

Civil Defence Emergency Management Group Plan for Taranaki

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1. Introduction

1.1 Purpose

The purpose of the Civil Defence Emergency Management Group Plan for Taranaki is to:

“Provide for an ‘all hazards’ approach to emergency management planning and activity within the Civil Defence Emergency Management Group area for Taranaki, as required by the Civil Defence Emergency Management Act 2002.”

The Civil Defence Emergency Management Group Plan for Taranaki [the Group Plan] is therefore the primary instrument whereby the community identifies and assesses its hazards and risks, and decides on the acceptable level of risk to be managed.

The definition of hazard in the Act is *“something that may cause, or contribute substantially to the cause of, an emergency”* and involves all hazards, whether from natural or technological/human-made resources. This is different to the historical approach to civil defence which did not fully address non-natural hazards such as civil unrest, public health or an agricultural emergency.

1.2 Legislative requirements

The Civil Defence Emergency Management Act 2002 [the Act] specifies the statutory requirements for civil defence emergency management in New Zealand. The purpose of the Act (section 3) is to:

- promote the sustainable management of hazards in a way that contributes to the social, economic, cultural and environmental well-being and safety of the public and the protection of property;
- encourage and enable communities to achieve acceptable levels of risk by applying risk management;
- provide for planning and preparation of emergencies and for response and recovery in the event of an emergency;
- require co-operation and co-ordination of local authorities across the areas of reduction, readiness, response and recovery;
- provide a basis for the integration of national and local civil defence emergency management planning and activity; and
- encourage the co-ordination of emergency management across the wide range of agencies and organisations preventing or managing emergencies.

In order to achieve this purpose, the Act also specifies the requirements for the establishment of Civil Defence Emergency Management [CDEM] Groups throughout the country and the responsibility each of these Groups face in preparing and producing Civil Defence Emergency Management Group Plans for each area. Section 48 of the Act requires that *“every Civil Defence Emergency Management Group must prepare and approve a civil defence emergency management group plan”* which is to replace existing civil defence plans prepared under the now repealed Civil Defence Act 1983.

Civil Defence Emergency Management Group Plans are to state and provide for (section 49(2)) the:

- hazards and risks to be managed by the CDEM Group;
- CDEM measures necessary to manage the hazards and risks identified;
- objectives of the plan and the relationship of these to the National CDEM Strategy;
- apportionment of liability between local authorities for the provision of financial and other resources for the activities of Group members;
- arrangements for declaring a state of local emergency;
- arrangements for co-operation and co-ordination with other Groups; and
- period for which the plan remains in force.

The CDEM Group Plan for Taranaki applies to the areas covered by the jurisdiction of the New Plymouth, Stratford and South Taranaki District Council's and includes the territorial sea (i.e. out to the 12 nautical mile limit), which is the seaward boundary of the Taranaki Regional Council. The Plan must not be inconsistent with any national civil defence emergency management strategy in force when the plan is approved.

1.3 Approval and effective period

The Civil Defence Emergency Management Group Plan for Taranaki has been prepared for, and approved by, the Taranaki Civil Defence Emergency Management Group in accordance with sections 52(1)(e) and 54 of the Act.

This Group Plan was approved by the Taranaki Civil Defence Emergency Management Group on 23 November 2004 to take effect from 24 November 2004 and will be reviewed after five years from the date of final approval, unless reviewed in the interim.

1.4 Consultation process

Many agencies, organisations and individuals participated in, and contributed to, the development of the Group Plan for Taranaki.

A formal consultation period was also undertaken for a one month period (from 7 August to 10 September 2004) – involving a public notice in appropriate newspapers, access to the Group Plan on the Taranaki Regional Council's website and the distribution of approximately 160 copies of the draft Group Plan to the following:

- members of the Co-ordinating Executive Group;
- members of the Civil Defence Emergency Management Group;
- other civil defence emergency management groups throughout the country;
- neighbouring district councils;
- members of each of the advisory groups;
- iwi;
- government departments not already covered by advisory groups;
- any other organisation/individual identified as having an interest in emergency management in Taranaki; and
- to anyone specifically requesting a copy.

Copies were also made available at all territorial authority service centres and libraries throughout the region.

Furthermore, pursuant to section 49 of the Act, the Minister of Civil Defence was provided with a copy of the Group Plan for his comments after the formal consultation period, but prior to final Group Plan approval.

1.5 Community outcomes

Under the Local Government Act 2002 all local authorities are required to identify 'community outcomes' for the intermediate and long-term future of its district or region. The purpose of this process is to enable the community as a whole to decide what is important to it.

The community outcomes identified for the Taranaki region are as follows:

- **Connected Taranaki** – A region that delivers accessible and integrated infrastructure, transport and communications systems which meet the needs of residents, business and visitors.
- **Prosperous Taranaki** – A region that boasts a sustainable, resilient and innovative economy that prospers within the natural and social environment.
- **Secure and Healthy Taranaki** – A region that provides a safe, healthy and friendly place to live, work or visit.
- **Skilled Taranaki** – A region that values and supports learning so that all people can play a full and active role in its social, cultural and economic life.
- **Sustainable Taranaki** – A region that appreciates its natural environment and its physical and human resources in planning, delivery and protection.
- **Together Taranaki** – A region that is caring and inclusive, works together, and enables people to have a strong and distinctive sense of identity.
- **Vibrant Taranaki** – A region that provides high quality and diverse cultural and recreational experiences, and encourages independence and creativity.

The outcomes identified as relating directly to civil defence emergency management planning and response are the following:

1. Secure and Healthy Taranaki
2. Prosperous Taranaki
3. Sustainable Taranaki
4. Connected Taranaki

1.6 Goals

The goals and generic objectives of this Group Plan are as follows:

Goal 1: To increase community awareness, understanding and participation in civil defence emergency management.

Objectives under this goal for the 4 R's (reduction, readiness, response and recovery) include:

- Objective 1A Increase the level of community awareness of the risks from hazards.
- Objective 1B Improve community understanding and participation in CDEM.
- Objective 1C Encourage and enable community participation in determining acceptable levels of risk.

Goal 2:	To reduce the risks from hazards to Taranaki
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Objectives under this goal for the 4 R's (reduction, readiness, response and recovery) include:

- Objective 2A Improve the co-ordination, promotion and accessibility of CDEM research.
- Objective 2B Develop a comprehensive understanding of Taranaki's hazardscape.
- Objective 2C Encourage all CDEM stakeholders to reduce the risks from hazards to acceptable levels.
- Objective 2D Improve the co-ordination of policy relevant to CDEM in Taranaki.

Goal 3:	To enhance Taranaki's capability to manage emergencies
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Objectives under this goal for the 4 R's (reduction, readiness, response and recovery) include:

- Objective 3A Promote continuing and co-ordinated professional development in CDEM.
- Objective 3B Enhance the ability of local authorities and neighbouring CDEM Groups to prepare for and manage emergencies.
- Objective 3C Enhance the ability of emergency services to prepare for and manage emergencies.
- Objective 3D Enhance the ability of lifeline utilities to prepare for and manage emergencies.
- Objective 3E Enhance the ability of government departments to prepare for and manage emergencies.
- Objective 3F Support government in improving the ability of government to manage an event of national significance.

Goal 4:	To enhance Taranaki's capability to recover from disasters
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Objectives under this goal for the 4 R's (reduction, readiness, response and recovery) include:

- Objective 4A Implement effective recovery planning and activities for the physical impacts of disasters.
- Objective 4B Implement effective recovery planning and activities for the social and economic impacts of disasters.

These goals and objectives are based directly on those of the National Civil Defence Emergency Management Strategy 2003-2006.

1.7 Structure of the Group Plan

The structure of the Group Plan follows the requirements of section 49(2) of the Act and takes account of the Director's guidelines for developing a CDEM Group Plan (section 53(2)).

The Group Plan includes the following eight chapters:

1. Introduction
2. Administrative arrangements for CDEM in Taranaki
3. Hazards and risks in Taranaki
4. Managing the hazards and risks – reduction and readiness
5. Managing emergencies - response
6. Managing emergencies - recovery
7. Taranaki context
8. Monitoring

Please note: the Taranaki context section of the Group Plan (section 7) provides the background information for the rest of the document. However, this section has been placed at the back of the document due to its size and the need to focus on the new approach to CDEM which endorses the 4 R's for comprehensive emergency management – risk reduction, readiness, response and recovery.

To set the scene for the following five sections of the Group Plan (sections 2 - 6), the following are **key features of Taranaki** that direct how civil defence emergency management is undertaken in Taranaki:

- A variety of landforms, physical features and a temperate climate - with few climatic extremes.
- Reliance of the Taranaki economy on natural resources – agriculture, oil and gas (which are of national importance), forestry etc.
- The importance of surface water resources for community water supply, industry and agriculture in Taranaki.
- A concentration of population in north Taranaki, but also a dispersed rural population and a number of small rural service towns throughout the region.
- Taranaki's relative geographic isolation, which makes the region more vulnerable to disruptions from hazards.
- A well established civil defence emergency management system, with good working relationships between relevant agencies and organisations.
- A well developed infrastructure of: road, rail, urban water supply, sewerage and stormwater systems, electricity generation and transmission, telecommunications, oil and gas production/distribution, deep water port and airport.
- A range of locally based health and emergency services, as well as other services provided by central government departments, local government organisations and welfare groups.

1.8 Associated documents

The Taranaki CDEM Group Volcanic Strategy 2004 is to be noted as a reference document to this Group Plan.

The following documents have been cited but are not incorporated by reference to this Group Plan. That is, they are to be noted for information purposes only:

- Hazard and risk analysis: explanatory notes report
- Taranaki CDEM Group Business Plans (including the Public Awareness and Training Strategy)
- Waitara Flood Plan
- Naphtha Community Action Plan
- CDEM Group: Emergency Manager's Response Guide
- CDEM Group: Controller's Guide
- CDEM Group: EOC Activation Guide
- CDEM Group: Emergency Welfare Centres Guide
- CDEM Group: Media Management Guide
- CDEM Group: Technical Systems Guide
- CDEM Group: Operating Instructions
- CDEM Group: Public Awareness and Training Strategy
- CDEM Group: Callout List

1.9 Definitions

Act	means the Civil Defence Emergency Management Act 2002.
D.C.'s	means district councils (in the case of the Taranaki CDEM Group area this includes the New Plymouth, Stratford and South Taranaki District Councils).
CDEM Group	means a Civil Defence Emergency Management Group established under section 12 of the Civil Defence Emergency Management Act 2002. CDEM Group may at times be read to mean the Taranaki CDEM Group with regard to this Plan.
CIMS	means the New Zealand Co-ordinated Incident Management System.
Civil defence emergency management	means the application of knowledge, measures and practices that: <ul style="list-style-type: none"> • are necessary or desirable for the safety of the public or property; and • are designed to guard against, prevent, reduce, or overcome any hazard or harm or loss that may be associated with any emergency, and includes, without limitation, the planning, organisation, co-ordination, and implementation of those measures, knowledge, and practices (section 4 of the Act).
Community outcomes	means the outcomes for that district or region that are identified as priorities for the time being (Local Government Act 2002).
Emergency	means a situation that: <ul style="list-style-type: none"> • is the result of any happening, whether natural or otherwise, including (without limitation) any explosion,

	<p>earthquake, eruption, tsunami, land movement, flood, storm, tornado, cyclone, serious fire, leakage or spillage of any dangerous gas or substance, technological failure, infestation, plague, epidemic, failure of or disruption to an emergency service or a lifeline utility, or actual or imminent attack or warlike act; and</p> <ul style="list-style-type: none"> • causes or may cause loss of life 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 co-ordinated response under the Act (section 4 of the Act).
Emergency Welfare Centre	means a Centre established for the delivery of emergency welfare services directly to a community affected (refer to section 5.5.3).
EOC	means an Emergency Operations Centre established by the CDEM Group for the purpose of providing strategic advice and direction at Group Controller level, and for the co-ordination of emergency welfare services. Typically, the Group EOC will be located at the TEMO (refer to section 5.5.2).
EVAG	means the Egmont Volcano Advisory Group as outlined in section 2.4 of this Group Plan.
GNS	means the Institute of Geological and Nuclear Sciences.
Group Controller	means the Group Controller appointed under section 26 of the Act (refer to section 5.3.4).
HAG	means the Health Advisory Group as outlined in section 2.4 of this Group Plan.
Hapū	means a sub-tribe, usually a number of whānau (families) with a common ancestor ¹ .
Hazard	means something that may cause, or contribute substantially to the cause of, an emergency (section 4 of the Act) and involves all hazards, whether from natural or technological/human-made sources.
HSTLC	means the Hazardous Substances Technical Liaison Committee as outlined in section 2.4 of this Group Plan.
Incident Controller	means an Incident Controller in terms of the New Zealand Co-ordinated Incident Management System. This person may also be appointed by a Group Controller where a lead agency cannot be clearly identified or the incident is not discreet enough to allow normal incident management rules to apply.
Iwi	means the tribe or grouping of Māori people descended from a common ancestor(s) ² .
LAG	means the Lifelines Advisory Group as outlined in section 2.4 of this Group Plan.
Lifeline utilities	means an entity named or described in Part A of Schedule 1, or that carries on a business described in Part B of Schedule 1

¹ Ministry for the Environment, 1991, Consultation with Tangata Whenua.

² Ministry for the Environment, 1991, Consultation with Tangata Whenua.

	of the Civil Defence Emergency Management Act 2002.
Local authority	means a regional council or territorial authority (Local Government Act 2002).
MAF	means the Ministry of Agriculture and Forestry.
NPDC	means the New Plymouth District Council.
NZFS	means the New Zealand Fire Service.
OSH	means the Occupational Safety and Health Service.
RAG	means the Rural Advisory Group as outlined in section 2.4 of this Group Plan.
Regional Council	means a regional council named in Part 1 of Schedule 2 of the Local Government Act 2002. Regional Council may at times also be read as meaning the Taranaki Regional Council.
Risk	means the chance of something happening that will have an impact on people and property – measured in terms of consequences and likelihood (refer to section 3.1).
Rohe	means boundary, a territory (either geographical or spiritual) of an iwi or hapū.
SDC	means the Stratford District Council.
STDC	means the South Taranaki District Council.
Tangata whenua	in relation to a particular area, means the iwi, or hapū, that holds mana whenua over that area ³ .
TDHB	means the Taranaki District Health Board.
TEMO	means the Taranaki Emergency Management Office of the Taranaki Regional Council located at 45 Robe Street, New Plymouth.
Territorial authority	means a city council or a district council named in Part 2 of Schedule 2 of the Local Government Act 2002.
TRC	means the Taranaki Regional Council.
WAG	means the Welfare Advisory Group as outlined in section 2.4 of this Group Plan.
Welfare Manager	means a person appointed to the position under section 0 of this Group Plan.

1.10 Assessment of alternatives, costs and benefits

Section 65 of the Civil Defence Emergency Management Act requires the CDEM Group to consider alternatives, assess benefits and costs and provide good reason for and against proposing provisions or regulations where such provisions impose requirements on persons other than the CDEM Group, its member local authorities or emergency services.

As the CDEM Group Plan for Taranaki does not impose requirements (or subsequent costs) on persons other than the CDEM Group itself, its member local authorities or emergency services, it has not been necessary to carry out an assessment of alternatives, costs or benefits pursuant to section 65 of the Act. Therefore the Group Plan is not deemed to be contrary to the requirements of this statute. A process of public consultation is also undertaken in the

³ Section 2 of the Resource Management Act 1991.

preparation of a Group Plan for Taranaki to obtain feedback on any proposed provisions and regulations.

It is important to note that the Group Plan for Taranaki is a **guideline** only for individuals and organisations involved in civil defence emergency management, and does not place regulatory requirements on those involved other than outlining the requirements already specified in legislation.

2. Administrative arrangements for civil defence emergency management

2.1 Introduction

The purpose of this section of the Group Plan is to describe the administrative arrangements for civil defence emergency management in Taranaki.

The structure outlined in Figure 1 describes the committees and advisory groups established for the delivery of civil defence emergency management in Taranaki. These arrangements will be applied in planning for all aspects of emergency management in Taranaki and were used in the preparation of this Group Plan. They will also be of benefit for the development of response and recovery strategies in the event of an emergency.

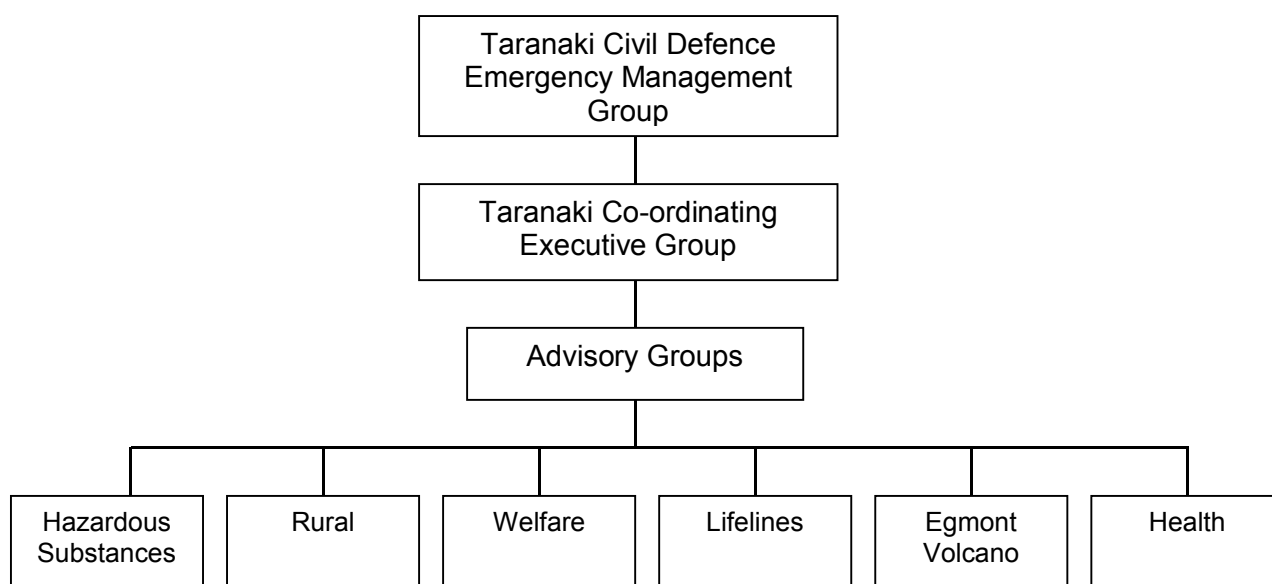


Figure 1 Civil Defence Emergency Management structure in Taranaki

2.2 Civil Defence Emergency Management Group

The Taranaki Civil Defence Emergency Management (CDEM) Group is established under section 12 of the Act, as a joint committee under clause 30(1)(b) of Schedule 7 of the Local Government Act 2002.

The Taranaki Civil Defence Emergency Management Group comprises representatives of:

- New Plymouth District
- Stratford District
- South Taranaki District
- Taranaki Region

Each local authority is represented on the CDEM Group by the Mayor/Chairperson or Deputy Mayor/Chairperson of the local authority. The Taranaki CDEM Group elects its own chairperson who will hold office for one term of local government or such other term as may be decided by the Group.

The powers, obligations, functions and general powers of the CDEM Group are stated in sections 16, 17 and 18 of the Act. In summary, the functions of the CDEM Group include:

- **CDEM co-ordination:** the co-ordination of planning programmes and activities related to civil defence emergency management across the areas of reduction, readiness, response and recovery.
- **Risk management:** carrying out hazard and risk management.
- **Planning for CDEM:** developing, approving, implementing and monitoring a CDEM Group Plan and regularly reviewing the Plan.
- **Providing a CDEM organisation and resources:** maintaining and providing resources for effective CDEM, including suitably trained and competent personnel, and an appropriate organisational structure, together with necessary materials, services and information.
- **Promotion and public awareness:** promoting and raising public awareness of civil defence emergency management within its area.
- **Emergency response and recovery:** responding to and managing adverse effects of emergencies, carrying out recovery activities and assisting other Groups when requested.
- **Monitoring:** Monitoring and reporting on compliance within its area.

2.3 Co-ordinating Executive Group

The Taranaki Co-ordinating Executive Group (CEG) was established on 1 May 2003 under section 20 of the Act. The CEG comprises the statutory appointments of:

- the Chief Executive, or their representative, from each member local authority;
- a senior member of the Police;
- a senior member of the Fire Service, and
- the Chief Executive, or their representative, from the Taranaki District Health Board.

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

- the chairperson of the Welfare Advisory Group;
- the chairperson of the Lifelines Advisory Group;
- the chairperson of the Rural Advisory Group; and
- the Group Controller.

The CEG elects its own chairperson who will hold office for one year.

The purpose of the Co-ordinating Executive Group is to provide specialist advice to the CDEM Group; implement the decisions of the CDEM Group; and to oversee the development, implementation, maintenance, monitoring and evaluation of the CDEM Group Plan.

2.4 Advisory Groups

There are six advisory groups that provide support and specialist expertise across the 4 R's (reduction, readiness, response and recovery) to the Co-ordinating Executive Group and CDEM Group as follows:

- **Hazardous Substances Technical Liaison Committee (HSTLC):** their main purpose being to provide the skills and expertise to support, in an advisory capacity, integrated agency planning activity that addresses the readiness for, and response to hazardous substance incidents (see Appendix 1: Hazardous Substances Technical Liaison Committee terms of reference for detail).
- **Rural Advisory Group (RAG):** provides advice to the CDEM Group on rural issues, enables a forum for planning across the sector in terms of continuity plans, participates in the development of the Group Plan and represents the rural sector with regard to civil defence emergency management matters in Taranaki (see Appendix 2: Rural Advisory Group terms of reference for detail).
- **Welfare Advisory Group (WAG):** has the responsibility of providing advice to the CDEM Group on welfare issues, providing a forum for planning across the sector in terms of continuity plans and participation in the development of the Group Plan (see Appendix 3: Welfare Advisory Group terms of reference for detail).
- **Lifelines Advisory Group (LAG):** has the responsibility of providing technical advice to the CDEM Group on lifeline issues, providing a lifelines forum to address integrated CDEM planning and preparedness, and participation in the development of the Group Plan (see Appendix 4: Lifelines Advisory Group terms of reference for detail).
- **Egmont Volcano Advisory Group (EVAG):** has the purpose of providing expert comment to the CDEM Group on the Taranaki Volcano-Seismic Network annual report, enabling a forum for discussion on issues relevant to volcanic hazards, as well as assisting in the development of volcanic hazard planning documents and the Group Plan (see Appendix 5: Egmont Volcano Advisory Group terms of reference for detail).
- **Health Advisory Group (HAG):** has the responsibility of providing a forum for discussion of issues relevant to health, the provision of advice to the CDEM Group and discussion of contingent capability for emergencies across the health sector in Taranaki, and assisting with the development of the Group Plan.

Terms of reference for the Health Advisory Groups are still in development. Members of each of these Advisory Groups are either specialists with technical knowledge or experience in their field, or representatives of organisations with leadership responsibilities, operational or service delivery functions of relevance to CDEM.

2.5 Administering Authority

Pursuant to section 23 of the Act, the Taranaki Regional Council [the Regional Council] is the administering authority for the Taranaki CDEM Group. The Regional Council is therefore required to:

- provide for the administration of the CDEM Group, CEG, and advisory groups (outlined in section 2.4), as required;
- provide financial services and advice to the CDEM Group for both programmed and emergency activities; and

- purchase and manage assets on behalf of the CDEM Group.

2.6 Taranaki Emergency Management Office

The administering authority maintains the Taranaki Emergency Management Office (TEMO) and associated Emergency Operations Centre (EOC). Civil defence emergency management activities of the CDEM Group will therefore be managed by the TEMO.

The Taranaki Emergency Management Office has the purpose of:

- maintaining the Emergency Operations Center (EOC) for Taranaki;
- assisting members in the co-ordination of hazard and risk management;
- providing for the training of competent personnel for civil defence emergency management;
- making available materials, services and information for effective civil defence emergency management;
- monitoring and responding to the adverse effects of emergencies on behalf of the CDEM Group and disseminating warnings in line with the CDEM Group's Response Guide;
- assisting with recovery operations on behalf of the CDEM Group;
- assisting other CDEM Groups and the Ministry of Civil Defence & Emergency Management in implementing civil defence emergency management when requested;
- promoting and raising public awareness in line with the Public Awareness and Training Strategy developed by the CDEM Group; and
- administering the CDEM Group Plan and reference documents, including those documents identified in section 1.8 for information purposes only.

Section 5.5.2 of the Group Plan also provides more detail on the functions of the TEMO.

2.7 Co-operative arrangements with other Civil Defence Emergency Management Groups

The Act requires the Taranaki CDEM Group to make arrangements for co-ordination and co-operation between other CDEM Groups. In particular, the Taranaki CDEM Group will enter into memoranda of understanding with the neighbouring CDEM Groups (i.e. the Waikato and Manawatu/Wanganui CDEM Groups). The purpose of these memoranda is to outline the support to be provided by adjoining CDEM groups both during and following a local emergency. It also enables other collaborative activities to be specified that will be undertaken between the CDEM groups to enhance the co-ordination of emergency management, planning and activities related to civil defence emergency management in their respective areas.

The Taranaki CDEM Group believes that the spirit of the Act is one of co-operation between Groups across New Zealand. To this end, the provisions of Schedule 1 of each of these memoranda, for support during an emergency, can hold true for any of the CDEM Groups throughout New Zealand.

Memoranda of Understandings will also be signed for operational purposes between the administering authority and specific agencies concerned in civil defence emergency management in Taranaki, including the Red Cross and AgriQuality. The intent of these

memoranda is to provide clarity and common agreement as to the availability of facilities and resources in the event of a local emergency and how access to these resources can occur.

2.8 Key appointments

There are a number of key appointments that the Taranaki CDEM Group must, or may make (subject to sections 25 - 30 of the Act). Key appointments are those recognized as having a significant role to play in emergency management in Taranaki, therefore the following appointments are to be made:

- **Group Controller and alternatives** – The functions and powers of the Group Controller and alternatives (appointed by the Taranaki CDEM Group) are outlined in section 5.3.4 of the Group Plan.
- **Welfare Manager** - The functions of the Welfare Manager are described in section 0 of the Group Plan.
- **Recovery Facilitator and alternatives** - The Recovery Facilitator can be appointed as outlined in section 0 of the Group Plan. Terms of reference for the Recovery Facilitator are described in section Appendix 10: Recovery Facilitator's terms of reference.

2.9 Funding and resourcing arrangements

Taranaki CDEM Group funding can be divided into three categories:

- programmed activities;
- emergency expenditure; and
- disaster relief fund.

2.9.1 Programmed activities

Programmed activities relate to the day-to-day running of the CDEM Group. Consequently, the CDEM Group considers a draft annual business plan each year based on the following functions:

- risk management;
- staff and resources;
- response;
- recovery;
- assistance to other CDEM Groups;
- promotion of the CDEM Act;
- compliance with other statutes;
- development, management and review of the Group Plan;
- Ministry of Civil Defence & Emergency Management assistance; and
- public awareness.

When the business plan is agreed for the next financial year by members of the CDEM Group, provision may be made for members to budget accordingly. The administering authority subsequently adopts a capital expenditure programme/estimates, then advises the total cost of civil defence emergency management to the Taranaki CDEM Group.

