and conducted on a regional basis and provides the six Otago councils and our emergency service partners the ability to coordinate and efficiently deliver our Civil Defence Emergency Management work programmes across the 4Rs (Reduction, Readiness, Response and Recovery) to ensure our communities are well prepared for an emergency. EMO will continually review progress with implementation during the life of the plan.

This plan focuses on ensuring enhanced community awareness, preparedness and participation in civil defence emergency management. We are building and encouraging the social networks that provide the support and knowledge necessary to assist each other and sustain our communities through an emergency. This will result in greater resilience in our diverse communities and assist with the recovery following an emergency.

I would like to thank all those who have been involved with the plan review. Achieving success will require the coordinated efforts of all organisations involved in emergency management, and the enthusiastic support of the community.



**STEPHEN WOODHEAD.**

*Chairman, Otago Emergency Management Group.*

*This Plan became operative on [DATE OF ADOPTION BY JOINT COMMITTEE], and replaces the previous Otago Civil Defence Emergency Group Plan 2017*

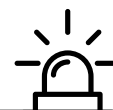
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# WHO ARE THE OTAGO CIVIL DEFENCE AND EMERGENCY MANAGEMENT GROUP?



The Otago Civil Defence Emergency Management Group (Otago CDEM Group) was established under The Act 2002 (henceforth referred to as The Act). The Act requires every regional council and every territorial authority within that region to unite to establish a Civil Defence Emergency Management Group (CDEM Group).

## MEMBERS OF THE OTAGO CDEM GROUP ARE (FIGURE 1: PAGE 5):

- Central Otago District Council
- Clutha District Council
- Dunedin City Council
- Otago Regional Council
- Queenstown Lakes District Council
- Waitaki District Council

# WHY DO WE HAVE CIVIL DEFENCE EMERGENCY MANAGEMENT?



As a country and region, we face events that impact on our communities. Flooding, snow storms, earthquakes, landslides, tsunamis, plant and animal diseases, oil spills, infrastructure failures, and pandemics are just some of the hazards that present risks for Otago.

Individuals and members of the community are all responsible for their own safety and security. People need to be able to take care of themselves and each other as much as possible when lives are disrupted by emergency events. However, despite taking action to manage risks, individuals and communities can still be overwhelmed by emergencies. The role of Otago CDEM is to take an integrated approach to emergency management, based on the national principles of the 4Rs (Reduction, Readiness, Response and Recovery). (Refer page 10)

## WHY THE OTAGO GROUP PLAN IS A TEN-YEAR PLAN

This Otago CDEM Group Plan meets a statutory requirement of the Civil Defence Emergency Management Act (s48). The Act requires that Group Plans must not be inconsistent with the current National Disaster Resilience Strategy (2019) and the National CDEM Plan (2015). To align with all local authorities' long-term plans, we have established a ten-year planning cycle with three-yearly reviews. Otago CDEM Group has closely aligned the Otago CDEM Group plan 2018-2028, and the activities identified to deliver it, to be compatible with the National Disaster Resilience Strategy 2019. All the appendices referred to within this document are separate programmes of work, plans, processes, or policies. They provide further detail, clarity, and legally required information to support this plan and are accessed through appendices and website references documented at the end of this plan.

## BACKGROUND TO THE PLAN

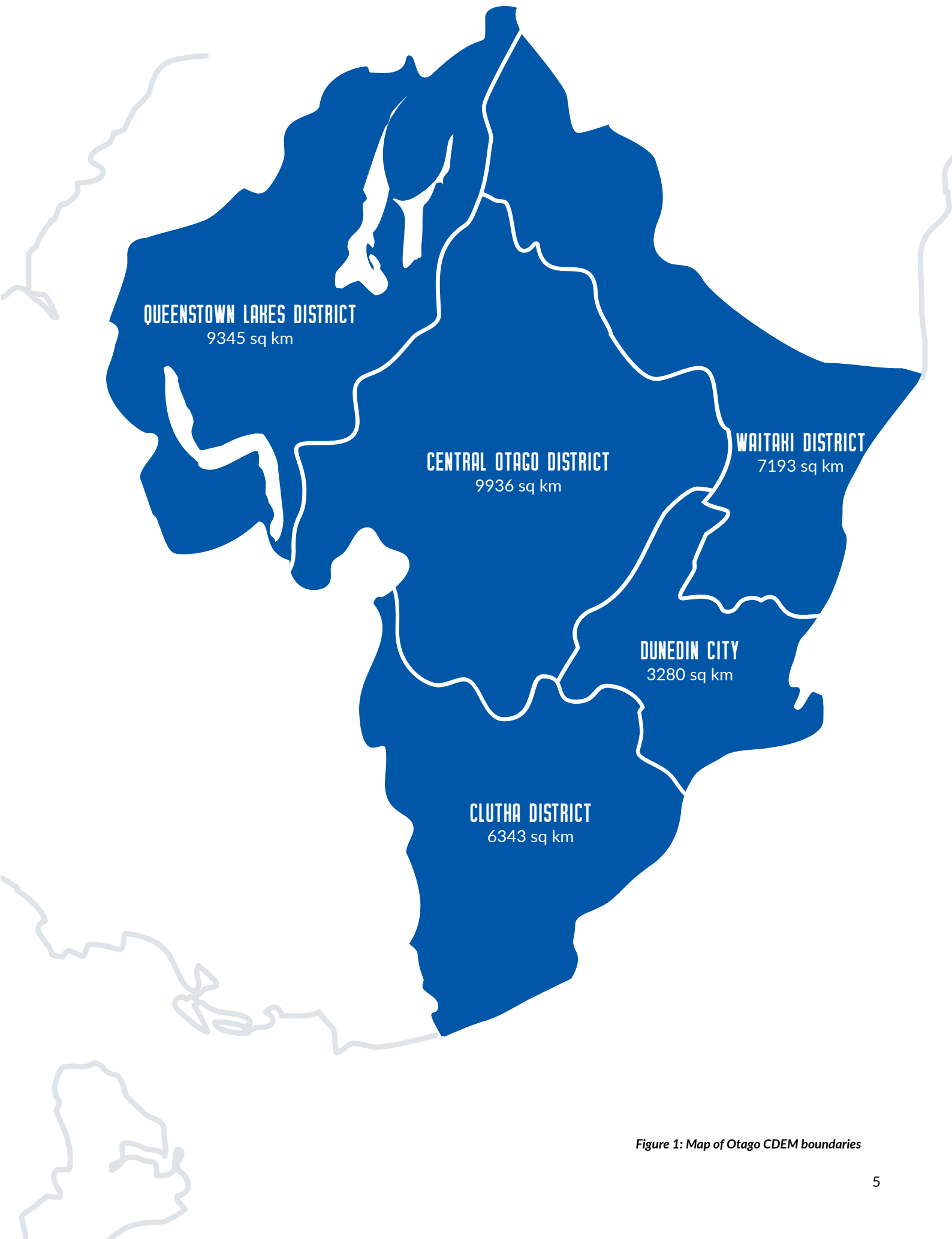
This plan is the statutory reference for the Otago CDEM Group and details the arrangements for the implementation of CDEM within the Group's jurisdiction. It has been developed in accordance with The Act 2002 and the Director's Guidelines for CDEM Group Planning (DGL0918). It was developed over 18 months, with region-wide consultation through workshops with elected members, community boards and leadership organisations, emergency

services, critical lifelines infrastructure, Emergency Operations Centre response members and critical leadership staff within the different councils and their own Emergency Management Officers. The full report from these workshops is available as a supporting document: Sessions Feedback from Group Planning Workshop is available on the website [www.otagocdem.govt.nz](http://www.otagocdem.govt.nz).

This is the first edition of this Otago Civil Defence and Emergency Management Group Plan and replaces any previous Group Plan (most recently the 2012-2017 Otago Civil Defence Emergency Management Group Plan). It will remain in effect for ten years from the date of approval and be reviewed every three years. The activities, projects, and programmes of work to support the plan are subject to continual monitoring and review and will be adapted as required to meet the objectives of the plan without additional consultation.

Otago CDEM Group plan sets out the framework for Otago's coordinated activities across all 4Rs. (Refer page 6) It guides the work programmes to ensure that the information, resources, and documentation are in place to support the 4Rs. Importantly, the plan also establishes the relationships that will be called upon when an event goes beyond the scope or capacity of an individual agency.





**QUEENSTOWN LAKES DISTRICT**  
9345 sq km

**CENTRAL OTAGO DISTRICT**  
9936 sq km

**WAITAKI DISTRICT**  
7193 sq km

**DUNEDIN CITY**  
3280 sq km

**CLUTHA DISTRICT**  
6343 sq km

Figure 1: Map of Otago CDEM boundaries

# VISION AND PRINCIPLES



In support of Otago CDEM's vision, "Otago is a stronger, more connected, and adaptable region", the Otago CDEM Group works with our partners in emergency services, infrastructure providers, other government agencies and the community to coordinate and efficiently deliver our work programmes to ensure our communities are well prepared for an emergency across the 4Rs.

- **Accountability** – Collective and individual responsibility for the delivery of CDEM demonstrated via regular monitoring, evaluation and reporting.
- **Collaboration** – A broad and sincere relationship is created and sustained between organisations and individuals to ensure trust, good communication, consensus building and a good team atmosphere.
- **Coordination** – CDEM activities of all relevant organisations and individuals will be to an agreed level of service and synchronised to achieve a common purpose.
- **Integration** – Unity of effort among all levels of Otago CDEM and all parts of our communities.
- **Professionalism** – Knowledge-based approach underpinned by science and knowledge, education, training, experience, best practice and continuous improvement.
- **Risk Driven** – Sound risk management principles (hazard identification, risk and impact analysis) are used in assigning priorities and tasks.

## PURPOSE STATEMENT

Otago CDEM Group supports communities to:

- Identify and understand their risks and take steps to eliminate or reduce those risks, where possible.
- Develop capabilities and operational systems before

an emergency occurs so that communities are prepared. This includes developing personal, family/whānau, business, and community preparedness.

- Take action immediately before, during and directly after an event to save lives and protect property.
- Put in place coordinated efforts and processes to assist with immediate, medium-term, and long-term recovery following an emergency.

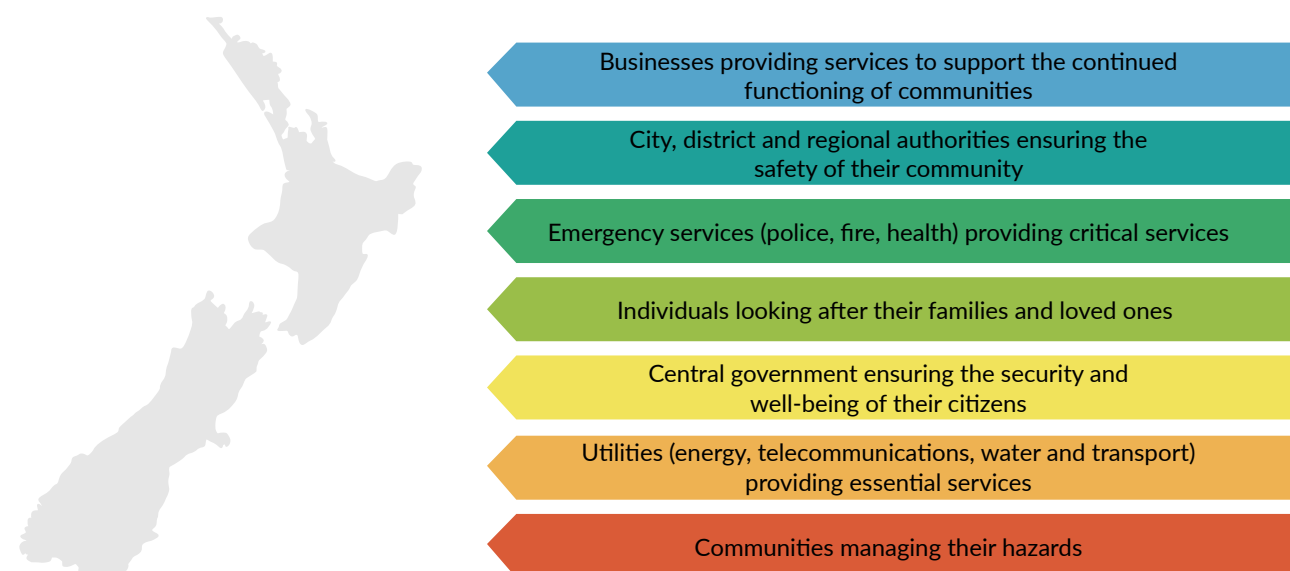
Ultimately, the work of CDEM enables communities to be more resilient in dealing with the impacts of emergencies.

This Otago Civil Defence and Emergency Management Group Plan directs the Group to:

- Strengthen relationships between agencies involved in emergency management.
- Encourage cooperative planning and action between the various emergency management agencies and the community.
- Demonstrate a commitment to deliver more effective emergency management through agreed activities that support the plan.
- Address reduction, readiness, response and recovery.
- Provide information on hazards and risks in Otago and the principles of operation within which agencies involved in emergency management have agreed to cooperate.
- To ensure local arrangements reflect the intent of the national plan
- Build the relationship between emergency management Otago and Te Rūnanga o Ngāi Tahu, to ensure greater recognition, understanding, and integration of iwi/Māori perspectives and tikanga in emergency management
- Whanaungatanga, kotahitanga - 'Acting inclusively, including to incorporate and recognise Treaty of Waitangi principles'

## WE SUPPORT

Figure 2: This Group Plan recognises resilience requires the collaborative and inclusive approach.



# OBJECTIVES AND ACTIVITIES TO DELIVER THE GROUP PLAN IN ALIGNMENT WITH THE NATIONAL STRATEGY



**TABLE 1: OTAGO CDEM GROUP OBJECTIVES AND ACTIVITIES IN ALIGNMENT WITH THE NATIONAL CDEM DISASTER RESILIENCE STRATEGY 2019 PRIORITIES OF:**

1. Managing Risks
2. Effective response to and recovery from emergencies
3. Enabling empowering and supporting community resilience

OBJECTIVE	ACTIVITIES
<b>1</b> Establish the priorities for coordinated risk management and improvements in resilience in Otago	<ul style="list-style-type: none"> <li>• Continually review the risks and hazardscape that may affect Otago's communities</li> <li>• Maintain and ensure further development of the Lifeline Utilities Programme</li> <li>• Develop and maintain strong public engagement across the region</li> <li>• Set group priorities in collaboration with stakeholders and strategic partners</li> </ul>
<b>2</b> Improve people's knowledge of the region's vulnerability to hazards	<ul style="list-style-type: none"> <li>• Support the development of credible research and investigation across all risk groups</li> <li>• Provide access to information from credible sources</li> <li>• Review the level of knowledge in relation to the hazardscape and risks within the region</li> <li>• Undertake public and internal education to raise awareness of risks and hazards in the region</li> </ul>
<b>3</b> Collaboratively plan and implement reduction and or mitigation measures for risk priorities	<ul style="list-style-type: none"> <li>• Continually review the risks and hazardscape</li> <li>• Maintain a programme of reduction and mitigation measures</li> <li>• Work with strategic partners and neighbouring regions to ensure a collaborative approach to risk and response</li> <li>• Undertake public and internal education to raise awareness of priorities and reduction/mitigation measures</li> </ul>
<b>4</b> In partnership with local councils support and assist communities with emergency planning	<ul style="list-style-type: none"> <li>• Work with communities that do not yet have plans to develop such plans</li> <li>• Support communities that already have plans to maintain or update these as needed</li> <li>• Communicate with communities about changes in risk and readiness</li> <li>• Provide information that is robust, credible and trusted, so that during an emergency Otago CDEM is the preferred source of information for communities</li> <li>• Include recovery in emergency plans and leverage the current process to talk to the community about recovery.</li> </ul>
<b>5</b> Collaboratively develop plans for emergencies	<ul style="list-style-type: none"> <li>• Develop and maintain regional and multi-regional programmes for the reduction of, readiness for, response to and recovery from significant events</li> <li>• Develop and maintain relationships with other emergency management groups throughout New Zealand</li> <li>• Encourage and support business continuity planning</li> <li>• Actively support welfare, rural support and lifeline utilities programmes and committees</li> <li>• Develop and maintain relationships with Te Rūnanga o Ngāi Tahu to prepare for and respond to and recover from adverse events</li> </ul>
<b>6</b> Identify and apply lessons from events outside and within Otago	<ul style="list-style-type: none"> <li>• Review lessons from past events to identify best practice</li> <li>• Apply lessons learnt from others</li> <li>• Identify opportunities to innovate across all 4Rs</li> <li>• Strengthen relationships with strategic partners across all 4Rs</li> </ul>
<b>7</b> Through governance, cooperation, coordination and resource provision provide for adequate capability and capacity	<ul style="list-style-type: none"> <li>• Align processes and training across all areas of business</li> <li>• Plan for a seamless transition to recovery</li> <li>• Develop an evaluation framework for this plan</li> <li>• Report against this Plan, keeping this Plan 'living' and adapting it as necessary</li> <li>• Continually review and develop progress as outlines within the KPIs across all 4Rs</li> </ul>



# National Disaster Resilience Strategy Rautaki ā-Motu Manawaroa Aitūā

Working together to manage risk and build resilience

## Our Vision

New Zealand is a disaster resilient nation that acts proactively to manage risks and build resilience in a way that contributes to the wellbeing and prosperity of all New Zealanders.

## Our Goal

To strengthen the resilience of the nation 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.