Members of the CDEM Group have agreed to apportion the total costs of civil defence emergency management as follows:

➤ Taranaki Regional Council	50%
➤ New Plymouth District Council	35%
➤ South Taranaki District Council	12%
➤ Stratford District Council	3%

The total cost of civil defence emergency management includes: those costs associated with the programmed activities endorsed by the CDEM Group, all administrative and overhead costs, emergency preparedness (including the maintenance of emergency facilities and equipment), and the facilities and resources of the Taranaki Emergency Management Office.

With regard to capital purchases for and on behalf of the CDEM Group, these will be managed by the administering authority (i.e. the Taranaki Regional Council) and identified separately from operating costs but apportioned on the same basis as operating costs (i.e. 50-35-12-3).

A Memorandum of Understanding has also been entered into for Civil Defence Emergency Management Group use of civil defence assets made available by South Taranaki District Council.

2.9.2 Emergency expenditure

The costs associated with emergency management response and recovery during an emergency on behalf of the CDEM Group (i.e. those supporting the Group Controller and Welfare Manager's activities) will also be shared on the basis of the above funding apportionment (i.e. 50-35-12-3), regardless of the area for which the response was undertaken.

Costs associated with an emergency response by any member of the CDEM Group, or any other organisation, are also the responsibility of that organisation. These costs include the continuation of core business, as well as liaison and co-operation with the Group Controller for effective civil defence emergency management. Where a local authority has incurred other emergency expenditure, for example emergency works for road clearing, provision of water etc., the local authority may submit a subsidy claim for Category B expenditure from the Ministry of Civil Defence & Emergency Management. The residual costs, or the full cost (if the threshold is not met) for Group operations, will be met by the members of the Group, in line with the agreed funding split.

Therefore:

'the costs incurred to responding agencies for the continuation of their core business shall lie with that agency'.

Important note: A clear record of who authorises any expenditure, its purpose and total amounts must be kept, with the Group Controller ensuring that all costs are properly accounted for.

Costs associated with an emergency response by the CDEM Group (as described in this Group Plan), whether a local emergency was declared or not, will initially be borne by the Taranaki CDEM Group and administered by the administering authority. The administering authority can then seek reimbursement of response and recovery costs through available mechanisms. In particular, Category A and Category B claims can be forwarded to the Ministry of Civil Defence & Emergency Management.

These categories can be defined as:

Category A expenditure is defined as - the cost of:

- Emergency accommodation
- Transportation
- Feeding and clothing

In terms of Category A claims, all costs incurred by the CDEM Group for emergency welfare will be claimed by the administering authority. The district councils should not incur Category A expenses.

Category B expenditure is described as –

Other expenditure associated with emergency response, but not including recovery costs. Central government will reimburse the local authorities for 60% of these costs above a threshold calculated as 0.0075% of the Equalised Capital Value of the district or districts, and 0.002% for the regional council.

- Local authorities take full first-line responsibility for dealing with the impact of a disaster in their geographic and functional areas of responsibility. Central government assistance can be called upon only where local resources are inadequate to cope with the scale of the disaster or they are unable to cope within a reasonable time-frame.
- While the initial and primary responsibility rests with the local community, central government will assist in rescue, medical care, provision of emergency feeding, housing and transport, where this cannot be adequately achieved by a local authority, community or voluntary agency in a timely manner. Such assistance may be either physical or financial.

With regard to recovery costs the National Civil Defence Plan currently specifies that:

- Government assistance will be available where the cost of repair or recovery of uninsurable essential services (which include water, storm water, electrical, sewerage and gas facilities) and other structures, such as retaining walls and tunnels upon which the essential services depend is greater than 0.0075% of Equalised Capital Value in the case of City or District Councils, and 0.002% of the Equalised Capital Value in the case of the Regional Council. Where damage costs are greater than this threshold the government will provide 60% of the repair or recovery cost of the outstanding amount.

Category B and Recovery cost claims meeting the set criteria are combined to achieve the one threshold.

The Ministry has also requested that CDEM Groups collate and co-ordinate the response and recovery claims to submit to the Ministry after an emergency event, rather than individual local authorities submitting separate claims.

The claim is to be certified by the relevant chief executive(s) and forwarded to the Ministry of Civil Defence & Emergency Management. Claims should be accompanied by all relevant details to support the classification of costs as emergency expenditure.

The duration and boundaries of emergency declarations are to be explicitly stated. Costs are to be separately identified under Category A and B. Receipts are not initially required but details of payments made should be listed for each item under the appropriate category.

All claims for Category B expenditure must be accompanied by a statement of the Equalised Capital Value as issued at the 31 March prior to the emergency by Quotable Value New Zealand. If a claim is made for a limited number of districts, the separate valuation for those districts should be shown for their calculation.

<p>All CDEM Group residual response and recovery costs will be divided between members based on the 50-35-12-3 funding split.</p>
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2.9.3 Disaster Relief Fund

In Taranaki the Disaster Relief Fund is administered by the Taranaki Regional Council on behalf of the Taranaki Disaster Relief Fund Trustees. Trustees meet on a regular basis during and following an emergency to consider applications to the fund.

Rules for processing applications and eligibility are outlined in the 'Taranaki Disaster Relief Trust Fund - Trust Deed' document.

3. Identification of hazards and risks for Taranaki

3.1 Risk analysis and evaluation

The CDEM Act 2002 requires CDEM Group Plans to take an ‘all hazards’ approach to improve and promote the sustainable management of hazards, enable communities to achieve acceptable levels of risk, as well as plan and prepare for emergency response and recovery. CDEM Group Plans are therefore expected to take a consequence-based approach to civil defence emergency management planning.

The purpose of this section of the Group Plan is to therefore provide an outline of the hazard and risk analysis process undertaken as part of the development of the Group Plan. This process required a clear understanding of the key features of Taranaki (as outlined in the Taranaki context section of this Group Plan – section 7) and involved the following three steps:

- Step One: Identify hazards and describe the risks
- Step Two: Analyse risks
- Step Three: Evaluate risk

The results of the risk analysis and evaluation are detailed in the document ‘*Hazard and risk analysis: explanatory notes*’ that are to be read as background information for this section of the Group Plan.

Step One: Identify hazards and describe risks

The **first phase** of Step One was to identify all hazards relevant to the CDEM Group for Taranaki. The Resource Management Act requires local authorities to keep information about the natural hazards relevant to their communities (section 35(5)(j) of the RMA). The 1991 hazard analysis⁴ formed the basis of this information and was amended to include the ‘all hazards’ approach of the new CDEM Act 2002. The hazard list was then refined to remove hazards that are not relevant to the CDEM Group for Taranaki and resulted in ten hazards being identified as significant hazards for the region. More detail of the hazards initially assessed in this phase of step one is provided in the document ‘*Hazard and risk analysis: explanatory notes*’.

The **second phase** of this step was to describe the risk impacts of each hazard. Risk is defined as ‘the chance of something happening that will have an impact on people and property – measured in terms of consequences and likelihood⁵’. The explanatory notes provided include detail of the scenarios identified for each of the ten significant hazards.

Step Two: Analyse risks

Step Two involved a risk analysis process to determine the likelihood and consequences of risk and its associated level. The Ministry of Civil Defence & Emergency Management guidelines for developing a CDEM Group Plan recommend the use of the AS/NZS 4360

⁴ Taranaki Regional Council. 1991. *Preliminary Hazard Analysis*.

⁵ Adapted from AS/NZS 4360: 1999 Section 1.3 Definitions (Ministry for Civil Defence and Emergency Management. *Working Together: Developing a CDEM Group Plan*. DGL 2/02.

qualitative assessment technique as the standard approach to analyse the consequences of impact and likelihood of events. This model measures the *likelihood* (levels 1 – 5) and *consequences of impact* (levels A – E) for each hazard. The ‘level of risk’ is a combined result of both likelihood and impact, resulting in each hazard having a low, moderate, high or extreme level of risk.

Step Three: Evaluate risk

The evaluation of risks in Step Three involved both the prioritisation of categorised risks against established criteria and identification of key issues. Analysis was therefore used at the completion of the initial risk analysis (using AS/NZS 4360) to prioritise hazards based on the seriousness, management, urgency and growth (SMUG) characteristics of each hazard, as well as for the identification of key issues. The SMUG ratings from 1 – 5 (the higher the number the more serious the risk) are used to give each hazard a ranking, determining the primary and secondary hazards for Taranaki. The SMUG criteria are as follows:

- **Seriousness** – the relative impact in terms of people and/or dollars.
- **Manageability** – how difficult a hazard’s risks are to address and the level of cross-sector management effort being applied across the 4 R’s directly or indirectly.
- **Urgency** – the measure of how imperative or critical it is to address the risk (associated with the probability/likelihood of the risk from the hazard – including return period considerations).
- **Growth** – the rate at which the risk will increase (through an increase in the probability of the extreme event occurring, an increase in the exposure of the community, or a combination of the two).

3.2 Significant hazards in Taranaki

The AS/NZS 4360 and SMUG analysis process was used to determine the top ten ‘significant hazards’ in Taranaki. The identification of these significant hazards differs from previous hazard analysis work undertaken for Taranaki and is a reflection of the ‘all hazards’ approach to emergency management planning. The significant hazards identified for the Taranaki region are:

	NZS 4360	SMUG
• Public health threat	extreme	14
• Flooding – eastern hill country	extreme	14
• Earthquake – local fault	extreme	14
• Volcanic eruption – Egmont	extreme	13
• Flooding – Lower Waitara River	extreme	12.7
• Structural failure (inc. dam failure) – significant structure	mod – ext	11.6
• Essential utilities failure – small community water supply	mod – ext	11.6
• High winds/hurricane	high – ext	11.4
• Biological threat – exotic animal disease (cattle)	extreme	10.8
• Hazardous substance – spillage or leakage	high	10.2

These significant hazards and their associated likelihood and impacts are demonstrated in

Figure 2. The description of how these hazards were identified as ‘significant hazards’ for the Taranaki CDEM (i.e. the methods used) area is provided in the document ‘*Hazard and risk analysis: explanatory notes*’. A brief description of each of these hazards and associated graphics is also provided in section 4 of the Group Plan.

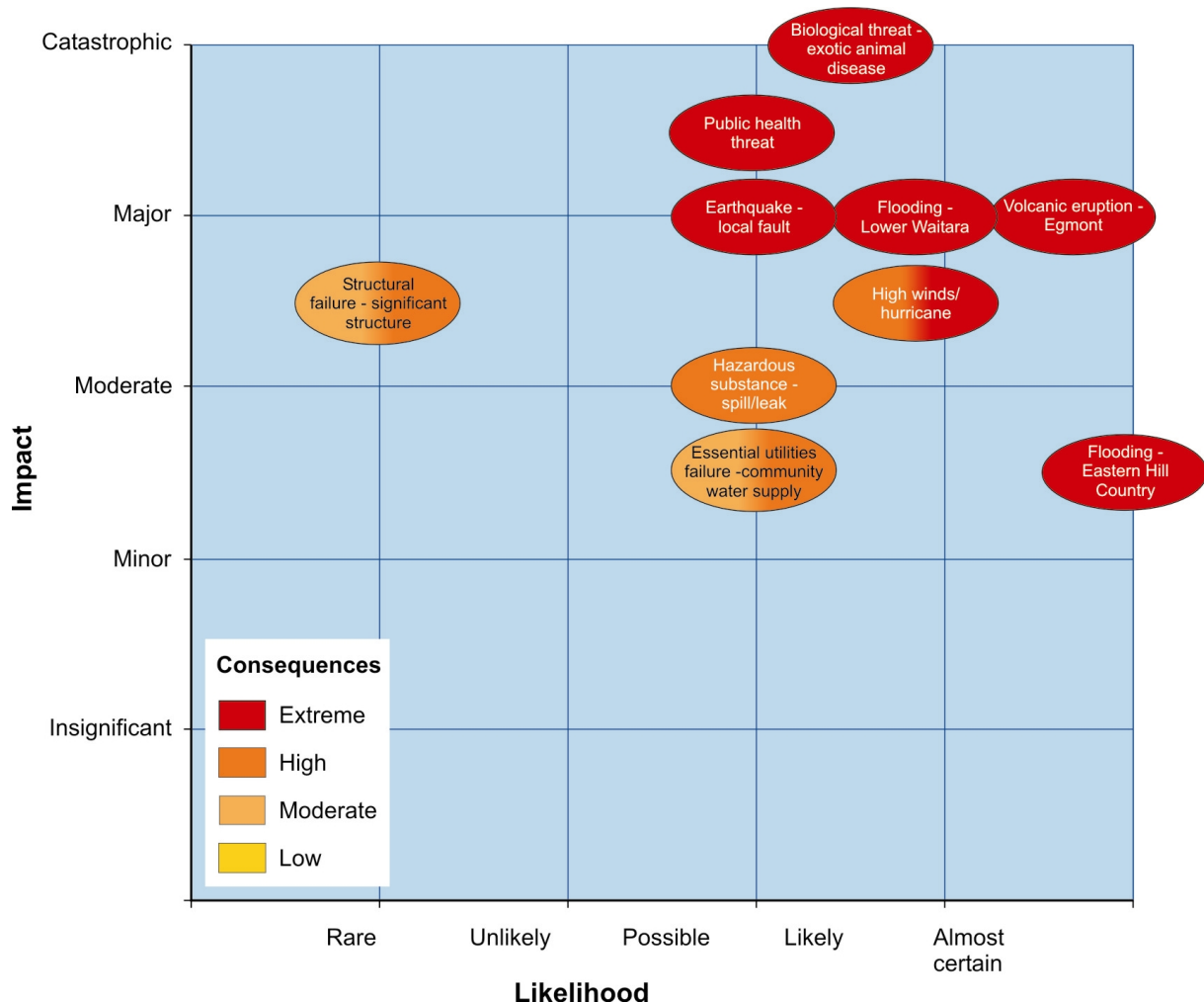


Figure 2 Significant hazards in Taranaki

Following Steps 1-3, further work is required to identify in greater detail:

- the consequences of each significant hazard (the effects of the event);
- responsibility for the management of each hazard (i.e. lead agencies);
- description of works that have already been done and by whom (mitigation work completed to-date);
- identification of any gaps and inconsistencies in this work (risk management); and
- the development of issues associated with each hazard (derived from the consequences and what we need to plan for).

In response to the above, a project will be undertaken by the CDEM Group to further refine the initial risk analysis work. This project will address areas such as:

- The hazard - the significant hazards for Taranaki.
- The impact areas:
 - People
 - Built environment

- Natural environment
- Society, and
- Economy
- Consequences - what are the consequences of each hazard on the various impact areas.
- The functions required to address the consequences.
- Identifying the lead agencies and supporting agencies.
- Identifying the mandates for response.
- Identifying existing processes and resources.
- Identifying function issues.
- Identifying potential actions.

This work has been identified as an action to occur within section 4 (Managing hazards and risks – reduction and readiness) of this Group Plan.

Nationally significant hazards

As a result of the process undertaken to identify the most significant hazards in Taranaki, the following have been acknowledged as hazards that are of national significance:

- Public health threat
- Volcanic eruption
- Biological threat

Furthermore, a terrorist attack was not included in the SMUG analysis due to it already being recognised as a hazard of national significance. Considerable effort has therefore been made at the national level to analyse this risk. An example of this from Taranaki could be a threat to the oil and gas industry.

3.3 Other hazards

As a result of the risk analysis and evaluation of all hazards in Taranaki, section 4 of the Group Plan focuses in more detail on the significant hazards for the Taranaki region (listed in section 3.2 above), rather than on other hazards. However, should any other hazardous event occur with significant consequences, the established systems and processes included in this Group Plan, together with the CDEM Act, will be sufficient to enable appropriate emergency response and recovery works to occur.

The management of these other hazards is also addressed in the Group Plan through:

- Section 4 - Managing the hazards and risks – reduction and readiness;
- Section 5 - Managing emergencies – response; and
- Section 6 - Managing emergencies – recovery.

4. Managing hazards and risks – reduction and readiness

4.1 Introduction

Taranaki is subject to a wide range of natural and non-natural hazards, all of which have potentially significant consequences for public safety and physical, social and economic wellbeing. In order to reduce the potential impacts of these hazards and be prepared for such threats, the following section of the Group Plan outlines the **reduction and readiness actions** to be undertaken by individuals, organisations and agencies involved in civil defence emergency management throughout Taranaki.

The section is set out to demonstrate these risk reduction and readiness efforts, firstly in relation to all hazards and secondly in relation to each of the ten significant hazards identified in section 3.2. Each of the targets and actions outlined in this section were identified through a process of consultation with appropriate stakeholders within the Taranaki CDEM Group area.

Reduction and readiness can be defined as:

- Reduction: Identifying and analysing long-term risks to human life and property from natural or man-made hazards; taking steps to eliminate these risks where practicable, and where not, reducing the likelihood or magnitude of their impact.
- Readiness: Developing operational systems and capabilities before an emergency happens. These include self-help and response programmes for the general public, as well as specific programmes for emergency services, utilities and other agencies⁶.

4.2 All hazards

The design and development of an effective civil defence emergency management organisation is based on risk identification, assessment of vulnerability and planning to minimise risk (i.e. reduction and readiness). In particular, planning to minimise risk can include:

- recruiting and training staff;
- inter-agency planning and liaison arrangements;
- development of guidelines, procedures and action plans;
- promoting readiness within local communities to respond; and
- resourcing and pre-deployment arrangements.

In developing the hazard specific targets and actions for reduction and readiness, it was recognised that many of the industry practices identified above apply across all hazards. The first set of targets and actions identified for this section of the Group Plan are therefore generic and may be applied across all hazards that could occur within the Taranaki CDEM Group area.

⁶ Ministry of Civil Defence & Emergency Management. 'Resilient New Zealand: National Civil Defence Emergency Management Strategy 2003 – 2006'.

4.2.1 All hazards approach

Several key questions can be raised when identifying opportunities to reduce any hazards and risks in Taranaki. These include:

- Is there a way to avoid the risk?
- Is there a way to reduce the probability of the risk?
- Is there a way to reduce the consequences of the risk?
- Is there a way to transfer the risk?

In recognition of these questions the following mechanisms have been identified as playing an important role in hazard reduction and readiness in Taranaki:

Operational Planning

Operational planning for civil defence emergency management is aimed at reducing the consequences of risk through the integrated planning and consideration of all threats or impacts of an emergency event on a community. Consequently, the Civil Defence Emergency Management Group Plan provides the basis for a co-ordinated approach to readiness, reduction, response and recovery in Taranaki. Additionally, planning between agencies to ensure that a consistent approach to an emergency event increases the level of co-operation when an event actually occurs.

As noted in section 1.8, please refer to the associated documents identified for further information on operational planning in Taranaki.

Operational Training

The CDEM Group for Taranaki is the organisation responsible for co-ordinating training exercises and programmes for civil defence emergency management. However, operational training for organisations and individuals remains the responsibility of the relevant agencies/authorities.

Specific training opportunities provided by the CDEM Group include:

- CIMS courses
- Emergency planning courses
- Government department training
- Group-wide response exercise/s – to assist in monitoring the effectiveness and appropriateness of the Group Plan.
- CDEM Group functional level training, including:
 - Controller's Team
 - Media Management Team
 - Emergency Operations Centre operations
 - Emergency Welfare Centre teams

For further information on the CDEM Group training exercises being delivered in Taranaki, please refer to the Annual Business Plans.

Public awareness

Public awareness has been recognised throughout New Zealand as playing a pivotal role in improving levels of community readiness and achieving public involvement in reducing the adverse effects of hazards. Of primary importance to any public awareness campaign is to:

- develop community awareness and understanding of hazards that could occur in Taranaki and engaging in preparatory activities;
- develop an understanding and knowledge of what to do before, during and after an emergency; and
- increase understanding of the need to participate in rebuilding and restoring communities after the emergency event has passed.

For further information on the CDEM Group public awareness policies and programmes being delivered in Taranaki, please refer to the 'Public Awareness and Training Strategy' included at the back of the annual CDEM Group Business Plans.

Warnings

Early warnings alert communities to potential hazards and threats. In the event of a hazard being identified as significant, it also enables effective readiness and response planning.

A number of agencies are involved in the monitoring and assessment of hazards in Taranaki. Therefore, warnings will be disseminated by agencies with this responsibility according to their practices and procedures. Such warnings can include:

- Exotic stock disease..... Ministry of Agriculture and Forestry
- Fire..... National Rural Fire Authority
- Flooding..... Taranaki Regional Council
- Food safety Ministry of Agriculture and Forestry
- Hazardous substance..... NZ Fire Service (general warnings)
- Public health..... Ministry of Health/Medical Officer of Health
- Rain, wind and snow MetService
- Tsunami Ministry of Civil Defence & Emergency Management
- Volcanic activity Institute of Geological and Nuclear Sciences
- Rooding..... Transit New Zealand and district councils

Where appropriate, and according to the procedures of the Taranaki CDEM Group, the Taranaki Emergency Management Office will distribute warnings further within the Taranaki CDEM Group area.

For detailed information on the actions to be taken by emergency management staff on receipt of a warning, please refer to the CDEM Group's 'Emergency Manager's Response Guide' identified in section 1.8 of the Group Plan.

4.2.2 All hazards targets

The following are the Group Plan's reduction and readiness targets relating to all hazards in Taranaki:

Target No.	Target	
4.2 (a)	To promote awareness of all hazards in the region and methods of reducing the adverse effects of these hazards.	Reduction
4.2 (b)	To encourage individuals and communities to reduce the adverse effects of hazards through various mitigation measures and general preparedness.	

4.2 (c)	To ensure that a co-ordinated approach is taken to the reduction of all hazard threats in Taranaki.	Readiness
4.2 (d)	To ensure that correct and sufficient information is provided to the general public.	

4.2.3 All hazards actions

The Group Plan's actions for all hazards in the Taranaki CDEM area are as follows:

	Action	Responsibility	Targets	Obj.s ⁷	Timeframe
Reduction	The CDEM Group to make available generic emergency management advice for organisations, communities and individuals on hazard reduction methods available.	CDEM Group	1A, 1B, 2B, 3B, 3C & 3E,	4.2(a), 4.2(b), & 4.2(d) ⁸	Ongoing
	The CDEM Group to provide education, information and advice to the general public to raise people's awareness of the risks associated with hazards in Taranaki and therefore reduce the risk.	CDEM Group	1A, 1B & 2B,	4.2(a), 4.2(b) & 4.2(d)	Ongoing
Readiness	The CDEM Group to assist organisations, communities and individuals with civil defence emergency management plans in order to better prepare the community.	CDEM Group	1A, 1B, 2D, 3A, 3C, 3D, 3E, 4A & 4B,	4.2(a), 4.2(b) & 4.2(c)	Ongoing
	The CDEM Group to equip and maintain an Emergency Operations Centre (EOC) and Emergency Welfare Centres for an effective CDEM response.	CDEM Group	3B, 3C, 3D, 3E & 3F	4.2(c)	Ongoing
	The CDEM Group to recruit and train staff, including volunteers, for the management of an EOC and Centres.	CDEM Group	3B, 3C, 3D, 3E & 3F	4.2(c)	Ongoing
	The CDEM Group to maintain communication networks, other than the public switched telephone network, for communications between EOC, the Centres and communities of interest.	CDEM Group	3B, 3C, 3D & 3E	4.2(c)	Ongoing
	The CDEM Group to provide and maintain a database of emergency contact details on behalf of the Group and emergency services.	CDEM Group	3B & 3C	4.2(c)	Ongoing
	The CDEM Group to disseminate warnings, as appropriate, in readiness for an emergency response.	CDEM Group	1A, 3B, 3C, 3D, 3E & 3F	4.2(c) & 4.2(d)	As required
	The CDEM Group to prepare guidelines, procedures and action plans to aid staff of the Group Controller and Welfare Manager in responding to emergencies.	CDEM Group	1C, 2D, 3B, 3C, 3D, 3E, 4A & 4B	4.2(c)	Ongoing
	The CDEM Group to prepare a recovery guideline.	CDEM Group	1A, 1B, 1C, 2D, 3B, 3C, 3D, 3E, 4A & 4B	4.2(c)	2005/06
Both Reduction	Through a risk refinement project identify gaps and inconsistencies in statutes and current practise as outlined in section 5.3 of this Group Plan.	CDEM Group	2A, 2C, 2D & 3A	4.2(c)	2005/06

⁷ Objectives

⁸ Each of the actions identified in section 4 are linked with targets specific to the hazard and also to the general Group Plan objectives identified in section 1.6.

	Promote the inclusion of reduction and readiness objectives, policies and methods in other statutory documents and plans relating to civil defence emergency management.	CDEM Group	2C, 2D & 3A	4.2(b)	Ongoing
	Development of a CDEM website to raise public awareness of reduction and readiness actions available to mitigate the adverse effects of all hazards in Taranaki.	CDEM, TRC	1A, 1B & 2B	4.2(a), 4.2(b) & 4.2(d)	Ongoing
	Continued use of advisory groups to provide specific advice to the CDEM Group as and when required for reduction and readiness purposes.	CDEM Group	2B, 3A, 3B, 3C, 3D, 3E, 3F, 4A & 4B	4.2(a)	Ongoing

Note: As identified in section 2.2 of the Group Plan the CDEM Group comprises of representatives from the Taranaki Regional Council, New Plymouth District Council, Stratford District Council and the South Taranaki District Council. However, in some instances it is necessary for actions undertaken by the CDEM Group to also involve representatives of the emergency services (for example, the New Zealand Police, Fire Service and the Taranaki District Health Board).

Furthermore, by identifying the CDEM Group as the agency responsible for the actions identified in 4.2.3, this does not limit other individuals/organisations/agencies from undertaking or being involved in similar actions and responsibilities relating to civil defence emergency management (for example the Fire Service and Taranaki District Health Board etc).

4.3 Significant hazards

4.3.1 Public health threat

Public health threats in the context of this section of the document relate to communicable disease and non communicable environmental hazards (biological, chemical and physical) which pose a threat to the health of populations of the region, not merely the medical/clinical aspects of health care.

Risks to public health, whether as a primary source or secondary source of risk, are a significant threat to the population of Taranaki. Failure of food management systems, lifelines utilities, or the introduction of infectious diseases or toxic substances (whether deliberate or accidental), may also result in a local emergency for public health reasons.

Identification of a lead agency for public health response will depend on the nature of the emergency. The roles and responsibilities of territorial authority environmental health officers, district health board health protection officers and the Medical Officer of Health require some clarification for emergency response. Co-operation between these agencies is therefore required to achieve this clarification.

Public health threat targets

The Group Plan's targets for public health are as follows:

Target No.	Target	
4.3.1 (a)	To reduce the effects to the community of a public health threat.	Reduction
4.3.1 (b)	To reduce the risks to public health through the various activities of the Taranaki District Health Board.	
4.3.1 (c)	To increase community preparedness for a public health threat.	Readiness
4.3.1 (d)	To ensure that a co-ordinated response to a public health threat occurs through an increased understanding of roles and responsibilities.	