## We will do this through:

### 1 Managing Risks

### 2 Effective Response to and Recovery from Emergencies

### 3 Enabling, Empowering, and Supporting Community Resilience

## OUR OBJECTIVES

- Identify and understand risk scenarios (including the components of hazard, exposure, vulnerability, and capacity), and use this knowledge to inform decision-making
- Put in place organisational structures and identify necessary processes – including being informed by community perspectives – to understand and act on reducing risks
- Build risk awareness, risk literacy, and risk management capability, including the ability to assess risk
- Address gaps in risk reduction policy (particularly in the light of climate change adaptation)
- Ensure development and investment practices, particularly in the built and natural environments, are risk-aware, taking care not to create any unnecessary or unacceptable new risk
- Understand the economic impact of disaster and disruption, and the need for investment in resilience; identify and develop financial mechanisms that support resilience activities
- Ensure that the safety and wellbeing of people is at the heart of the emergency management system
- Build the relationship between emergency management organisations and iwi/groups representing Māori, to ensure greater recognition, understanding, and integration of iwi/Māori perspectives and tikanga in emergency management
- Strengthen the national leadership of the emergency management system to provide clearer direction and more consistent response to and recovery from emergencies
- Ensure it is clear who is responsible for what, nationally, regionally, and locally, in response and recovery; enable and empower community-level response, and ensure it is connected into wider coordinated responses, when and where necessary
- Build the capability and capacity of the emergency management workforce for response and recovery
- Improve the information and intelligence system that supports decision-making in emergencies to enable informed, timely, and consistent decisions by stakeholders and the public
- Enable and empower individuals, households, organisations, and businesses to build their resilience, paying particular attention to those people and groups who may be disproportionately affected by disasters
- Cultivate an environment for social connectedness which promotes a culture of mutual help; embed a collective impact approach to building community resilience
- Take a whole of city/district/region approach to resilience, including to embed strategic objectives for resilience in key plans and strategies
- Address the capacity and adequacy of critical infrastructure systems, and upgrade them as practicable, according to risks identified
- Embed a strategic, resilience approach to recovery planning that takes account of risks identified, recognises long-term priorities and opportunities to build back better, and ensures the needs of the affected are at the centre of recovery processes
- Recognise the importance of culture to resilience, including to support the continuity of cultural places, institutions and activities, and to enable the participation of different cultures in resilience



The National Disaster Resilience Strategy underpins New Zealand's delivery of priorities under the Sendai Framework. [www.unisdr.org/we/coordinate/sendai-framework](http://www.unisdr.org/we/coordinate/sendai-framework)

# STATUTORY REQUIREMENTS OF THE PLAN

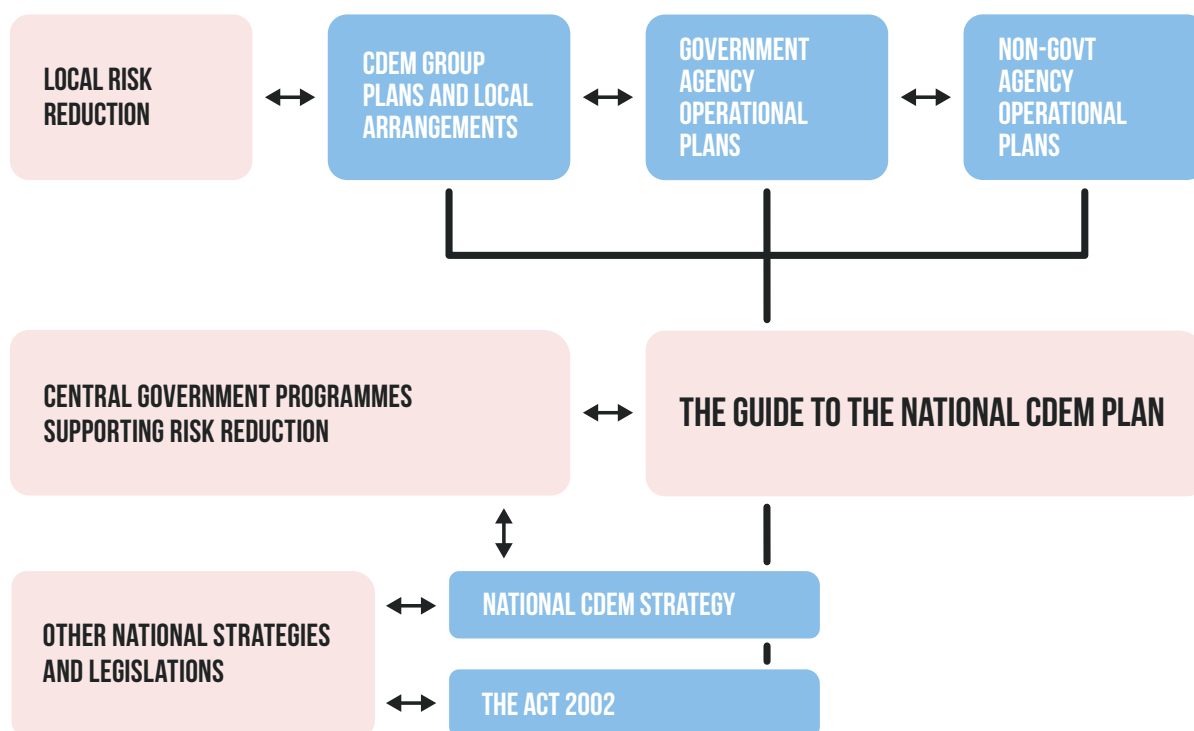


Figure 4: MCDEM Framework - Statutory Requirements of the Plan

# STRENGTHENING OUR COMMUNITIES RESILIENCE



Each regional CDEM Group must identify, analyse, evaluate, and prioritise the risks within its region. In Otago our district-based staff work with our communities to develop greater resilience through education around local hazards and risks, and to help develop a community-based preparedness capacity for when events occur.

The first steps are to understand how each community functions and the risks and hazards they face. With that

information, community-focused preparedness plans and guides are developed. These are available on the Otago CDEM Group website [www.otagocdem.govt.nz](http://www.otagocdem.govt.nz). As the National Disaster Resilience Strategy identifies, resilience relates to social cultural, economic, built, natural and governance elements. "It promotes integrated, collective, holistic approaches with the goal of linking bottom-up, grassroots endeavours, with top-down policy and programmes that empower, enable and support individuals and communities.

# THE FOUR Rs PRINCIPLE – 4Rs



The Act requires that an integrated risk management approach be taken when dealing with hazards using the '4Rs'.



## REDUCTION

Identifying and analysing risks to life and property from hazards, taking steps to eliminate those risks if practicable, and, if not, reducing the magnitude of their impact and the likelihood of their occurrence to an acceptable level.



## RESPONSE

Actions taken immediately before, during, or directly after an emergency to save lives and property, and to help communities recover.



## READINESS

Developing operational systems and capabilities before an emergency happens, including self-help and response programmes for the general public and specific programmes for emergency services, lifeline utilities, and other agencies.



## RECOVERY

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



# HAZARDS AND RISKS IN OTAGO



The review and development of the risk register for the Otago CDEM Group Plan considers the risk management principles and processes established in the ISO 31000 standard.

Otago is at risk from natural hazards such as earthquakes, floods, severe weather, and landslides, which can damage property and threaten human life. The Otago Regional Council has identified and studied numerous hazards. Flooding is the most regular event, with the June 2015 and July 2017 floods affecting communities in Dunedin and coastal Otago. An earthquake on the Alpine Fault is assessed as the maximum credible risk to the region. Local faults, such as the Nevis Cardrona, Dunstan, Pisa, Akatore and Titri, have also been identified as posing a significant risk. Other threats include biosecurity, pandemics, coastal erosion, climate change and man-made catastrophes such as terrorism.

Otago has the second largest land area of any region in New Zealand, covering approximately 36,000 km<sup>2</sup> or 12% of New Zealand's land area. Otago is bordered by Southland to the south, the West Coast to the west, and Canterbury to the north. The two main rivers are the Waitaki on the northern boundary and the Clutha in the south. The region includes the large lakes Hawea, Wanaka and Wakatipu as well as man-made lakes above the Clyde and Roxburgh dams.

The relative importance of key sectors varies considerably across Otago. Consequently, responses to events may be different district to district.

The importance of primary production, processing and tourism to Otago's economy also make it more vulnerable to disruptive events such as drought, flooding and snowfall.

Climate change is predicted to have impacts on the frequency and severity of events caused by natural hazards. These include more intense rainfall patterns and associated flooding, more frequent and intense droughts, more damaging winds and increased wildfire risk. Sea level rise and a change in wave patterns is predicted especially in eastern areas.

Otago has a relatively dispersed population of 229,200. Aligned with the nature of Otago's economy and infrastructure, this dispersed population base has several implications for CDEM:

- Limited access to major population areas makes many residents dependent on the ongoing support and maintenance of supply chains.
- Rapid and sustained growth in residential dwellings, retail development and subdivisions in the Queenstown Lakes and Central Otago.
- The high numbers of tourists and holiday home owners in Queenstown Lakes and Central Otago districts create major challenges. Most visitors to the area are transient and have little awareness or understanding of the local hazardscape. Preparing them for the unexpected and informing them during an emergency is more challenging than reaching the resident population, and they will have very different needs during and after an event.
- Queenstown Lakes District resident population is forecast to grow by 67% by 2038 and its visitor population by 43% during that period (based on average day forecast). Queenstown Lakes District is also experiencing significant growth in its commercial developments.<sup>3</sup>
- The National Policy Statement for Urban Development recognises that alongside Queenstown: Dunedin and Central Otago are also experiencing significant growth in their residential and commercial developments increasing the need for CDEM capacity throughout the region.
- Otago University has 21,000<sup>4</sup> students in Dunedin, of whom 17,000 are from outside the city so have less awareness of the local hazardscape. Surveys consistently show that young people have less interest in preparing for emergencies, making this group a challenge for increasing resilience.
- The size and influence of the tourism industry also means that the group area is susceptible to economic impacts if a major disaster deters tourists from coming to the area.
- Otago's electricity generation facilities and the HVDC link are nationally important.
- People in isolated rural communities including isolated coastal communities and the many families living on farms including in highly rural remote areas like hill and high-country farming areas.

<sup>2</sup>Data collected from Stats NZ estimated population data 2018. [www.stats.govt.nz/information-releases/subnational-population-estimates-at-30-june-2018-provisional](http://www.stats.govt.nz/information-releases/subnational-population-estimates-at-30-june-2018-provisional)

<sup>3</sup><https://ecoprofile.infometrics.co.nz/Queenstown-Lakes%20District>

<sup>4</sup>University of Otago website [www.otago.ac.nz/about/quickstats.html](http://www.otago.ac.nz/about/quickstats.html)



Flood warning -  
river monitoring  
device

Flood Warning River Monitoring Device



# REDUCTION



Reduction is “identifying and analysing long-term risks to human life and property from hazards, taking steps to eliminate these risks if practicable and, if not, reducing the magnitude of their impact and the likelihood of their occurring”.

The National Disaster Resilience Strategy 2018 has a far stronger focus on resilience, risk and reduction, with four of the five key priorities in their objectives having specific activities to enable the delivery of these priorities:

- Build a culture of resilience
- Improve our understanding of risk
- Review existing risk and minimise the creation of new risk
- Strengthen resilience both planned and adaptive
- Build a seamless end to end response system.

## ISSUES AND PRIORITIES

The Otago CDEM Group Plan identifies several challenges relating to risk reduction:

- Otago has a complex hazardscape with a wide range of hazards. Some good material exists within the hazard analysis for the Otago area undertaken by the Otago Regional Council. However, there are gaps in some areas that require further scientific input and analysis, and not all stakeholders and communities have a good awareness of the hazards.
- Hazard management, risk assessment, and implementation of mitigation measures are fragmented and lack consistency across a broad range of organisations.
- Business continuity planning is inconsistent across the region, with many organisations not prioritising this activity.
- There is a need to develop a common understanding and interpretation of the purpose and status of reduction activities and practices. Many people are not well prepared for adverse events, putting themselves, others and responders at risk.
- Inconsistent lines of communication across all agencies, organisations and responders can hinder a coordinated response.
- Not all infrastructure is resilient and risk reduction is often more expensive than other 4Rs areas as it can involve costly infrastructure programmes that can be difficult to justify economically in advance of an emergency. This is especially relevant when compared to other activities with more immediate, high profile and tangible outcomes. It can also involve planning controls that place restrictions and can impose costs on private landowners.

- Individual agencies such as utility operators must incorporate risk reduction into their activities (eg., extra storage capacity in pump stations, and battery/generator backups at telecommunication sites). The earthquakes in New Zealand since 2011 have highlighted the need for all agencies to address risk reduction.

## OPPORTUNITIES, STRATEGIES AND PLANS

The Otago CDEM Group Plan identifies several opportunities and strategies relating to risk reduction:

- Local Councils have extensive frameworks for identifying and mitigating local risks such as business continuity (e.g. IT cloud mitigation, security), infrastructure (3 waters, roading resilience) and community assets (e.g. facility strengthening)
- Risk reduction is built into national codes
- There is good collaboration and coordination between iwi (Ngāi Tahu) and Otago CDEM in relation to emergency management, across the 4Rs.
- Work with Papatipu Rūnanga and local marae to understand their local risks and hazards and support the development of their emergency response plans.
- The Otago Lifeline Utilities Group is committed to a coordinated approach to understanding the hazardscape within Otago and implications for Lifeline Utilities in the region. The committee will be proactive at engaging the wider stakeholder group when focussing on specific geographic areas to ensure collaborative and inclusive development for future programmes of work.
- GIS technology can be utilised to increase situational awareness in business as usual and in response in relation to hazards and the infrastructure in Otago and across regional boundaries.
- There is an opportunity to learn lessons from others nationally and internationally as well as from more localised adverse events. In applying good practice learned, Otago will develop towards increased capability.
- Many communities are now asking for help with emergency planning and this increased awareness allows individuals to develop their own reduction plans in line with their community plans.
- Otago is engaged and aligned with the National Framework. Otago will continue to work collaboratively with other CDEM groups and the Ministry of Civil Defence and Emergency Management.
- Otago will encourage more integrated strategic planning across all sectors and government organisations for achieving resilience by promoting a consistent approach to identifying and reducing risks.
- Many physical risk reduction efforts in Otago currently focus on flood mitigation and management, which also include coastal erosion and climate change as contributing factors.
- The AF8 SAFER Framework is a three-year project specific to the Alpine Fault but is also relevant to other earthquake sources. The potential severity of an AF8 event is driving wider consideration of lifeline and welfare impacts to understand the detailed response and recovery requirements after such an event.



## HOW WE WILL GET THERE:

- Continued involvement in Project AF8, including ongoing membership of the steering group, and a contribution of at least \$20k pa towards the project's activities that will increase readiness and response capability in Otago. Continue to provide communication and engagement support for Project AF8 in partnership with AF8 personnel, local council communications staff and engaging selected Otago media.
- Partner with universities, GNS and ORC hazards team to organise an annual hazards forum.
- Investigate opportunities to access funding, through Resilience to Nature's Challenges, the Resilience Fund, and other external sources.
- Partner with local authorities and research institutions on risk research projects. Provide support and contribute in the opportunity to align work and carry out projects that have benefits for land use, asset management, CDEM planning, and community education initiatives.
- Collaborate with local authorities and other partners to deliver programmes that engage communities in learning about their hazards and risks. In the short-term we will focus on flooding, earthquake and tsunami, and understanding the impacts of climate change and sea level rise, as these are important for future decision-making.
- Identify specific research topics that would support better understanding of risk and human behaviour, and approach Otago University or Canterbury University to promote these to PhD students.
- Advocate for risk reduction through local, regional and national planning frameworks.
- Support the work of the Otago Lifeline Utilities Group by ensuring critical flows of information are maintained and the annual Otago Lifeline Utilities Forum is well supported and attended.
- Share information from science and hazard partners on [www.otagocdem.govt.nz](http://www.otagocdem.govt.nz) and social media platforms.
- Provide tailored content to each Council's newsletters at least quarterly.

## KEY PERFORMANCE INDICATORS FOR OTAGO CDEM HAVE BEEN IDENTIFIED AS:

KPI REF	MEASURE	METHOD OF COLLECTION	FREQUENCY (OF MEASURE)	BASELINE	TARGET
1	Percentage of residents who have a good understanding of the risks and effects of disasters in their area	Preparedness survey	Triennially	NEW	Increasing
2	Number of people accessing hazard information provided by linking from Otago CDEM Group to the ORC hazards database.	Through website statistics	Yearly	NEW	Increasing
3	Annual Otago Lifelines and Risk Reduction Forum is well attended	Attendance statistics	Annually	NEW	Consistent attendance







# READINESS



Readiness involves planning to ensure that CDEM organisations and the community have the capacity and capability to respond to, and recover from, an emergency.

## STATUTORY AND POLICY FRAMEWORK

National Disaster Resilience Strategy (2019) encourages increasing community awareness, understanding and participation and capability through readiness for response and recovery.

The National Disaster Resilience Strategy 2018 has a far stronger focus on resilience, risk and reduction, holding five key priorities with objectives identified as important contributors to achieving these priorities:

- Build a culture of resilience.
- Improve our understanding of risk.
- Review existing risk and minimise the creation of new risk.
- Strengthen resilience both planned and adaptive.
- Build a seamless end to end emergency management system.

## ISSUES AND PRIORITIES

This CDEM Group Plan identifies several outstanding priorities relating to readiness to be completed over the lifetime of the plan:

- Encourage businesses to improve their business continuity planning.
- Improve public understanding of the need to prepare for adverse events.
- Build stronger relations with response and recovery organisations to increase consistency in readiness activities and messaging.

**PLANNING AND PREPARATION WILL HAVE HELPED TO REDUCE THE IMPACT ON THE COMMUNITY AND SERVICES. OUR COMMUNITIES WILL KNOW WHAT TO DO.**

## STRATEGIES AND PLANS

Since the development of Otago CDEM as a CDEM Group structure we have completed, or are in the process of developing, several readiness-specific pieces of work.

These include:

- Risk Reduction Register.
- Lifeline Utilities Programme.
- Otago Southland Integrated Air Operations Plan (2019).
- Community Response Plans/Guides.
- Group Welfare Plan.
- Animal Welfare Plan.
- Group Strategic Recovery Plan.
- Training and Capability programmes.
- Consistency across the region in core operational systems, documentation and policies.
- There is good collaboration and coordination between iwi (Ngāi Tahu) and Otago CDEM in relation to emergency management, across the 4Rs.

## WHERE ARE WE NOW?

In 2018 an Otago-wide survey was undertaken to get a snapshot of the region's emergency preparedness levels.

The table below highlights the preparedness levels gathered from the survey.

	% LEVEL
People who have an emergency kit (stored food, water, a radio, batteries, and a torch)	29%
People who have an emergency plan for when they are at home	42%
People who have an emergency plan for when they are not at home	29%
Have at least three litres of water stored per person, per day for three days	57%
People who believe their workplace has made preparations for a CDEM event	36%



## OPPORTUNITIES RELATING TO READINESS:

- Increased collaboration and communication with our partner agencies and communities.
- More communities are developing their own local response and recovery plans and asking for help in their planning.
- Improving GIS and operational systems technology provides a greater level of situational awareness, allowing better readiness planning.
- Learning from the experiences of others and taking opportunities to follow best practice to build our resilience.
- National capability is increasing, supporting interregional planning.
- Development of plans for adverse event management, including Project AF8 and national plans for climate change and tsunami.
- The Lifeline Utilities Committee provides a vehicle for the Lifeline Utilities sector to collaborate with Otago CDEM Group and with each other.
- Plans to provide adequate capability, capacity, resources for a coordinated and collaborative response and recovery are being developed, evaluated, reviewed, and adapted as needed.

## HOW WE WILL GET THERE:

- Develop public education strategies with communities about being prepared, with an initial focus on flooding/ tsunami/earthquake.
- Engage with service groups, schools, clubs and others, as opportunities present, with the aim of at least one engagement a month in each district.
- Hold at least one public event (information session/ hazard talk/readiness workshop, etc) in partnership with the local councils twice a year.
- Facilitate living community response plans/guides that communities own and are responsible for.
- Promote and use resources to support local businesses to be resilient and to build their social capital.
- Encourage all Lifeline Utilities to proactively engage in regional CDEM planning.
- Engage with community groups and organisations that do, or could, play a role in emergency management. This includes rural support organisations, neighbourhood support groups, community boards and other groups.
- Develop and deliver training programmes to engage local authority staff in emergency preparedness.
- Support the establishment of community response groups in areas currently without them. Hold an annual workshop or exercise with each group.
- Be a visible presence in the communities through personal contact and contributing content to community papers and local Facebook pages (linking to EMO website and FB).
- Further develop sector steering groups e.g. Emergency Services, Welfare, Tourism Operators to help improve readiness, develop relationships and strengthen interoperability.

## KEY PERFORMANCE INDICATORS

KPI REF	MEASURE	METHOD OF COLLECTION	FREQUENCY (OF MEASURE)	BASELINE	TARGET
4	Number of residents who take part in national CDEM campaigns	Through national activity data collection	2-yearly	26,684	10% increase
5	Number of local authority staff who express confidence in their CDEM training and are involved as response team members	Through training course evaluations	Evaluations completed for every ITF Foundational, ITF intermediate CIMS 4 and functional managers training courses	NEW	Increasing
6	Number of people following the Otago CDEM Facebook page	Through Facebook statistics	Yearly	4,847 (October 2018)	10% increase
7	EM Otago's locally based staff engage directly with community response groups once their community response plans/ guides are adopted	Through monthly reporting	Bi-annual	New	100%
8	Community response groups exercise their community response plans/guides	Through participation	Every two years	New	100%
9	Number of people following the Otago Twitter feed	Through Twitter analytics	Yearly	315 (October 2018)	10% increase
10	All critical Lifeline Utilities within the region have consistent representation at meetings and contribute towards relevant Otago CDEM programmes of work.	Through meeting attendance and project contribution	Annually and via Regional Forum	New	Increasing and sustained



Photo: Otago Daily Times

# RESPONSE



Response describes the actions taken immediately before, during or directly after a civil defence emergency to save lives, protect property and support our communities to recover. The Group's response arrangements have been established to ensure that all available resources are effectively applied to plan for and manage the consequences any emergency that affects Otago. While the priority during an emergency is the preservation of life, response planning aims to minimise all the effects of an event and ensures that people are given early support to recover.

The specific arrangements for Otago in monitoring, activation and declaration stages during a response are outlined in the 'Operational Arrangements' section. More procedural information may be obtained on the website. The key principles for Otago and the national directive are outlined below.

## KEY RESPONSE PRINCIPLES:

- The Coordinated Incident Management System (CIMS) is used consistently to achieve effective coordinated management of emergencies by establishing common structures, functions and terminology whilst enabling agencies to develop their own processes, procedures and training that is aligned with the CIMS structure.
- A local response will escalate only to the level required to manage the incident. The District Emergency Operations Centre (EOC) and any established Incident Control Point will be flexible and will be directed by a local controller to a size and structure appropriate to the incident.
- The CDEM Group, through the Group Controller, will activate the Group ECC to the level required to monitor, support, coordinate, and/or direct operational responses appropriate to the event.
- Local mayors are the strategic leaders of their respective districts and the mayor, local controller, and group controller will work closely together to ensure the affected communities are informed and supported to the highest level possible.
- All agencies are responsible for their own response under their own plans but are coordinated by a lead agency. In a declared emergency, Civil Defence & Emergency Management are the lead agency.
- CDEM partner agencies undertake initial assessments of the consequences of an event and will coordinate their agency response with the lead agency.
- Welfare services agencies work together with Otago CDEM Group members to plan for and coordinate arrangements for the delivery of welfare services during an emergency to minimise the consequences for individuals, families and whānau, communities and animals.

- Lifeline Utilities entities and the CDEM Group work together to share best practice, plan cooperatively, and, during a response, operate in partnership creating an easier flow of information during an emergency.
- Emergency management responses can be undertaken without a state of emergency being declared and TLA recovery activities are fully supported.
- When activated, the Group ECC will coordinate regional resources and support EOCs.
- Recovery measures are planned for, and progressively implemented, from the first day of the response.

The National Civil Defence Emergency Plan Order (2015) defines the roles and responsibilities of CDEM agencies under Part 5. In addition to their specific roles and responsibilities, all agencies are required to carry out activities across all 4Rs in accordance with parts 6, 7, 8 and 9 of The National Civil Defence Emergency Plan Order 2015.

## ISSUES AND PRIORITIES

This CDEM Group Plan identifies several outstanding issues relating to response to be addressed over the lifetime of the plan:

- In an extreme event, infrastructure (i.e. roads, buildings, power, water, communications) failure may hamper response.
- Many Otago people and organisations are not well prepared for adverse events, placing pressure on resources during a response.
- The public's expectation of receiving swift, accurate information in an emergency is always a challenge for response agencies.

## OPPORTUNITIES AND STRATEGIES AND PLANS

The CDEM Group Plan identifies several opportunities and strategies relating to response:

- Increased collaboration and communication during a response are being supported and improved upon throughout our Lifeline Utilities, strategic partners, and stakeholders.
- Communities are beginning to engage with the Group in advance of an event and understand where they can receive credible, timely and accurate information during an event.
- Use of GIS and other operational systems technology allows a greater level of situational awareness during a response.
- Learning from others' experiences and taking opportunities to follow best practice in building our response capability.
- National capability to support regions in their responses will increase through a cadre of experts.
- Development of response plans for adverse event management will be well publicised, exercised and available during a response.
- Lifeline Utilities are encouraged to maintain communication with the Group Lifeline Utilities Coordinator so that information can be shared with non-affected areas even when the ECC is not activated.
- Adequate capability, capacity and resources for a coordinated and collaborative response are being further explored and actioned as appropriate.



## HOW WE WILL GET THERE?

- Ensure processes and training are consistent across all functions within EOCs and ECCs to build regional capability and shared resourcing.
- With our partner councils, aim to undertake quarterly table-top exercises across all functions in EOCs and ECCs and at least annually across all EOCs and the ECC combined.
- Develop training plans for key functional roles.
- Provide training opportunities and pathways for all response team members.
- Develop a cadre of trained regional responders able to be deployed within Otago and to support national responses as requested.
- Continue to build the audience on Otago CDEM Group's digital channels by maintaining and sharing regular relevant content to build confidence in Otago CDEM Group as the trusted source of information and advice.
- Support the continual development of robust communications and operational systems for use in a response.
- Support the recruitment and training of multiple Lifeline Utilities Coordinators for an ECC response and Officers/Liaisons for each EOC and mandated utilities.
- Undertake regular online surveys to quantify the developing resilience of online followers.
- Develop strong situational awareness using GIS and other software technology.
- Maintain and develop a response planning framework that includes scenario-based plans and standard operating procedures.
- Develop standard operating procedures in partnership with CDEM partners where necessary, through forums such as the LUSC, R&R, WCG, RAG and others as relevant.
- Create and maintain a regional network of Public Information Managers (through local authorities) who are trained to a nationally recognised and consistent standard.
- Develop Lifeline Utilities Coordination capacity and capability to provide regional coordination of information, regardless of an ECC activation.

## KEY PERFORMANCE INDICATORS

KPI REF	MEASURE	METHOD OF COLLECTION	FREQUENCY (OF MEASURE)	BASELINE	TARGET
11	EOCs and ECC are sufficiently staffed to become functionally operational within one hour of local or Group controller's decision to activate	Through event debrief reporting	For each activation	NEW	100%
12	Percentage of staff trained to carry out functional roles in the EOC/ECC	Through ITF database and records	Yearly	NEW	Increasing
13	EM Otago issues public warnings and alerts for rapid onset emergencies within 20 minutes of first receipt of official advice, 24/7	By comparing time of verified information received with time of alerts issued	For each rapid onset emergency	NEW	100%
14	Otago CDEM Group participates in or leads at least one multi agency exercise per year	Through tracking by Otago CDEM Group	Yearly	NEW	At least one per year
15	Members of the public understand where to get official information and advice relevant to their local communities in emergencies when the local EOC or Group ECC has been activated	Through Survey Monkey surveys on the www. otagocdem.govt.nz website and Facebook page	Yearly	NEW	75% of participants
16	Ongoing effect is given to Project AF8 through multi-agency operational planning focused on the development of coordinated multi-regional response plans and activities	Through the Group business plan and individual work plans	Yearly	NEW	Consistent progress reported annually

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## TOURISM WILL RECOVER QUICKER BECAUSE OF THE QUALITY AND EFFECTIVENESS OF THE RESPONSE

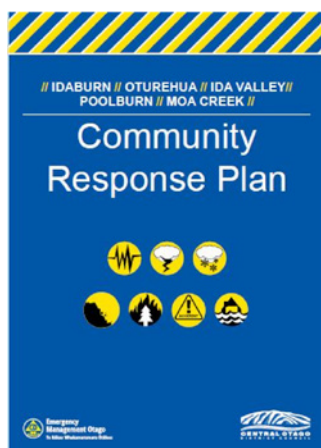
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### COMMUNITY RESPONSE PLANS/GUIDES

Community response plans/guides are a primary means for communities to establish locally appropriate arrangements to support residents and visitors during an emergency. They provide a consistent basis for residents and groups within an agreed area to organise and implement their own local arrangements for emergencies.

Plans are being developed at community level with the guidance and support of Otago CDEM Group staff. They are tailored to reflect local hazards, capability, circumstances and preferences. Twelve plans are complete (November 2018) with over 20 more in development. Once adopted, these localised arrangements become the basis of each community's response to emergencies.

The Community Response Plans/Guides are consistent with and supported by the district-wide response managed from each council's EOC, which in turn is coordinated across the region by the Otago CDEM Group from the ECC. All local and district response plans fit within the overarching framework of the Otago CDEM Group Plan. Once complete and adopted by their communities, the plans are regularly reviewed and become part of their district's readiness and response capability.



*An example of a community response plan/guide is available on [www.otagocdem.govt.nz](http://www.otagocdem.govt.nz)*



Photo: Otago Daily Times



# RECOVERY



Recovery is defined as the coordinated efforts and processes to effect the immediate, medium- and long-term holistic regeneration and enhancement of a community following a disaster. It is the process of re-establishing the quality of life of the community following an emergency while taking opportunities to meet future community needs and exposure to hazards and risks. The Otago CDEM Group Plan and subsequent planning for recovery activities acknowledges that the primary organisation responsible for a community's recovery is its district council, under the leadership of the mayor. The Otago CDEM Group's actions and activities will always take this into account and will work with the affected mayor/s to facilitate the best outcomes possible.

Recovery relies in large part on the active collaboration of partners and stakeholders for its effectiveness.

CDEM Groups are required to appoint Local and Group Recovery Managers to lead recovery activities.

## **STATUTORY AND POLICY FRAMEWORK**

The Act (2002) details the requirement for groups to carry out recovery activities (S17.1e).

The Joint Committee (CDEM Group) is responsible for strategic planning for recovery and must ensure that the CDEM Group plan states and provides for strategic planning for recovery.

The Amendment Act (2016) amends the Civil Defence Emergency Management Act to:

- Establish a legislative framework for recovery management, by providing a mandate for recovery managers and by strengthening the requirement to plan for recovery.
- Support a seamless transition from response into the initial recovery phase, by establishing a transition notice mechanism that will make some emergency powers available for a specified period of time (local or national transition period).

With these changes, the Government's intent is to highlight the importance of planning for recovery and underline the responsibilities of both local councils and CDEM Groups, as detailed in the Director's Guideline, Strategic Planning for Recovery (DGL 20/17).



## GROUP PLAN REQUIREMENTS IN RELATION TO RECOVERY

From 1 June 2018, CDEM Group plans need to state and provide for strategic planning for recovery. The Strategic Planning for Recovery Director's Guideline provides guidance on five strategic areas that CDEM Groups need to consider.

1. Minimising the escalation of the consequences of the emergency.
2. Regeneration and enhancement of:
  - a) the social, psychological, economic, cultural and physical well-being of individuals and communities, and
  - b) the economic, built and natural environments that support that well-being.
3. Taking practicable opportunities to adapt to meet the future needs of the community.
4. Reducing future exposure to hazards and their associated risks.
5. Supporting the resumption of essential community functions.

By working through the areas and associated considerations, CDEM Groups are able to identify areas for improvement, and the strategic actions to address these. These strategic actions and priorities must be recorded in the CDEM Group plan.

The CDEM Group plan must also consider the following elements for strategic planning for recovery:

- The Group's strategic actions to support recovery preparedness and recovery management.
- The Group's priorities for action.
- The timeline for implementation.

The Strategic Recovery Plan fully incorporates the recovery planning requirements. These include the requirement for each district to:

- Appoint and train local recovery managers.
- Develop local recovery structures and processes to support the local manager.
- Develop a Group Recovery Toolkit.
- Make recovery plans for specific hazards (e.g., a rupture of the Alpine Fault).

### RECOVERY GOALS

*We engage with our community on recovery to understand the immediate, medium- and long-term outcomes that our community would want following an emergency.*

Based on the Otago-wide workshops and generally accepted best practice, the following are prioritised as Otago CDEM's Strategic Recovery Objectives when engaging with local authorities, partner agencies, and the community.

### 1) Planning for recovery

Strategic planning for recovery should be intentional and focused on ensuring communities are well-placed and supported to recover from any emergencies resulting from specific hazards and risks identified in the Otago CDEM Group Plan.

- Give effect to The Treaty of Waitangi and the leadership role Ngāi Tahu has demonstrated in previous emergencies.
- Recovery planning includes individual and community welfare, infrastructure, culture, heritage, and the full spectrum of animal welfare including companion animals, livestock, and wildlife in the natural environment. (Note: this requires interaction with, and support from, several national agencies. Otago CDEM provides an interface with, and support to, these organisations, where necessary.)
- Recovery planning requires a whole-of-local-authority approach including the Otago CDEM Group, partner agencies, planners, building officials, finance and infrastructure managers, etc. All have a part to play and can influence the extent to which the Otago CDEM Group and local authorities plan for, and can manage, the recovery from an emergency. It is important that all are involved in conversations about the hazards and risks, potential consequences of an emergency, what effective planning for recovery might involve, and what can be done prior to and following an emergency.
- Strategic recovery plans should be accessible, tested where appropriate, and updated regularly, especially after an emergency event.

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**RECOVERY—WE WILL ACT ON WHAT WE LEARN FROM OTHERS. WE WON'T WAIT UNTIL NEW PLANS ARE BEING CREATED—WE WILL ADAPT AS THE NEED TO CHANGE IS IDENTIFIED**

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## 2) Engagement for recovery

Strategic recovery actions will require processes and resources to achieve each of the recovery objectives:

- Develop a comprehensive Otago-wide coverage of Community Response Plans/Guides (CRPs). CRPs should encourage and provide development of Recovery Assistance Centres and Community Led Centres.
- Facilitate the development of Business Continuity Plans (BCPs). The outcome should be wide development of credible and effective BCPs.
- Appoint a Group Recovery Manager and an Alternate recovery manager to coordinate recovery activities across the region. Local recovery managers in each local authority will also be appointed by the CDEM Group. Prior to an emergency, recovery managers should work together to establish relationships and strategies for effective recovery.
- Educate and train personnel for recovery roles.
- Plan and participate in recovery exercises as part of the wider Otago CDEM exercise programme.
- Build strong relationships with agencies and non-government organisations that will assist in the recovery phase through active involvement in:
  - Welfare Coordination Group/Local Welfare Committees
  - Rural Advisory Groups.
  - Lifelines Steering Committees.
- Encourage and support local councils' strategic recovery planning activities as part of each council's long-term plan.
- Encourage conversations with vulnerable populations, such as coastal communities prone to flooding and tsunami, and communities close to the Alpine Fault, in order to better understand the risks and how they might prepare themselves to adapt to a changed future hazardscape. Conversations should similarly be held with Culturally and Linguistically Diverse (CALD) Communities.

- Understanding the important role animals play in our lives and develop specific recovery plans for animal welfare that cover the full spectrum of animals: companion animals; production animals; animals in research, testing, and teaching facilities; zoo and circus animals; and wildlife.

### The Otago CDEM Group Plan identifies several opportunities and objectives relating to recovery:

- Processes are established to support business continuity planning across the region to support recovery.
- Through better planning, communities will become more resilient and will be able to recover more quickly after an event.