Public health threat actions

The Group Plan's actions for public health are as follows:

	Action	Responsibility	Obj.s ⁹	Targets	Timeframe
Reduction	Identify and clarify areas of ambiguity in legislation for the responsibility of lead agencies involved in a public health response.	TDHB & D.C.'s	2D, 3A, 3B, 3C, 3D & 3E	4.3.1(a) & 4.3.1(d)	Ongoing
	Monitoring, investigation, enforcement of legislation, provision of advice and consultation on: <ul style="list-style-type: none"> areas where the relevant environmental stressors may have a detrimental effect on public health; community water supplies and systems to ensure the safe supply of water intended for human consumption; and the safe removal and treatment of sewage in Taranaki. 	TDHB, D.C.'s ¹⁰	1A, 1B & 2B	4.3.1(a) & 4.3.1(b)	Ongoing
	Enforcement of legislation, promotion of safe food preparation practice and general food safety advice to ensure the safety and security of food supplied to the population of Taranaki.	TDHB, D.C.'s	1A, 1B & 2B	4.3.1(a) & 4.3.1(b)	Ongoing
	The continuation of vaccination campaigns in Taranaki as and when required.	TDHB	1A, 1B & 1C	4.3.1(a) & 4.3.1(b)	Ongoing
	Monitoring, enforcement of appropriate legislation, advice and consultation on the sources, transmission routes, prevention and incidences of communicable disease in Taranaki.	TDHB	1A, 1B & 2B	4.3.1(a) & 4.3.1(b)	Ongoing

⁹ Objectives

¹⁰ Note: to ensure clarity in understanding the specific responsibilities of each organisation/agency involved in civil defence emergency management please refer to section 5.3 of the Group Plan.

Readiness	The development and maintenance of contingency plans for public health threats to enable organisations to be prepared for such an event.	TDHB, D.C.'s	1C, 2D, 3B, 3C, 3D, 3E, 4A & 4B	4.3.1(a) & 4.3.1(b)	Ongoing
	A review of vulnerable water supplies to mitigate risk from possible failures identified in the risk assessment.	D.C.'s	2B, 2C & 3B	4.3.1(c)	Ongoing
	The identification of Emergency Medical Centres (EMC's) and normally specific medical practices in the event of a public health threat.	TDHB	1A, 1B, 2C & 3C	4.3.1(b) & 4.3.1(c)	2004/05
	To identify and plan for Community Health services to be used extensively for the provision of primary community health care in the event of a public health threat.	TDHB	1A, 1B, 2C & 3C	4.3.1(b) & 4.3.1(c)	2004/05
Both Reduction and Readiness	Continued use of the WAG and HAG groups to provide specific advice to the CDEM Group and TDHB as and when required for reduction and readiness purposes.	CDEM Group	2B, 3A, 3B, 3C, 3D, 3E, 3F, 4A & 4B	4.3.1(a) & 4.3.1(d)	Ongoing
	The CDEM Group to assist in the successful co-ordination and understanding of roles and responsibilities of the various agencies involved in public health response.	CDEM Group	1B, 2C, 2D, 3A, 3B, 3C, 3D, 3E, 4A & 4B	4.3.1(a), 4.3.1(c) & 4.3.1(d)	Ongoing

4.3.2 Flooding - eastern hill country

Frequent heavy rain events and the steep gradients of many Taranaki river catchments in the eastern hill country of Taranaki can result in significant risks arising from flooding in the valleys of the eastern hill country. Rapid drainage from hill country areas means that peak flood flows are of relatively short duration, typically ranging from 1 or 2 hours in upper catchment areas, to 12-18 hours in lower catchments. The nature and intensities of these heavy rain events therefore often leads to widespread damage to bridges, roads, riverbanks and channels, cause silt and debris deposition (hence affecting farmland and other assets), and can result in significant damage to the natural environment. Flood risk on the ring plain and coastal terraces along the northern and southern coasts is relatively low as high velocity flood flows are contained largely within the deeply incised stream channels.

Agency roles and responsibilities are clearly defined for flood management, minimisation and management purposes in Taranaki and include the following:

- MetService - the provision of severe weather warning and weather forecasting advice.
- Taranaki Regional Council - role of advice on rainfall and river levels, the provision of flood warnings and the prevention of damage through flood management and mitigation.
- New Zealand Police - responsible for public safety of residents at risk from flooding.
- Taranaki CDEM Group - responsible for the provisions of strategic advice and direction in the event of a flood through the Group Controller and the Welfare Manager.
- Provision has also been made in this Group Plan for the Group Controller to appoint an Incident Controller (as per CIMS), empowered by the Group Controller. This provision may be required in a hill country flooding event where large geographic areas are affected and a discrete incident can not be identified for emergency services to respond to.

Flooding - eastern hill country targets

The Group Plan's targets for flooding in the eastern hill country are as follows:

Target No.	Target	
4.3.2 (a)	To reduce the adverse effects of flooding in the eastern hill country on the general public and natural environment.	Reduction
4.3.2 (b)	To reduce the adverse effects of flooding through increased public awareness and understanding.	
4.3.2 (c)	To promote building control mechanisms and planning to reduce the impact of a significant flooding event in the eastern hill country.	
4.3.2 (d)	To prepare people for the adverse effects of flooding in the eastern hill country through warnings and increased public awareness.	Readiness
4.3.2 (e)	To monitor the downstream effects of particular land management practices in the eastern hill country.	

Flooding - eastern hill country actions

The Group Plan's actions for flooding in the eastern hill country are as follows:

	Action	Responsi- bility	Obj.s	Targets	Timeframe
Reduction	Investigate and obtain further information on the location of flood hazard zones in the eastern hill country of Taranaki and the identification of buildings/structures which may be threatened in the event of heavy rain by flooding or landslides.	TRC, RAG members, Fed. Farmers and D.C.'s ¹¹	1C, 2A, 2B, 2C, 3B, 3C, 3D, 3E & 3F	4.3.2(a)	Initiated in 2005 - Ongoing
	Promote the identification in district plans of significant flood hazard zones in the eastern hill country and the subsequent implementation of rules to discourage the development of structures in these areas.	TRC and D.C.'s	1A, 1C, 2B, 2C, 3B & 3E	4.3.2(a) & 4.3.2(c)	Ongoing
	Recognition provided in Long Term Council Community Plan's of a financial commitment to flood mitigation measures.	TRC and D.C.'s	1C, 2C, 2D, 3B & 3E	4.3.2(a)	Ongoing
	Promotion of channel clearances (both vegetation and silt) and continuation of river control advocacy to raise public awareness of the methods available for reducing adverse flooding effects.	TRC	1A, 1B, 1C, 2C, 3B & 3E	4.3.2 (a), 4.3.2(b) & 4.3.2 (c)	Ongoing

¹¹ Note: to ensure clarity in understanding the specific responsibilities of each organisation/agency involved in civil defence emergency management please refer to section 5.3 of the Group Plan.

	Continuation of the TRC's land management programme to assist in reducing the adverse effects of flooding in the eastern hill country.	TRC	1A, 1B, 1C, 2C, 3B & 3E	4.3.2 (a), 4.3.2(b) & 4.3.2 (c)	Ongoing
Readiness	Operate appropriate flood warning systems, including procedures and protocols for notification of potential floods.	TRC	1A, 3B, 3C, 3D & 3E	4.3.2 (a), 4.3.2(b) & 4.3.2 (d)	Ongoing
	To collect information on the downstream effects of particular land management practices in the eastern hill country through land management monitoring mechanisms.	TRC	1A, 2A, 2B, 3B, 3E,	4.3.2 (a) & 4.3.2 (e)	Ongoing
Both Reduction and Readiness	Continued use of the WAG, LAG and RAG groups to provide specific advice to the CDEM Group as and when required for reduction and readiness purposes.	CDEM Group	2B, 3A, 3B, 3C, 3D, 3E, 3F, 4A, 4B &	4.3.2 (a)	Ongoing
	CDEM Group planning to enable the provision of a co-ordinated response to eastern hill country flooding and the welfare needs of people isolated or evacuated.	CDEM Group	1B, 2C, 2D, 3A, 3B, 3C, 3D, 3E, 4A, 4B,	4.3.2 (a) & 4.3.2 (d)	Ongoing

4.3.3 Earthquake – local fault

New Zealand lies across the boundary of two major tectonic plates – the Pacific and Indo-Australian plates. The greatest intensity of seismic activity is found along converging plate boundaries where oceanic plates are undergoing subduction. Earthquakes are produced by sudden slip movements along faults, and in New Zealand concentrations of earthquake activity are along the major fault lines that trace the plate boundaries.

Although Taranaki is not located in the most seismically active area of New Zealand, earthquakes have occurred several times over the last few decades. Known local fault locations include the Turi, Ararata, Waverley zone, Oaonui and Inglewood (and Norfolk) faults, with several more located both on and offshore. These faults are the likely source of large, shallow earthquakes that originate in the region, however the rate of earthquake activity in Taranaki is relatively low compared to many other parts of the country. The earth movements and ground surface deformation resulting from earthquakes are therefore recognised as a significant hazard to both urban and industrial centres of Taranaki.

The response to local fault activity within the CDEM Group area is typical of the enhanced CIMS model adopted within the region. Each agency has various roles to play, and these are spelled out at both national and Group level. However, incident management for an earthquake threat is primarily the key role of emergency services and responding agencies, with the majority of work taking place in the field. Incident management can include such activities as urban search and rescue, fire fighting and evacuation, with co-ordination between agencies the responsibility of the Group Controller. The welfare needs of the community are also met by the CDEM Group, through the Welfare Manager.

With regard to the readiness and reduction phases, the following agencies have responsibilities:

- The Taranaki Regional Council – is responsible for the collection and distribution of information on natural hazards (including earthquakes) and can address the responsibility for avoiding or mitigating natural hazards through regional plans.
- Each of the three district councils (New Plymouth, Stratford and South Taranaki) – could identify fault lines, as well as control subdivision and development in areas identified at risk of natural hazards (such as earthquakes) through their district plan rules and standards.
- Taranaki CDEM Group – responsible for providing co-ordinated, strategic and specific advice and direction to all players within the CDEM Group area, including the public.
- Institute of Geological and Nuclear Sciences (GNS) – through the GeoNet Project, GNS has the role and responsibility of locating and deriving the size of all significant and damaging earthquakes in New Zealand.

Earthquake – local fault targets

The Group Plan's targets for earthquakes are as follows:

Target No.	Target	
4.3.3 (a)	To reduce the adverse effects of a local fault earthquake on the general public and natural environment of Taranaki.	Reduction
4.3.3 (b)	To encourage the development of structures and certain land uses appropriate distances from identified local fault zones.	
4.3.3 (c)	To prepare people for the adverse effects of a local fault earthquake through increased public awareness.	Readiness
4.3.3 (d)	To provide a network to monitor seismicity recorded within the vicinity of Mt Taranaki/Egmont for precursor signs of volcanic eruption.	

Earthquake – local fault actions

The Group Plan's actions for earthquakes are as follows:

	Action	Responsi- bility	Obj.s	Targets	Timeframe
Reduction	Promote the development of district plan rules or building controls for the use and development of resources in identified local fault hazard zones and hence reduce the adverse effects of an earthquake event.	TRC, CDEM Group & D.C.'s	1A, 1C, 2B, 2C, 3B & 3E	4.3.3(a), & 4.3.3(b)	Ongoing
Readiness	Undertake a risk and impact assessment of regional infrastructure at risk from a local fault earthquake (lifelines project).	CDEM Group, LAG	1C, 2A, 2B, 2C, 3B, 3C, 3D, 3E & 3F	4.3.3(a)	Ongoing
	Promote the voluntary development of individual, agency and organisational contingency plans to identify response mechanisms available in the event of an earthquake.	CDEM Group	1C, 2D, 3B, 3C, 3D, 3E, 4A & 4B	4.3.3(a)	Ongoing

	Continued maintenance of the Taranaki Volcano-Seismic Network to ensure effective monitoring of seismic activity and the activation of early warnings.	TRC	1A, 2A, 2B, 3B, 3C, 3D, 3E & 3F	4.3.4(a), & 4.3.4(d)	Ongoing
Both Reduction and Readiness	Continued provision of education and advice to the general public through the implementation of public awareness campaigns and the distribution of school kits at regular intervals.	CDEM Group	1A, 1B, 2B & 2C	4.3.3(a) & 4.3.3(c)	Ongoing
	To promote the accurate identification and analysis of local fault zones in Taranaki.	CDEM Group	2A, 2B & 2C	4.3.3(a)	Ongoing
	Continued use of the WAG, HAG, LAG and RAG groups to provide specific advice to the CDEM Group as and when required for reduction and readiness purposes.	CDEM Group	2B, 3A, 3B, 3C, 3D, 3E, 3F, 4A & 4B	4.3.3(a)	Ongoing

4.3.4 Volcanic eruption – Mt Taranaki/Egmont

The Egmont Volcanic Centre is one of eight volcanic areas in the North Island, with moderate or major eruptions occurring on average every 340 years (the last major eruption being around 1755). There is also no evidence to suggest that Mt Taranaki/Egmont has finally ceased erupting. Rather, it must be regarded as an active volcano in a state of quiescence and is one of a number of volcanoes in New Zealand where future eruptions can be expected.

The potential hazards from eruptions from Mt Taranaki/Egmont can be grouped into three categories: ground hugging flows, airborne material, and secondary or related hazard.

The Taranaki CDEM Group Volcanic Strategy 2004 provides the basis for contingency planning and emergency response with regard to a possible eruption on Mt Taranaki/Egmont. The purpose of this Strategy is to establish an operational framework for the protection of human life in case of actual (or potential) volcanic activity and to provide a greater degree of considered input than previously achieved in a non-eruptive period. To this end, the Strategy may provide some direction, however realities on the day will prevail.

Agency roles and responsibilities are clearly defined for volcanic response management purposes and include:

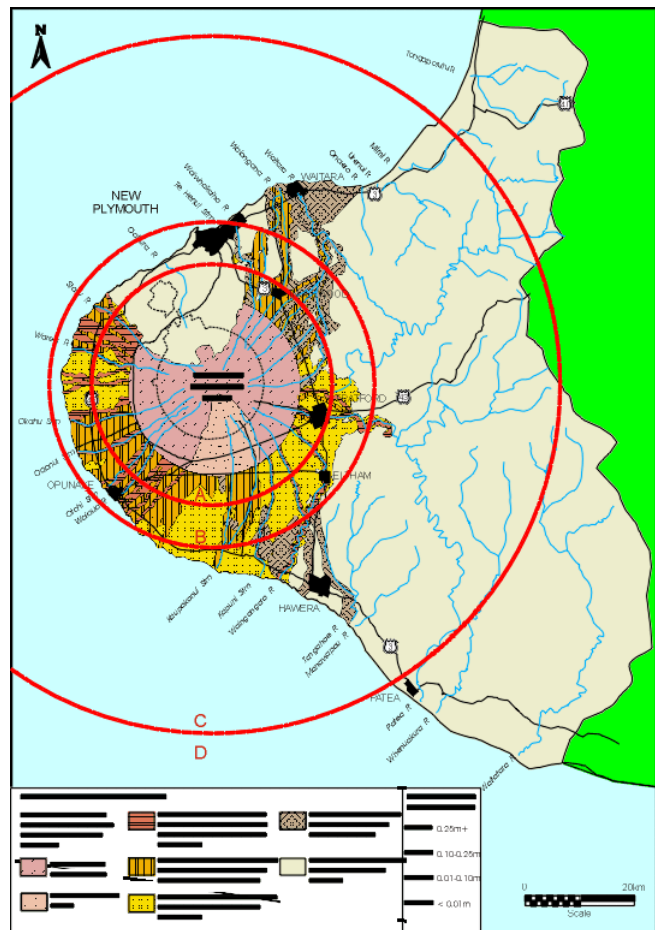


Figure 3 Volcanic hazard zones

- Institute of Geological and Nuclear Sciences – responsible for the provision of Science Alert Bulletins and Ashfall Predictions to the Ministry of Civil Defence & Emergency Management. GNS also has the responsibility for setting the Scientific Alert Level.
- Ministry of Civil Defence & Emergency Management – responsible for providing strategic and generic advice to Government and direction to all responders during national emergencies.
- CDEM Groups – responsible for providing co-ordinated, strategic and specific advice and direction to all players within the CDEM Group area, including the public.
- Department of Conservation – involved in the management of Egmont National Park.

Note: The Taranaki CDEM Group Volcanic Strategy 2004 is to be incorporated as a reference document to this Group Plan.

Volcanic eruption – Mt Taranaki/Egmont targets

The Group Plan's targets for a volcanic eruption on Mt Taranaki/Egmont are as follows:

Target No.	Target	
4.3.4 (a)	To reduce the adverse effects of a volcanic eruption on the general public of Taranaki.	Reduction
4.3.4 (b)	To promote awareness of volcanic hazards in Taranaki and the Taranaki Volcanic Strategy.	
4.3.4 (c)	To prepare people for the adverse effects of a volcanic eruption.	Readiness
4.3.4 (d)	To ensure consistency in contingency planning throughout the region.	
4.3.4 (e)	To provide a network to monitor seismicity recorded within the vicinity of Mt Taranaki/Egmont for precursor signs of volcanic eruption.	

Volcanic eruption – Mt Taranaki/Egmont actions

The Group Plan's actions for a volcanic eruption on Mt Taranaki/Egmont are as follows:

	Action	Responsibility	Obj.s	Targets	Timeframe
Reduction	Continuation of public awareness campaigns, education programmes and the distribution of schools kits to raise awareness of the risks associated with volcanic eruptions.	CDEM Group	1A, 1B, 2B & 2C	4.3.4(a), 4.3.4(b) & 4.3.4(c)	Ongoing
	Promote the development of district plan rules to control the use and development of resources in identified volcanic hazard areas.	TRC, CDEM Group, D.C.'s	1A, 1C, 2B, 2C, 3B & 3E	4.3.4(a) & 4.3.4(b)	Ongoing
	Further risk and impact assessment of regional infrastructure at risk from a volcanic eruption.	Massey University	2A, 2B, 2C, 3B, 3C, 3D, 3E & 3F	4.3.4(a)	2010

Readiness	Promote the voluntary development of individual, agency and organisational contingency plans to identify response mechanisms available in the event of a volcanic eruption.	CDEM Group	1C, 2D, 3B, 3C, 3D, 3E, 4A & 4B	4.3.4(a), 4.3.4(c) & 4.3.4(d)	Ongoing
	Continued maintenance of the Taranaki Volcano-Seismic Network to ensure effective monitoring of seismic activity and the activation of early warnings.	TRC	1A, 2A, 2B, 3B, 3C, 3D, 3E & 3F	4.3.4(a), 4.3.4(c) & 4.3.4(e)	Ongoing
	Promote awareness of the Taranaki CDEM Group Volcanic Strategy for Taranaki 2004.	CDEM Group	1A, 1B, 2B & 2C	4.3.4(a), 4.3.4(b) & 4.3.4(c)	Ongoing
Both Reduction and Readiness	Continued use of EVAG (in particular), WAG, HAG, RAG and LAG groups to provide scientific and other advice to the CDEM Group as and when required for reduction and readiness purposes.	CDEM Group	2B, 3A, 3B, 3C, 3D, 3E, 3F, 4A & 4B	4.3.4(a), 4.3.4(b) & 4.3.4(c)	Ongoing
	Continuation of seismic monitoring in conjunction with the GeoNet programme run by the Institute of Geological and Nuclear Sciences.	GNS, TRC	1A, 2A, 2B, 3B, 3C, 3D, 3E & 3F	4.3.4(a) & 4.3.4(e)	Ongoing

4.3.5 Flooding – lower Waitara River

Flooding of the lower reaches of the Waitara River has long been recognised as a potential threat to that community. The flood hazard zone is well defined, community awareness high and contingency planning undertaken.

The primary concerns relating to CDEM relate to when the design limits of the flood protection works are exceeded, or the flood protection works fail during an event.

Figure 4 demonstrates the area identified by the Taranaki Regional Council as the flood hazard zone for Waitara Township.

River training works in the form of several rock groynes have been constructed (lower left of Figure 4) to realign the river away from its close proximity to the stop bank in that locality.

Stop banks were constructed alongside the river provide flood protection for the township in 1971/72.

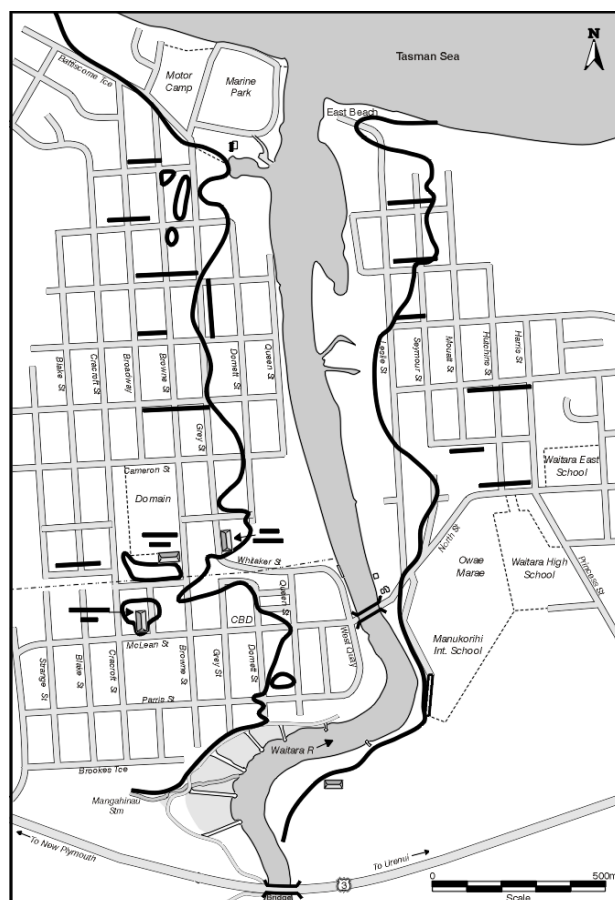


Figure 4 Waitara flood hazard zone

Flooding – lower Waitara River targets

The Group Plan's targets for flooding of the lower Waitara River are as follows:

Target No.	Target	
4.3.5 (a)	To reduce the adverse effects of a major flooding event of the lower Waitara River.	Reduction
4.3.5 (b)	To reduce the adverse effects of a major flooding event of the lower Waitara River through increased public awareness of mitigation methods available to reduce these effects.	
4.3.5 (c)	To promote building control mechanisms and planning to help reduce the adverse impacts of a significant flooding event in and around the Waitara township.	
4.3.5 (d)	To prepare people for the adverse effects of the lower Waitara River flooding.	Readiness

Flooding – lower Waitara River actions

The Group Plan's actions for flooding of the lower Waitara River are as follows:

	Action	Responsibility	Obj.s	Targets	Timeframe
Reduction	Encourage appropriate activities in areas prone to flooding through district plan rules and public awareness campaigns.	TRC and D.C.'s	1A, 1B, 1C, 2B, 2C, 3B & 3E	4.3.5(a), 4.3.5(b) & 4.3.5(c)	Ongoing
	Recognition provided in Long Term Council Community Plan's of a financial commitment to flood mitigation measures for the lower Waitara River.	TRC and D.C.'s	1C, 2C, 2D, 3B & 3E	4.3.5(a)	Ongoing
Readiness	To maintain the Waitara Flood Plan and update when necessary.	TRC, CDEM Group & Police	2B, 2D, 3B, 3C, 3D, 3E, 4A & 4B	4.3.5(d)	Ongoing
	Ongoing monitoring of water levels and maintenance of remote rainfall/river level recorders and warning systems in the Waitara River to enable hydrological records to be obtained.	TRC	1A, 2B, 3B, 3C, 3D & 3E	4.3.5(d)	Ongoing
Both Reduction and Readiness	Ongoing maintenance and review of flood mitigation work within the Waitara Flood Protection Scheme.	TRC	3B & 3E	4.3.5(a) & 4.3.5(d)	Ongoing
	Continuation of education and public awareness campaigns to inform people of the adverse effects of a significant flooding event in the lower Waitara River.	CDEM Group	1A, 1B, 2B & 2C	4.3.5(b) & 4.3.5(d)	Ongoing

	Continued use of the WAG, HAG and LAG groups to provide specific advice to the CDEM Group as and when required for reduction and readiness purposes.	CDEM Group	2B, 3A, 3B, 3C, 3D, 3E, 3F, 4A & 4B	4.3.5(a), 4.3.5(c) & 4.3.5(d)	Ongoing
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4.3.6 Structural failure – significant structure

The failure of a significant structure typically comes about as a consequence of another hazard. Earthquakes and floods for example may cause structures to fail. From time to time however, structures fail for less apparent reasons. The structural failure of the new E Terminal building at the Charles de Gaulle Airport (Paris) in May 2004 is an example of structural failure due to a less apparent cause.

The risk analysis for Taranaki identified the Patea dam as a significant structure with the potential to cause the greatest immediate impact should the structure fail. This structure is owned and operated by Trustpower. Given the potential impact on the community from such a failure, the systems and resources of the CDEM Group may be required to ensure a co-ordinated response to the communities affected.

Structural failure – significant structure targets

The Group Plan's targets for significant structure failure are as follows:

Target No.	Target	
4.3.6 (a)	To reduce the adverse effects of a significant structural failure in Taranaki through increased public awareness.	Reduction
4.3.6 (b)	To reduce the adverse effects of a significant structural failure through the provision of safe and effective engineering practices.	
4.3.6 (c)	To ensure that a co-ordinated response occurs in the event of a significant structural failure in Taranaki and the welfare needs of the community are met.	Readiness
4.3.6 (d)	To prepare the general public for the adverse effects of a significant structural failure through increased public awareness.	

Structural failure – significant structure actions

The Group Plan's actions for significant structure failure are as follows:

	Action	Responsibility	Obj.s	Targets	Timeframe
Reduction	The continued implementation of safe and effective engineering practices to further reduce the risk of a significant structural failure of the Patea dam.	Trustpower	3B & 3E	4.3.6(b)	Ongoing
Readiness	Maintenance of the Trustpower warning network with up-to-date contact details of those to be contacted in the event of the Patea dam failure.	Trustpower	1A, 3B, 3C, 3D & 3E	4.3.6(a) & 4.3.6(c)	Ongoing

	Review and update of the ' <i>Contingency Plan for Failure of Patea Hydroelectric Dam</i> ' to ensure that a CIMS approach to CDEM planning is adopted.	CDEM Group, NZFS, Trust-power, Police	1C, 2D, 3B, 3C, 3D, 3E, 4A & 4B	4.3.6(c)	As required
Both Reduction and Readiness	The provision of education and advice to the general public to inform them of the adverse effects associated with a possible structural failure of the Patea dam.	Trust-power	1A, 1B, 2B & 2C	4.3.6(a) & 4.3.6(d)	Ongoing
	Continued use of the WAG, HAG and LAG groups to provide specific advice to the CDEM Group as and when required for reduction and readiness purposes.	CDEM Group	2B, 3A, 3B, 3C, 3D, 3E, 3F, 4A & 4B	4.3.6(c)	Ongoing

4.3.7 Essential utility failure – small community water supply

The vulnerability of small community water supplies such as those in Opunake or Eltham was recognised during the risk assessment. Failure of such systems also gives rise to a public health risk described earlier in the Group Plan.

The management of community water supplies is a territorial authority responsibility. Consequently, the responsibility for risk reduction, readiness, response and recovery also lies with the territorial authority. Similar to the failure of a significant structure, given the potential impact on the community of an essential utility failure, the systems and resources of the CDEM Group may be required to ensure a co-ordinated response to the welfare needs of the communities affected.

Essential utility failure – small community water supply targets

The Group Plan's targets for essential utility failure are as follows:

Target No.	Target	
4.3.7 (a)	To reduce the adverse effects of an essential utility failure in Taranaki through increased public awareness.	Reduction
4.3.7 (b)	To reduce the adverse effects of an essential utilities failure through the provision of safe and efficient engineering practices and structures.	
4.3.7 (c)	To ensure that a co-ordinated response occurs in the event of an essential utility failure in Taranaki and the welfare needs of the community are met.	Readiness
4.3.7 (d)	To prepare the general public for an essential utility failure in Taranaki through increased public awareness.	