### HOW WE WILL GET THERE?

- Establish appropriate district and regional recovery structures, especially the appointment and training of recovery managers.
- Educate and train personnel for recovery roles.
- Encourage conversations around local councils' strategic recovery planning.
- Build strong relationships with agencies and non-government organisations.
- Encourage conversations with vulnerable populations.
- Complete development of Community Response Plans/Guides.
- Encourage and support the development of business continuity plans by working with sector groups to promote business continuity planning.
- Specific recovery planning for animal welfare.
- Plan for, and participate in, a specific recovery exercise in year 3.

## KEY PERFORMANCE INDICATORS

KPI REF	MEASURE	METHOD OF COLLECTION	FREQUENCY (OF MEASURE)	BASELINE	TARGET
17	Group recovery structure is established, operational, and complies with the NZ CDEM Amendment Act (2016)	Reported through the MCDEM Capability Assessment Review	As per the MCDEM National Review Programme	NEW	By 2020
18	Local recovery managers are appointed and trained to national standards in each district.	Through tracking by Otago CDEM Group	Yearly	NEW	100%
19	One workshop is held per year for local recovery managers	Through tracking by Otago CDEM Group	Yearly	NEW	Increased attendance participation
20	Demonstrate active encouragement and support for Lifeline Utilities to develop business continuity plans and benchmark every two years	Resilience benchmarking tools	Once every two years	NEW	Increasing



# MANAGEMENT AND GOVERNANCE



This section describes the management and governance arrangements for the provision of CDEM in Otago. This includes how CDEM will be delivered and the roles and responsibilities of the Group Joint Committee (JC), the Coordinating Executive Group (CEG), the Group Emergency Management Office, and established sub-committees. Key appointments and funding arrangements are also described.

The Otago CDEM Group Joint Committee, made up of all the mayors from the five districts and the chairperson of the Regional Council, has overall governance responsibility for CDEM in the Otago area. Operational management is supported by the Coordinating Executive Group (CEG), made up of the Chief Executives of the six councils (or persons acting on their behalf), plus senior representatives from the NZ Police, Fire and Emergency NZ, St John, Southern District Health Board, Ngāi Tahu and the Ministry of Social Development. The CEG provides advice to the JC and ensures its decisions are implemented.

The key appointments for all governance committees are named and available on the Otago CDEM website [www.otagocdem.govt.nz](http://www.otagocdem.govt.nz).

## OTAGO CDEM GROUP – JOINT COMMITTEES



The Otago CDEM Group has the purpose and all of the functions, powers and obligations of a CDEM Group as defined by The Act 2002. Section 17 of The Act 2002 defines the function of a group and each of its members that, in summary, require it to:

- Identify, assess and manage relevant hazards and risks.
- Ensure provision of trained and competent personnel, an appropriate organisational structure and the necessary services and resources for effective civil defence emergency management in its area.
- Respond to and manage the adverse effects of emergencies.
- Plan for and carry out recovery activities.
- Assist other CDEM Groups when requested.
- Promote public awareness of and compliance with The Act and legislative provisions relevant to the purpose of The Act.
- Develop, approve, implement, monitor and review a Civil Defence Emergency Management Group Plan.
- Participate in the development of the National Civil Defence Emergency Management Strategy and the National Civil Defence Emergency Management Plan.
- Promote civil defence emergency management in its area that is consistent with the purpose of The Act.

The powers and obligations of members of the Group are covered in section 16 of The Act (2002). The Group has all the powers 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. Members of the Group:

- May acquire, hold, and dispose of real or personal property for the use of the Group.
- May remunerate its representative for the cost of that person's participation in the Group.
- Must provide to the Group the information or reports that may be required by the Group.
- Must pay the costs of administrative and related services in accordance with section 24.
- Must pay the costs, or a share of the costs, of any CDEM activity that the member has agreed to pay.
- May carry out any other functions or duties conferred on a member of a Group under this Act.



The Otago CDEM Group Joint Committee is responsible for the conduct of the CDEM business in the Group.

The Joint Committee:

- Sets the strategic direction of the Group via the CDEM Group Plan.
- Approves Group annual work programmes.
- Monitors progress in implementing Group work programmes.
- Amends and approves the CDEM Group Plan as required.
- Appoints controllers and delegates powers as required.
- Appoints the Group Recovery Manager.
- Ensures that programmes of work reflect the priorities of the Group Plan.

#### **COORDINATING EXECUTIVE GROUP (CEG)**

The CEG is a statutory group under Section 20 of The Act with the following prescribed functions:

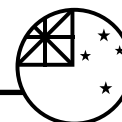
- Providing advice to the CDEM Group and any subgroups or subcommittees.
- Implementing, as appropriate, the decisions of the CDEM Group.
- Overseeing the implementation, development, maintenance, monitoring and evaluation of the Group Plan.

The CEG has no prescribed operational role during the response phase of an emergency.

The Otago CDEM Group Director reports to the CEG through the Chair for operational matters and to the Joint Committee through the Chair for strategic direction.



# NATIONAL COMMITTEES

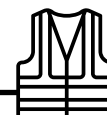


## NATIONAL EMERGENCY MANAGEMENT DEVELOPMENT GROUP (NEMDG)

The NEMDG is comprised of the Directors/Regional Managers of all sixteen CDEM Groups and representatives of the Ministry of Civil Defence & Emergency Management (MCDEM). Its purpose is to provide a forum for MCDEM and CDEM Groups to collaboratively develop and deliver effective emergency management to our communities in a nationally consistent manner.

The Otago CDEM Group Director sits as Otago's representative. The NEMDG Terms of Reference are available on the MCDEM website [www.civildefence.govt.nz](http://www.civildefence.govt.nz)

# OPERATIONAL COMMITTEES



The following committees provide operational relationships and direction, as the activities of CDEM within Otago, and not limited to the Otago CDEM Group. While an overview is provided below, more details including the TORs for each committee are available on the website.

## LIAISON COMMITTEE

The CDEM Liaison Committee is made up of the EM Otago Director and a senior manager from each of the five district councils and the regional council, who act as local support for the district-based emergency management officers. The Liaison Committee acts as a medium to improve coordination and ensure the Otago CDEM Group priorities are aligned with each district's own operational priorities.

## LIFELINE UTILITIES STEERING COMMITTEE (LUSC)

The Lifeline Utilities Steering Committee, chaired by a member of the committee, meets every two months and comprises the critical infrastructure groups across transportation, power, water, roading and telecommunications. The Otago Lifeline Utilities Steering Committee also includes, as non-voting members, the critical user groups such as emergency services, the NZ Defence Force, and the health sector, represented by the Southern District Health Board. On an as-required or co-opted basis, other stakeholder and strategic interest representatives, such as tourism, fast moving consumer goods, contractors, etc are invited. The Otago LUSC was established to provide a forum to share best practice approaches and undertake work of mutual benefit to the members. The focus of the LUSC is on reducing vulnerabilities by affirming the roles and responsibilities of the Lifeline Utilities and supporting interdependent response planning.

**The Lifelines Programme** is a body of work that addresses the vulnerabilities, interdependencies and criticalities across the region and is a 'living' document that is reviewed and amended as required and when new information is identified. This programme is maintained by the Planning and Development Manager from within the Otago CDEM Group team who holds the portfolio of Lifelines Programme Manager.

## READINESS AND RESPONSE COMMITTEE (R&R)

This committee, chaired by the Director, addresses training,

resources, communications, public information, and operations. It comprises emergency management officers from EM Otago, Emergency Services representatives as well as the Group Welfare Manager and the Group Public Information Manager. The R&R Committee can establish sub-committees and/or co-opt other people with specific skills as required. This committee will also liaise with other committees locally, regionally, and nationally, as required.

## WELFARE COORDINATION GROUP (WCG)

The WCG coordinates and supports the delivery of welfare services by local authorities and agencies prior to and during an emergency. The WCG, which is chaired by the Group Welfare Manager, ensures that welfare service delivery is planned, organised, integrated, coordinated and supported. Membership in the WCG enables welfare agencies to understand their roles and responsibilities across the 4Rs under the National CDEM Plan 2015, the Otago Civil Defence and Emergency Management Group Plan, and the Group Welfare Plan.

**The Group Welfare Plan** The Group Welfare Plan (developed in 2017-2018) is a core plan across all 4Rs. The plan defines the role of Civil Defence Centres (CDC) and community-led centres. The former are venues for scalable agency engagement with the community, including the potential to provide on-site shelter and emergency accommodation. The latter are venues where community members or community-based organisations establish and operate centres that offer support to the community liaising closely with the EOC. There are significant differences between a Civil Defence Centre and a community-led centre, which are reflected in staffing levels, training, and meeting legislative requirements, such as the Privacy Act and supporting unaccompanied children or youth.

**The Animal Welfare Plan** recognises the importance of companion animals as a consideration for most individuals when required to leave their property during an event. The psychosocial impacts on individuals uncertain whether their pet is safe or not has a negative impact on their willingness to leave, their resilience during the event, and their personal recovery.



Otago CDEM recognises the Ministry for Primary Industries (MPI) as the responsible agency for animal welfare at the national and CDEM Group levels under the National Civil Defence Emergency Management Plan. Accordingly, the Animal Welfare Plan was developed in partnership with MPI to ensure that all animals are afforded protection during and following emergencies.

### **RURAL ADVISORY GROUP (RAG)**

The Otago RAG assists Otago CDEM to coordinate agencies in the rural community to prepare for and respond to emergencies within the region. The scope includes human welfare, animal welfare, agriculture, horticulture, viticulture including the wine industry, and primary industry business resilience and recovery.

Members take responsibility for understanding the arrangements and roles in emergency management across the Otago region to support leadership and coordination, which will provide synergies and increase the effectiveness of emergency management for the rural community and speed the rate of recovery.

The RAG may deliver specified rural focused projects to improve emergency management planning. The RAG will assist the Otago CDEM Group with developing SOPs for rural emergencies.

The RAG may deliver specified projects to improve emergency management planning. The RAG will assist the Otago CDEM Group with developing SOPs for rural civil defence emergencies.

## **LOCAL ARRANGEMENTS**



### **ADMINISTERING AUTHORITY**

Otago CDEM Group is a shared service across all six local authorities of Otago. Otago Regional Council is the Administering Authority for the CDEM Group.

#### **The Administering Authority:**

- Employs all staff of Otago CDEM Group and is responsible for all employment-related matters including health and safety, wellbeing, welfare, operational policies, and conduct.
- Provides administrative and related services to the Group, such as preparing agendas, arranging meetings, and taking and disseminating minutes from meetings.
- Provides financial management for the CDEM Group, including budgeting and reporting.

In addition to the funding collected by the Regional Council through the targeted rate to resource the Otago CDEM Group and its activities, each local authority member of the Group is operationally and financially responsible for its own local arrangements. Each council also contributes skills, expertise and mutual support to the Group on an 'as available' basis.

### Local Council arrangements include:

- Reduction, readiness, response and recovery activities within the district that support the objectives outlined in the Group Plan.
  - Current local civil defence arrangements that are consistent with the Group Plan framework and priorities.
  - Standard operating procedures, hazard-specific plans, and other documents that are required to give effect to the Group Plan and are relevant to local needs and priorities.
  - A minimum of three local controllers, and sufficient trained and locally domiciled staff to fulfil key functional roles in the local Emergency Operations Centre for (ideally) at least two shifts during any activation.
  - Facilities for a local Emergency Operations Centre (Emergency Coordinating Centre in the case of the Otago Regional Council) at a location which is, as far as practical, safe from natural hazards, with phone, internet, radio and satellite communications and back-up power supply, with access to an alternative EOC/ ECC location if required.
  - Coordination with the other members of the Otago Group on planning, programmes, and activities related to civil defence emergency management across the areas of reduction, readiness, response, and recovery.
- A local budget to support the EOC in its capability, capacity development, and resources.
  - A commitment to release staff for ongoing training and to take part in exercises and respond to events.
  - A named Local Recovery Manager and deputy of a senior level with sufficient financial delegation.
  - A named Local Welfare Manager and deputy at a senior level with sufficient coordination delegation.
  - An identified member and deputy of the council within Three Waters or Roding to participate in and contribute to the Lifeline Utilities Steering Committee.
  - A commitment to attendance at CDEM standing committee meetings.

## FINANCIAL ARRANGEMENTS



Regional funding is collected by the Otago Regional Council via a regionally targeted rate on behalf of all local Councils. This provides:

- Fulltime CDEM staff.
- CDEM vehicles and operating costs.
- Equipment and other relevant staff related expenses (e.g., uniforms, training, etc).
- Support for the development of community-based emergency response plans.
- Online channels for regionally-focused CDEM communication and public information management.
- Regional public education and engagement.
- Regional communications infrastructure (satellite/ radio/data).
- National programmes and activities.
- Partner agency support activities.
- Support for each TA in response to events.
- Development and delivery of training and exercise programmes.
- Development and delivery of regional welfare structure and planning.
- Development and operation of regional plans (e.g., Group Strategic/Air Operations/Fuel/Welfare etc).
- Development of consistent and collaborative local systems and structures.

Funding of local CDEM activities is funded by the local councils via local rates and provides:

- All resources required for a local EOC.
- Agreed resources for approved local community Civil Defence Centres (e.g., signage, admin resources, communications).
- Operational costs during responses.
- Training and exercising of all relevant staff.
- Local costs for district-based Otago CDEM staff (workspace/stationery/refreshments, etc).
- Local communications infrastructure requirements (in partnership with Group).
- Payment arrangements for local EOC staff (TLA and non-TLA employed response team members).
- Acceptance of staff cost if TLA staff are deployed in support of another district (TLA directed).
- Funding for local public education (TLA directed).





Lake Wanaka



# MONITORING AND EVALUATION



The Otago CDEM Group has a strong commitment to continually monitor and review our activities outside the mandated processes indicated below. We undertake our work collaboratively and cohesively with internal and external partners, stakeholders, and agencies. Our team values input and recommendations from others for improvement across all areas of work and ensures that the vision of the Otago CDEM Group is at the forefront of our daily interactions and activities.

## ANNUAL WORK PROGRAMME

The CEG receives regular reporting on the outcomes achieved for the priorities and activities focussed on agreed objectives within each district across the group.

## OTAGO CDEM GROUP PLAN TARGETS

An annual report is provided to the CEG and the Joint Committee on progress towards meeting the objectives and long-term goals set out in this plan. Work programmes may be adapted where identified outcomes are not being achieved and improvements or alternatives have been identified.

## NATIONAL CAPABILITY ASSESSMENT

Under section 8 of The Act, 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 the national Capability Assessment Tool. This tool aims to create a standard assessment of emergency management capability in New Zealand. It consists of a set of key performance indicators and performance measures against which organisations can assess themselves or be externally assessed.

As well as providing an understanding of the organisational strengths, weaknesses, and gaps, it enables MCDEM to provide a nationwide picture of implementation of requirements of The Act and progress towards CDEM’s high-level goals and objectives.

The Ministry of Civil Defence and Emergency Management conducted its Otago capability assessment in 2014 and provided a comprehensive report containing several recommendations to the Group. The results of this assessment defined the current structure and development of Otago CDEM Group.



# OPERATIONAL ARRANGEMENTS



## EMERGENCY COORDINATION ARRANGEMENTS DURING RESPONSE



### COMMUNITY

A response may be managed at the community level by individuals, family, community groups and businesses. This level of response has no 'official' response structure and no response agencies are directly involved. The community response may support response agencies' activities when requested.

The Otago CDEM Group acknowledges and supports the local councils as being the principal and primary conduit to their communities. The Group ECC's primary role is to coordinate a major response in support of each affected district and to provide the interface with national CDEM arrangements.

### PAPATIPU RŪNANGA STRUCTURE

Those people that live and participate within the rūnanga community take on the responsibility of keeping the home fires burning. They are part of the continuum that is Ngāi Tahu, they maintain the marae, greet and look after the visitors, bury the dead, help to raise the next generations and keep alive the traditions and stories of their culture.

There are four Papatipu Rūnanga within Ōtākou:

- Te Rūnanga o Moeraki
- Kāti Huirapa Rūnaka ki Puketeraki
- Te Rūnanga o Ōtākou
- Hokonui Rūnanga Incorporated Society

### INCIDENT CONTROL POINT (ICP)

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

### HEALTH AND SAFETY

We ensure compliance with the Health and Safety at Work Act 2015 (HSWA).

### EMERGENCY OPERATION CENTRES (EOCs)

- An EOC manages the response to local events within its boundary.
- EOCs are operated and staffed by territorial local authorities. For the Otago CDEM Group, Dunedin City Council has a dedicated permanent EOC and each of the district councils have made provision to establish an EOC in an event.

- The EOC provides a base for the local controller and acts as a liaison point for all agencies for local-scale events. The EOC operates under the CIMS structure and is responsible for all CIMS functions, including activating civil defence centres to provide welfare services support to affected communities.
- Emergency management staff support EOCs with their operations.
- EOCs report directly to the Emergency Coordination Centre (ECC).

### CDEM GROUP EMERGENCY COORDINATION CENTRE (ECC)

- The ECC coordinates the response to regional events that span territorial boundaries.
- The ECC is operated by the Otago CDEM group.
- The ECC maintains liaison with the National Crisis Management Centre (NCMC).
- Emergency Management staff support the ECC with its operations.
- The ECC reports directly to the NCMC.

### NATIONAL CRISIS MANAGEMENT CENTRE (NCMC)

- The NCMC is an all-of-government Coordination Centre. The national-level response to events that require all-of-government coordination are managed from the NCMC. The NCMC's day to day operations are managed by the Ministry of Civil Defence & Emergency Management.
- Where an event is CDEM-led, MCDEM uses the NCMC to support the National Controller and to coordinate an all-of-government response.

# ACTIVATION OF EMERGENCY ARRANGEMENTS



## MODES OF OPERATION

EOCs, ECC and NCMC operate under four conceptual modes. The scale and nature of the event will determine the appropriate mode of operation. Table 2 below sets these out in detail.

The activation of one centre will normally result in the next higher centre initiating low-level monitoring to ensure it has capability to engage or assist should the situation escalate. For example, if an EOC is activated and directing a response, the duty officer for the Group will alert the Group Controller and Group PIM in the first instance so they can engage or assist if required.

The EOCs/ECC retain a situational awareness at all times. Otago CDEM Group has a 24/7 'on call' system in place.

**TABLE 2: MODES OF OPERATION FOR OTAGO EOCs/ECC**

MODE	ROLES	SCALE	EM STAFF ROLE	CONTROLLER'S ROLE
<b>MONITOR</b>	Monitor and assess threats and incidents that may lead to a local emergency. Public information management as required.	On standby 24/7 'on call' system in place.	EMO 'on call' rostered person will collect and disseminate information.	Group Controller will be notified.
<b>ENGAGE</b>	In addition to monitoring activities, collect, analyse and disseminate information on emergencies. Report to or advise stakeholders. Liaison with government may be established through the MCDem Regional Emergency Management Advisor. Public information management.	Increased staffing. Duty Public Information Manager (PIM) activated. Response Manager activated to establish additional staffing needs. Welfare Manager activated to establish community welfare needs. Partner agencies informed and may be involved.	Controller, in consultation, will advise of event escalation. EMO staff will activate and be deployed to EOC and/or ECC. Further escalation will lead to activation of EOC and/or ECC with local authority staff activated.	Controllers lead response and may exercise delegated powers. May consider declaring a state of local emergency. Group Controller supports the local controllers. Other CDEM Groups and the NCMC are informed.
<b>ASSIST</b>	In addition to engagement activities, process, or coordinate requests for support, establish liaison with government, and report to and advise stakeholders. Public information management.	Partial to full staffing. Partner agencies likely to be activated.	Controllers will lead response. EMO staff will be deployed to EOCs and/or ECC. Local authority staff activated to run EOC and/or ECC. EMO staff supporting local authority staff with their operational functions.	Controllers lead local or regional response.
<b>DIRECT</b>	In addition to assisting activities, control and direct the overall response. Recovery Manager activated, and recovery planning commences.	Full staffing.	Controllers will lead response. Local authority staff running EOCs and/or ECC, with EM staff supporting this operation.	Controllers may be using statutory powers if a state of emergency has been declared. Controllers set priorities and direct operations.



**TABLE 3: EVENT PROGRESSION PROCESS**

Otago CDEM Group uses a scalable system to respond to incidents/events.

EVENT TYPE	EVENT STATUS / PROCEDURES	ECC / EOC ROLES	CONTROLLER/RECOVERY MANAGER ROLES
<b>Local incident: Can be dealt with by Emergency Services and/or Local Authority resources alone. Specialists may be required for specific circumstances.</b>	No declaration. CIMS structures and principles used to manage incident. Lead agency depends on incident type.	EOCs may be alerted or be partially operative in support of the lead agency.	Local controller and mayor notified if EOC involved.
<b>Local multi-agency incident: Can be dealt with by Emergency Services and/or local authority resources though remote support (ICP) likely to be required. Specialists may be required for specific circumstances.</b>	No declaration. CIMS structures and principles used to manage incident. Local authority may assume coordinating role for functions agreed on the day.	EOC in key support agency role. Local authority EOC partially or fully activated and co-ordinating agreed functions. Possibility of ECC partially activated in monitoring role.	Local controller coordinating the agreed functions. Group Controller notified. Local Recovery Manager advised.
<b>Imminent or State of Local Emergency involving a single TLA: The event may not or cannot be managed without the adoption of emergency powers.</b>	Declaration of state of local emergency in a single TLA is being considered, or has been deemed necessary. Declaration can be for an entire district or one or more wards.	EOC fully activated and is coordinating response and management of the emergency. ECC and adjacent EOCs alerted or partially activated to monitor the situation and ready to respond if the situation deteriorates.	Local controller exercising statutory powers authorised by the mayor through a declaration. Group controller supporting the local controller, and giving consideration to further escalation. Adjacent CDEM Groups and National Controller notified by Group Controller. Local Recovery Manager engaged, Group Recovery Manager advised.
<b>Imminent or State of Local Emergency that is regionally significant: The event affects one TLA but requires response and resources from outside that TLA, or the event affects two or more TLAs within Otago, or coordinated assistance is required to support an adjoining CDEM Group.</b>	Declaration of state of local emergency in Otago is being considered, or has been deemed necessary, which involves the entire CDEM Group area or one or more districts, or an adjacent CDEM Group requires assistance.	ECC and all EOCs fully activated. NCMC and adjacent ECCs may be alerted or partially activated to monitor the situation and be ready to respond if the situation deteriorates.	Group controller exercising statutory powers through a local group declaration. National controller giving consideration to further escalation. Local controllers responding to priorities set by/agreed with the Group controller. Group Recovery Manager engaged.
<b>Imminent or State of National Emergency.</b>	Declaration of state of national emergency is being considered, or has been deemed necessary.	NCMC, ECCs and all EOCs fully activated	National controller exercising statutory powers. Group controller responding to priorities set by/agreed with the national controller. Local controller/s responding to priorities set by/agreed with the Group controller.







## ALERTING GROUP STAFF, RESPONSE PARTNERS AND LIFELINE UTILITIES

In any event requiring the Otago CDEM Group to activate at any level (monitoring / activation / declaration), the required CIMS function managers and Recovery Managers will be alerted by the response manager in accordance with the activation procedures outlined in Otago CDEM Activation Manual:

- Response manager contacts CIMS function managers by SMS (Bulletin)/phone/text/email.
- CIMS Function Managers call in their first shift at staffing levels determined by the level of activation, using phone, text or email.
- Logistics staff develop roster system as a priority and make contact with the second and subsequent shifts in accordance with their SOPs.
- The Lifeline Utilities Coordinator makes contact with key lifelines for status reports.
- The emergency services will provide a liaison person to be the point of contact between the ECC and their agency.
- The Group controller will normally personally advise the CEG Chair, the Chair of ORC, and the mayors and CEs of all Otago councils that the ECC is activating, and also whether any declarations are likely or have been made.

## ALERTING THE PUBLIC

Alerts for most types of emergencies are initiated by other agencies and shared by Otago CDEM to increase their reach to affected communities. TLAs are the primary stakeholder in managing information alerts to their local community. The release of alerts should always be a collaborative exercise that combine the regional level of oversight with the local level of knowledge. These emergency events include:

- Flooding: warnings and watches for heavy rain issued by MetService; warnings for flooding in Otago's rivers and lakes issued by ORC.
- Storm: warnings and watches for gales, thunderstorms and cyclones issued by MetService.
- Tsunami: warnings and advisories issued by MCDEM.
- Fire: warnings of extreme fire danger and significant rural fires issued by FENZ.
- Landslide: alerts issued by GNS Science, local council or Police.
- Hazardous substances: alerts issued by FENZ.
- Threats to public safety: alerts issued by Police.
- Contaminated water: alerts issued by local authority and/or Public Health South.
- Pest plant and animal disease outbreaks: alerts issued by MPI.

The Group Public Information Manager will share these alerts as they are received through all available channels that are appropriate for the level of threat, principally:

- Facebook (both Otago CDEM's page and community pages).
- Twitter.
- Local radio stations in the area affected utilising the national MOU with broadcasters.
- Websites (both Otago CDEM and local authority websites, and national news websites).
- Emails to stakeholders.
- Third party channels including local council text alerts, social media channels and email lists.
- Emergency mobile alert (cell broadcasting) – likely only in a significant life threatening event, as MCDEM, FENZ, Police, MPI and Health are all capable of sending these alerts as initiating agencies if they assess the threat to be at a level that requires it.
- All channels that will reach the target audience, e.g. TV, community response groups, emergency service siren/loud speaker notifications in local communities where available.

In the event of a sudden onset emergency (e.g., earthquake, landslide or threat of a local source tsunami), Otago CDEM's procedure is:

- Duty Officer or Controller instructs the PIM to issue an alert. Alerts will be issued using as many of these channels as are available.
- Alerts will be issued using as many of these channels as are available:
  - Emergency mobile alert (cell broadcasting following a life-threatening event as MCDEM, FENZ, Police, MPI and Health are all capable of sending these alerts as initiating agencies if they assess the threat to be at a level that requires it.
  - Local radio stations in the affected area, utilising the national MOU with broadcasters.
  - Other media that will reach the target audience.
  - Facebook (both Otago CDEM's page and local community pages).
  - Twitter.
  - Websites (both Otago CDEM and news websites including Stuff and ODT Online).
  - Emails to stakeholders.
  - Third party channels including local council text alerts, social media channels and email lists.

When a state of emergency has been declared for any district in Otago, or for the whole region, the Group public information manager will advise the affected community.

## LEAD AGENCY FOR EMERGENCY EVENTS

The National CDEM Plan 2015 sets out the lead agency for emergency events. Table 4 below has been adapted from the National Plan to reflect the Otago CDEM Group regional agencies where applicable. It provides a useful reference for emergency events in relation to the Act that gives each agency its legislative powers required to manage these emergency events.

Where the Otago CDEM Group is the lead agency, powers are conferred through The Act. For other emergencies, the Otago CDEM Group may play a support role.

**TABLE 4: LEAD AGENCIES**

HAZARD	LEAD AGENCY (REGIONAL LEVEL)	LEGISLATIVE POWERS
Geological (earthquakes, volcanic hazards, landslides, tsunami)	Otago CDEM Group	The Act 2002
Meteorological (coastal hazards, coastal erosion, storm surges, large swells, floods, severe winds and snow)	Otago CDEM Group	The Act 2002
Infrastructure failure	Otago CDEM Group	The Act 2002
Drought (affecting rural sector)	Ministry for Primary Industries	Government Policy
Animal and plant pests and diseases (biosecurity)	Ministry for Primary Industries	Biosecurity Act 1993, Hazardous Substances And New Organisms Act 1996
Food safety	Ministry for Primary Industries	Food Act 2014
Infectious human disease (pandemic)	Southern District Health Board	Epidemic Preparedness Act 2006, Health Act 1956
Wild fire	Fire and Emergency New Zealand, Department of Conservation (for conservation estate), New Zealand Defence Force	Fire and Emergency NZ Act 2017, Conservation Act 1987, Defence Act 1990
Urban fire	Fire and Emergency New Zealand	Fire and Emergency NZ Act 2017
Hazardous substance incidents	Fire and Emergency New Zealand	Fire and Emergency NZ Act 2017, Hazardous Substances and New Organisms Act 1996
Major transport accident	New Zealand Police	Various
Terrorism	New Zealand Police	Crimes Act 1961, International Terrorism (Emergency Powers) Act 1987, Terrorism Suppression Act 2002
Marine Oil Spill	Otago Regional Council	Maritime Transport Act 1994
Radiation Incident	Fire and Emergency New Zealand	Radiation Protection Act 1965, Fire Service Act 1975



## AGENCY ROLES AND RESPONSIBILITIES

The CDEM National Plan 2015 sets out key functions for CDEM partners. These are set out in Table 5 below. They provide a useful summary to reference the roles and responsibilities agencies take in CDEM.

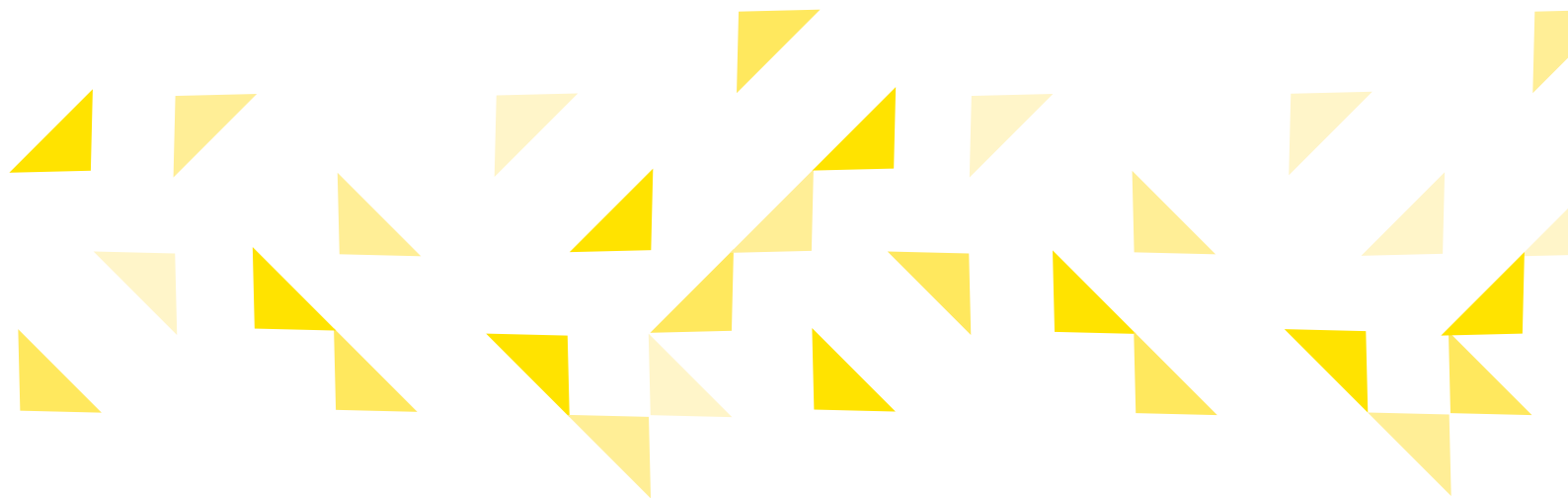
**TABLE 5: KEY FUNCTIONS**

<b>AGENCY</b>	<b>FUNCTION (FROM CDEM NATIONAL PLAN 2015)</b>
Local authorities (LAs)	Unite with regional neighbours and emergency services to form a CDEM Group. Each territorial authority to plan and provide for CDEM in its district. Coordinate response and recovery at local level.
Otago CDEM	Coordinates and facilitates the day to day planning and project work on behalf of CDEM Group to ensure the Otago CDEM Group is able to respond effectively to any emergency event. Supports the Group ECC and local EOC's in effectively responding to and the recovery from emergency events.
MCDEM	Lead agency responsible for coordinating emergencies resulting from various hazards using the arrangements in the National Plan 2015. Support agency, coordinating the CDEM response to any emergency managed by another lead agency.
NZ Police	Maintenance of law and order during an emergency. Protect life and property and assist the movement of rescue, medical, fire and other essential services, assist with disseminating public warnings, conduct search and rescue activities, carry out disaster victim identification, control access to affected areas, assist with evacuation, and coordinate inquiries to assist family/whānau to make contact and to trace missing persons. NZ Police often accept the initial responsibility for coordination of an emergency, and will hand over to the appropriate lead agency once that agency is ready. Depending on the nature of the event, NZ Police may also carry out investigation activities during a response.
Fire and Emergency New Zealand	In relation to CDEM activities, FENZ has the following functions: Providing fire prevention, response and suppression services; stabilising and rendering safe incidents that involve hazardous substances; rescuing trapped persons; providing urban search and rescue services; and performing technical rescues. FENZ are also tasked specifically with responding to severe weather related events, natural hazard events and disasters. Investigation of the cause of an event may also be carried out.
Southern District Health Board	Provide services to minimise the consequences of the emergency for the health of individuals and the community. Coordinating the local health sector response to emergencies, ensuring appropriate coordination and liaison with CDEM Group and local authorities.
Ambulance providers (St John)	Maintaining services and managing increased demand, and responding to emergencies involving risk to public health.
NZ Defence Force	Provide appropriate support to government authorities during an emergency, while maintaining operational outputs and missions. Support agency.
Lifeline Utilities	Continue to deliver the infrastructure services to the community they normally provide to the fullest possible extent through using business continuity, response and recovery plans. Lifeline utilities also provide technical advice where required across all 4Rs.
Welfare agencies	Support individuals, family, whānau and animals through the provision of welfare services via the sub-functions of registration, needs assessment, inquiry, care and protection services for children and young persons, psychosocial support, household goods and services, shelter and accommodation, financial assistance and animal welfare. Operational arrangements for each of the welfare sub-functions are set out in the Otago CDEM Group Welfare Plan.
Building consenting authorities (territorial authorities)	Lead management of buildings during a response, including leading rapid impact assessments and managing the safety of people in or near a building through cordoning, stabilisation and barricading work, carrying out demolitions and setting up partial demolition cordoning.
Science and research organisations	Provide evidence-based advice to support lead agencies, including definitive scientific advice, or to communicate risk.
Government departments and other agencies	Be capable of managing their own response to emergencies. Plan for, and be able to ensure, continuity of service, particularly in support of critical CDEM activities.

## OTHER SIGNIFICANT ROLES AND RELATIONSHIPS

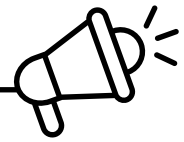
TABLE 6: OTHER ROLES AND RELATIONSHIPS

AGENCY	FUNCTION
Maritime New Zealand	Investigate and analyse the causes of maritime accidents including health and safety responsibilities. Provide a national land, sea and air search and rescue coordination service. Manage New Zealand's national maritime incident and oil spill response capability. Lead responses to significant maritime incidents and emergencies (including oil spills).
Coastguard New Zealand	Provides the primary maritime search and rescue service for New Zealand.
Otago Harbourmaster	Maintain navigation aids, lights and beacons. Respond to oil spill events.
Te Rūnanga o Ngāi Tahu	As the Treaty Partner, its role in emergency management and its primary concern for Papatipu Rūnanga, Ngāi Tahu whānui, the wider community and the impact on the Ngāi Tahu takiwā from an emergency.



Oil Spill Exercise, Dunedin Harbour

# DECLARATIONS DURING AN EMERGENCY



In accordance with The Act, section 25(5), the persons authorised to declare a state of local emergency are the mayor of the territorial authority affected, or an elected member of that territorial authority designated to act on behalf of the mayor.

In accordance with section 25(1) of The Act, the Otago CDEM Group appoints the Chairperson of the Otago CDEM Group as the person authorised to declare a state of local emergency for all or part of Otago. In their absence the Deputy Chairperson or any other available member of the Otago CDEM Group can declare.

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 sections 71 and 72 of The Act.