Essential utility failure – small community water supply actions

The Group Plan's actions for essential utility failure are as follows:

	Action	Responsi- bility	Obj.s	Targets	Timeframe
Reduction	The continued implementation of safe and effective engineering practices to further reduce the risk of a small community water supply failure.	D.C.'s	3B & 3E	4.3.7(b)	Ongoing
Readiness	To prepare and implement contingency plans for both the Eltham and Opunake Water Supply systems so that clear guidelines are provided for when such a utility should fail.	STDC	1C, 2D, 3B, 3C, 3D, 3E, 4A & 4B	4.3.7(c)	Ongoing
Both Reduction and Readiness	The provision of education, advice and information to the general public of the adverse effects associated with small community water supply failure.	CDEM Group, D.C.'s	1A, 1B, 2B & 2C	4.3.7(a) & 4.3.7(d)	Ongoing
	Continued use of the WAG, HAG and LAG groups to provide specific advice to the CDEM Group as and when required for reduction and readiness purposes.	CDEM Group	2B, 3A, 3B, 3C, 3D, 3E, 3F, 4A & 4B	4.3.7(c)	Ongoing

4.3.8 High wind

Taranaki frequently has high wind events that cause small amounts of localised damage due largely to the prevailing westerly air stream, although wind speeds vary greatly according to geographical features which influence exposures. Northerlies dominate in central and inland Taranaki where the eastern hills offer protection from south-easterly winds and westerlies are influenced by Mt Taranaki/Egmont. Cape Egmont also experiences considerable wind from all directions, except the east.

Generally, the highest winds speeds in Taranaki tend to occur in spring and autumn, causing limited local damage. From time to time however events, such as Cyclone Bola, can have a devastating effect on the community. High winds in Taranaki have therefore been identified as a significant hazard due to the relatively high probability and potentially large area of community impacted.

Although no lead agency is identified within national structures for disseminating warnings at the local level for wind events, the Taranaki CDEM Group has undertaken responsibility for the role of disseminating warnings issued by the MetService. The Group will also monitor and warn the community when certain trigger levels have been activated without a Met Service warning having been issued.

High wind targets

The Group Plan's targets for high wind are as follows:

Target No.	Target	
4.3.8 (a)	To reduce the adverse effects of high winds in Taranaki.	Reduction
4.3.8 (b)	To maintain a network of wind alarms in Taranaki.	Readiness
4.3.8 (c)	To prepare for strong wind events in the region through the successful dissemination of wind warnings.	
4.3.8 (d)	To prepare people for the adverse effects of high winds through increased public awareness.	

High wind actions

The Group Plan's actions for high wind are as follows:

	Action	Responsi-bility	Obj.s	Targets	Timeframe
Reduction	Preparation of a feasibility study into wind vulnerability in Taranaki.	CDEM Group	1A, 2B, 3B, 3C, 3D & 3E	4.3.8(a)	2006
Readiness	Maintenance of an up-to-date contacts list for the weather watch network.	CDEM Group	1A, 3B, 3C, 3D & 3E	4.3.8(b)	Ongoing
	Continued collection of up-to-date and accurate information of wind speeds in Taranaki through telemetric wind recorders located at specific sites.	TRC	1A, 2B, 3B, 3C, 3D & 3E	4.3.8(b)	Ongoing
Both Reduction and Readiness	Continuation of public awareness campaigns to increase understanding of the risks high winds can pose to the community, including the dissemination of education kits to schools.	CDEM Group	1A, 1B, 2B & 2C	4.3.8(a) & 4.3.8(d)	Ongoing
	Continued use of the RAG, LAG, WAG and HAG groups to provide specific advice to the CDEM Group as and when required for reduction and readiness purposes.	CDEM Group	2B, 3A, 3B, 3C, 3D, 3E, 3F, 4A & 4B	4.3.8(a)	Ongoing

4.3.9 Biological threat – exotic animal disease

The possibility of a number of exotic animal diseases was considered during the hazard and risk analysis process, with an outbreak of foot and mouth considered to have the most significant consequences for the Taranaki CDEM area.

The management of foot and mouth disease response and recovery is the responsibility of the Ministry for Agriculture and Forestry (MAF). A number of other agencies are contracted to MAF to provide operational and technical capability to assist with containment, surveillance and eradication activities both in the rural sector and associated industry

processing plants. In the event of an exotic animal disease release the first priority of MAF for response is to contain and delimit the extent of infection followed by a review of options for the feasibility of eradication and/or management. An Incursion Policy defines the approaches to be taken by MAF and this may be viewed on the MAF website¹².

The resources and facilities of the CDEM Group are subject to a Memorandum of Understanding between the Taranaki Regional Council and AgriQuality.

Biological threat – exotic animal disease targets

The Group Plan's targets for biological threat are as follows:

Target No.	Target	
4.3.9 (a)	To reduce the risk of adverse effects on human, animal and environmental health from a biological disease through increased public awareness.	Reduction
4.3.9 (b)	To ensure that the risk of any biological disease occurring in Taranaki is reduced to the lowest practicable level through effective planning and mitigation measures.	
4.3.9 (c)	To promote a co-ordinated approach to the management of exotic disease and pest incursions in Taranaki to ensure increased efficiency and the avoidance of duplication in activities.	
4.3.9 (d)	To prepare organisations and individuals to respond in a safe, quick and effective manner to a biological animal disease outbreak in Taranaki.	Readiness

Biological threat – exotic animal disease actions

The Group Plan's actions for biological threat are as follows:

Action		Responsi- bility	Obj.s	Targets	Timeframe
Reduction	All imports of biological material that may pose a threat to New Zealand's primary industries, environment and native flora and fauna to be subject to the requirements of Import Health Standards.	MAF	1B, 2C, 3B, 3C, 3D, 3E & 3F	4.3.9(b)	Ongoing
	All ports of entry to NZ to have agricultural quarantine inspection provisions to inspect foreign vessels and cargo for risk goods.	MAF	1B, 2C, 3B, 3C, 3D, 3E & 3F	4.3.9(b)	Ongoing
Readiness	The operation of a national freephone number (operated 24/7) for the purposes of reporting suspected exotic pests or diseases.	MAF	1B, 3B, 3C, 3D, 3E & 3F	4.3.9(b) & 4.3.9 (d)	Ongoing

¹² www.maf.govt.nz

	The identification of stock disposal options (inclusive of licensed landfills) for on farm burial, mass disposal and rendering facilities through contingency planning mechanisms.	MAF, TRC	1C, 2D, 3B, 3C, 3D, 3E, 3F, 4A & 4B	4.3.9(d)	2005/06
Both Reduction and Readiness	Continuation of education and public awareness to inform the general public of the risks associated with a biological threat.	MAF, TRC	1A, 1B, 2B & 2C	4.3.9(a)	Ongoing
	Use of RAG and WAG for the provision of local resources and knowledge to assist the CDEM Group and MAF as and when required for reduction and readiness purposes, along with containment and control activities in the event of an exotic animal disease incursion (including the need to provide sector based resources and farmer welfare support).	CDEM Group	2B, 3A, 3B, 3C, 3D, 3E, 3F, 4A & 4B	4.3.9(b) 4.3.9(c) & 4.3.9(d)	Ongoing

4.3.10 Hazardous substances – spillage or leakage

The manufacture and use of hazardous substances in Taranaki are normal and necessary processes involved in the industry, agriculture, horticulture, forestry and domestic sectors. These substances can range from petrochemicals, to the application of agrichemical sprays (such as herbicides and insecticides), as well as paints, batteries and household cleaners.

Where there is a spill or leakage associated with these hazardous substances, the area may need to be deemed a contaminated site. Such a site can pose a risk to both human health and the environment and may affect the economy of Taranaki through damage to property and/or damage to market access for export produce.

The Taranaki Regional Council is responsible under the Resource Management Act for regulating the discharge to the environment of hazardous substances, or from contaminated sites. District councils on the other hand have the responsibility for managing land uses for the prevention or mitigation of adverse effects arising from the storage, use, disposal or transportation of hazardous substances under the same statute – this responsibility may extend to contaminated sites. They also have the responsibility to regulate the use of hazardous substances under the Hazardous Substances and New Organisms Act 1996 [HSNO], only where that use is located in either a private dwelling or public place that is not a workplace.

There are a number of other organisations also involved in the management of hazardous substances and spill response. These are as follows:

- The Police may enforce the provisions of HSNO Act in or on any motor vehicle or rail service vehicle, on any road, or on any railway line.
- The Civil Aviation Authority shall ensure that the provisions of the HSNO Act are enforced in, on, or at any aircraft.
- The Maritime Safety Authority (also TRC or Westgate Transport Ltd within Port Taranaki) shall ensure that the provisions of the HSNO Act are enforced in or on any ship, or for any oil spill.
- The Ministry of Health shall ensure that the provisions of this Act are enforced where it is necessary to protect public health.

- The Fire Service is responsible under the Fire Services Act 1975 for managing emergencies where the safety of persons and property is endangered by hazardous substances.
- The role of the Occupational Safety and Health Service is to ensure that the provisions of the HSNO Act are enforced in places of work.
- A number of larger industrial sites in Taranaki also have their own trained staff, response equipment and contingency plans in preparation to deal with a hazardous substance spill or leakage.

In recognition of the wide range of organisations involved with the management and mitigation of hazardous substance spills or leakages, the purpose of the CDEM Group is to co-ordinate the reduction and readiness actions through the CDEM Group Plan.

Hazardous substance targets

The Group Plan's targets for hazardous substances are as follows:

Target No.	Target	
4.3.10 (a)	To reduce the risk of adverse effects on human and environmental health of a hazardous substance spill or leakage in Taranaki through increased public awareness and more efficient and effective management of the use of hazardous substances and site contamination.	Reduction
4.3.10 (b)	To ensure that any risks of adverse effects occurring as a result of the storage, use and transportation or disposal of hazardous substances are reduced to the lowest practicable level.	
4.3.10 (c)	To adopt a region-wide, multi-agency and co-ordinated approach to the management of site contamination and hazardous substance use, transportation and disposal to ensure increased efficiency in reducing the effects of a hazardous substance spill or leakage and the avoidance of duplication in activities.	Readiness
4.3.10 (d)	To assist those organisations involved in avoiding, remedying and mitigating the effects of a hazardous substance spill or leakage to be prepared for such an event.	
4.3.10 (e)	To promote an appropriate level of monitoring/inspection undertaken of locations where hazardous substances are known to be stored or used.	

Hazardous substance actions

The Group Plan's actions for hazardous substances are as follows:

Action		Responsi-bility	Obj.s	Targets	Timeframe
Reductio	Control the routing of vehicles containing certain quantities and classes of hazardous substances in Taranaki to avoid, reduce or mitigate the adverse effects of a spill or leakage.	D.C.'s	1B, 1C, 2B, 2C, 3B, 3C, 3D & 3E	4.3.10(a), 4.3.10(b) & 4.3.10(c)	Ongoing

	Control the siting of activities involving hazardous substances and storage to avoid, reduce or mitigate the adverse effects of a spill or leakage.	D.C.'s	1B, 1C, 2B, 2C, 3B, 3C, 3D & 3E	4.3.10(a), 4.3.10(b) & 4.3.10(c)	Ongoing
	Continuation of urban and rural hazardous waste collections as required and advisory services for industrial activities.	TRC, D.C.'s	1B, 1C, 2B, 2C, 3B, 3C, 3D, 3E,	4.3.10(a), 4.3.10(b) & 4.3.10(c)	As required
	Maintenance of drop-off areas for hazardous wastes in each of the New Plymouth, Stratford and South Taranaki districts.	D.C.'s	1B, 1C, 2B, 2C, 3B, 3C, 3D & 3E	4.3.10(a), 4.3.10(b) & 4.3.10(c)	Ongoing
Readiness	Promote the development of contingency plans as part of resource consent conditions to assist in preparing for an accidental spill or release of hazardous substances.	TRC, D.C.'s	1C, 2D, 3B, 3C, 3D, 3E, 4A & 4B	4.3.10(c), 4.3.10(d) & 4.3.10(e)	Ongoing
	Development of a Clandestine Laboratory Incident Action Plan for Taranaki.	HSTLC	2B, 2C, 2D, 3B, 3C, 3E, 4A & 4B	4.3.10(c), 4.3.10(d) & 4.3.10(e)	2004
Both Reduction and Readiness	Ensuring a collaborative approach to the management of contaminated sites and hazardous substance use and disposal.	TRC, all three D.C.'s	2B, 2C, 2D, 3B, 3C, 3D & 3E	4.3.10(a), 4.3.10(b), 4.3.10(c), 4.3.10(d) & 4.3.10(e)	Ongoing
	Continued site monitoring and investigations into various land uses that may pose risks to people and the environment – clean ups and remediation work to be undertaken where spills or leakages could occur.	TRC, D.C.'s	1A, 2B, 3B, 3C, 3D & 3E	4.3.10(a), 4.3.10(b), 4.3.10(c), 4.3.10(d) & 4.3.10(e)	Ongoing
	To obtain up-to-date information on legislative requirements for the management and use of hazardous materials in Taranaki.	All agencies – Police, TRC, D.C.'s, NZFS, OSH etc	2D, 3A, 3B, 3C, 3D & 3E	4.3.10(d)	Ongoing
	Continued use of the HSTLC, WAG, HAG and RAG groups to provide specific advice to the CDEM Group as and when required for reduction and readiness purposes.	CDEM Group	2B, 3A, 3B, 3C, 3D, 3E, 3F, 4A, 4B,	4.3.10(a), 4.3.10(b) & 4.3.10(c)	Ongoing

5. Managing emergencies - response

5.1 Introduction

5.1.1 Purpose

The purpose of this section of the Group Plan is to provide an outline of the **response arrangements** established by the Taranaki Civil Defence Emergency Management Group to address an emergency situation in Taranaki in a co-ordinated manner.

Response is defined as:

Actions taken immediately before, during or directly after an emergency, to save lives and property, as well as help communities to recover¹³.

It is important to note here, that the Taranaki CDEM Group is not a primary care or emergencies services agency. Rather, it is the mechanism for co-ordinating resources (under the 4 R's of readiness, reduction, response and recovery) for the purpose of civil defence emergency management. Furthermore, the CDEM Group does not have a high level of resources or equipment by which it provides care in the case of an emergency.

In the case of such an emergency, the Taranaki CDEM Group utilises the New Zealand Co-ordinated Incident Management System (CIMS), which allows for a co-ordinated approach to emergency management response where multi-agencies are involved. Following an outline of this system in this section of the Group Plan the key lead agencies roles and responsibilities related to civil defence emergency management are identified. The Group Plan then outlines the two functions the Group has divided the response element of civil defence emergency management into:

- response co-ordination; and
- emergency welfare.

Remember:

The **first** principle of civil defence emergency management is self-reliance.

The **second** principle is that - in the event of a local emergency the CDEM Group co-ordinates emergency response involving various agencies, including emergency welfare.

¹³ Ministry of Civil Defence & Emergency Management. 'Resilient New Zealand: National Civil Defence Emergency Management Strategy 2003 – 2006'.

5.1.2 Guidelines for response

For further information on the specific response actions or activities to be undertaken in the event of a local emergency the following documents have been identified as guidelines to follow:

- Waitara Flood Plan – this document comprises the Police Incident Action Plan, the CDEM Group Community Action Plan and Response Co-ordination Plan for a flood event in the Waitara township.
- Naphtha Community Action Plan – this document identifies a procedure to follow for the activation of an emergency welfare centre specifically for a Naphtha incident in Paritutu Road.
- CDEM Group: Emergency Manager's Response Guide – details the actions to be taken by the Regional Council's emergency management officers upon receipt of warnings.
- CDEM Group: Controller's Guide – summarizes the structure, role and responsibility of the Group Controllers team.
- CDEM Group: EOC Activation Guide – provides a detailed description of the levels of alert, activation procedures and key roles/responsibilities for operating the Taranaki EOC.
- CDEM Group: Emergency Welfare Centres Guide – provides a description of the roles/responsibilities for emergency welfare centre staff.
- CDEM Group: Media Management Guide – provides a description of the roles/responsibilities for the Group Controller's media management team.
- CDEM Group: Technical Systems Guide – provides detailed information on technical equipment such as communications, security and utilities.
- CDEM Group: Operating Instructions – includes instructions for the operation of individual items of plant and equipment.
- CDEM Group: Callout List – a database generated report of contact details for emergency management staff and organisations.

Each of these documents is based around the principles of the New Zealand Co-ordinated Incident Management System. They also provide specific direction for response actions/activities which is too detailed to include within the CDEM Group Plan.

5.2 New Zealand Co-ordinated Incident Management System

The New Zealand Coordinated Incident Management System (CIMS) has been developed by emergency services in response to a need identified by the emergency services. The CIMS approach can be adopted for a range of situations and is particularly useful when a number of agencies are involved in a response. CIMS is based on the following elements:

- common terminology;
- a modular organisation;
- integrated communications;
- consolidated incident action plans;
- manageable span of control;
- designated incident facilities, and
- comprehensive resource management.

5.2.1 Management structure

The CIMS is built around four major components:

1. Control – the management of an incident.
2. Planning/intelligence – the collection and analysis of incident information and planning of response activities.
3. Operations – the direction of agency resources in combating an incident.
4. Logistics – the provision of facilities, services and materials required to combat an incident.

These four major components are the foundation upon which the CIMS is built. They apply during a routine emergency, when preparing for a major event, or when managing a response to a major disaster.

5.2.2 Incident Controller

The Incident Controller is responsible for the overall direction of response activities and is the person in charge at the scene of an incident. They are to fulfil all management functions and responsibilities until the incident requires additional appointments. Such responsibilities are to include:

- establishing command and control;
- establishing the Incident Control Point;
- protecting life and property;
- controlling personnel and equipment;
- maintaining accountability for responder and public safety, as well as for task accomplishment; and
- establishing and maintaining effective liaison with outside organisations, including the Incident Emergency Operations Centre, when it is activated.

Initially, the Incident Controller will be the senior ‘first-responder’ to arrive at the scene. As additional responders arrive, control may transfer on the basis of which agency has primary authority for overall control of the incident. As incidents grow in size or become more complex, the responsible jurisdiction or agency may assign a more highly qualified Incident Controller.

5.3 Response co-ordination

The Taranaki CDEM Group is, in part, concerned with the management of the adverse effects of emergencies (section 17(1)(d)). The appointment of a person to provide strategic advice and direction to all responding agencies is a most effective method of addressing this management function.

5.3.1 Group Controller

The Act therefore provides for the appointment of a Group Controller with functions and powers to undertake this role during a declared state of local emergency. Fundamentally, the purpose of a Group Controller is to perform the following functions during a declared state of local emergency (section 28 of the Act):

1. Co-ordinate the use of personnel, material, information, services, and other resources made available by departments, CDEM Groups and other persons.

2. Perform functions and duties delegated to the Group Controller.
3. Exercise powers in a manner consistent with the priorities determined by the National Controller or Director during a state of national emergency.

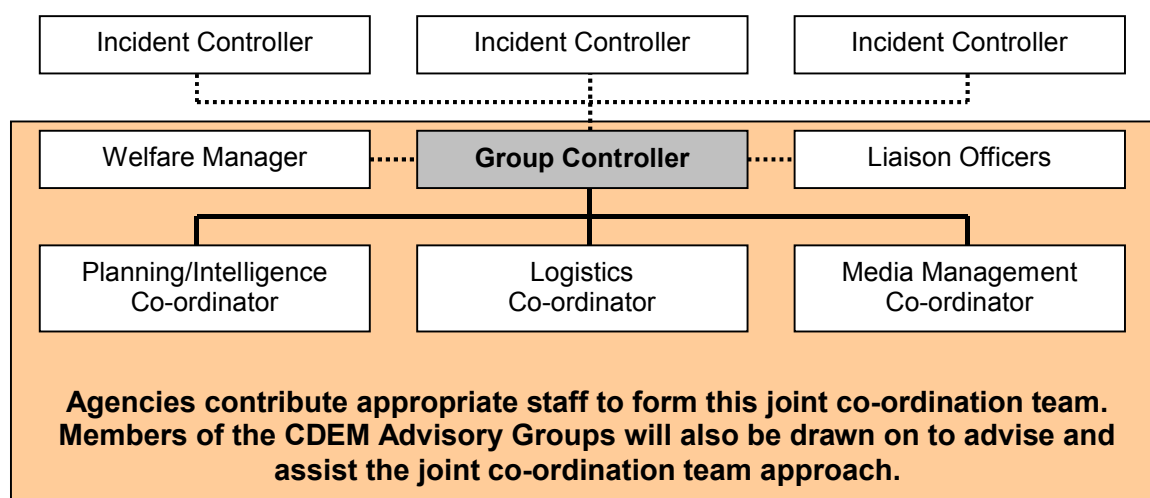


Figure 5 Group Controller's team

Important note: As identified in Figure 5, the Advisory Groups play a vital role in providing technical advice and support throughout the 4 R's of emergency management, but in particular the response phase of an emergency.

5.3.2 Management structure

The management structure described in Figure 5 is based on the Co-ordinated Incident Management System (CIMS) as outlined in section 5.2. The structure is designed to be modular in approach with planning/intelligence, logistics and media management functions all residing with the Group Controller. If necessary, the functions may be delegated for more detailed management.

Where a state of emergency has been declared, Incident Controllers report to the Group Controller for briefing purposes. If necessary, the Group Controller will provide strategic advice and direction to Incident Controllers during a declared state of local emergency or national emergency. Incident Controllers are also expected to manage the response to their incidents with the resources available to them.

If necessary, during a declared state of local emergency, the Group Controller may appoint an Incident Controller to manage the response to an incident or incidents. This may be necessary where a lead agency cannot be clearly identified or the incident is not discreet enough to allow normal incident management rules to apply. In this case, the Incident Controller is responsible to, and empowered by, the Group Controller.

Liaison Officers will actively participate in the running of the Group Controller's team. Expertise may need to be brought in from their agency to assist e.g. specialist media managers, planners, logisticians etc.

The Group Controller will utilise the facilities at the Taranaki Emergency Management Office, 45 Robe Street, New Plymouth. The design of these facilities includes provision for the Groups Controller's team and the support systems for response co-ordination.

5.3.3 Declaration of a state of local emergency

Who can declare a state of local emergency?

In identifying the need to declare a state of local emergency, the emergency management staff of the EOC contact the first available CDEM Group representative in the following order:

1. The CDEM Group representative for the area affected; or
2. The Chair of the CDEM Group; or
3. Any other available member of the CDEM Group.

These representatives are then authorised to declare, extend or terminate a state of local emergency.

Where the area affected covers more than one district, in the first instance responsibility lies with the Taranaki Regional Council representative of the CDEM Group to declare a state of local emergency. When they are not available, steps 2-3 above are followed (in that order of precedence).

When to declare a state of local emergency?

When declaring a state of local emergency the following is to be considered:

1. Is the situation being monitored by qualified personnel or officers?
2. Declaration check list is completed, including:
 - Is there clear and present danger to the population within the Taranaki CDEM Group area (if yes, serious consideration should be given to declaring a state of emergency)?
 - Is there a need to evacuate?
 - Are services and utilities still functioning e.g. communications, water supplies, roads, electricity etc?
 - Do you perceive problems if any (or all) of these services are unavailable for several days?
 - Is sufficient and correct information available e.g. weather warnings, area of impact, effects on communities etc?
 - Is there a threat to stock?
3. Meetings are held to consider the need for a declaration – eight to ten agencies could be involved in these meetings, plus the Group Controller and a person who can declare a state of local emergency.

In doing so, recognition is made that many issues need to be considered and that the decision to 'declare' is to be based on a thorough and well informed risk evaluation at the time of the emergency. Even if no local emergency has been declared the Taranaki CDEM Group still has a role in monitoring a situation and ensuring that a co-ordinated approach to welfare needs is undertaken where necessary.

Benefits of declaring a state of local emergency

The benefits associated with declaring a state of local emergency are as follows:

1. Group controller to co-ordinate response by all agencies.

2. Group controller has special powers that may be exercised to assist response during a declaration.
3. The co-ordination of emergency welfare response is enhanced.
4. Agency mandates are triggered by a declaration.
5. Public awareness of the situation is heightened.

The Act enables a declaration to be made across either the whole CDEM Group area, or for a part of the area. No benefits can be achieved by declaring for less than a district area.

Commencement and duration

A declaration of state of local emergency may be made verbally and must be confirmed in writing in the prescribed form as soon as practicable (see 'Appendix 6: Declaration of a state of local emergency' for details). A state of local emergency comes into force immediately upon the making of the declaration (or such time later as may be specified in the declaration) and expires on the commencement of the seventh day after the date in which it was declared, unless terminated earlier.

Extension and termination procedures

Any person authorised to declare a state of local emergency may make a declaration extending a state of local emergency in the prescribed form (see 'Appendix 7: Declaration extending a state of local emergency' for details). This can also be the case for those terminating a state of local emergency in the prescribed form (Appendix 8: Declaration terminating a state of local emergency). Before a declaration terminating an emergency is made, all arrangements for recovery management should be in place.

Publication and notification procedures

A person who makes a declaration either declaring, extending or terminating a state of local emergency, must immediately give notice to the public of the declaration by such means of communication that are reasonably practicable in the circumstances. Full use will be made of the Media Management Team for this purpose.

The administering authority will ensure that all declarations are published in the *Gazette*. A copy of all declarations will also be retained by the administering authority for the CDEM Group records.

Requirements in the event of a national emergency

A state of local emergency may not be declared while a state of national emergency is in force in respect of that area. If it appears to the Minister that an emergency has occurred and a state of local emergency has not been declared, the Minister may declare a state of local emergency for the area affected (section 68(5) and 69 of the Act).

Where hazards are of 'national significance' the CDEM Group remains accountable for their area whatever the scale of the emergency. The Group therefore needs to plan for a continuing role if events assume national significance and require assistance or a national declaration. With regard to an emergency, 'national significance' includes any case where the Minister or Director considers that:

- there is widespread public concern of interest; or
- there is likely to be a significant use of resources; or
- it is likely that the area of more than one CDEM Group will be affected; or
- it affects or is likely to affect New Zealand's international obligations; or
- it involves technology, processes or methods that are new in New Zealand; or

- it results or is likely to result in or contribute to significant irreversible changes to the environment.

5.3.4 Appointment of a Group Controller

Pursuant to section 26(1) of the Act, the Taranaki CDEM Group hereby appoints **David Lloyd Lean** as the Group Controller for the Taranaki CDEM Group. Furthermore, the Group hereby designates the following Alternative Group Controllers:

- Mr. Anthony Edwin Wilson
- Mr. Graham Young
- Mr. Michael Joseph Merrick
- Mr. Donald Hugh McIntyre

The appointment of an Alternative Group Controller, where the Group Controller is unable to fulfill their functions, will be determined by the member of the Civil Defence Emergency Management Group signing the declaration of local emergency at the time. Alternatives in order of precedence will also be named at this time depending on availability and the nature and location of the emergency. The Taranaki CDEM Group considers it unnecessary to utilise the provisions of section 27 of the Act to appoint a local controller.

A Group Controller has the following powers as of right:

- Power of entry to obtain information in urgent cases (section 78 of the Act)
- Evacuation of premises and places (section 86)
- Entry on premises (section 87)
- Closing of roads and public places (section 88)
- Removal of aircraft, vessels, vehicles etc. (section 89)
- Requisitioning powers (section 90)
- Power to give directions (section 91)
- Power to carry out inspections etc (section 92)
- Power to enter into contracts (section 94)

The Taranaki CDEM Group also delegates the following functions and powers to the Group Controller:

- Function to respond to and manage the adverse effects of emergencies in its area (section 17(1)(d)) of the Act.
- Power to issue and control the use of signs, badges, insignia and identification passes authorised under the Act, or the CDEM Group Plan (section 18(2)(c)).
- Power to exercise any other powers that are necessary to give effect to the CDEM Group Plan (section 18(2)(f)).
- Power to carry out, or require to be carried out, all or any of the following:
 - works;
 - clearing of roads and other public places; and
 - removing or disposing of, or securing or otherwise making safe, dangerous structures and materials wherever they may be (section 85(1)(a)).
- Power to provide for the rescue of endangered persons and their removal to areas of safety (section 85 (1)(b)).
- Power to set up first aid posts, and provide first aid to be given to casualties and for their movement to hospital, other place of treatment, or areas of safety (section 85(1)(c))

- Power to provide for the relief of distress, including emergency food, clothing and shelter (section 85(1)(d)).
- Power to provide for the conservation and supply of food, fuel, and other essential supplies (section 85 (1)(e)).
- Power to prohibit or regulate land, air, and water traffic within the area or district to the extent necessary to conduct civil defence emergency management (section 85(1)(f)).
- Power to undertake emergency measures for the disposal of deceased persons or animals if satisfied that the measures are urgently necessary in the interests of public health (section 85(1)(g)).
- Power to disseminate information and advice to the public (section 85(1)(h)).
- Power to enter into arrangements, including employment arrangements, with any person for the purpose of carrying out civil defence emergency management as may be agreed (section 85(1)(i)).
- Power to provide equipment, accommodation, and facilities for the exercise of any of the powers conferred by section 85 (section 85 (1)(j)).

The Taranaki CDEM Group delegates to the Group Controller authority to expend CDEM Group funds for emergency response. Such transactions should not exceed \$20,000 per transaction and shall be conducted following Taranaki Regional Council financial procedures. Administrative assistance will be provided by the Taranaki Regional Council to ensure financial accountability.

The Taranaki CDEM Group may, at any time, remove from office or replace a Group Controller appointed under section 26(1) of the Act. Furthermore, the Taranaki CDEM Group may, at any time, remove from office or replace the Group Controller during a state of emergency on the concurrence of the majority decision of the Group. If no majority vote on this decision by Group members is achieved, the status quo is to be maintained.

In the majority of circumstances, response activities will be co-ordinated from the CDEM Group's Emergency Operations Centre in New Plymouth. However, arrangements for an alternative EOC to be based at Hawera have been established.

5.4 Key response agency roles and responsibilities

The purpose of this section of the Group Plan is to outline the statutory and agreed roles and responsibilities of agencies that have responsibility for civil defence emergency management in Taranaki. This section therefore identifies the lead and possible support agencies, and their associated responsibilities in alphabetical order. A summary matrix of responsibilities is also outlined in Appendix 9: Matrix of responsibilities – response and recovery, with an 'identification of any gaps and inconsistencies in statutes and current practices of lead agencies' specified as an action to occur under section 4.2.3 of this Group Plan.

The responsibilities of departments, agencies and organisations in relation to emergency readiness, reduction, response and recovery are outlined in the National Civil Defence Plan 2002. During transition to new civil defence emergency management arrangements, these responsibilities and functions will continue. A revised National CDEM Plan is required by the Act to be in place by 1 December 2005.

Co-ordination of these agencies will be undertaken by the Group Controller during the response phase of an emergency, with the co-ordination efforts to be transferred to the Recovery Facilitator or Recovery Co-ordinator during the recovery phase (refer to section 6 of the Group Plan for details).

5.4.1 Airport authority

The airport authority (as defined by the Airport Authorities Act 1988) that operates the primary airport at New Plymouth, must (section 60 of the Act):

- 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;
- participate in the development of civil defence emergency management plans; and
- provide free of charge any technical advice to any CDEM Group.

The New Plymouth Airport Authority will provide a liaison officer and technical support to the Group Controller as required. For further information on airport facilities within the specific context of Taranaki, please refer to section 7.7.6 of the Group Plan.

5.4.2 Department of Conservation

In the event of an emergency, the Department of Conservation must take all necessary steps to undertake civil defence emergency management or to perform the functions and duties described in the Act, Regulations or a civil defence emergency management plan (section 59 of the Act). Their general responsibilities and specific duties also include:

- making departmental fire resources available through New Zealand Fire Service co-ordination;
- making available resources including communication and rescue services to CDEM organisations; and
- liaising with civil defence emergency management authorities.

For further information on the Department of Conservation within the specific context of Taranaki, please refer to section 7.8.5 of the Group Plan.

5.4.3 Electricity generation and distribution entities

An entity that generates or distributes electricity through a network must undertake the following (section 60 of the Act):

- 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;
- participate in the development of civil defence emergency management plans; and
- provide free of charge any technical advice to any CDEM Group.

Entities that meet this definition that currently operate within the Taranaki CDEM Group area include: Powerco Limited, Contact Energy Limited, TrustPower Limited – Taranaki Generation and Transpower New Zealand Limited.

Priorities for load shedding/restoration have been identified as:

1. Medical centres (including hospitals)
2. Emergency operations centres (EOC's) and other emergency co-ordination points
3. Energy control centres
4. Communications networks
5. Water and sewage pumping facilities
6. Gas production facilities

7. Liquid fuel pumping and delivery facilities
8. Essential domestic/commercial/industrial uses
9. Other purposes

Electricity generation and distribution companies in Taranaki will also provide a liaison officer and technical support to the Group Controller as required. For further information on electricity generation and distribution within the specific context of Taranaki, please refer to section 7.7.7 of the Group Plan.

5.4.4 Gas distribution entities

An entity that produces, supplies, or distributes manufactured gas or natural gas (whether it is supplied or distributed through a network or in bottles of more than 20kg of gas) must (section 60 of the Act):

- 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;
- participate in the development of civil defence emergency management plans; and
- provide free of charge any technical advice to any CDEM Group.

Entities that meet this definition that currently operate within the Taranaki CDEM Group area include: Powerco Limited and NGC.

Priorities for load shedding/restoration are the same for gas as those identified for electricity. Gas production and distribution companies in Taranaki will also provide a liaison officer and technical support to the Group Controller as required. For further information on gas distribution within the specific context of Taranaki, please refer to section 7.7.8 of the Group Plan.

5.4.5 Ministry of Civil Defence & Emergency Management

The functions and powers of the Director of Civil Defence & Emergency Management are outlined in the Act (sections 8 and 9). In general terms, the functions of the Ministry can be described as follows:

- Provide strategic policy advice on New Zealand's capability to manage and be resilient to the social and economic costs of disasters.
- Ensure the establishment of structures to provide the capability to manage and respond to disasters in New Zealand.
- Provide support to sector stakeholders in their delivery of civil defence emergency management.
- Ensure a co-ordinated approach, at both national and community level to planning for reduction, readiness, response, and recovery.
- Manage central government response and recovery functions for large scale events that are beyond the capacity of local authorities.

The Ministry of Civil Defence & Emergency Management provides a fundamental link to Government and, as such, will provide a liaison officer and technical support to the Group Controller and Welfare Manager throughout an emergency event.

5.4.6 New Zealand Fire Service

In the event of an emergency, the New Zealand Fire Service (NZFS) must take all necessary steps to undertake civil defence emergency management or to perform the functions and

duties described in the Act, Regulations or a civil defence emergency management plan (section 59 of the Act).

New Zealand Fire Service general responsibilities and specific duties during an emergency include:

- firefighting;
- containment of hazardous substance releases and spills;
- redistribution of water for specific needs;
- urban search and rescue;
- limitation of damage;
- salvage of essential resources;
- temporary re-establishment of piped water supplies;
- fire safety;
- co-ordinate fire brigades for the purpose of reinforcement at serious fires, fire protection in rural areas and fire protection in the event of war or emergency; and
- liaising with civil defence emergency management authorities.

The New Zealand Fire Service will co-ordinate the use of personnel and equipment made available to assist with Fire Service responsibilities and duties. They will also provide a liaison officer and technical support to the Group Controller on an on-going basis during an emergency. For further information on the New Zealand Fire Service within the specific context of Taranaki, please refer to section 7.8.2 of the Group Plan.

5.4.7 New Zealand Police

In the event of an emergency, the New Zealand Police must take all necessary steps to undertake civil defence emergency management or to perform the functions and duties described in the Act, Regulations or a civil defence emergency management plan (section 59 of the Act).

The National CDEM Plan also specifies that the general responsibilities and specific duties of the New Zealand Police include:

- dissemination of warnings;
- maintenance of law and order;
- protection of life and property;
- facilitating movement of rescue, medical, fire and other essential services;
- coordination and control of land transport and access;
- assisting with next of kin enquiries;
- co-ordination of land and marine search and rescue;
- ensuring the security of evacuated areas;
- assisting with and supporting the registration and identification of casualties and evacuees;
- arranging and carrying out Disaster Victim Identification procedures to identify the deceased and provide for the requirements of the Coroner;
- providing for road traffic safety and movement control;
- providing representation to CDEM emergency operations centres; and
- liaising with civil defence emergency management authorities.

In achieving the above, the New Zealand Police will co-ordinate the use of personnel and equipment made available to assist with Police responsibilities and duties. They will also provide a liaison officer and technical support to the Group Controller on an on-going basis

during the emergency. For further information on the New Zealand Police within the specific context of Taranaki, please refer to section 7.8.2 of the Group Plan.

5.4.8 Port company

The port company (as defined in section 2(1) of the Port Companies Act 1988) that carries out port-related commercial activities at Port Taranaki, must (section 60 of the Act):

- 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;
- participate in the development of civil defence emergency management plans; and
- provide free of charge any technical advice to any CDEM Group.

Westgate Transport Ltd (as the port company for Port Taranaki) will provide a liaison officer and technical support to the Group Controller as required. For further information on port facilities within the specific context of Taranaki, please refer to section 7.7.5 of the Group Plan.

5.4.9 Railway entities

An entity that provides a rail network or services, must (section 60 of the Act):

- 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;
- participate in the development of civil defence emergency management plans; and
- provide free of charge any technical advice to any CDEM Group.

Entities that meet this definition that currently operate within the Taranaki CDEM Group area include: Toll Rail, TrackCo and the Waitara Railway Preservation Society Inc.

Toll Rail will provide a liaison officer and technical support to the Group Controller as required. For further information on railway entities within the specific context of Taranaki, please refer to section 7.7.4 of the Group Plan.

5.4.10 Taranaki District Health Board

The Taranaki District Health Board (TDHB) is defined by the Act as a health and hospital service, which in turn is defined as an emergency service. In the event of an emergency the Taranaki District Health Board must take all necessary steps to undertake civil defence emergency management or to perform the functions and duties described in the Act, Regulations or a civil defence emergency management plan (section 59 of the Act).

Taranaki District Health Board general responsibilities and specific duties include:

- preparing a corporate plan for health emergencies, including: reduction of impact consequences, continuing care of existing patients, resource activation and contingency planning, alternative facilities and sources of supply, care of staff, co-operation and liaison, and support to other agencies;
- funding, resourcing and allocating or contracting responsibilities;
- ensuring that the obligations for response capability and actual response in an emergency are met;
- participating in an alternative communications network that links key healthcare facilities and CDEM organisations;
- maintaining an effective system for rapidly notifying or calling up staff in an emergency;
- participating in co-ordinated planning, training, exercise and response arrangements with complimentary or neighbouring providers and other key agencies; and

- liaising with civil defence emergency management authorities.

The Taranaki District Health Board will also co-ordinate the use of personnel and equipment made available to assist with Health Board responsibilities and duties, as well as ensure the provision of a liaison officer and technical support to the Group Controller as required. For further information on the Taranaki District Health Board within the specific context of Taranaki, please refer to section 7.8.1 of the Group Plan.

5.4.11 Taranaki Regional Council

In response to section 59 of the Act, the Taranaki Regional Council must take all necessary steps to undertake civil defence emergency management or to perform the functions and duties described in the Act, Regulations or a civil defence emergency management plan. The Regional Council must also plan and provide for civil defence emergency management and ensure that it is able to function to the fullest extent possible, even though this may be at reduced levels, during and after an emergency (section 64 of the Act).

In recognition of the above the Regional Council acknowledges, in particular, the importance of maintaining its hydrological warning function and Taranaki Emergency Management Office functions. The Regional Council will therefore provide a liaison officer, technical and administrative support to the Group Controller and Welfare Manager throughout an emergency. For further information on the Regional Council and its generic roles and responsibilities within the Taranaki context, please refer to section 7.8.5 of the Group Plan.

5.4.12 Telephone entities

An entity that provides a telecommunications network (within the meaning of the Telecommunications Act 1987), must (section 60 of the Act):

- 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;
- participate in the development of civil defence emergency management plans; and
- provide free of charge any technical advice to any CDEM Group.

Entities that meet this definition that currently operate within the Taranaki CDEM Group area include: Telecom Corporation of New Zealand, Vodafone, Telstra Clear and Broadcast Communications Limited.

Priorities for load shedding/restoration should preserve the following priority order:

1. Information gathering regarding the emergency
2. Information dissemination and warnings
3. Rescue and evacuation of people under immediate threat
4. The continuation of central and local government and law and order
5. Casualty management
6. Public information
7. Welfare and care of displaced people
8. Maintenance of essential services
9. Protection of property
10. Restoration and recovery
11. Other emergency management functions

Telephone entities will also provide a liaison officer and technical support to the Group Controller as required. For further information on telecommunications networks within the specific context of Taranaki, please refer to section 7.7.9 of the Group Plan.

5.4.13 Territorial authorities

Territorial authorities (i.e. either a city council or a district council as defined by the Local Government Act 2002) within Taranaki are required to take all necessary steps to undertake civil defence emergency management as a local authority, or perform any functions or

duties described in the Act, regulations made under the Act or any civil defence emergency management plan (section 59 of the Act).

In addition, in the response phase of an emergency territorial authorities are to:

- When acting as a lifeline utility provider - provide free of charge any technical advice to any CDEM Group (section 60 of the Act). Typically, this could include advice on water supply, waste water or sewerage networks/disposal, and roading issues.
- Plan and provide for civil defence emergency management and ensure that it is able to function to the fullest extent possible, even though this may be at reduced levels, during and after an emergency (sections 60 and 64 of the Act).

Territorial authorities will also provide a liaison officer and technical support to the Group Controller as required on an on-going basis during an emergency. For further information on territorial authorities and their generic roles and responsibilities within the Taranaki context, please refer to section 7.8.5 of the Group Plan.

5.4.14 Transit New Zealand

Transit New Zealand is defined by the Act as a lifeline utility entity (Schedule 1, Part B).

Pursuant to section 60 of the Act, Transit New Zealand 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;
- participate in the development of civil defence emergency management plans; and
- provide free of charge technical advice to any CDEM Group.

Transit New Zealand's general responsibilities and specific duties include:

- providing information and advice to CDEM organisations on resources and capabilities;
- restoring Taranaki's State Highway network to a satisfactory operating condition; and
- liaising with civil defence emergency management authorities.

For further information on Transit New Zealand within the specific context of Taranaki, please refer to section 7.7.3 of the Group Plan.

5.5 Emergency welfare

The Taranaki CDEM Group is, in part, concerned with the welfare of the community during emergencies (section 85(1)(d)). The appointment of a person to provide a co-ordinated approach to the provision of emergency welfare is a most effective method of addressing this management issue.

The management structure described in Figure 6 is based on CIMS. The Welfare Manager is responsible for delivering emergency welfare through their respective Emergency Operations Centres. They will liaise with Incident Controllers and the Group Controller's Media Management Co-ordinator whether or not there is a declared emergency.

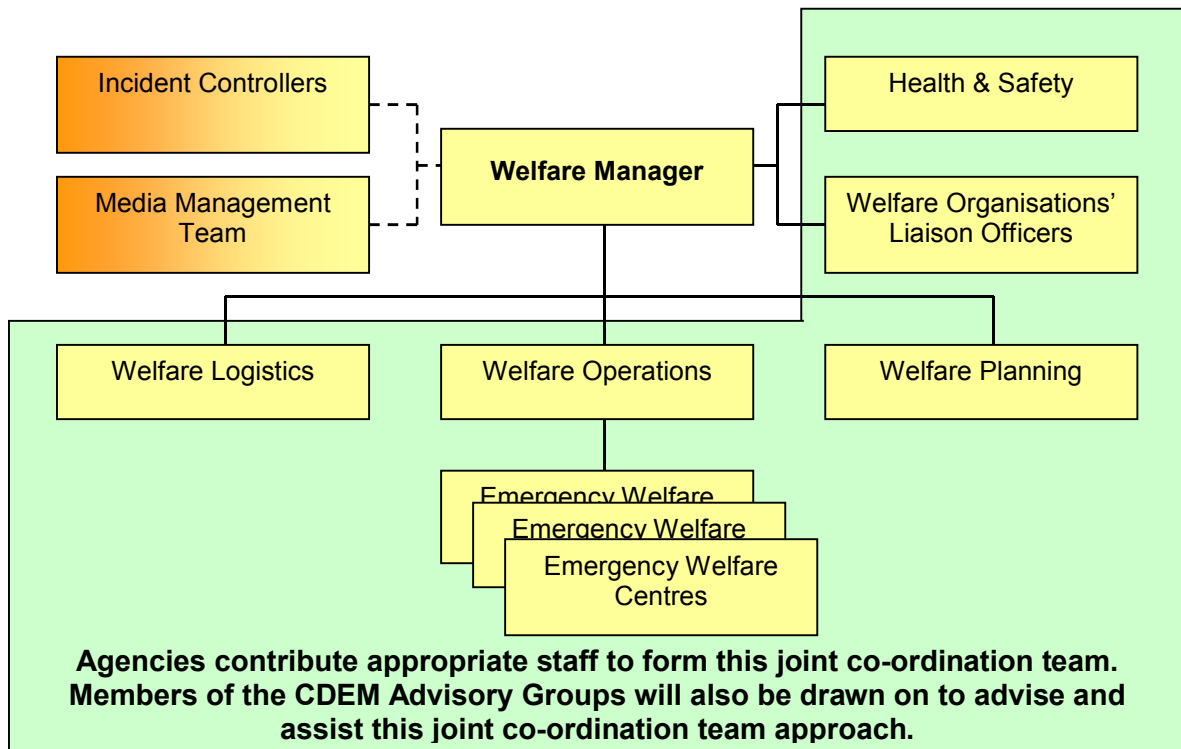


Figure 6 Emergency welfare management structure

5.5.1 Welfare Manager

A Welfare Manager is appointed to co-ordinate the emergency welfare response within the Taranaki CDEM Group area. Where a state of emergency has been declared the Welfare Manager advises and assists the Group Controller. As with all responding agencies, the Group Controller may provide strategic advice and direction to the Welfare Manager.

The Taranaki CDEM Group appoints the Senior Emergency Management Officer as the Welfare Manager. As necessary, this Officer may delegate their functions to an appropriately qualified person.

The Taranaki CDEM Group also delegates the function to 'provide for the relief of distress, including emergency food, clothing and shelter' (section 85 (1)(d)) to the Taranaki CDEM Group Welfare Manager. Special powers are not required to deliver this function, therefore powers under the Act have not been delegated. Should any powers be required for emergency welfare measures (such as conservation of food, fuel and essential supplies), these measures must be requested of the Group Controller.

In addition, the Welfare Manager should:

- liaise closely with Incident Controllers to determine the welfare requirements of specific incidents;
- liaise with the Group Controller;
- liaise with and co-ordinate responding health and welfare agencies, including those dealing with the disabled;
- ensure the development of effective action plans to address welfare concerns;
- participate in the development of Incident Action Plans which are the responsibility of the Incident Controllers;

- appoint and manage staff for the delivery of effective emergency welfare as required;
- deliver emergency welfare as required; and
- maintain a log of activities and an audit trail.

The Taranaki CDEM Group delegates authority to the Welfare Manager to expend CDEM Group funds for emergency welfare purposes. Such transaction should not exceed \$5,000 per transaction and shall be conducted following Taranaki Regional Council financial procedures. Wherever possible, compensation for costs will be sought from the Ministry of Civil Defence & Emergency Management in line with national policies.

Where an emergency welfare response is required but a declared emergency is not warranted, the costs associated with the welfare response will be met by the Taranaki CDEM Group.

5.5.2 Emergency Operations Centre

The Taranaki Emergency Management Office (TEMO) is located at Marsland Hill, 45 Robe Street, New Plymouth with the facilities owned by the Taranaki Regional Council. It incorporates a purpose built Emergency Operations Centre (EOC) and is the base for the Taranaki Regional Council's emergency management staff.



Figure 7 Taranaki Emergency Management Office

The EOC is dual purpose and will be used for the preparation, planning and co-ordination of the emergency welfare response, as well as the Group Controller response across the Group area. Where necessary, and to suit the location of the emergency, delivery of emergency welfare services will be undertaken at Emergency Welfare Centres close to the scene of the emergency. Arrangements have also been made with South Taranaki District Council for an alternative EOC in Hawera, in particular for the use of facilities and staff for EOC operations.

Reliable and efficient communications between the agencies planning an emergency response in the EOC, as well as colleagues delivering welfare services to those affected, will be essential to ensuring an effective response.

The 'TEMO Activation Guide' has been prepared to describe activation processes, roles and responsibilities within the Taranaki Emergency Management Office.

5.5.3 Emergency Welfare Centres

Emergency Welfare Centres have been identified in a number of communities, including the:

- | | |
|-----------------------------|--------------------------------|
| • Waverley Town Hall | • Okato Area School |
| • Patea Old Folks Hall | • Oakura Hall and Bowling Club |
| • Hawera Community Centre | • Spotswood College |
| • Hicks Park Sports Complex | • Pukekura Raceway |
| • Normanby Primary School | • Fitzroy School |

- Eltham Primary School
- Kaponga Primary School
- Manaia Primary School
- Opunake High School
- Rahotu Primary School
- Bell Block School and Hall
- Waitara Central School
- Owae Marae
- Inglewood High School
- Urenui School and Hall
- Stratford War Memorial Hall

These Centres are provided with emergency communications equipment and a Centre Kit, which contains the basic equipment to operate a Centre. When necessary, the Welfare Manager may also choose to operate a Centre from a new location. Wherever this may be, the venue should be made widely known to emergency responders and the community.

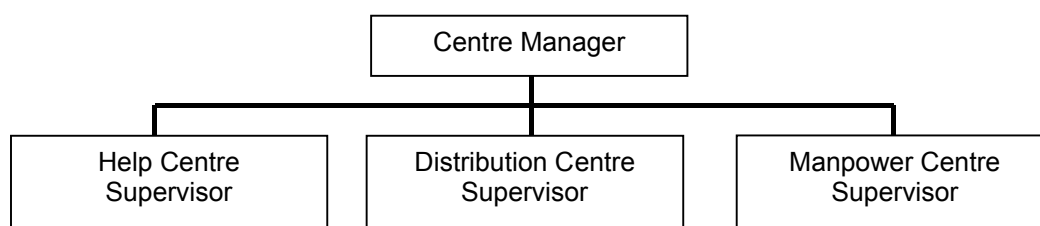


Figure 8 Emergency Welfare Centre management structure

Emergency Welfare Centres are activated by the Welfare Manager and are the interface between the community and the civil defence emergency management organisation. They provide a one-stop-shop for emergency welfare to the community. The Centres are managed by a Centre Manager and staffed to provide the services required on the day. These services may include temporary shelter, registration, finding accommodation, refreshments, providing information about the emergency and response, first aid, co-ordination of manpower, receipt and distribution of goods, and counselling.

5.5.4 Communities of interest

Where communities have been identified as not requiring a pre-designated Emergency Welfare Centre, but communications with that community may still be required during an emergency, radio communications have been established in those communities. These include:

- Mokau¹⁴
- Tongaporutu
- Ahititi
- Purangi
- Matau
- Makahu
- Te Wera Valley
- Tahora
- Hurleyville
- Okaiawa
- Ohangai
- Kapuni
- Waitotara Township
- Makakaho Junction

5.5.5 Welfare lead agencies

The delivery of emergency welfare is co-ordinated by the CDEM Group at the EOC in New Plymouth. The role/s these agencies undertake will be co-ordinated by the Welfare Manager during the response phase, with responsibility transferred to the Recovery

¹⁴ Arrangements have been established with the Mokau Police and Waikato CDEM Group for the provision of radio communications even though they are located outside the Taranaki region.

Facilitator or Recovery Co-ordinator during the recovery phase. The following agencies have a mandated or agreed lead agency role:

- Work and Income New Zealand
- Child, Youth and Family Services
- Housing New Zealand
- New Zealand Red Cross
- Salvation Army

The first three of these agencies are to take all necessary steps to undertake civil defence emergency management or to perform the functions and duties described in the Act, Regulations or a civil defence emergency management plan (section 59 of the Act).

For further information on the welfare agencies located within Taranaki, please refer to section 7.8.6 of the Group Plan.

Work and Income New Zealand

Specific Work and Income New Zealand responsibilities include:

- arranging for the continuation of normal benefits and pensions;
- co-ordinating emergency payments and other emergency financial assistance;
- identifying labour for response and recovery purposes; and
- providing, on request, advice on welfare issues and activities to the CDEM Group.

Work and Income are an integral part of the emergency welfare response and will provide a liaison officer and technical support to the Welfare Manager on an on-going basis during an emergency.

Child Youth and Family

Specific Child Youth and Family responsibilities include:

- providing care services to those children and young persons identified (after registration) as separated from their parents or normal guardians by an event;
- co-ordinating assistance with counselling services for affected persons;
- being the lead agency for mental health; and
- advising the CDEM Group on the identification of and response to personal services requirements.

Child Youth and Family are an integral part of the emergency welfare response and will provide a liaison officer and technical support to the Welfare Manager on an on-going basis during an emergency.

Other agencies involved in the delivery of counselling services, under the direction of Child Youth and Family include:

- Taranaki District Health Board: Mental Health Services
- Victim Support
- Special Education Service
- Minister's Association

Housing New Zealand

Specific Housing New Zealand responsibilities include:

- providing skilled resources to co-ordinate the registration of spare accommodation during the recovery phase of an emergency; and
- provide, on request, representation to the CDEM Group.

Housing New Zealand will provide a liaison officer and technical support to the Welfare Manager as required.

New Zealand Red Cross

New Zealand Red Cross have accepted national mandates in regard to the National Civil Defence Plan. As such, in the event of an emergency New Zealand Red Cross is expected to:

- assess the impact of an event on its own assets;
- activate its own emergency plan;
- maintain and restore the services it provides; and
- communicate with the appropriate CDEM authority¹⁵.

New Zealand Red Cross responsibilities include:

- Where possible, co-ordinate the provision of essential clothing, blankets and toiletries for victims, and maintain reserve stocks.
- On request, establish a National Enquiry Centre and be given access to local registry information for this purpose.
- Answer international tracing enquiries through the national office in liaison with the Ministry of Foreign Affairs and Trade.
- Provide, where possible, personnel to assist in first aid and welfare tasks.
- Co-ordinate International Red Cross and Red Crescent assistance.
- Provide representation as required to the CDEM Group.

New Zealand Red Cross are an integral part of the emergency welfare response and will provide a liaison officer and technical support to the Welfare Manager on an on-going basis during an emergency.