The full Standard Operating Procedures for the Declaration process in Otago may be obtained on the Otago CDEM website.

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**THE RIGHT INFORMATION WILL BE PROVIDED THROUGH A WIDE VARIETY OF CHANNELS IN A TIMELY MANNER TO ENABLE THEM TO RESPOND APPROPRIATELY**

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# CONTROLLERS



## LEGISLATION AND AUTHORITY

Part 5 of The Act details controllers' powers in a response. These are listed in Appendix 2.

Regional Appointment: In May 2018 the Otago CDEM Group Joint Committee agreed that all controllers within Otago had the support to work across districts as required and that a further six named controllers from throughout New Zealand could be called upon and act as controllers as requested by the district and region during an event. This negates the need for the Joint Committee to hold a special meeting to approve such an action should this support be required during an event. The list of current approved Otago and out-of-region controllers ratified by the Joint Committee in May 2018 is maintained on the Otago CDEM website. External Controllers will be deployed into a local emergency in consultation and with the agreement of the local Controller.

## GROUP CONTROLLER

Under The Act the Otago CDEM Group Controller has specific powers where a state of emergency is in force. Section 85 of The Act defines emergency powers of CDEM Groups. These are listed in more detail in the appendix.

The Otago CDEM Group delegates its powers under Section 85 of The Act to the Group Controller. As outlined in the appendix, the Group Controller also has specific powers conferred on them by The Act during a state of emergency. These powers are set out in Sections 86 to 92, and Section 94. They include evacuation of premises and places; entry onto premises; closing roads and public places; removal of aircraft, vessels, vehicles, etc; requisitioning powers; power to give directions to stop activities or to take actions to prevent or limit the extent of the emergency; the power to carry out inspections; and the power to enter into contracts.

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





Henley Township: Credit Otago Daily Times



# WELFARE



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

The Otago CDEM Group is the lead agency for welfare services for any emergency where:

- The Otago CDEM Group is the lead agency (as Table 4).
- The Otago CDEM Group is specifically requested to provide welfare services by another lead agency.

## GROUP WELFARE MANAGER

Under the National CDEM Plan 2015, the Otago CDEM Group is required to provide a Group Welfare Manager, and to establish a Welfare Coordination Group (WCG).

Otago CDEM Group employs a Group Welfare Manager. Under the National CDEM Plan 2015, CDEM Groups may also have local welfare committees and local welfare managers.

Under the direction of the Group Controller or Group Recovery Manager the Group Welfare Manager coordinates the agencies responsible for welfare services during response and recovery. The Group Welfare Manager communicates with local welfare agencies at the local EOCs.

## GROUP WELFARE PLAN 2018

The Otago CDEM Group developed a Group Welfare Plan in consultation with relevant agencies and organisations in 2018.

The plan's purpose is to provide direction and clarity for the coordination of welfare services planning for emergency management in Otago.

The plan is available on the Otago CDEM Website.

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

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



## WELFARE COORDINATION GROUP (WCG)

TABLE 7: MEMBERSHIP OF OTAGO CDEM WCG AND WELFARE SUB-FUNCTIONS.

The WCG is a multi-agency/organisation committee constituted to support the welfare focussed activities of the Otago CDEM Group across all 4Rs.

AGENCY	RESPONSIBILITY FOR COORDINATING WELFARE SERVICES SUB-FUNCTIONS
Otago CDEM Group	Registration Needs assessment Household goods and services Shelter and accommodation (shelter and emergency accommodation)
New Zealand Police	Inquiry
Ministry of Social Development	Financial Assistance
Oranga Tamariki (Ministry for Children)	Care and protection services for children and young people
Southern District Health Board	Psychosocial support
Ministry of Business, Innovation and Employment	Shelter and accommodation (temporary accommodation)
Ministry for Primary Industries	Animal welfare

## LIFELINE UTILITIES COORDINATION

Every lifeline utility must:

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

### LIFELINE UTILITIES COORDINATOR (LUC)

Under the CDEM National Plan 2015, the Otago CDEM Group must nominate and train Lifeline Utilities Coordinators (LUCs) to perform lifeline coordination functions and ensure relationships and sector planning arrangements are in place during an emergency response.

At the time of writing, Otago Lifeline Utilities Steering Committee and Otago CDEM Group are in the process of recruiting Lifeline Utility Coordinators.

## VOLUNTEER COORDINATION

Volunteers are an integral part of an emergency response at both Group and EOC level. There are three categories of volunteers. They are:

- CDEM-trained volunteers – have had official training facilitated or provided by CDEM organisations.
- Spontaneous volunteers – respond spontaneously to emergencies and are managed by the Operations function within the ECC and EOC.
- Affiliated volunteers – are aligned to organisations other than CDEM

The Otago CDEM Group uses the Director's Guideline for Volunteer Coordination in CDEM (DGL 15/13) to guide volunteer coordination in an emergency.

## LIAISON

Liaison officers play a key role in passing accurate and timely information between the ECC/EOCs and their respective agencies. Liaison officers may liaise directly with each other as well as through the EOC/ECC, which can aid coordination of their activities. They can provide advice on their agency's capabilities and intentions and can help resolve problems.

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

The Otago CDEM Group expects CDEM partner agencies to provide a liaison to the ECC, on the request of the Controller. The identified partners who will provide a liaison are:

- New Zealand Police
- Fire and Emergency New Zealand (FENZ)
- Southern District Health Board
- St John Ambulance Service
- Te Puni Kōkiri
- Otago Lifeline Utilities
- NZ Defence Force

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

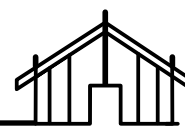




Aoraki, (Mount Cook) Photo: Anna Brankin



# OPERATIONAL ARRANGEMENTS WITH NGĀI TAHU



## TE TIRITI O WAITANGI OBLIGATIONS

Emergency Management Otago recognises the need to continue to build on its relationship with Te Rūnanga o Ngāi Tahu, to ensure greater recognition, understanding, and integration of iwi perspectives, tikanga in emergency management, and give effect to Te Tiriti o Waitangi and the treaty partnership. To ensure we achieve these aspirations, Te Rūnanga o Ngāi Tahu is formally a member of the Emergency Management Otago Coordinating Executive Group.

## MANAWHENUA

Emergency Management Otago recognises Te Rūnanga o Ngāi Tahu as the mandated statutory representative of Ngāi Tahu whānui. There are four Papatipu Rūnanga within the Otago CDEM Group region:

- Te Rūnanga o Moeraki
- Kāti Huirapa Rūnaka ki Puketeraki
- Te Rūnanga o Ōtākou
- Hokonui Rūnanga Incorporated Society

## PAPATIPU RŪNANGA STRUCTURE

Papatipu Rūnanga exist to uphold the mana of their people over the land, the sea and the natural resources.

Those people that live and participate within the rūnanga community take on the responsibility of keeping the home fires burning. They are part of the continuum that is Ngāi Tahu, they maintain the marae, greet and look after the visitors, bury the dead, help to raise the next generations and keep alive the traditions and stories of their culture.

No rūnanga is the same, each has opportunities and challenges shaped by the land, the environment, the towns and cities and the people that make the region home. The rūnanga have the local knowledge and understand the needs of their marae and community. Papatipu Rūnanga are the face of Ngāi Tahu at the regional level.

## NGĀI TAHU RESPONSE

Previously Papatipu Rūnanga and Te Rūnanga o Ngāi Tahu have responded to emergencies that have occurred within the Ngāi Tahu takiwā:

- Papatipu Rūnanga response: Following an emergency, marae often become the natural gathering places for affected whānau and their wider communities.
- Marae have established tribal networks; and have an inherent ability to manaaki large groups of people. For the most part, marae are able to provide a social-wellbeing response for the community and are well-equipped to assist in a welfare capacity during an emergency response including providing food and accommodation to affected people.
- Te Rūnanga o Ngāi Tahu response: In an emergency, the primary concern of Te Rūnanga o Ngāi Tahu is the welfare of the affected Papatipu Rūnanga, Ngāi Tahu whānau and the impact on our Ngāi Tahu takiwā. Te Rūnanga o Ngāi Tahu will liaise with the affected Papatipu Rūnanga and Civil Defence to assess the need and level of assistance required.

# TRANSITION TO RECOVERY



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

- The immediate threat to people and property has passed.
- The focus has shifted to restoration.
- Declaration powers are no longer required.
- Recovery agencies are moving towards meeting their requirements in their business as usual roles.

The Act now provides powers for the initial stage of recovery, by establishing a formal transition period. The purpose of a transition period is to provide targeted powers to support the initial recovery phase.

Powers are provided in the transition phase that recognise the circumstances following an emergency and allow actions to be taken that are in the public's interest. The phase allows for that period when the immediate response is over, but the community is not yet ready for the business-as-usual regime under which longer-term recovery usually operates.

Not every emergency will require a transition period to be notified. However, after any emergency response requiring a recovery phase there will be some form of transition when a handover occurs from the controller to the recovery manager.

## CONTROLLER HANDOVER TO RECOVERY MANAGER

After any emergency response requiring a recovery phase, the controller and recovery manager will follow the process outlined below:

### 1. Transition Briefing

The controller will chair a transition briefing. At the end of the briefing, coordination and accountability for transition and recovery related activities will be transferred to the recovery manager.

### 2. Response Transition Report

The controller will prepare a transition report, comprising:

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

### 3. Involvement in critical response briefings.

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

## RECOVERY MANAGER INITIAL ACTIONS

In the transition phase the recovery manager will carry out the following actions:

- Work with the PIM to prepare a communications plan for recovery.
- Begin implementing any recovery action plans.
- Initiate key recovery arrangements.
- Begin to address the effects of the emergency and put in place inter-agency processes, meetings and reporting arrangements to ensure recovery needs are met and coordinated.

## NOTIFYING A TRANSITION PERIOD

Under The Act (2002) a transition period notice is a legislative mechanism that allows extraordinary powers to be available to Recovery Managers for a given period of time. Under Section 94B of The Act:

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

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

For the Otago CDEM Group, the persons authorised to give notice of a local Transition Period are the same persons authorised to declare a State of Local Emergency. That is:

- In accordance with Section 25(5) of The Act, the mayor of a territorial authority, or an elected member designated to act on behalf of the mayor if the mayor is absent, may give notice of a local transition period that covers the district of that territorial authority.
- In accordance with Section 25 (1)(b) of The Act, the Otago CDEM Group authorises the Chairperson of the Otago CDEM Group Joint Committee to give notice of a local transition period for the region, or for one or more districts within the region.
- In the absence of the Chairperson, the authority to give notice passes to the Deputy Chairperson of the CDEM Group.
- In accordance with Section 25(4) of The Act, if the Chairperson or Deputy Chairperson are unable to exercise the authority to give notice, then a representative of any member of the Group may exercise the power to give notice of a local transition period.

## ROLE OF RECOVERY MANAGER IN A TRANSITION PERIOD

Under The Act the Group Recovery Manager has specific powers in relation to transition periods. During a local transition period, under Section 30A the Group Recovery Manager must direct and coordinate the use of personnel, material, information, services and other resources for the purposes of carrying out recovery activities.

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

**TABLE 8: POWERS IN RELATION TO TRANSITION PERIODS:**

SECTION	DESCRIPTION
Section 94H – General Transition Powers	Carry out or require to be carried out: <ul style="list-style-type: none"> <li>• Works</li> <li>• Clearing of roads</li> <li>• Examining and marking any property</li> <li>• Removing or disposing of dangerous structures and materials</li> <li>• Providing for the conservation and supply of food, fuel and other essential services</li> <li>• Dissemination of information and advice to the public</li> </ul>
Section 94I – power to require information	Require any person to provide information. The powers of Section 76, 77, 82 and 83 in relation to information are also conferred on Recovery Managers.
Section 94K – evacuation of premises and places	Require evacuation of premises or places, including public places, and exclude persons or vehicles from the premises or place.
Section 94L – entry on premises and places	May enter and if necessary break into any premises or places if it is on reasonable grounds for saving life, preventing injury or rescuing and removing injured persons, permitting or facilitating the carrying out of any urgent measures.
Section 94M – closing roads and public places	May totally or partially prohibit or restrict access to any road or public place.
Section 94N – power to give directions	May direct any person to stop an activity that may have adverse consequences or hinder the recovery.
Section 94P - reporting	If exercising a power under Part 5A of the CDEM Amendment Bill, the recovery manager must give a written report to the Director of MCDEM, and a copy of that report to the CDEM Group.





Blackjack Creek



# RECOVERING FROM AN EVENT

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Recovery is about supporting communities to return to the everyday functions of life following a disaster as soon as possible. The quicker our residents can return to their homes, businesses and schools can re-open, and normal routines can be resumed, the quicker our community will recover from an emergency. The aim of recovery is to support and enable communities to resume normal activities while incorporating lessons learned. Recovery often lasts much longer, and is more complex, than the response phase of an event. It can involve a far greater level of planning and management and must be based upon the needs and preferences of the community.

Recovery is a developmental and remedial process that aims to:

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

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

More detail on functions, roles and responsibilities in recovery are contained in the Otago Civil Defence Emergency Management Group Recovery Plan.

## CDEM RECOVERY PRINCIPLES

Recovery is founded on the needs and preferences of affected communities.

- Recovery will aim to minimise the escalation of the consequences of an event.
- Group recovery capability and capacity is based at the local TA level and will build upon local recovery capability and capacity.
- Recovery takes opportunities to adapt to meet the future built, environment, economic and social needs.
- Recovery will work to reduce the future exposure to hazards and their associated risks.
- Recovery takes an inclusive approach to community participation, recognising the roles of individuals and communities, the diversity of communities, and the importance of taking local knowledge into account.
- The recovery process starts at the beginning of the response phase, takes immediate actions to ensure the safety of individuals and communities, and integrates recovery with response whenever possible.
- Recovery management is part of the everyday work of the Otago CDEM Group, integrated with existing organisational systems as much as possible.
- Recovery management is considered to be comprehensive by linking recovery activities to the other emergency management processes, i.e., Reduction, Readiness and Response.

## GROUP RECOVERY STRUCTURE

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

## GROUP RECOVERY MANAGER

The role of the Group recovery manager is to:

- Provide leadership to the group on pre-event recovery planning and assistance and advice to local recovery managers.
- Coordinate recovery activities across the group as required.
- Liaise primarily with the local recovery managers, the national recovery manager and the recovery management team.
- Coordinate and collaborate with other government and non-government agencies.
- Advise the recovery team, the CEG and Otago CDEM Group Joint Committee on the application of The Act and ensure recovery activities including the use of powers are carried out in accordance with The Act.
- Monitor and report on progress and achievement of outcomes.

The Group recovery manager role commences during the response and ceases upon completion of the exit strategy.

## LOCAL RECOVERY MANAGER

The role of local recovery managers is to:

- Coordinate recovery activities within the local authority, and to manage local recovery offices.

The local recovery manager primarily liaises with:

- Communities affected by the emergency.
- The group and/or national recovery managers.
- Local sector groups.

## GROUP/LOCAL RECOVERY OFFICE

A group or local recovery office may be set up, depending on the size and complexity of the event. The purpose of the recovery office is to bring together subject-matter experts and project leads to provide a coordinated structure for recovery operations. The size of the office may vary.

A recovery office is likely to carry out the following tasks:

- Impact assessment to gain knowledge of the impacts of the event and use this to prioritise needs and resources.
- Information management, ensuring the collection, storage and dissemination of information, to enable an accurate understanding of recovery issues and requirements, and facilitation of good decision making.



- Public information management, to ensure communities understand what is happening and can take appropriate actions.
- Community engagement – to build social networks to enable the community to work together and share resources and information.
- Reporting to stakeholders, to maintain accountability and transparency, gain support and assistance, and to keep a record of the recovery efforts including lessons learnt.
- Planning, monitoring and reporting on recovery outcomes, noting the importance of providing clear objectives, measures and milestones to evaluate recovery progress.

The primary focus of the recovery office is the recovery of the community.

## EXIT STRATEGY



Towards the end of the recovery phase, councils and the community will be advised of the proposed ending of the CDEM recovery phase. That advice will include a detailed report from the Group or local recovery manager to the relevant council chief executives, the CEG and the Minister of Civil Defence and Emergency Management. It is important to note that although the recovery phase of a CDEM event may end, actual physical and psychosocial reconstruction may continue for a considerable period. Following the development and implementation of an exit strategy it is essential to conduct a debrief and review.

An exit strategy is a systematic plan to achieve coordinated withdrawal from a formal recovery process. It is developed to ensure a smooth transition from the end of the formal recovery phase to, 'business as usual', when normal social and economic activity resumes.

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

The exit strategy should contain the following information :

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

**Why:** the rationale for ending formal recovery.

**When:** the date of the end of the formal recovery process.

**Where:** public notification of the transition, and what will happen in the future.

**What:** achievements during the formal recovery phase, handover arrangements, and ongoing issues.



# EXPENDITURE DURING A CIVIL DEFENCE EMERGENCY



Each local authority must ensure appropriate delegations are made to the Group and Local Controllers to meet start-up costs to respond to an emergency. It is essential that every expense incurred during an emergency response is clearly authorised and documented. Otago CDEM Group will work with councils to develop cost recovery rules in the event that one or more councils provide support to another council in responding to an emergency within its jurisdiction.

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

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

The Otago Regional Council is responsible for funding:

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

Local authorities are responsible for funding:

- All costs associated with their own response personnel (excludes those employed by Otago CDEM Group), facilities and resources.
- All emergency expenditure incurred within their jurisdictional areas, under the direction of the local controller.

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

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

## EXPENDITURE IN TRANSITION AND RECOVERY

Recovery expenditure must be authorised by the recovery manager and a clear record of any expenditure must be kept by the recovery office.

## GROUP RECOVERY MANAGER AND OFFICE

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

## LOCAL RECOVERY MANAGER AND OFFICE

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

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

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

## GOVERNMENT FINANCIAL SUPPORT DURING RESPONSE

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

## CARING FOR THE DISPLACED

Central government will fully reimburse local authorities for costs incurred in caring for displaced people. Eligible costs include the full direct costs of accommodating, transporting, feeding and clothing people who cannot continue to live in their usual place of residence as a result of an emergency. This applies while people are en route to, or in, emergency accommodation such as halls or marae. Marae and other organisations that provide such accommodation can invoice local authorities, who can then claim reimbursement. If a marae considers it culturally inappropriate to invoice a local authority, the local authority may provide a koha to the marae, and then seek reimbursement of the koha.