Salvation Army

The Salvation Army have accepted a national mandate in regard to the National Civil Defence Plan. As such, Salvation Army is expected to:

- assess the impact of an event on its own assets;
- activate its own emergency plan;
- maintain and restore the services it provides, and
- communicate with the appropriate CDEM authority¹⁶.

Specific Salvation Army responsibility is, where possible, to co-ordinate and provide emergency catering facilities.

The Salvation Army are an integral part of the emergency welfare response and will provide a liaison officer and technical support to the Welfare Manager on an on-going basis during an emergency.

¹⁵ National Civil Defence Plan Annex A to Part One: Response.

¹⁶ National Civil Defence Plan Annex A to Part One: Response.

6. Managing emergencies - recovery

6.1 Introduction

The purpose of this section of the Group Plan is to provide an outline of the **recovery arrangements** established by the Taranaki Civil Defence Emergency Management Group to address an emergency situation in Taranaki.

Recovery is defined as:

The co-ordinated efforts and processes to effect the immediate, medium and long-term holistic rehabilitation of a community following a disaster.¹⁷

The level and scale of recovery after an emergency will depend largely on the level of the disaster. Furthermore, unlike response activities, this phase of the process is not directed by legislation and relies predominantly on the collaboration of individuals and stakeholders involved.

Recovery is a developmental and remedial process with the main objective of efficiently organising the resources available to restore communities to the point where normal social and economic activities resume. It therefore encompasses the following activities:

- Minimising the escalation of the consequences of the disaster.
- Rehabilitating the emotional, social and physical well being of individuals within communities.
- Taking opportunities to adapt to meet the physical, environmental, economic and psychological future needs.
- Reducing future exposure to hazards and their associated risks.

6.2 Transition from response to recovery

The transition from response to recovery can be a complex process and therefore requires careful management. Furthermore, as the recovery phase usually starts while response activities are still in progress, any key decisions taken during the response phase are likely to directly influence how recovery is to occur. The Recovery Facilitator therefore needs to be identified and commence their duties early on in the response phase.

By doing so, the Recovery Facilitator will efficiently be able to:

- align response and recovery priorities;
- connect with key agencies;
- understand key impacts and tasks; and
- identify recovery requirements and priorities as early as possible.

¹⁷ Ministry of Civil Defence & Emergency Management. March 2004. "Recovery Planning: Information for CDEM Groups [IS5/04]". Ministry of Civil Defence & Emergency Management, Wellington, New Zealand.

6.3 Priorities for recovery

The National Civil Defence Plan establishes the priorities to be followed in a recovery phase as:

- **Safety of individuals** - the safety of people remaining in the disaster area.
- **Social recovery** - the restoration of material and emotional needs of individuals and groups within the community.
- **Economic recovery** - facilitating the provision to the community of the tools needed to commence their own economic recovery.
- **Physical recovery** - restoring the built environment, consistent with appropriate risk management practices and principles.

6.4 Recovery structure

The CDEM Group structure for recovery (outlined in Figure 9), is again based on the CIMS model and is modular in its approach. It is also designed to facilitate and co-ordinate relief and recovery efforts. As identified in Figure 9, central to this structure is the role to be played by the Taranaki Group Recovery Facilitator (appointed pursuant to section 18 of the Act).

During the response phase of an emergency, the Recovery Facilitator must firstly identify the components of the structure and the players required to give effect to recovery. The declaration terminating a local emergency should not be made until transition processes between the response and recovery phases have been clearly identified.

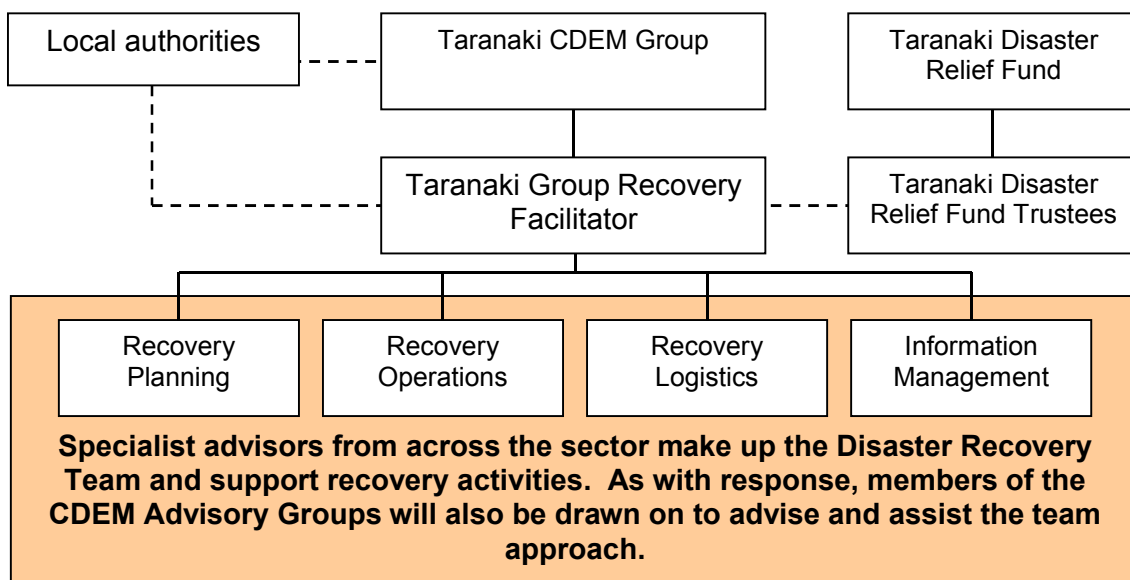


Figure 9 Recovery management structure

Important note: As identified in Figure 5, the Advisory Groups play a vital role in providing technical advice and support throughout the 4 R's of emergency management, including during the recovery.

6.5 Taranaki Group Recovery Facilitator

The Taranaki Civil Defence Emergency Management Group designates **Beverley Kathleen Raine** as the Taranaki Group Recovery Facilitator (Recovery Facilitator). In the event that the Recovery Facilitator is unavailable, the following alternative Recovery Facilitators may be appointed:

- David Stewart Neal
- Dex George Knowles

The duties and responsibilities of the Recovery Facilitator are described in the National Civil Defence Plan and the Ministry Guidelines¹⁸. Terms of reference have been established for the Taranaki Group Recovery Facilitator, consistent with those described in the Ministry Guidelines.

The Taranaki CDEM Group has also delegated authority to the Recovery Facilitator to expend CDEM Group funds for recovery management purposes. Such transactions should not exceed \$1,000 per transaction and shall be conducted following Taranaki Regional Council financial procedures.

6.6 Taranaki Disaster Recovery Team

The Recovery Facilitator will establish and manage the Taranaki Disaster Recovery Team (Recovery Team) to meet the needs of the recovery operation. The composition of the Recovery Team will be determined by the location, magnitude and nature of the emergency and the recovery tasks that result.

Recovery operations must address the following:

- **Environmental:** addresses the impact to the natural environment and means by which these impacts can be remedied. This includes: topography, hydrology, amenity values, waste and pollution management, biodiversity and ecosystems.
- **Lifelines (infrastructural):** addresses the impact to the built environment and means by which these impacts can be remedied/mitigated. This includes: houses, commercial and public buildings, supporting infrastructure and utilities.
- **Health and welfare (psychosocial and community):** addresses individual's emotional, spiritual, cultural, psychological, social and basic needs (including health) in the immediate, medium and long term. It also addresses the wider community social structure and mechanisms for supporting the community as a whole.
- **Business (economic):** addresses the need for economic recovery. This includes: recognising the needs of individuals and organisations, small and medium enterprise, as well as those of central government, rural businesses and schools.

The Recovery Facilitator will:

¹⁸ "Working Together: Developing a CDEM Group Plan". Ministry of Civil Defence and Emergency Management guidelines for CDEM Groups, December 2002.

1. Ensure the collection, collation and analysis of impact assessments undertaken by agencies during the response.
2. Identify and seek to resolve gaps in the impact assessment if necessary.
3. Plan and implement recovery options in conjunction with agencies and the affected community.
4. Establish priorities for recovery works and deadlines.
5. Identify whether adequate statutory or regulatory authorities exist to aid recovery.
6. Consider resource requirements - including equipment, facilities, personnel, and funding.
7. Identify and establish systems for equitable distribution of relief funds and donated goods made available to the Recovery Facilitator.
8. Disseminate information to agencies and the affected community.
9. Identify and establish systems for financial accountability.

6.7 Recovery planning

Within the context of the broadly described structure above, the development and implementation of a recovery plan post event should be prepared to include:

- transition from response;
- management structures;
- community involvement;
- impact assessment;
- information management;
- central government involvement;
- public information;
- rehabilitation, restoration and assistance activities;
- implementation of risk management measures (risk reduction);
- financial management;
- reporting and debriefing; and
- a withdrawal strategy.

Details of several of these elements of the recovery plan are outlined below. A summary of the role of a Recovery Facilitator and a sample Recovery Facilitator's job description and person specification are also described in the document 'Recovery Planning: Information for CDEM Groups [IS5/04]' prepared by the Ministry of Civil Defence & Emergency Management.

6.7.1 Community involvement

Community involvement in the recovery phase provides the framework for re-establishing the economic, social, emotional and physical well-being of the affected population. Of particular importance is the involvement of volunteers in any recovery operation. These volunteers can be either specific groups (for example the Task Force Green) or individuals who offer their help.

6.7.2 Information management

Recent emergencies have demonstrated the importance of sharing correct and precise information between agencies and individuals involved in both response and recovery phases. Information must also be shared with the wider community. Being able to deliver information that is consistent across agencies (for example, the status of lifelines) is vital in

achieving the required objectives in the shortest possible timeframe. Thoroughness in the delivery and management of this information is therefore fundamental to the recovery efforts.

Public information is also the mechanism for encouraging the community to participate in the process of restoration and rehabilitation. The role of the CDEM Group in the dissemination of public information includes:

- co-ordination of statements to the media;
- media briefings;
- operation of a CDEM Group call centre;
- newsletters to the affected community;
- making information available through Emergency Welfare Centres;
- sharing information with all responding agencies; and
- updating website information.

6.7.3 Central government co-ordination

The impact on communities in the event of an emergency sometimes reaches a level where central government assistance is required. Where the Minister of Civil Defence & Emergency Management is satisfied that a CDEM Group is, or is likely to be, unable to ensure the effective carrying out of recovery activities in its area, a Recovery Co-ordinator may be appointed (section 29 of the Act). Where this is the case, the Taranaki CDEM Group Recovery Facilitator will work in conjunction with the Recovery Co-ordinator. When the appointment of Recovery Co-ordinator is terminated, the Group Recovery Facilitator will continue their role to ensure that the co-ordination of recovery activities continues to ensure that they are completed.

Central government is a significant partner in civil defence emergency management response and recovery activities. In the event of an emergency central government can normally be expected to provide the following:¹⁹

- transitional feeding, housing and welfare assistance for affected people where this assistance is not available through other sources and agencies;
- transportation assistance if further evacuation becomes necessary;
- restoration of those services and facilities that are central government's responsibility to provide e.g. schools, highways, hospitals, etc;
- assistance in the assessment and appropriate restoration of those critical services and facilities which are the responsibility of other agencies to provide, but for which commercially viable insurance cannot be obtained, or where the responsible agency cannot effect restoration within an appropriate timeframe;
- assistance in making good other damage - this will normally be restricted to the provision of additional expertise to assist in detailed assessment of damage, the establishment of procedures and any necessary support to expedite insurance claims and damage repair, and (if necessary) the temporary provision of additional labour to speed clean-up operations; and
- co-ordination of central government and international response through the Director and (if necessary) the appointment of a Recovery Co-ordinator.

¹⁹ National Civil Defence Plan 2002, Ministry of Civil Defence Emergency Management.

Recovery Co-ordinator

In the event of a disaster causing social and economic damage of a magnitude that is beyond the Group's ability to initiate recovery, central government assistance will also be given. The Minister of Civil Defence & Emergency Management may appoint, on the terms and conditions that the Minister sees fit, a suitably qualified and experienced person as the Recovery Co-ordinator. The Recovery Co-ordinator is responsible to the Director of Civil Defence & Emergency Management for co-ordinating recovery efforts, until such time as recovery may be co-ordinated at Group level.

Primary responsibility for recovery remains that of the Taranaki CDEM Group in conjunction with the local authorities, communities of the region, enterprises and individuals. It is therefore essential for the long-term recovery effort that the Recovery Co-ordinator liaise closely with the CDEM Group and Group Recovery Facilitator when identifying priorities for recovery.

Commissioner for Disaster Recovery

If it appears to the Minister of Local Government that a local authority is unable to exercise adequately its responsibilities, duties, or powers, and a state of local or national emergency is in force, or has just expired, then the Minister may appoint a Commissioner for Disaster Recovery (pursuant to section 258 Local Government Act 2002).

The functions of the Commissioner are described in Part 2 of Schedule 15 of the Local Government Act 2002. However, in effect, the Commissioner replaces the local authority and has all the responsibilities, duties and powers of that local authority.

6.7.4 Relief funds

The Recovery Facilitator is responsible for facilitating access to the Taranaki Disaster Relief Trust Fund by people affected by the emergency.

Taranaki Disaster Relief Trust Fund

As specified in section 2.9.3, the Taranaki Regional Council administers, on behalf of the Taranaki Disaster Relief Trust Fund Trustees, the Taranaki Disaster Relief Trust Fund. Trustees of the fund are the Mayors of the territorial authorities and the Chair of the Taranaki Regional Council. Applications to the fund should be made following the procedures of the Fund and will be considered by the Trustees and paid promptly (where appropriate) by the Taranaki Regional Council.

All contributions for disaster relief from central government and other agencies must be made to the Taranaki Disaster Relief Trust Fund.

Other appeals and funds

During an emergency it is not uncommon for organisations, particularly radio and television, to initiate appeals for disaster relief. Funds raised and offered to the Taranaki CDEM Group for distribution should be deposited in the Taranaki Disaster Relief Trust Fund to ensure appropriate accountability and management.

6.7.5 Reporting and debriefing

The purposes of reporting and debriefing are to maintain accountability and clarity in the recovery phase, to inform the wider community of the status of an emergency and to gain support and/or assistance for recovery efforts.

Those responsible for preparing and filing regular reports include the Group Controller (while the state of emergency is still in place), the Recovery Facilitator and the CDEM Group. This will help the CDEM Group in justifying any actions taken and money spent to: the community affected, the public at large and central government (if there are any requests for assistance).

6.7.6 Withdrawal strategy

Every recovery phase is required to have an end. As this phase involves restoring the community to a point where normal social and economic activity may resume, it is important that notification of recovery management structures and activities withdrawing from a recovery must occur. This enables and encourages communities to regain control as soon as possible.

Consequently, in preparation for cessation of the co-ordinated recovery, the following is to occur:

- completion of a withdrawal strategy;
- final debriefings held;
- outstanding activities identified and agencies with an interest are identified;
- public notification of the end of the recovery through a notice in the paper and radio announcements; and
- final report requirements identified and preparation underway.

7. Taranaki context

7.1 Introduction

The purpose of the following section of the Group Plan is to provide an outline of the context to which civil defence emergency management applies in Taranaki. This includes an outline of Taranaki's physical features, climate, population, economy, infrastructure and services.

7.2 Location

The area encompassed by the CDEM Group for Taranaki includes the New Plymouth, Stratford and South Taranaki districts as demonstrated in Figure 10.

The CDEM Group boundary is based largely on the boundary of the Taranaki Regional Council, however also includes the far eastern portion of the Stratford district that is within the Manawatu-Wanganui region. In total, the CDEM Group area covers 860,900ha, extending from the Mohakatino catchment (approximately 70km north of New Plymouth) to the Waitotara catchment (approximately 56km south of Hawera), as well as

inland from Stratford to approximately 20km northeast of Tahora. The Waikato and Manawatu-Wanganui CDEM Groups adjoin the Taranaki CDEM Group area.

The main service centres of Taranaki are New Plymouth, Waitara, Inglewood, Stratford, Hawera, Eltham, Opunake, Manaia, Patea and Waverley.

7.3 Physical features

Taranaki consists of four distinct landforms, each of which poses different hazards and risks. These are:

- the volcanic landscape and ring plain centred on Mt Taranaki/Egmont;
- the Taranaki hill country, including the frontal and inland hill country;

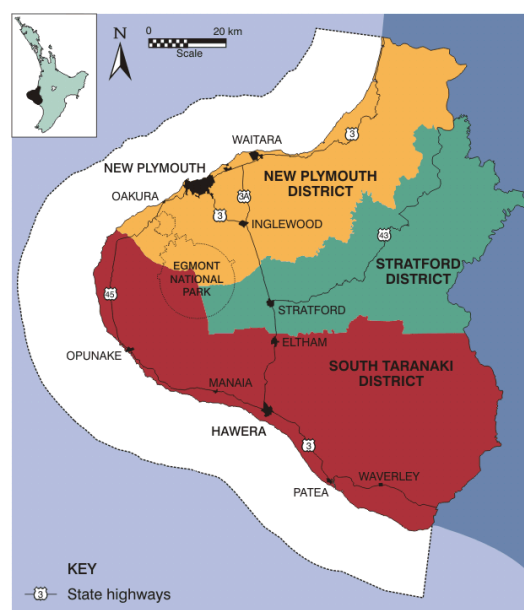
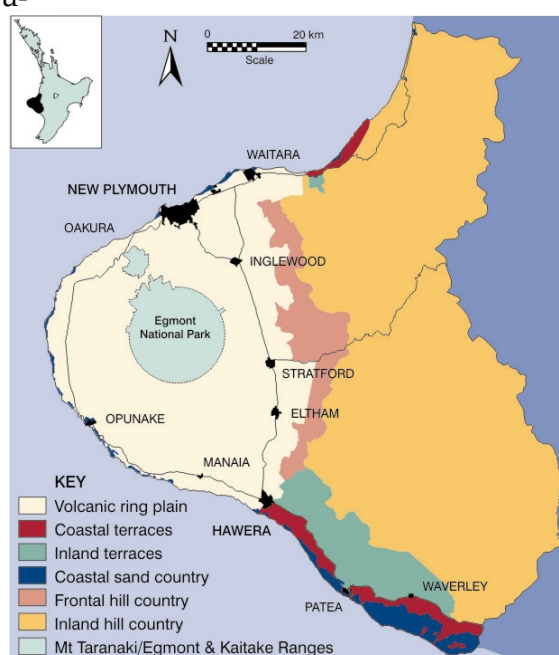


Figure 10 Taranaki CDEM Group boundary



- the coastal and inland marine terraces of the north and south Taranaki coast; and
- the coastal and marine environment (Figure 11).

Figure 11 Landforms of Taranaki

Rivers and streams can also pose a hazard and threat to the region.

7.3.1 Volcanic landscape and ring plain

Mt Taranaki/Egmont (2815m) dominates the Taranaki landscape and is the most recent of the andesitic volcanoes that have developed in western Taranaki over the last two million years. It is an active volcano in a state of quiescence, and is one of a number of volcanoes in New Zealand where future eruptions are expected. The Pouakai and Kaitake ranges are the remnants of older extinct volcanoes.

Mt Taranaki/Egmont last erupted c. 1755 and deposits surrounding the volcano record intermittent volcanic activity for the last 130,000 years. Over the last 50,000 years the cone has collapsed intermittently causing debris avalanches and lahars. Erosion of the volcanic cone between successive eruptions has redistributed the volcanic debris around the base of the volcano creating the ring plain. The fertile volcanic ash soils (yellow-brown loams) of the ring plain support intensive pastoral farming, particularly dairying.

7.3.2 Hill country

The Taranaki hill country lies to the east of the ring plain. The frontal hill country is of strongly rolling topography, while the inland hill country is deeply dissected. The underlying strata of the Taranaki hill country is not volcanic, but consists of tertiary age sedimentary rocks – mudstones, siltstones and sandstones (known locally as papa).

The soils of the hill country are mostly steepland soils – shallow soils that have developed on steep, relatively unstable slopes. The composition and depth of soils is extremely variable, depending on topography, age, the proportion of siltstone, mudstone and sandstone, as well as the climate. Often erosion has prevented the development of a mature soil in the hill country. This land instability presents a risk to property infrastructure such as roads, tracks and power supplies. However, whilst the hill country is prone to such erosion, it can support both pastoral farming and commercial forestry when managed in accordance with the physical limitations of the land.

7.3.3 Marine terraces

Marine terraces raised by tectonic activity extend along the north and south Taranaki coasts. In the far north only a narrow strip of coastal plain is preserved, but between Waitara and Lepperton in the north and from Hawera in the south, the terraces extend up to 20 kilometres inland. Along the coastline, cliffs ranging from three to 60 metres in height have formed from high energy wave action.

The volcanic tephra deposits on the old terrace surfaces are deep and (because they are further from the volcanic centre) are finely textured. The 'Egmont soils' of these areas are classic volcanic loams and are among the most versatile and productive in New Zealand.

Sand accumulation is concentrated near river mouths, particularly along the southern coastline, where dune fields extend inland for several kilometres. Only 2.1% of the Taranaki region is classified as coastal sand country. However, because of their weak structure, these soils are susceptible to wind erosion if the vegetation cover is disturbed.

7.3.4 Coastal environment

The Taranaki coastline lies exposed to the west and, as a consequence, high energy wave and wind conditions dominate the coastal environment. Furthermore, almost the entire coastline of Taranaki is subject to varying rates of erosion from both waves and wind. This has resulted in a predominantly cliff coastline, with the western coast characterised by boulder cliffs and offshore reefs derived from erosion of debris flow material. In north and south Taranaki, erosion of tertiary marine sediments has resulted in a coastline of almost continuous papa cliffs and sandy beaches.

A few areas of sheltered water beyond the major estuaries exist such as the Tongaporutu, Waitara and Patea rivers, and the confines of Port Taranaki.

7.3.5 Rivers and streams

Over 300 rivers and streams flow from the slopes of Mount Taranaki/Egmont in a distinctive radial pattern. These streams are characterised by short narrow catchments of steep gradient, normally well incised into the volcanic ash and debris flow material of the ring plain. The Egmont National Park acts as a huge reservoir, supplying a steady flow of water to the ring plain streams, even during prolonged dry periods. The rivers that flow from the mountain are therefore extensively used by the agricultural sector, for community water supplies and for a wide range of recreational purposes.

In marked contrast to the near perfect radial drainage of the ring plain, the hill country displays a 'dendritic' pattern of drainage, where the short tributaries are contained by narrow valleys (subject to periodic flooding) and then converge with a main river. In general, these rivers carry high sediment loads as a result of hill country erosion. The two largest rivers in Taranaki are the Waitara and Patea rivers, both of which drain sizeable portions of the Taranaki hill country and volcanic ring plain. The location of the main rivers and streams in Taranaki is demonstrated in Figure 12.

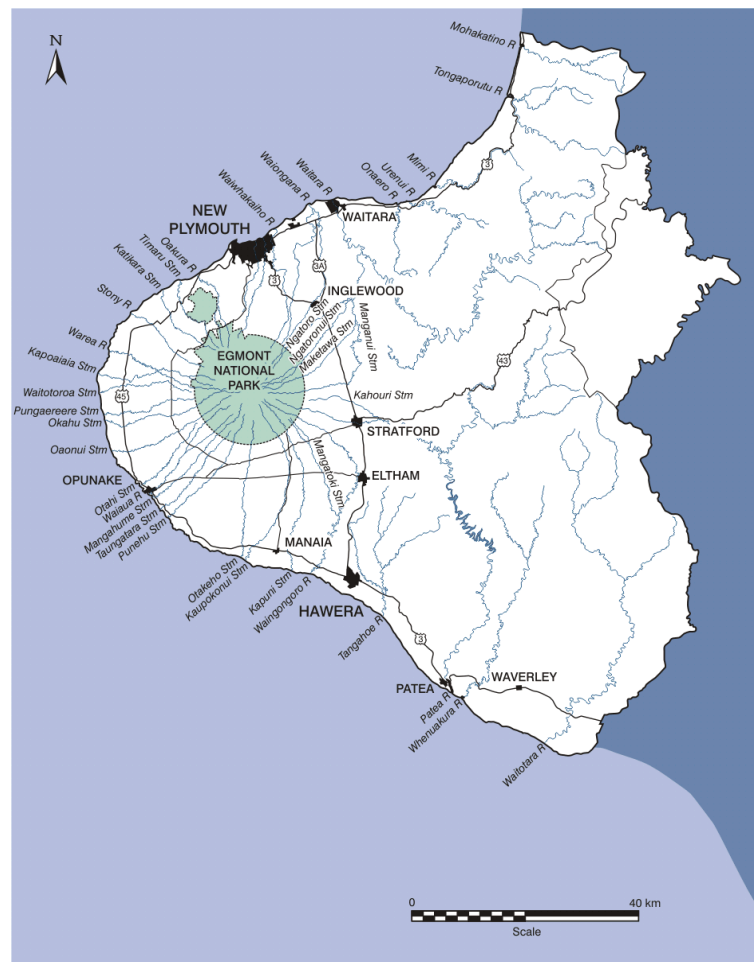


Figure 12 Main rivers and streams of Taranaki

7.4 Climate

The climate of Taranaki is determined by its westerly position, mid latitude location, and topography. Taranaki lies in the path of westerly moving weather systems over the Tasman Sea and has a generally sunny, windy climate, with moderate temperatures and regular rainfall throughout the year.

Rainfall varies markedly throughout the region, ranging from less than 1400mm in the coastal areas to in excess of 8000mm at the summit of Mount Taranaki/Egmont (Figure 13). The average intensity of rainfall at New Plymouth is estimated to be 2.6mm per hour, with a total of 600 hours of rainfall during the year. This intensity is considered to be fairly typical of Taranaki coastal regions. Inland localities are influenced by the effect of Mount Taranaki/Egmont on rainfall intensities and it is suggested that rainfall intensities in Stratford are likely to be 20-50% higher than at New Plymouth²⁰. Rainfall also increases with an increase in elevation at Mt Taranaki/Egmont and in the Taranaki hill country.

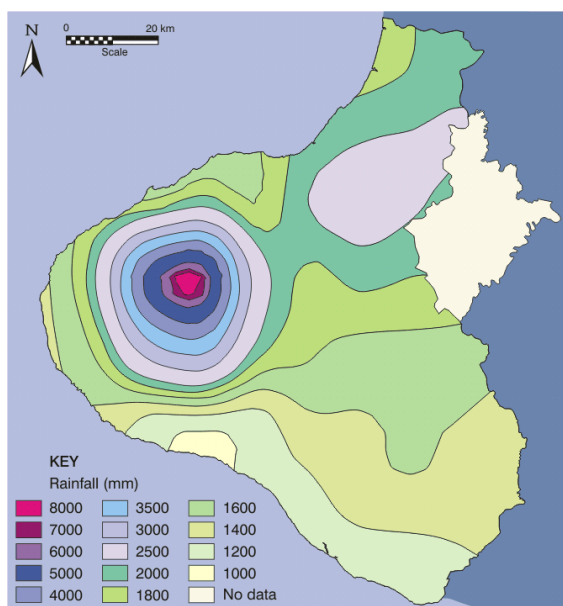


Figure 13 Mean annual rainfall, mm

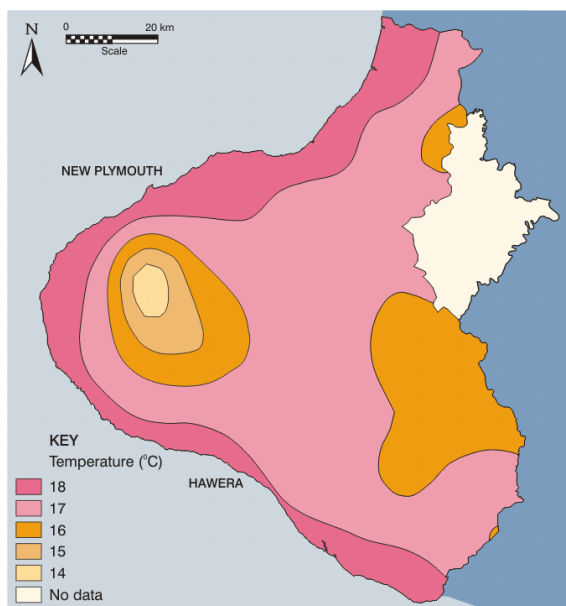


Figure 14 Mean temperature – January

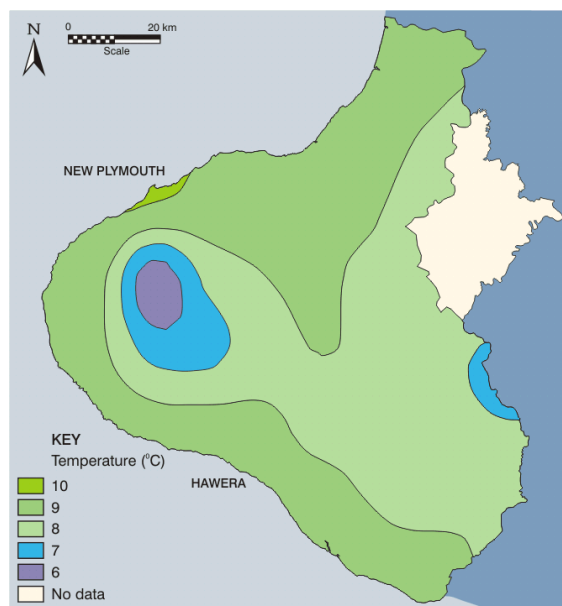


Figure 15 Mean temperature – July

²⁰ Fisher, G. W. and A. S. Porteous. 1996. *Air Quality in Taranaki. A Review of Monitoring Programmes*. National Institute of Water and Atmospheric Research, Auckland.

The mean daily temperatures for Taranaki in January (summer) and July (winter) are shown in Figure 14 and Figure 15 respectively. Minimum temperatures are lower at inland locations than at coastal locations, due to higher elevations inland and greater distance from the sea, which has a moderating effect on extreme temperatures. At sheltered inland sites, the daily temperature variation is larger than in coastal areas.

Taranaki also has average to high sunshine hours, with normal annual sunshine for New Plymouth Airport being about 2160 hours²¹.

Taranaki is windy, but wind strength varies greatly because of the range of topographical features in the region which influences the extent to which different areas are exposed (Figure 16).

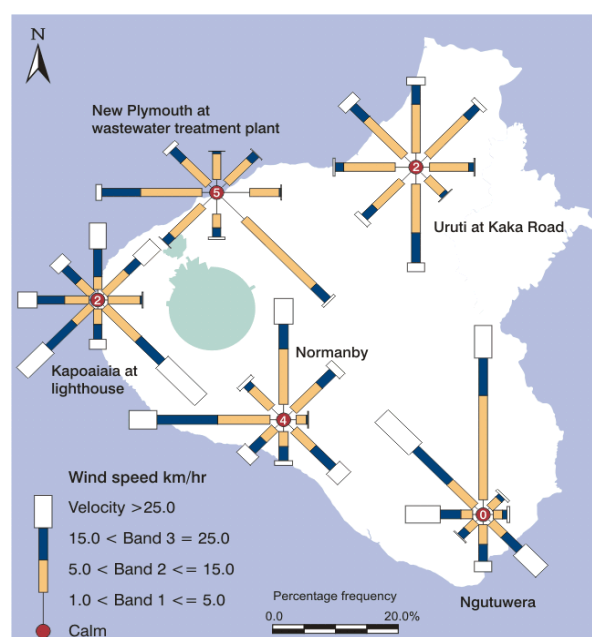


Figure 16 Wind roses for New Plymouth airport, Kapoiaia, Kaka Road and Ngutuweru

Westerly winds generally predominate in spring and summer, bringing unsettled and showery weather. South-easterlies are often predominant in coastal and exposed areas, with generally fine weather in Taranaki due to the sheltering effect of the ranges to the east. About 40% of New Plymouth's rain comes with winds from the north or northeast, with high rainfalls about Mt Taranaki/Egmont also common. However, much of southern Taranaki may remain relatively sheltered, with scattered showers or dry conditions. South-westerly winds are common in the cooler months.

7.5 Population

Taranaki's population was 102,858 at the March 2001 Census (Table 1). This represents a 3.5% decrease in population since 1996. Taranaki also experienced a small decline in population between 1991 and 1996. Over the last 10 years, Taranaki's population has decreased from 107,124 to 102,858, and currently accounts for 2.8% of New Zealand's total population. However, recent population estimates have projected Taranaki's total population as 105,700 in 2003²².

²¹ NIWA. 2001. *New Zealand National Climate Summary 1 January 2000 – 31 December 2000*.

²² Statistics New Zealand Quarterly Review, December 2003.

Table 1 Population changes in Taranaki 1991-2001²³

Local authority	Total population				
	1991	1996	% change 1991-1996	2001	% change 1996-2001
New Plymouth District	67 191	68 112	1.4	66 603	-2.2
Stratford District	9 882	9 546	-3.4	8 883	-6.9
South Taranaki District	30 228	29 133	-3.6	27 537	-5.5
Taranaki region	107 124	106 587	-0.5	102 858	-3.5

Population changes have also varied within the region. The most notable feature has been the continued concentration of population in the New Plymouth District, which in 2001 contained approximately 65% of the region's total population. Despite this fact, New Plymouth District's population did decrease in the 1996-2001 period after experiencing population increases over the previous 10 years. Both the Stratford and South Taranaki districts have also experienced declining populations over the last 10 years.

With regard to population density Taranaki is about average in relation to the rest of the country (14.2 people per square kilometre compared with 14.1 nationally)²⁴, with the general trend being a decrease in the population of smaller rural towns and an increased concentration of population in north Taranaki. This has resulted from a number of factors including reduced employment opportunities in rural areas and small towns through farm amalgamations, closure of dairy processing factories and reduced employment in servicing and other industries, combined with land diversification, lifestyle and retirement opportunities in north Taranaki. As an example, within the Stratford district only 11% of the population live in the "hill country" area east of Douglas, yet the hill country occupies three-quarters of the Stratford district land area.

The Taranaki population is both older and younger than the national average with a higher proportion of children under 15 years of age (23.7%) and adults over 65 years of age (14.2%), compared nationally with 22.7% and 12.1% respectively²⁵. This may be due to lifestyle factors with Taranaki seen as an attractive and desirable place for family living, with good facilities and affordable housing. Those in the 19-29 age groups may leave the region for further tertiary education or employment opportunities.

7.5.1 Tangata whenua

There are eight recognised iwi whose 'rohe' or tribal areas fall either wholly or partially within Taranaki (Figure 17). These are:

- Ngati Ruanui
- Nga Ruahine
- Taranaki
- Te Atiawa
- Ngati Mutunga
- Ngati Tama
- Ngati Maru
- Nga Rauru

²³ www.stats.govt.nz 2001 Census of Populations and Dwellings. Regional Summary.

²⁴ www.stats.govt.nz 2001 Census of Populations and Dwellings. Regional Summary.

²⁵ www.stats.govt.nz 2001 Census of Populations and Dwellings. Regional Summary.

Within these tribal groups there are several hapu seeking to gain or affirm separate iwi status.

The 2001 Census indicates that 14.7% of Taranaki's population is Maori²⁶ with 35 marae located throughout the region. The locations of these marae can be found on the Taranaki Regional Council's website (www.trc.govt.nz).

Tangata whenua and the environment

Maori view themselves as an integral part of the natural world. The spiritual beliefs held by Maori link the Tangata Whenua to their original parents Papa-tū-a-nuku (Earth Mother) and Ranginui (Sky Father) as part of a complete living system. The close attachment that Tangata Whenua have to their ancestral land and resources stems from their belief in a common origin and from occupation and use. This relationship to the environment provides a link with both ancestors and future generations, as well as establishing tribal identity and continuity.

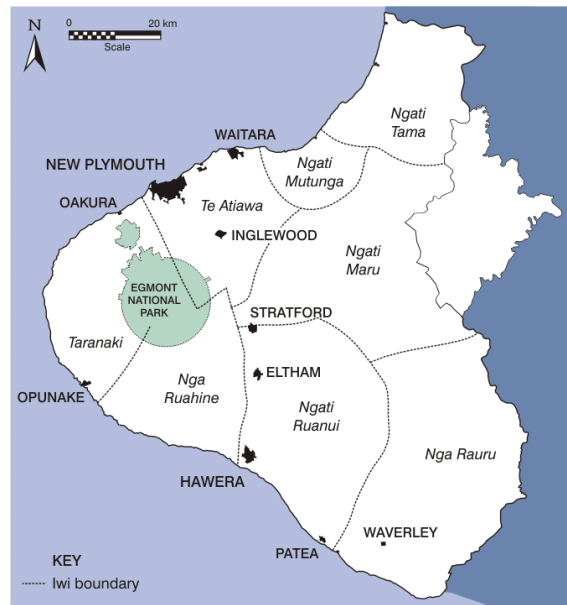


Figure 17 Iwi boundaries

The Treaty of Waitangi

The iwi of Taranaki are at various stages of negotiation with the Crown regarding settlement of historic Treaty of Waitangi claims. To date, two Treaty settlement claims between Taranaki iwi and the Crown have been signed. A deed of settlement between Ngati Ruanui and the Crown was signed on 12 May 2001 and a deed of settlement between Ngati Tama and the Crown was signed on 20 December 2001. A settlement agreement in principle was also signed between the Crown and Nga Rauru on 16 May 2002.

7.5.2 Households

As at 2001²⁷, there were 38,505 households in Taranaki with an average household size of 2.5 people. Of these, 96.1% households have access to a telephone, 31.6% to the internet, and 89.7% to a motor vehicle.

7.5.3 Employment and income

The predicted unemployment rate in the Taranaki region for 2004 was 5.1%, compared with 4.6% for all of New Zealand²⁸. As demonstrated in Figure 18, the single largest occupational group in the Taranaki region is agriculture and fishery workers (16.4%), demonstrating the reliance of the region on pastoral farming, particularly dairying (refer section 7.6.1 of the Group Plan). There is also a significant employment rate in the manufacturing sector as the region has developed a specialised engineering sector servicing the petrochemical industries. Although a small population of the total, employment in mining (1%) is five times the national average of 0.19%. This is largely due to the presence of the oil and gas industry (section 7.6.4).

²⁶ www.stats.govt.nz 2001 Census of Populations and Dwellings. Regional Summary.

²⁷ www.stats.govt.nz 2001 Census of Populations and Dwellings. Regional Summary.

²⁸ Statistics New Zealand Quarterly Review, March 2004.

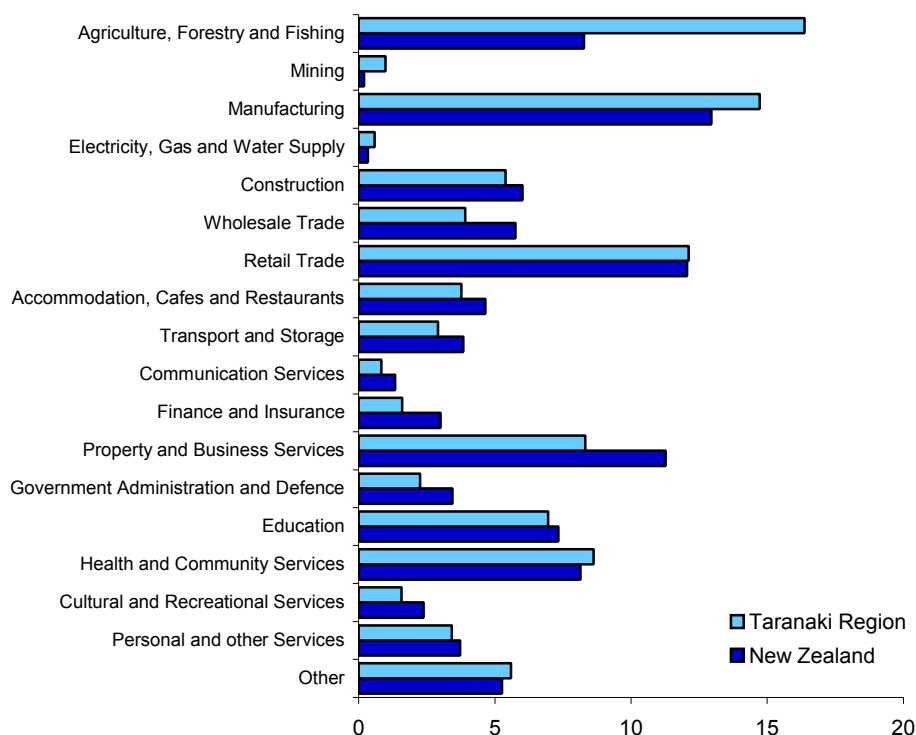


Figure 18 Taranaki employment by industry (www.stats.govt.nz 2001 Census data)

The median income of people in the Taranaki region aged 15 years and over was \$17,300 compared with \$18,500 nationally.

7.5.4 Education

There are 14 secondary schools, 4 intermediate schools, 91 primary schools, 4 Maori schools and 2 community learning schools in Taranaki. However, several of these schools are to be closed by the end of 2004.

There is one public tertiary education centre in Taranaki – the Western Institute of Technology at Taranaki (WITT). WITT has its main campus in New Plymouth, and also has learning centres in Taumarunui and Hawera. WITT offers programmes from Certificate to Degree level in a large number of fields including Business, Computing, Nursing, Arts and Media, Trades, Early Childhood Education, and Maori language and culture. There are also two private tertiary education facilities in New Plymouth as follows:

- the Practical Education Institute (PEI) offering continuing education and training to people within New Zealand and internationally; and
- the Pacific International Hotel Management School (PIHMS) providing practical daily experiences in all aspects of hotel operations to students.

As noted at the beginning of this chapter, a high proportion of Taranaki's 19-29 age group leave the region for tertiary education. The nearest universities are Massey University (Palmerston North) and Waikato University (Hamilton).

7.6 Economy

A notable feature of Taranaki is its reliance on the region's natural and physical resources for its economic and social wellbeing. Farming and other land based activities continue to play a prominent role in employment.

7.6.1 Agriculture and forestry

Over 16% of Taranaki's labour force is employed in the agriculture and forestry sector, compared with 8.3% nationally²⁹.

Dairying dominates farming in Taranaki, particularly on the ring plain. There are 2,272 dairy farms in Taranaki (16.6% of all New Zealand dairy farms), with over 500,000 dairy cows producing approximately 14% of New Zealand's total milk solids³⁰. Milk processing in Taranaki is now concentrated at one site – the Fonterra Whareroa site (formerly Kiwi Cooperative Dairies Ltd) near Hawera. At peak production this facility processes over 14 million litres of milk per day³¹. Other major agricultural processing industries are based at Kapuni (Fonterra Kapuni, formerly Lactose NZ Ltd) and Eltham (Mainland Products, Pastoral Foods and Dairy Meats Ltd). In addition to direct farm income from milk production, the added value from the processing of milk, whey and cheese manufacturing is a significant contributor to employment in the region.

Sheep and beef farming is concentrated in the hill country and plays an important part in the regional economy. There are approximately 1,150 sheep and beef farms in Taranaki stocking approximately 817,000 sheep and 123,000 beef cattle³². Meat processing works are located at Eltham (Riverlands), Hawera (Richmond) and Waitotara (Richmond).

Exotic forest plantations continue to expand with the region offering a suitable climate, suitable forestry sites and a well-established roading system and port facility. There has been a marked increase in exotic forest plantings in the region from 9,700 hectares in 1990 to an estimated 28,000 hectares in 2002³³.

Value of the dairy industry to the Taranaki economy

The dairy industry is a key driver of the Taranaki economy and plays a major role in the New Zealand economy. It is estimated that the value to Taranaki of dairy production is almost \$850 million per year³⁴, with capital investments in dairy land³⁵ and productive stock³⁶ being worth over \$4 billion.

²⁹ www.stats.govt.nz 2001 Census. Table 16 – Industry (division) for the employed census usually resident population count, aged 15 years and over, 2001.

³⁰ Livestock Improvement Corporation (2003). 2001-2002 Dairy Statistics.

³¹ Kiwi Cooperative Dairies Ltd.

³² Ministry of Agriculture and Forestry, 2000. North Central Monitoring Report, July 2000.

³³ www.stats.govt.nz 2002 Agricultural Production Census. Table 2 – Land use by region (as at 30 June 2002).

³⁴ Based on average production figures of 315 kg milk solids per cow with the average dairy company payout at \$5.35 per kg milk solids (Livestock Improvement Corporation (2003). 2001-2002 Dairy Statistics).

³⁵ Based on average land price being \$22 001 per hectare (Quotable Value NZ (2003). Rural Property Sales Statistics December 2002) for 180 417 total effective hectares used for dairying in Taranaki (Livestock Improvement Corporation (2003). 2001-2002 Dairy Statistics).

³⁶ Based on Taranaki's 501 004 in-milk dairy cows (Livestock Improvement Corporation (2003). 2001-2002 Dairy Statistics) being valued at an average of \$850 each (pers. comm. RF Lawrence, Ambreed NZ Ltd).

7.6.2 Pig and poultry farming

There are some 16 piggeries in Taranaki (a decline from 35 in 1995) and 47 poultry farms. Most pig farming is concentrated in the New Plymouth District.

Taranaki has a significant and growing poultry industry and is therefore recognised as the major poultry meat producing region in New Zealand (involving all aspects of the industry from breeding and growing to production and distribution). Operations are concentrated in north Taranaki with the major processing facility at Bell Block. The poultry industry has also undergone recent expansion with the closure of Tegel production operations at Te Horo near Levin and their shift to north Taranaki and Auckland in 1998.

7.6.3 Horticulture and cropping

Horticulture and cropping is not a significant land use in Taranaki – approximately 1,000 hectares in 2002³⁷. The crops grown include flowers, asparagus and roses. Maize crops (a supplementary feed stock for dairy cattle) have also expanded significantly.

Taranaki is self-sufficient in most crops with small local growers producing apples, tamarillos, kiwifruit, feijoas, berry fruit, some citrus fruit, strawberries and tomatoes for the local market and export.

7.6.4 Oil and gas industry

The Taranaki Basin is currently New Zealand's only hydrocarbon producing area. The Kapuni and off-shore Maui fields make up the major part of New Zealand's natural gas resources, with Figure 19 identifying the location of the major oil and gas fields in Taranaki.

By world standards, however, Taranaki remains under-explored. Between 1995 and 2001, 54 wells were drilled with many of these being wildcat wells³⁸. Extensive drilling programmes adopted by various companies have resulted in five significant finds since this time. The Mangahewa onshore gas and condensate field was discovered in 1997, the Maari offshore field in 1998, the Rimu onshore field in south

Taranaki in 1999 and nearby Kauri field in 2001. The Pohokura offshore gas field in the North Taranaki Bight, the largest gas and condensate find in 30 years, was discovered in 2000. Exploration interest in Taranaki therefore still remains high.

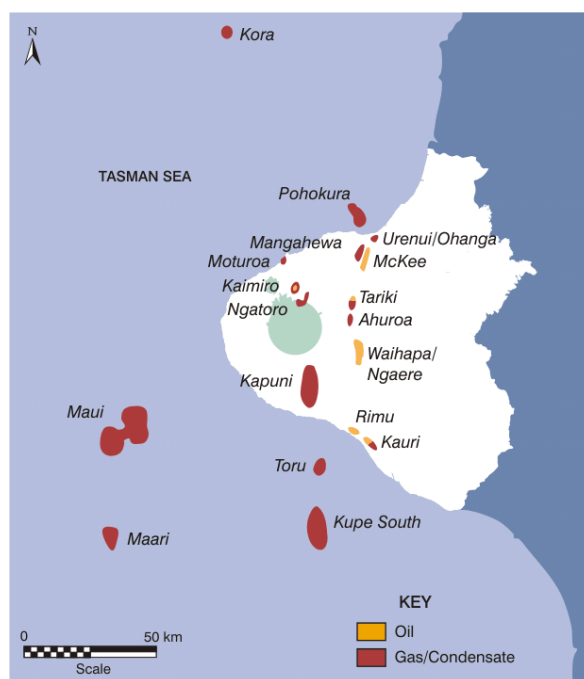


Figure 19 Main oil and gas fields in Taranaki

³⁷ Department of Statistics, *Final Results from the 2002 Census of Agriculture, Horticulture and Forestry*. May 2003.

³⁸ Rachael Palmer, *Fletcher Challenge Energy, Taranaki, 2001. Recent Developments in the oil and gas industry in Taranaki since 1995*.

The presence of oil and gas in Taranaki has given rise to new industries involved in the processing, distribution, use and export of hydrocarbons. Production stations or gas treatment plants are found at Oaonui, Kapuni, Waihapa, Rimu, Kaimiro and the McKee oil and gas fields. The Methanex Motunui Ltd methanol production facility and the Methanex Waitara Valley Ltd methanol plant are located at Motunui and the Waitara Valley respectively. An ammonia urea plant is also located at Kapuni, urea-formaldehyde resin (an adhesive product) plant at Bell Block, and gas-fired power stations at Stratford and New Plymouth.

7.6.5 Manufacturing

Taranaki has a relatively small but distinctive manufacturing base, having developed a national and international reputation for its expertise in food processing, particularly of dairy products and speciality dough production. Furthermore, the special servicing needs of the dairy and petrochemical sectors (and to a lesser extent the meat, energy, industrial, chemical and timber processing sectors) have contributed to the development of both heavy and light engineering industries. Manufacturing therefore provides approximately 16% of Taranaki's employment opportunities.

7.6.6 Tourism

Tourism is playing an increasingly important role in the Taranaki economy with approximately 466,000 domestic and international visitors annually³⁹. The region's mountain, bush, gardens and parks are attracting increasing numbers of visitors for rural-based and outdoor recreation activities.

7.7 Infrastructure

7.7.1 Water supplies, stormwater and waste water disposal (sewerage)

Water supplies

The main municipal water supply catchments for the Taranaki region are:

- Waiwhakaiho River and Lake Mangamahoe – New Plymouth, Waitara and surrounding areas;
- Kapuni Stream – Hawera and surrounding area;
- Waiaua Stream – Opunake;
- Patea River and Konini Stream – Stratford; and
- Ngatoro Stream – Inglewood.

Supplies for other towns are drawn from smaller catchments. Approximately 95% of municipal water in the Taranaki region is sourced from surface water, with groundwater sources used for Oakura, Patea, Waiinu Beach and Waverley municipal water supplies. In addition to surface water, rainwater provides a consistent supply of relatively good quality water particularly for household use in rural areas not connected to an urban supply.

New Plymouth district

The New Plymouth District Council provides water supply, wastewater and stormwater services to New Plymouth and some or all of these services to eight other smaller communities within the New Plymouth district.

³⁹ www.taranakinz.org – quoting statistics from Statistics NZ's Commercial Accommodation Monitor March 2004.

The New Plymouth District Council owns and operates four separate municipal water supply schemes, with treatment plants at Junction Road (sourced from the Waiwhakaiho River with Lake Mangamahoe acting as a reservoir), Dudley Road (Inglewood), Waiongana (untreated water for Waitara industry), Oxford Road (Okato) and Wairau Road (Oakura). The Junction Road Water Treatment Plant supplies New Plymouth, Bell Block, Waitara, Tikorangi and Urenui, with an extension to Omata planned for 2004. It services the greatest area and population in north Taranaki, with a maximum daily capacity of 44,000 cubic metres.

Table 2 shows that approximately 24,500 customers receive a water supply service from the New Plymouth District Council (including some rural customers), representing a serviced population of 51,100. There are slightly fewer wastewater and stormwater customers.

Table 2 New Plymouth District Council supply customers

Community	Water supply	Sewerage	Stormwater	Approximate population
New Plymouth	Yes	Yes	Yes	40,000
Waitara	Yes	Yes	Yes	6,000
Urenui	Yes	No	Yes	250
Inglewood	Yes	Yes	Yes	3,000
Egmont Village	No	No	Yes	100
Onaero	No	No	Yes	100
Oakura	Yes	No	Yes	1,200
Okato	Yes	No	Yes	350
Lepperton	Yes	No	Yes	100
Total Population				51,100

The New Plymouth District Council's maintenance contractor is ordinarily contacted through their call centre for urgent and reactive maintenance requests. The contractor is required to be contactable at all times and have sufficient staff on standby to attend callouts. A callout may be generated by either plant telemetry systems, Council service request, or from the public. The District Council also has an Incident Response Plan for escalating emergencies that may occur within their water and waste networks.

Stratford district

Within the Stratford district there are three water supplies, one wastewater system and two stormwater reticulation systems that are managed by Stratford District Council.

The main water supply services the township of Stratford and takes its water from the Patea River adjacent to the Cardiff Rd Bridge. The supply services a population of 5,000 people and, while it has the capacity to produce over 8,000 cubic metres per day, it is only consented to take 5,270 cubic metres.

The two other supplies are located at Toko and Midhirst, both of which are very small - having only a combined capacity of 480 cubic metres per day.

All physical works have been contracted out to a private contractor who operates under a Facilities Management Contract. This contract requires that the contractor respond to certain events within set times and report back in a format set by Council allowing records

to be maintained. A call out may be generated by either plant telemetry systems, Council request or a direct approach from the public.

South Taranaki district

There are currently 14 separate water supply schemes within the South Taranaki district. Of these: 11 are owned and operated by the South Taranaki District Council, eight are urban or community water supplies and six are rural schemes. The 11 Council schemes supply approximately 15% of the land area within the South Taranaki district with reticulated water.

The largest municipal urban water supply in south Taranaki is that to Hawera, sourced from the Kapuni Stream at Kapuni and piped via Okaiawa to Normanby, Hawera and Ohawe. This supply serves a population of 10,720 with a maximum daily demand of just over 10,000 cubic metres. Other significant urban schemes supply water to the townships of Opunake, Eltham and Patea. The largest rural scheme is the Waimate West supply which has an average daily demand of between 10,000 and 20,000 cubic metres. This scheme services 827 connections, including the townships of Kaponga and Manaia, as well as significant industry.

Groundwater sources are used for the Patea, Waverley, Waverley Beach and Waiinu Beach supplies, with pumps to raise the pressure within the reticulations.

Agricultural use of water supplies

Agricultural uses of water include stock drinking, farm dairy cooling and wash-down water, pasture irrigation and domestic use. Agricultural uses account for 33% of all allocated surface water and approximately 49% of all allocated groundwater in Taranaki.

Furthermore, water demand for agricultural purposes is anticipated to grow as a result of increasing dairy intensification and pasture irrigation in Taranaki (cow numbers have increased from 208,300 in the 1986-87 season to 495,00 in 2000-01)⁴⁰. Associated with this is an increase in the use of both surface water and groundwater sources, and the need to dispose of farm dairy effluent. The treatment and disposal of farm effluent also has the potential to affect these water supplies, consequently all oxidation ponds and spray irrigation systems are now licensed and monitored by the Taranaki Regional Council.