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

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

## OTHER RESPONSE COSTS

The Government may partially reimburse other costs. The eligibility for reimbursement is determined by whether the goods or services purchased contributed to the precautions or preventive actions described in clause 162 (b) and (c) of the National CDEM Plan Order 2015, include actions that reduce immediate danger to human life, and are taken immediately before or during the emergency. Following an emergency, the Group Controller will recommend to the Otago CDEM Group which costs should



reasonably be met by the Otago CDEM Group. There may be circumstances where shared Otago CDEM Group funding could be applied where there are widespread adverse regional, environmental, social, or economic impacts, and consequential regional benefits from localised response efforts to mitigate these impacts.

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

### **GOVERNMENT FINANCIAL SUPPORT DURING RECOVERY**

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

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

### **INFRASTRUCTURE RECOVERY REPAIRS**

Essential infrastructure recovery repairs may be claimed. This includes:

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

### **DISASTER RELIEF FUNDS**

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

### **ROAD AND BRIDGE REPAIR SUBSIDIES**

Central government is responsible for state highway restoration through the New Zealand Transport Agency (NZTA). NZTA may also provide financial support to local authorities towards the costs of road and bridge repair after a weather event or other natural disasters.

## ACRONYM/TERM-DEFINITION

### 4Rs

Reduction, Readiness, Response and Recovery.

### THE ACT

The Civil Defence and Emergency Management Act 2002

### CDC

Clutha District Council in this document. CDC also refers to Community Defence Centres in a response, (in this document this is written in full). These are venues in local communities developed for community engagement and are scalable and usually led by the CDEM responding agency.

### CDEM

Civil Defence and Emergency Management.

### CDEM EVENTS

These include actual emergencies and/or evolving situations which may cause harm to life or property.

### CLC - COMMUNITY LED CENTRES

A venue where community members or organisations operate a centre to offer support to the community.

### CEG

Coordinating Executive Group: Established under Section 20 of The Act. 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.

### CODC

Central Otago District Council.

### CRG

Community Response Group

### DCC

Dunedin City Council.

### DECLARATION

A declaration allows the controller and others access to statutory powers with the effect of granting people the necessary authority to protect life and property in extraordinary emergency events. The rationale for declaring a state of emergency is:

- an emergency event has occurred or may occur;
- the safety of the public or property is endangered;
- loss of life, injury, illness, or distress may be caused; or
- usual services are inadequate to deal with the emergency.

### EMERGENCY

As defined under The Act:

- 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 Utilities, or actual or imminent attack or warlike act; and
- 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

- 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, District Health Boards (including ambulance services) and New Zealand Defence Forces.

### EOC

Emergency Operations Centre: A territorial authority facility where the response to an event may be managed and supported at a local level.

### EMO

Emergency Management Otago: The public face/branding for the Otago CDEM Group at an operational level.

### ECC

Emergency Coordination Centre: the Group's facility for the coordination of an event where more than one TLA or other agency is involved and which requires regional coordination.

### FENZ

Fire and Emergency New Zealand.

### FMCG

Fast Moving Consumer Goods (i.e., groceries).

### 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.

### LIFELINE UTILITIES

These are the critical infrastructures named in or described in section 60 of the CDEM Act. Within Otago, these include:

- Transportation to include airports, port companies, road and rail networks
- Power including generation, transmission and distribution of gas, electricity and wind
- Water: 3 waters (potable, grey and black water)
- Telecommunications: Chorus
- Roads: NZTA and TLAs
- Fuel: Chevron

### LUC

Lifeline Utilities Coordinator: members of Lifelines who form part of the response team in the ECC in an event. Their role is to liaise with all the Lifeline Utilities and provide critical information flow both ways to aid the response and recovery.

### LUSC

Lifeline Utilities Steering Committee: Representation from all of Otago's critical lifelines infrastructure and critical users of lifelines facilities. Including health providers and emergency services.

### LIVING DOCUMENT OR ACTIVITIES

A project, document or programme of work that is under continual review and is subject to change throughout the duration of this Plan.

### LTP

A council's long-term plan (usually ten years). This may also be known in some councils as the '10 Year Plan'.



**MPI**

Ministry for Primary Industries.

**MSD**

Ministry of Social Development.

**NZ DEFENCE FORCE**

Navy, Army and Air Force.

**NZTA**

New Zealand Transport Authority.

**ORC**

Otago Regional Council.

**OTAGO CDEM GROUP**

Otago Civil Defence and Emergency Management Group: Established under section 12 of The Act 2002. Unless otherwise stated in the Plan, it refers to the CDEM Group, a joint standing committee with membership comprising the mayors from the Central Otago District, Clutha District, Dunedin City, Queenstown Lakes District and Waitaki District councils and the chairperson of the Otago Regional Council.

**QLDC**

Queenstown Lakes District Council.

**RC**

Recovery Committee.

**RR**

Risk Reduction Committee.

**R&R**

Readiness and Response Committee.

**RAG**

Rural Advisory Group.

**RPS**

The Otago Council's Regional Policy Statement.

**RTR**

Regionally Targeted Rate: Otago CDEM Group is funded through a targeted annual rate collected by Otago Regional Council on their behalf.

**SDHB**

Southern District Health Board.

**SRP**

Strategic Recovery Plan.

**SOP**

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

**SUPPORTING/SUPPORT AGENCY**

Government agencies that provide support in a CDEM Response and are an integral part of day to day operations for the Otago CDEM Group. These include FENZ and the SDHB.

**TLA**

Territorial local authority.

**WDC**

Waitaki District Council.

**WCG**

Welfare Coordination Group.

## REFERENCES

**REFERENCES**

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All these reports and others relating to natural hazards can be found on the Otago Regional Council website at the following link [www.orc.govt.nz/plans-policies-reports/reports-and-publications/natural-hazards](http://www.orc.govt.nz/plans-policies-reports/reports-and-publications/natural-hazards)

## SUPPORTING INFORMATION



The following documents are available on the website [www.otagocdem.govt.nz](http://www.otagocdem.govt.nz).

The Act 2002

The National Civil Defence Emergency Management Plan 2015

The Guide to the National Civil Defence Emergency Management Plan 2015

The Otago CDEM Strategic Recovery Plan 2018

The Otago CDEM Group Welfare Plan 2018

The Otago CDEM Group Animal Welfare Plan 2018

The Lifelines Programme (Vulnerabilities Assessment) 2018

The Otago CDEM Risk Register 2017

Assessment of liquefaction hazards in the Dunedin district 2014

# APPENDIX 1

Appendix 1 covers the current hazards and long-term threats identified for Otago. Based on the information derived from the Risk Assessment Register data collected by Otago CDEM annually in collaboration with its partner agencies and organisations, the Risk Assessment Register for Otago captures all hazards, their likelihood and consequential impact on Otago and is maintained as a separate document. As the threat landscape changes and vulnerabilities are exposed, our priorities will change, in light of this it must be understood that the current identified priority hazards are a culmination of data supplied to Otago CDEM by key partners across Otago at the current time this plan was developed.

## PRIORITY HAZARDS IN OTAGO



### SEISMIC RISK IN OTAGO

A severe earthquake in a major urban area (Dunedin, Oamaru, Queenstown, Wanaka, Alexandra, Balclutha) could have substantial social, environmental and economic consequences, as Christchurch experienced in 2010 and 2011. There are several active faults in Otago, which increase earthquake vulnerability near the Otago boundaries and within the region itself. Several faults show evidence of activity in the Holocene period (last 10,000 years). These include the Cardrona, Dunstan, Rough Ridge, Hyde, Taieri Ridge, Waihemo and Akatore faults (Murashev & Davey, 2004). These faults also pose significant risks to key roads and other lifelines in rural areas.

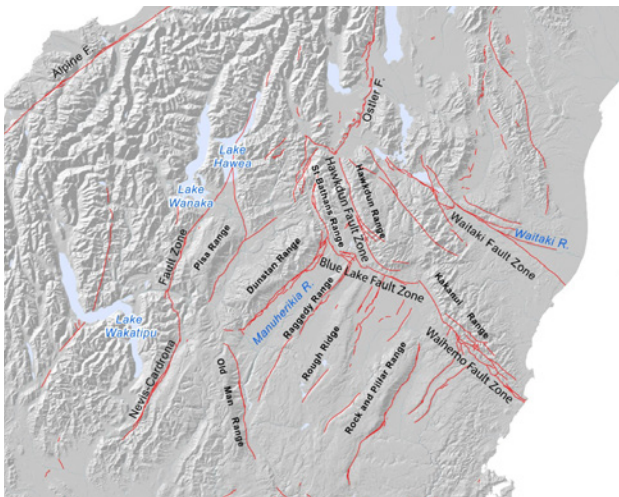


Figure 1: Principal faults in Otago, with the major fault zones that define Otago's northeast margin: Waihemo, Blue Lake, and Hawkdun Fault Zones. Image courtesy of Otago University Dept of Geology.

### THE ALPINE FAULT

The Alpine Fault is unique in that it has consistently produced a magnitude 8+ earthquake at a period of 300 years between each one for the past 8000 years. The last time was in 1717. It is Otago's most credible devastating threat with an estimated probability of 30% likelihood in the next 50 years. An earthquake of this magnitude will have a significant impact of the Queenstown Lakes district, where at any one time up to 123,249 visitors may be present.<sup>1</sup>The volume of tourists into the Queenstown Lakes district presents a significant

planning challenge. This will require specific consideration around accommodation and evacuation of up to 123,249 visitors following a disaster. The roading routes in and out of Queenstown are likely to be impassable, there is no direct sea access, and the airport may be useable but the roads in and out of the town itself not. When it occurs, little else we are doing at the time will matter, and possibly for a long period afterwards. It is clear from the seismic modelling that all parts of Otago will be directly affected to a greater or lesser degree. Planning for this event provides us with the opportunity of being able to prepare for a response of this level and, although the next event might not be of this severity, anything less should be made easier by the planning, training and exercising we have undertaken during the lifetime of this Plan.

<sup>1</sup>Based on 2019 average day forecast 2019: <https://ecoprofile.infometrics.co.nz/Queenstown-Lakes%20District>

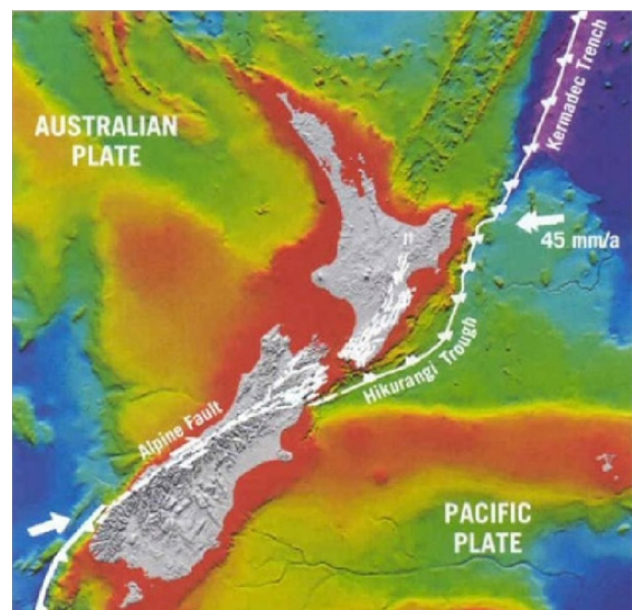


Figure 2: The Alpine Fault



## LIQUEFACTION

Liquefaction is a process where earthquake shaking causes poorly consolidated, groundwater-saturated geological materials to lose strength and stiffness, due to increased groundwater pore pressure in the material (Barrell et al., 2014). As sediments are shaken, they act like a fluid or shaken jelly, causing deformation, cracking, subsidence of the ground and sometimes lateral spread towards rivers or lakes. Liquefaction can cause severe damage to infrastructure, such as breaking of foundations, fracturing of pipes and buoyant rises of light buried structures such as tanks. Areas with unconsolidated sediments or soils, and high groundwater tables have a high-risk exposure to liquefaction and settlement of soils. Locations close to active faults have a higher risk exposure to liquefaction due to intense ground shaking.

GNS completed an assessment of the liquefaction hazards in the Dunedin district in 2014. The report divided the district into liquefaction susceptibility domains. Domain B includes areas underlain by river or stream sediments and has a low-to-moderate likelihood of saturated liquefaction-susceptible sediments. Domain C includes areas underlain by young marine or estuarine sediments and includes South Dunedin and the Taieri Plains. These areas have a moderate to high likelihood of containing liquefaction-susceptible sediments.

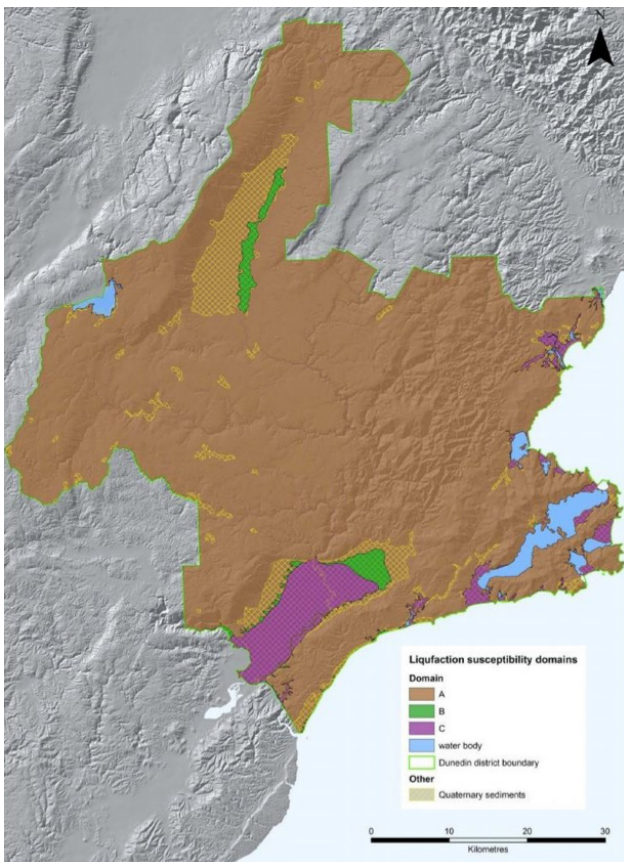


Figure 3- Map of liquefaction susceptibility domains for the Dunedin district (GNS)



## FLOODING

Floods are the most commonly occurring emergency in Otago. Our communities often experience inundation from rivers and streams and we are also more regularly experiencing significant surface flooding after intense localised rain, requiring a response to this hazard at any time of the year. Floods become a hazard when they may affect public safety, property, transport routes and other infrastructure that supports communities.

During major coastal storms, coastal inundation can flood low-lying areas all along Otago's coast, with increased erosion of cliffs and beaches.

Otago has multiple areas with single access road routes that are susceptible to flooding. This poses significant challenges for those living in these communities, affecting their ability to return home from work or to evacuate during extreme weather.

The Otago Regional Council's monitoring network tracks rainfall and river flows from storms. The ORC flood management team works closely with forecasters to predict and model the impact of rainfall, and with Otago CDEM during events. In partnership with the other councils, the Regional Council's flood team provides warnings to affected communities and the media, to better inform those at potential or actual risk.



Photo 1: Henley Flood 2017



Photo 2: Toko Mouth - single access route in flood 2007





## LANDSLIDES

A landslide describes a wide range of ground movements, such as rockfalls, deep failure of slopes, and shallow debris flows. Soil and rock can fail to bind across the surface of a slope or deep below the surface, causing movement of debris. Landslides are often unpredictable and can be caused by intense rain, an earthquake, construction work, or even freeze/thaw effects during the winter season. The nature of the slope and its vegetation cover has a significant effect on the risk. A landslide may be several metres or several hundred metres wide. Otago is particularly vulnerable to landslides due to its geographical make up.

Historical landslides include the Abbotsford Landslide in Dunedin, 1979, where slope failure damaged homes. Intense rainfall in June 2015 and July 2017 caused many slips along the Otago Peninsula, which blocked and damaged roads. Known landslides in Otago are mapped on the Otago Regional Council online natural hazards database.

Heavy rainfall in 2017 and 2018 created significant landslips and debris flows on the Otago Peninsula and in Roxburgh.



Photo 3: Roxburgh landslide 2018



Photo 4: Major Slip affecting properties in Blanket Bay. (From Helicopters Otago BK177, Tuesday, 25 July, 2017)



## COASTAL EROSION

Coastal erosion is the wearing away of land and beach sediments by waves, tidal currents, drainage and high winds. The Otago coastline has cliffs, gravel beaches, and sandy bays that are all susceptible to erosion from the sea and other natural processes. The rate of erosion can be unpredictable and is often increased during storms or high tides.

Much of the Otago coastline is vulnerable to coastal hazards, which include erosion from waves, tidal currents, strong winds and storm surges. Rapid rates of shoreline change can occur on sandy beaches due to coastal erosion. Rock walls have been built at St Clair in Dunedin and Oamaru to mitigate the effects of coastal erosion. At St Clair, rock wall mitigation has increased the wave energy further down the beach and resulted in increased erosion of middle/St Kilda beaches. Sand sausages have been used to prevent ongoing erosion of the sand dunes.



Photo 5: Erosion of the fore-dune at St Kilda beach in July 2007 (left) and September 2007 (right) (Goldsmith and Sims 2014)



## STORM SURGES

A storm surge is a higher than normal sea level due to changes in atmospheric pressure and wind, which can result in inundation of roads and coastal property over an extended period. Storm surges can accelerate coastal erosion, flood coastal communities, destroy homes, and strand travellers.

Flooding can also occur inland as the surge enters estuaries and lagoons, impeding normal river flows and keeping river levels higher than normal. If severe weather has already been experienced inland, then these rivers may already be high, increasing the risk or extent of flooding in the lower reaches.

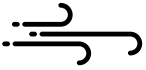


Photo 6: Storm surge affecting Pounaweia, April 2006



### STORMS

Storms are a common occurrence throughout Otago and may bring high winds, heavy rain, flooding, snow or coastal storm surges. The frequency, intensity and duration of storms are difficult to predict, although forecasting has become more accurate. Some communities may be at risk from several types of storm hazards.



### WINDS

Damaging wind can be caused by several of the weather patterns that regularly flow over Otago. MetService issues a strong wind warning when winds of more than 87km/hr are expected over land. Severe winds can affect power and telecommunications networks, uproot trees, and peel off roofs. High-sided vehicles, such as trucks and campervans, are at risk. Gales in Otago have damaged roofs, fences and signs and resulted in closure of airports, power lines being brought down, and electrical sparks igniting fires.



### SNOWSTORMS

Snowstorms can create a severe hazard for people in Otago. While some communities, such as Queenstown and Wanaka, are accustomed to dealing with heavy snow and its consequent disruption semi-annually, deep snow can also accumulate in densely populated coastal areas. The most common effects of blizzards are disrupted power supplies and blocked roads, and disrupted flights and delays in the delivery of fast-moving consumer goods. Snowstorms can occur through most parts of Otago during winter and have been known to cut off isolated communities for days. Depending on many factors, including access, power can sometimes take days or even weeks to be restored. Telecommunications networks can be similarly affected. Rural communities are familiar with these problems, often having lived with severe weather patterns for generations. Having back-up generators and alternative forms of heating at the ready is important in more isolated areas where infrastructure takes longer to restore. Urban communities are less prepared in relation to alternative power sources but may similarly be affected if sustained power outages occur.



### COASTAL TSUNAMI

A tsunami is a natural phenomenon consisting of a series of waves or surges caused when a large mass of earth on the bottom of the ocean drops or rises, rapidly displacing the water above it. Tsunamis are generated by earthquakes, volcanic eruptions, or underwater landslides. The source of the disturbance may be close to the New Zealand coastline or on the other side of the Pacific Ocean.

A near-source tsunami is generated close to the coastline. The water level will fall rapidly past the low tide mark and

then quickly return, potentially several metres high. If this happens, there won't be enough time to issue an effective warning so MCDEM has created a public education programme centred on the message that if an earthquake lasts more than a minute, or is so strong that it is difficult to remain standing, people near the coast should "get gone" without waiting for an official instruction. An earthquake centred on the Puysegur Trench, off the coast of Southland, or a regional fault such as the Akatore or Green Island Fault, could trigger a near-source tsunami which may affect coastal communities south of Otago Peninsula.

A distant source tsunami may start as far away as South America, taking much longer to reach New Zealand and affecting more of the coastline, potentially to a height of several metres. The Ministry of Civil Defence and Emergency Management will issue national warnings to CDEM Groups, emergency services, and to the public via numerous channels including the National Emergency Mobile Alerting System and broadcast media. A small number of Otago communities have sirens that may be triggered in the event of a tsunami.

Distant source tsunami may affect coastal communities along the Otago coast and people living near the mouth of a river (for example, along the Taieri and Clutha rivers). Urban areas that could be affected by a tsunami include South Dunedin and Oamaru. Otago Regional Council has modelled inundation zones for the localities in Figure 4, which identifies tsunami risks. Online maps identifying tsunami evacuation zones for the whole Otago coast are on the Otago CDEM Group website.



Figure 4: Coastal communities that could be affected by a tsunami (Goldsmith, 2012)



### DAM FAILURE/INLAND TSUNAMI

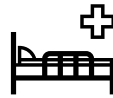
Although the risk of a dam break is relatively low, especially for the major hydro dams (which are built to a very high standard), there is still a degree of risk across Otago from a major earthquake. An earthquake may not damage the dam but may create both a seiche or an inland tsunami, caused by significant movement of the lake bed, or substantial rockfall into the lake. Lake tsunami can also send flood waves downstream. A tsunami occurred in Charles Sound after the Fiordland earthquake in 2003. Due to the remoteness nobody was affected. However, a rockslide caused a 4-5m high tsunami 800 metres away (Mackey and Goldsmith, 2015). NIWA has mapped sediments on the bed of Lake Tekapo to establish evidence of previous lake tsunami (Mountjoy et al 2018) and identified that their findings will be relevant for similar lakes, including Wakatipu and Wanaka.

These events are likely to occur so quickly a warning is unlikely to be issued. When a major earthquake occurs (i.e., so strong that you might not be able to stand) the national message is: "If an earthquake is long or strong, get gone." People living around lakes and reservoirs need to be aware of their surroundings and where they can reach safety, should a strong or prolonged earthquake occur.



### FIRES

Vegetation fires are an annual hazard across many areas of Otago. They most commonly occur in summer and autumn but are a potential risk at any time – particularly in the "Red Zones" around Queenstown Hill and Mt Iron in Wanaka, where a total fire ban is in place year-round. The drier areas of Central Otago and Strath Taieri are also at risk.



### PANDEMIC

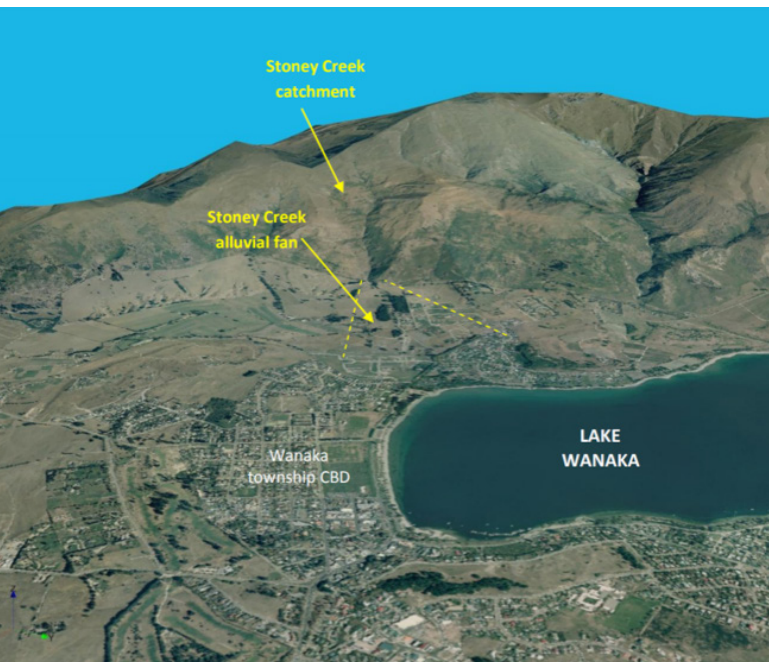
The Ministry of Health has identified that an influenza pandemic is the most likely event to cause a large-scale health emergency in New Zealand. Three major influenza pandemics occurred in the 20th century, reaching New Zealand in 1918, 1957 and 1968. Recent estimates put mortality from the 1918 pandemic at between 50 million and 100 million worldwide. In New Zealand, the 1918 pandemic is estimated to have infected between a third and one half of the entire population, causing about 8,000 deaths, of which at least 2,160 were Māori. Deaths from this 'spanish flu' pandemic numbered 496 in Otago. However, the first wave of influenza A (H1N1) 2009 reminds us that some pandemics may have only a small impact on natural death rates.

The New Zealand standard planning model assumes a severe pandemic wave in which 40% of the New Zealand population (more than 1.9 million people) become ill over an eight-week period. The peak incidence in the model occurs in weeks three to five, when about 1.5 million people – a third of New Zealand's population – would be ill, convalescing or just recovered.

The standard planning model assumes a total case fatality rate of 2%, within which about 38,000 deaths would occur over the eight-week period, peaking at about 23,500 in week four (compared with New Zealand's normal weekly death rate of around 599). This is not a prediction – it is not possible to make any such forecast before a pandemic develops. A 21st century pandemic may not reflect the course, incidence or fatality rates of the 1918 pandemic.







## ALLUVIAL FANS

An alluvial fan is a build up of river or stream sediments that form a sloping landform, shaped like an open fan or a segment of a cone. These typically occur near the boundaries between hill slopes and valleys. Flooding on alluvial fans can be damaging as the fans have steeper gradients than floodplains. Inundation from flood water, debris flow, debris flow deposits, channel migration, deposition and erosion are all hazards. Otago Regional Council has identified 'high hazard' alluvial fans that are vulnerable. Communities in the Makarora Valley and parts of Queenstown, Wanaka and Roxburgh are exposed to intermittent alluvial fan hazards (Woods, 2011).

Figure 5: Image showing west Wanaka, including the Stoney Creek catchment and indicative fan area



## CLIMATE CHANGE

While not considered a natural hazard, climate change is a factor affecting the frequency and intensity of existing hazards. Climate change has the potential to affect the entire region. Areas already vulnerable to natural hazards, such as South Dunedin, will become more exposed. Central Otago may become more vulnerable to droughts and fires over summer and harsh frosts over winter. More extreme weather can also increase the likelihood of flooding, storms, coastal erosion and landslides.

In New Zealand, changes in temperature and rainfall are already occurring. These changes will occur to differing extents in different parts of New Zealand throughout this century and beyond. Based on the latest climate projections for New Zealand, by the end of this century the Ministry for the Environment and NIWA predict we are likely to experience:

- Higher temperatures – greater increases in the North Island than the South, with the greatest warming in the northeast (although the amount of warming in New Zealand is likely to be lower than the global average).
- A change in rainfall patterns, with increased summer rainfall in the north and east of the North Island and increased winter rainfall in many parts of the South Island.
- Rising sea level which will affect coastal communities such as South Dunedin, Aramoana, Oamaru, and Brighton.
- Increased severity of extreme weather including storms, heavy rainfall and drought, which can result in flooding and landslides and causes stress for communities who require extra resources to cope with changing weather conditions.



## DROUGHT

A drought is a prolonged period of no or minimal rainfall resulting in a shortage of water. Droughts develop slowly and can extend over a wide area. Central Otago is at risk from drought over summer if there is a lack of rainfall, as is the rest of the region.

Social impacts of drought include challenging and stressful conditions for people, animals and primary industries, and conflict over water resources.

Environmental impacts include loss of vegetation, increased soil erosion and reduced air quality. There may be economic impacts from dependence on pastoral industries.

The Otago Natural Hazards database provides a series of maps identifying low, unusually low, annual and seasonal precipitation totals.

## THE NATURAL HAZARDS DATABASE

This database, developed by ORC, contains information on natural hazards in Otago. It is intended to improve public access to hazard information and to help the public, local authorities, and others make informed decisions about their exposure to natural hazards.

The hazard information is generally relevant over a reasonably wide area. As such, the information contained within this database is not a substitute for a Land Information Memorandum (LIM), which will provide relevant hazard information relating to specific parcels of land. A LIM can be obtained from your local city/district council.

Significant work has been undertaken by Otago Regional Council in relation to its hazards and it is recommended that readers refer to these reports available online and through customer services by request. The Natural Hazards Database is a useful tool for information.

Otago Regional Council completed a comprehensive report looking at the hazards which included rising water levels and seismic activity for the area of South Dunedin and this is available in The Natural Hazards of South Dunedin Report July 2016.

The types of hazard information available include:

- Alluvial Fan
- Drought
- Earthquake
- Flooding
- Landslide
- Snow
- Storm surge
- Tsunami
- Wind

Information can be searched by place name or individual property, or by zooming in on an area or property of interest.

Hazards information is indicative and is constantly being reviewed and subject to change by ORC's Natural Hazards division.



Katiki Beach

# APPENDIX 2

## GROUP CONTROLLER DELEGATIONS

GROUP CONTROLLER	
DELEGATION	DESCRIPTION
Section 18(2)	General powers: recruiting and training volunteers, conducting training exercises, issuing and controlling the use of signs, badges, insignia and identified passes, providing and operating warning systems, providing communications, equipment, accommodation and facilities, and any other powers necessary to give effect to an emergency management plan.
Section 76	Power to Require Information: the power to require information that in their opinion is necessary for the exercise of civil defence emergency management.
Section 85	In accordance with Section 18 (1) of The Act, the Otago CDEM Group delegates its functions under Section 85 of The Act to the Group Controller. That is, the Emergency Powers of Civil Defence Emergency Management Groups: While a state of emergency is in force, carry out or require to be carried out works, clearing roads and other public places, removing or disposing of dangerous structures and materials, provide for the rescue of endangered people, set up first aid posts and provide for first aid, provide for the relief of distress including emergency food, shelter and clothing, provide for the conservation of food, fuel and other essential supplies, prohibit or regulate land air and water traffic, undertake measures for the disposal of dead persons or animals, disseminate information and advice to the public, enter into arrangements with any person for the purpose of carrying out civil defence emergency management, and provide equipment, accommodation and facilities for the exercise of any of the power conferred by the emergency powers.

### POWERS CONFERRED BY THE ACT

Section 78 Sections 86 to 92 Section 94	The Group Controller also has specific powers conferred on them by The Act during a state of emergency. These include evacuation of premises and places; entry on premises; closing roads and public places; removal of aircraft, vessels, vehicles, etc; requisitioning powers; power to give directions to stop activities or to take actions to prevent or limit the extent of the emergency; the power to carry out inspections; and the power to enter into contracts.
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### LOCAL CONTROLLER

Local controllers are also delegated the general powers set out in The Act. These are the same as for the Group Controller. Local Controllers are required under Section 27 (2) to follow directions given by the Group Controller during an emergency. These are listed in Table 8.

Unlike the Group Controller, local controllers do not have the powers of Sections 86 – 92 and 94 automatically conferred on them by The Act. The Group must direct local controllers to carry out these powers through their appointment.

The Otago CDEM Group has appointed personnel to the positions of Group Controller, Alternative Group Controllers, and Local Controllers.

## LOCAL CONTROLLER DELEGATIONS

LOCAL CONTROLLER	
DELEGATION	DESCRIPTION
Section 27(1)	Otago CDEM Group may appoint 1 or more persons to be a Local Controller, and direct that person or persons to carry out any of the functions and duties of, or delegated to, the Group Controller of the Group and to exercise the powers of Controllers in the area for which the Group Controller is appointed. (Note: all controllers are appointed and authorised to act as a Local Controller in any district or city within the Otago CDEM Group.)
LIMITATION	
Section 27 (2)	Despite the above delegation under Section 27(1), the Local Controller must follow any directions given by the Group Controller during an emergency. (Note: emergency as defined in Section 2 of The Act is not necessarily a declared emergency.)
AUTHORISATION	DESCRIPTION
Section 76	In accordance with Section 76 (1) of The Act, the Otago CDEM Group authorises the Local Controller to carry out the powers conferred by Section 76 of The Act. That is, the power to require information that in their opinion is necessary for the exercise of civil defence emergency management.
Section 88	In accordance with Section 88 of The Act, the Otago CDEM Group authorises local controllers to close roads and public places in areas where a state of emergency is in force.



## POWER TO REPLACE A GROUP CONTROLLER DURING A STATE OF EMERGENCY

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

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

## PUBLIC INFORMATION MANAGEMENT (PIM)

The Otago CDEM Group Public Information Management team includes the 24/7 Group PIM who is employed full time by the Otago CDEM Group, and other communications and engagement staff from around the region who are designated as the local public information managers and team members deployed when required. The PIM team is responsible for:

- Issuing clear, accurate, timely and relevant information to the community through all available channels.
- Liaising with the media, including preparing and leading media briefings.
- Monitoring information coming in via social media and other channels and sharing relevant details with the Intelligence section to contribute to updated situational awareness.
- Ensuring call centres, helplines and reception personnel have updated, accurate, consistent information.
- Ensuring information points within civil defence centres or community meeting places provide updated, accurate, consistent information from CDEM and other response/recovery agencies.

- Managing community engagement and stakeholder liaison.
- Advising the controller and CIMS function managers on all matters relating to public information management.
- Liaising with the mayor/Regional Council chair and ensuring other elected representatives are briefed and supported in their community engagement.
- Working with CDEM spokespeople.
- Liaising with all of Government.

Providing the public with clear, accurate, timely and relevant information during an event is an essential part of the CDEM response. It enables people to have more confidence in the response and recovery, to understand what is happening and take appropriate actions. When several agencies are involved in a response and providing their own information to the public, it is important that the messages and advice are consistent to avoid confusion and loss of trust.

The way public information is managed has a significant impact on the outcomes of an event. It will influence the way the public reacts and can have longer-term implications for how the community responds during recovery and beyond.

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

The Otago CDEM Group PIM Plan provides specific information on the channels available to share information with the public, the sub-functions within the team and how they are carried out, activation procedures, and SOPs.

## RECOVERY MANAGER DELEGATIONS

### RECOVERY MANAGER

DELEGATION	DESCRIPTION
Section 29(1)	A Civil Defence Emergency Management Group must appoint, either by name or by reference to the holder of an office, a suitably qualified and experienced person to be the Group Recovery Manager for its area.
Section 30 (1)	S30 (1) A Civil Defence Emergency Management Group may appoint, either by name or by reference to the holder of an office, one or more suitably qualified and experienced persons to be a Local Recovery Manager, and direct that person or those persons to perform any of the functions and duties of, or delegated to, the Group Recovery Manager of the Group and to exercise the powers of the Group Recovery Manager in the area for which the Group Recovery Manager is appointed, including, but not limited to, the powers in sections 94H, 94I, and 94K to 94N.

### FUNCTIONS OF A GROUP RECOVERY MANAGER

Section 30A (1)	A Group Recovery Manager must, during a local transition period for the area for which the Group Recovery Manager is appointed, direct and co-ordinate the use of the personnel, material, formation, services, and other resources made available by departments, Civil Defence Emergency Management Groups, and other persons for the purpose of carrying out recovery activities.
Section 30A (2)	The Group Recovery Manager must also perform any functions or duties delegated to the Group Recovery Manager by the Civil Defence Emergency Management Group or conferred on Group Recovery Managers by this Act or any other enactment, and may exercise any power conferred on the Group Recovery Manager by delegation under this act.