Industrial use of water supplies

Industry uses significant volumes of water – approximately 32% of all surface water use and 35% of groundwater abstractions in Taranaki. The main industry users of surface water are petrochemical processing (15%), dairy processing (11%), as well as meat and by-product processing (2%). Taranaki industries that rely on surface water for their core activities are listed in Table 3, with all major industries having prepared contingency plans for a possible water supply failure.

The Motunui methanol plant is the single petrochemical industry user of groundwater (24%), with meat and by-product processing (6%), dairy processing (3%) and hydrocarbon exploration/servicing (2%) also utilising groundwater sources.

⁴⁰ *Livestock Improvement Corporation Ltd, 2001. Dairy Statistics 2000-01.*

Table 3 Taranaki industries that rely on surface water for core activities

Industry	Water usage
Fonterra Whareroa	Dairy processing complex <ul style="list-style-type: none"> • processing and manufacture of dairy products • cleaning of plant • cooling purposes
Fonterra Kapuni	Lactose manufacturing <ul style="list-style-type: none"> • cooling purposes • production
Fonterra New Plymouth Coolstores	Cooling plant purposes
Egmont Tanneries Limited	Tannery and processing of animal skin goods <ul style="list-style-type: none"> • hide tanning operations
Dow AgroScience (NZ) Limited	Irrigation of agricultural crops at the Waireka Research Station
Ballance Agri-Nutrients Kapuni Limited	Ammonia Urea Plant <ul style="list-style-type: none"> • Surface water – plant operations • Groundwater – site remediation purposes and process use
TrustPower Limited	Hydro electric power generation <ul style="list-style-type: none"> • Patea scheme • Mangorei scheme • Motukawa scheme
Methanex Waitara Valley Limited	Operation of the methanol plant
Methanex Motunui Limited	Surface water – petrochemical plant Groundwater – site de-watering to minimise risk of substrate liquefaction in the event of seismic activity
Richmond Hawera Limited	Richmond Limited meat processing plant <ul style="list-style-type: none"> • refrigerator condenser cooling • processing operations
NGC of New Zealand Limited	<ul style="list-style-type: none"> • Operation of Kapuni Natural Gas Treatment Plant • Cogeneration plant steam exporting pipeline • Other on-site and off-site ancillary purposes
Shell Todd Oil Services Limited	Kapuni Production Station <ul style="list-style-type: none"> • oil and gas production • well killing purposes
New Zealand Energy Limited	Hydro electric power generation <ul style="list-style-type: none"> • Opunake scheme
Taranaki By-Products Limited	Rendering operation
Swift Energy New Zealand Limited	Hydrocarbon exploration purposes Hydrostatic testing of pipelines and crude oil tanks Drilling rig operations Utility and firewater purposes
Taranaki Abattoir Company [1992] Limited	Meat processing and rendering plant <ul style="list-style-type: none"> • stock and yard washing
Riverlands Eltham Limited	Meat processing plant <ul style="list-style-type: none"> • stock drinking • yard wash-down • miscellaneous purposes
Stratford Power Limited	Combined Cycle Power Station <ul style="list-style-type: none"> • cooling purposes • steam
Tegel Foods Ltd (Lepperton and Bell Block)	Meat processing plant <ul style="list-style-type: none"> • cooling water • wash-down
MCK Metals Ltd (Bell Block)	Aluminium resmelter and extrusion <ul style="list-style-type: none"> • cooling water
Contact Energy (New Plymouth Power Station)	Combined Cycle Power Station <ul style="list-style-type: none"> • cooling purposes • steam

Stormwater disposal

Reticulated sewerage and stormwater systems exist in the main urban centres and towns of Taranaki. These systems are owned and operated by each of the three district councils, with contractors often used to carry out general maintenance work. In the urban areas most of the rainfall and water runoff is caught in lined kerbside drains and discharged into the stormwater system after progressing through roadside stormwater sumps. These sumps capture the 'first flush' for dilution and enable solids (such as gravel and silt) to settle out of the flow. A natural wetland and ponding system has also been established in the Bell Block area of New Plymouth to catch any stormwater that is discharged from the industrial sites located in that area.

In rural areas, stormwater usually runs straight into waterways or drains, once soakage into the bed of the roadside channels is saturated. Most of the larger industrial or commercial sites in Taranaki also have their own stormwater management systems in place, whereby stormwater that may carry contamination is directed to interceptors to catch floatables (such as oils and scums) and heavier materials (such as silts and gravel, that often have harmful substances adhering to them) that may be discharged into stormwater drains and subsequently enter water bodies nearby.

The New Plymouth, Stratford and South Taranaki District Councils are responsible for the efficient drainage of stormwater in their district and for the control and management of stormwater drainage systems, including the effects of discharges from such systems into waterways and the sea. The Taranaki Regional Council regulates these discharges. Where there is a significant discharger sharing a municipal stormwater system with a territorial authority, the Taranaki Regional Council may require that discharger to obtain its own resource consent. The district councils also have the responsibility, as road controlling authorities, to manage the effects of stormwater/road run-off from roads they are responsible for.

Waste water disposal (sewerage)

New Plymouth district

The New Plymouth District Council operates reticulated sewerage networks in the towns of Inglewood, Waitara, Bell Block and New Plymouth. Sewage from all but Waitara is piped to the New Plymouth Waste Water Treatment Plant where it is treated and the effluent discharged to sea via a marine (piped) outfall. Similarly, Waitara sewage is treated at the Waitara Waste Water Treatment Plant and pumped to a sea outfall adjacent to the Waitara River mouth.

All other areas in New Plymouth District use on-site sewage treatment, mainly septic tanks with effluent disposal beds. The townships of Oakura, Onaero and Urenui are programmed to be serviced by reticulated sewerage systems within the next 5 years, with transfer by pumping and overland pipelines to the existing Wastewater Treatment Plants of New Plymouth and Waitara for treatment and disposal via existing marine outfalls. The New Plymouth District Council also has a Sewerage System Emergency Discharge Contingency Plan for responding to pump station failure and for managing overflows.

Stratford district

Within the Stratford district there is only one municipal wastewater system which serves the Stratford urban area. This system has 2,200 connections and a treatment system consisting of oxidation ponds that discharge to the Patea River east of the Stratford township.

All other areas within the district are served by privately owned septic tanks.

South Taranaki district

The South Taranaki District Council operates eight sewage treatment plants throughout the district. Details of each plant (including treatment systems) are outlined in Table 4.

Table 4 South Taranaki sewage and waste water disposal and treatment facilities

Treatment plant	System	Discharge
Eltham Waste Water Plant	Oxidation ponds Wetland treatment Discharge to Mangawhero Stream	1500m ³ /day
Kaponga Waste Water Plant	Primary oxidation pond Discharge to Kaupokonui River	130m ³ /day
Opunake Waste Water Plant	Primary oxidation pond Wetland treatment Pumped to series of disposal soakage trenches	2100m ³ /day
Manaia Waste Water Plant	Single primary oxidation pond Discharge to unnamed stream	330m ³ /day
Hawera Waste Water Plant	Two oxidation pond system Pumped 3km to join Fonterra marine outfall (1.8km long)	10000m ³ /day
Patea Waste Water Plant	Primary oxidation pond Discharge to Patea River	450m ³ /day
Waverley Waste Water Plant	Primary oxidation pond Discharge to unnamed tributary of Wairoa Stream	450m ³ /day
Waiinu Waste Water Plant	Utilises partially treated effluent from 21 communal septic tanks Influent flows to a wet well Wet well pumps to sand filters Filtered effluent discharged to underground trenches	80m ³ /day

The 'Sewage Pump Station Emergency Discharge Contingency Plan' for the South Taranaki District Council outlines actions to be taken by the South Taranaki District Council and its contractors in the event of a failure of any of the pump stations or their associated rising mains.

7.7.2 Solid and hazardous waste facilities

Hazardous wastes are by-products of many industrial and commercial processes and can be either solids, liquids or gases. Liquid waste currently represents the largest proportion of hazardous waste produced in New Zealand, with most of this being disposed of via sewers⁴¹.

In Taranaki hazardous industrial and commercial waste is not accepted at landfill sites. The only hazardous waste that may be disposed of to a landfill is small quantities mixed in general domestic refuse collected from households. The New Plymouth and South Taranaki District Councils have a dedicated store for the storage of hazardous waste at a transfer station in their districts. Staff at transfer stations with such facilities are trained in the handling and storage of hazardous substances for compliance with New Zealand Standard

⁴¹ Regional Waste Strategy for Taranaki, February 2004.

4452 for the 'storage and handling of toxic substances'. The hazardous wastes are then collected by an approved carrier and transported to appropriate disposal or recovery facilities. Stratford District Council has a facility at its transfer station for the temporary storage of hazardous goods, and then transported to the New Plymouth District Council facility on a regular basis, where an approved contractor collects them.

Major industries using hazardous substances also have appropriate storage facilities with contingency plans in place to deal with incidents on site, should they occur.

With regard to solid waste disposal, it is anticipated that by December 2005 there will be only one operational landfill in Taranaki at the Colson Road site (New Plymouth). The aim is for this landfill to continue to meet industry best practice standards, to enforce the policy of non-acceptance of hazardous waste, to divert inert material where possible and review its cost pricing policy when necessary. An alternative landfill site has also been identified near Eltham (as one option) for when this site has reached its capacity.

7.7.3 Roothing network

In total there are 3853 kilometres of roads in Taranaki, of which 3128 kilometres are sealed. The network is made up of 386 kilometres of state highways and 3466 kilometres of local roads, of which 2992 kilometres are rural local roads (Table 5).

Table 5 Regional roading network⁴²

	Stratford	South Taranaki	New Plymouth	Total
Rural (km)	541.4	1475.7	954.1	2971.2
Urban (km)	40.3	136.3	297.4	474.0
Special purpose roads	14.2	-	6.9	21.1
Total local roads	595.9	1612.0	1258.4	3466.3
			State Highways	386.5
			Total all roads	3852.8

In the Taranaki region there are 158 bridges on state highways (including one single-lane bridge at the Stratford cemetery on SH43) and 668 bridges on local roads, of which 438 are single-lane. This equates to Taranaki roads having a bridge approximately every six kilometres.

Taranaki's extensive roading network provides vital access and communication links to and within the region. High quality roads and an appropriate network of roads is essential for the region's agricultural, petrochemical, forestry and tourism industries, as well as for maintaining access to widely scattered rural communities and large numbers of individual households. This network has developed primarily in response to the needs of these groups, particularly primary producers.

State Highways 3 and 3A link the region with the main centres to the north and south. State Highway 43 provides access to inland centres and the central North Island. State Highway



⁴² Transfund New Zealand (2002). Transfund roading statistics 2

45 connects coastal residents to New Plymouth and Hawera.

Roading will continue as the dominant infrastructure for passenger and freight transport modes in the Taranaki region, particularly as the basis of the economy will remain orientated towards primary production which cannot, by character, be centralised. The roading network is the most effective way of servicing this region's widespread, low density population.

State Highway 3 is of significant strategic value for Taranaki. It is important to the viability of industries in Taranaki in being able to compete in the North Island market (as well as the overseas export markets), for regional tourism and for access to other services and facilities in major centres to the north and south of Taranaki.⁴³ State Highway 3 also provides an alternative route in the event of road closures in the central North Island.

Figure 20 Taranaki's State Highway Network

7.7.4 Rail network

New Zealand Rail Ltd was privatised in 1993 and became Tranz Rail Ltd in 1995. In May 2004, the company was purchased by Toll NZ which operates both Toll Rail and Toll Tranz Link to provide a nationwide freight and distribution service.

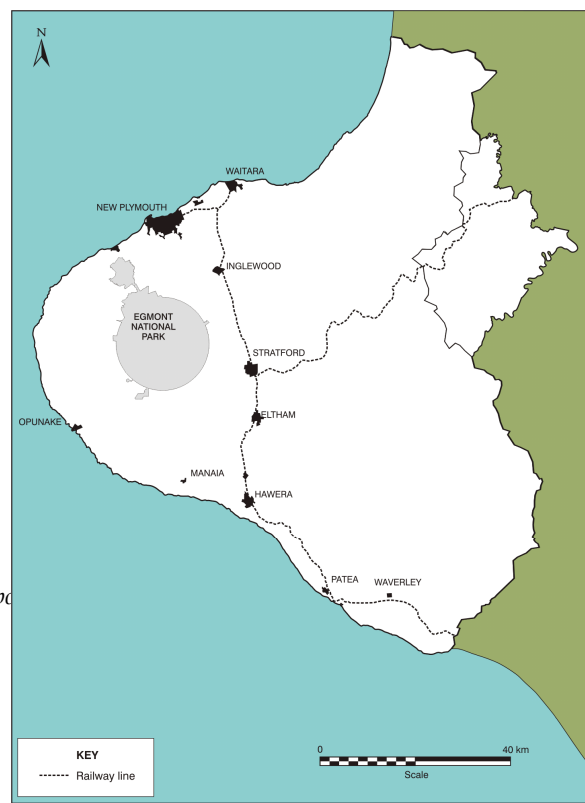
Toll Rail provides freight services over a national rail network throughout New Zealand. Freight is transported on container trains (containerised freight), pack trains (consolidated general freight), bulk trains (coal, logs, milk) and block trains (steel, aggregates and fertiliser). Toll Rail is the sole rail freight operator of the national rail network.

New Zealand's total railway network extends over 4,205 kilometres of main line track, of which approximately 214 kilometres are within Taranaki. The main rail links managed by Tranz Rail, which have been transferred to a new state owned enterprise TrackCo, in this region are:

- Wanganui to Stratford;
- Stratford to Ohahukura (near Taumaranui); and
- a link line between Stratford and New Plymouth (refer to Figure 21).

Toll Tranz Link operates through a network of 17 freight terminals throughout the country (one being in New Plymouth). There are also industrial sidings throughout Taranaki for Fonterra (Whareroa, Kapuni and Moturoa), Ballance Agri-Nutrients (Kapuni), Ravensdown, Shell Todd Oil Services, NGC and Westgate Port Taranaki.

The main freight transported by rail on the Taranaki lines include meat products, fertiliser, dairy products, wood chips and bulk milk. Toll Tranz Link has indicated



⁴³ Taranaki Regional Council (2000). *Regional Land Transport*

an increase in both the number and size of freight trains utilised in Taranaki. This can be attributed to:

- increased bulk milk volumes transported from the lower North Island to Fonterra's processing plant at Whareroa;
- an increase in Fonterra's dairy product being exported from Port Taranaki (the product is rail freighted from the Whareroa site to Port Taranaki);
- continued freight of LPG from STOS to various locations out of the region;
- continued freight of fertiliser from Ballance Agri-Nutrients Kapuni out of the region; and
- continued freight of Ravensdown fertiliser from the Awatoto works to Taranaki stores.

Figure 21 Taranaki's rail network

There are no passenger or commuter rail services operating within the Taranaki region, with New Plymouth being one of the few provincial cities in New Zealand that does not have a rail passenger link.

Taranaki does however have a privately owned heritage railway. The Waitara Railway Preservation Society Inc purchased the 7½ kilometre rail link from Lepperton Junction to the Waitara township in May 2001, with funding assistance from the Taranaki Electricity Trust and TSB Community Trust. The Waitara link line was the first railway system in Taranaki and it is anticipated the line will operate as a tourist attraction from 2004⁴⁴.

7.7.5 Westgate Port Taranaki

Port Taranaki is the only major deep water port on the west coast of New Zealand. The port is operated by Westgate Transport Ltd and offers nine fully serviced berths for a wide variety of cargoes and vessels. It also provides an official maximum draft of ten metres, though vessels of up to 11 metre draft have been handled, dependent on the circumstances at the time.

In terms of freight tonnes handled, Port Taranaki is New Zealand's second largest export port and fifth largest port overall. In 2003 the total trade volume of the Port was 5.05 million freight tonnes. Major exports for the port during 2002/2003 include⁴⁵:

- methanol exports from Methanex Motunui and Waitara Valley;
- export of 55% of Fonterra Whareroa dairy product;
- log and fertiliser export; and
- crude oils and Liquid Petroleum Gas (LPG).

There are four main wharves at Port Taranaki:

- Moturoa wharf – predominantly dry bulk cargo including fertiliser and coal.
- Newton King Tanker Terminal – handles a wide range of petrochemical products and bulk liquids including crude oils, liquefied petroleum gas and methanol. These products are piped from onshore and offshore sites throughout the region before being pumped to dedicated load-out facilities.
- Blyde Terminal – an integrated cargo handling facility based around a terminal operation on the Blyde complex. It caters for Port Taranaki's growing container trade as

⁴⁴ Pers. Comm. Graeme Goldsworthy, Waitara Railway Preservation Society Inc.

⁴⁵ Westgate Transport Limited (2002). *Annual Report on Westgate Transport Limited 2002*.

well as for general and refrigerated conventionally handled cargoes. It is the port's newest development and reflects growth the port is enjoying as a major point of export for New Zealand dairy products.

- Main breakwater – while the primary purpose of the main breakwater is to protect the harbour from the open sea, it is also a fully operational facility. The berth is primarily used to help provide the operational flexibility required to cater for shipping growth at the port.

7.7.6 Airport

The New Plymouth Airport is the only full commercial air freight and passenger airport in Taranaki. Current commercial air traffic through the airport is provided on a scheduled basis by Air New Zealand Link and Origin Pacific Airways, utilising various aircraft with seating capacities ranging from 19 to 33 passenger seats. The advent of smaller aircraft and higher frequencies of operation has virtually stopped the operation of freight carriage at smaller airports such as New Plymouth. For the last several years freight tonnage has been steady at about 120 tonnes per annum, mostly in courier packages and/or excess baggage.

There are three runways available to air traffic – the main sealed runway (1310 metres in length) and two grass runways (1200 and 1000 metres in length). The main sealed runway is capable of operating civilian aircraft up to Boeing 737-200 series size (with some load restrictions). The RNZAF fleet of Hercules transports are also able to operate from both grass and sealed runways, with advice from the RNZAF indicating that the newly acquired Boeing 757 fleet is capable of operating from New Plymouth.

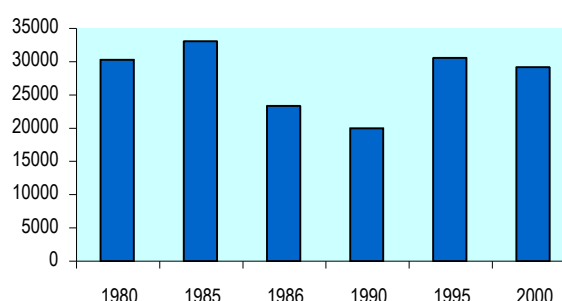


Figure 22 New Plymouth airport, aircraft movements

Aircraft movements recorded at New Plymouth Airport identified fluctuations over time, with a strong correlation between the number of aircraft movements and project activity in the region. Figure 22 demonstrates these fluctuations – the two high points of the graph (1985 and 1995) link with the end of the 'Think Big' era in Taranaki (1985) and the Kiwi Co-operative Dairies Ltd expansion project (1995). Passenger movements have increased since 1991, with significant increases recorded with the introduction of Origin Pacific flights in 1999 and Air New Zealand's express class fares in 2002.

The New Plymouth Airport expects to double passenger numbers over the next 20 years as a result of larger aircraft and higher utilisation of services. There is also an increase in the use of air ambulance services into and out of New Plymouth as a result of changes in the operation of the Taranaki District Health Board. Other airfields in the region that are large enough to accommodate twin engine cargo planes if grass runway conditions are suitable to land on include Hawera, Stratford and Norfolk Road (with a number of private airstrips throughout Taranaki available for top dressing aircraft).

7.7.7 Electricity generation and transmission

Most of Taranaki's electricity supplies are sourced from the major electricity generators and distributed throughout the country by both Transpower NZ Ltd via the National Grid and by local distribution network companies to electricity retailers and end users. The major generation facilities based in Taranaki include the New Plymouth Power Station and the Stratford (Taranaki) Combined Cycle Power Station. Four smaller local hydroelectric powered schemes include the Mangorei, Patea, Motukawa and Waiaua hydroelectric power schemes.

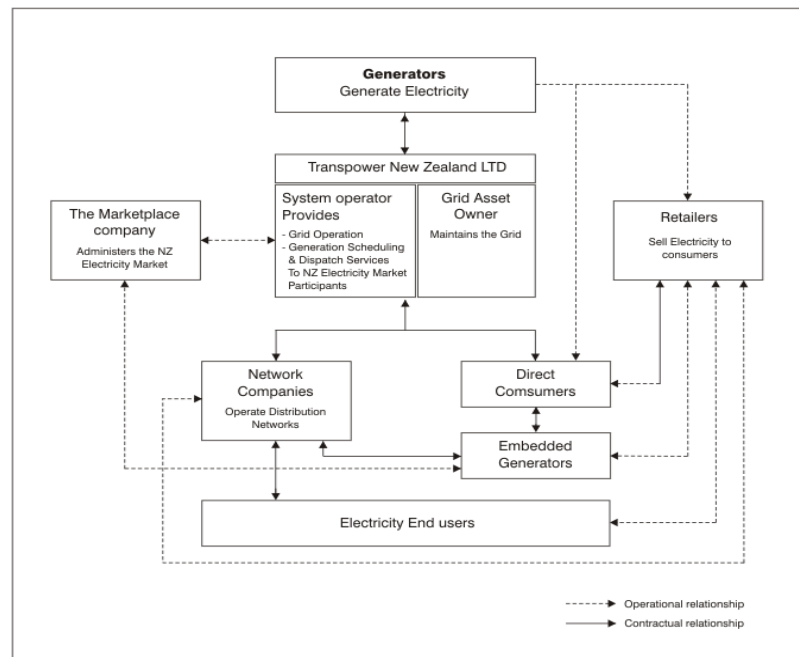


Figure 23 Diagrammatic representation of the electricity industry

Figure 23 demonstrates the complexity of the New Zealand electricity market. From an emergency management perspective, the Taranaki CDEM Group is mostly interested in the sector's ability to maintain or restore services to users.

Direct consumers of electricity from the National Grid in Taranaki include companies such as Methanex and Fonterra. Electricity end users are typically connected to a network distribution companies electricity network, such as that operated by Powerco in Taranaki. End users may choose to purchase their electricity through different retailers of electricity but it is still delivered via the distribution company.

On this basis, the focal point for meeting the CDEM Group's objective of maintained or restored electricity services to users will be the network company (or companies) operating within the Group's area.

New Plymouth Power Station

New Plymouth Power Station (NPPS) is owned and operated by Contact Energy and is located at Port Taranaki, New Plymouth. The station has a variable capacity of 45MW – 420MW from 4 x 105MW units using natural gas, heavy fuel oil or a combination of both. Natural gas is sourced mainly from the Maui gas field with a small quantity coming from the TAWN fields (Tariki, Ahuroa, Waihapa and Ngaere). A maximum 63,000 litres of heavy fuel oil is stored in 2 tanks on site, which would yield a minimum 24 days generation (assuming full tanks).

The station is reliant on water supplied from NPDC to produce the steam in the boilers. Two-five days water supply is stored in 2 x 1 million litre tanks above the station. An emergency supply along Breakwater Rd is also available, however water quality would be an issue.

NPPS feeds its power into the national grid via the Stratford substation at 220,000 volts, the Carrington Street substation at 110,000 volts, and/or the Moturoa substation at 33,000 volts. The station has an owner's infeed supply of 33,000 volts from the Transpower network, of which 4MW is required for auxiliary power during cold start up of the first unit and also during major plant outages. While the station is capable of operating in island mode there is no 'black start' capability.

NPPS is staffed 24hrs a day with a minimum of 3 staff during night time hours and approximately 40 staff during daytime hours. Maintenance and protection checks are carried out on both the mechanical and electrical plant on a regular basis to ensure plant reliability and electrical supply integrity is maintained at its optimum, as well as to satisfy regulatory requirements.

Taranaki Combined Cycle Power Station

The Taranaki Combined Cycle (TCC) Power Station is owned and operated by Contact Energy and located on East Road, 2 kilometres from Stratford. The station became fully commercial in 1998 and has a net average capacity of 354MW and fuel efficiency of 57.5%. TCC utilises gas turbine technology to obtain its high fuel efficiency rates and is fired by natural gas. The fuel supply is sourced mainly from the Maui gas field with a small quantity coming from the TAWN fields (Tariki, Ahuroa, Waihapa and Ngaere).

TCC feeds its power into the National Grid via the Stratford switchyard at 220,000 volts. The station has an owner's infeed supply of 400 volts which is fed via the local area distribution system. This supply is used for auxiliary power during major plant outages. However, if this supply is not available onsite diesel generators can supply the plant with auxiliary power and has full black start capability. The station is also capable of operating in island mode.

TCC is staffed 24hrs a day with a minimum of 2 staff during night time hours and approximately 16 staff during daytime hours. Maintenance and protection checks are carried out on both the mechanical and electrical plant on a regular basis to ensure plant reliability and electrical supply integrity is maintained at its optimum.

Electricity distribution

Transpower New Zealand Ltd is a State

Owned Enterprise that owns and operates New Zealand's high-voltage electricity transmission grid – the National Grid. The

National Grid connects the power stations owned by generating companies to substations feeding the local networks that distribute electricity to homes and businesses. Some large industrial users of electricity also receive their power directly from the National Grid.

Figure 24 identifies the location of the high-voltage transmission lines in Taranaki.

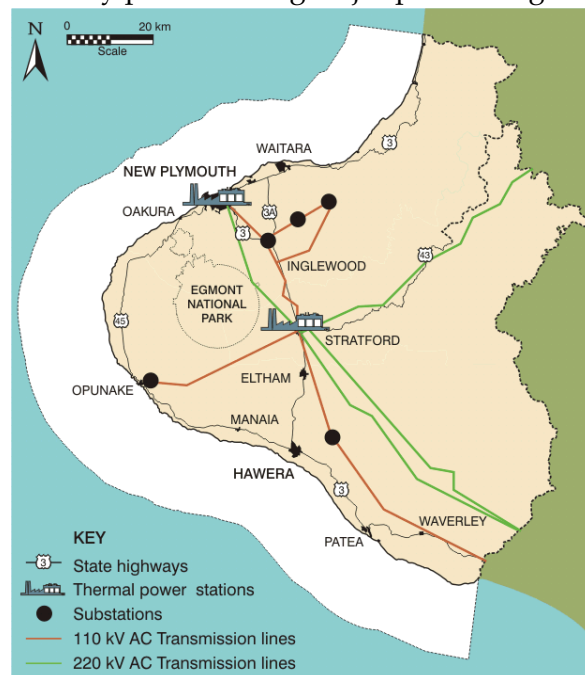


Figure 24 Map of the National Grid in Taranaki

Powerco owns and operates the electricity sub-transmission and distribution networks in Taranaki (both urban and rural). The networks comprise sub-transmission (33 kV) networks supplying 21 zone substations throughout Taranaki. These substations reduce the voltage from 33kV to lower distribution voltages (11kV or 6.6kV). Radial distribution networks run from the zone substations throughout the service areas.

Distribution transformers ranging in capacity from 15kVA to 1500kVA are installed throughout the network to transform the voltage from 6.6kV or 11kV to 400V. In rural areas transformers are generally less than 100kVA and are pole mounted. In urban areas they are generally ground mounted and average 200 to 300kVA. Larger transformers are used at industrial user sites and more dense commercial areas.

7.7.8 Oil and gas production and distribution

Oil and gas production

Swift Energy NZ Ltd produces oil and gas from two areas in Taranaki – the TAWN (Tariki, Ahuroa, Waihapa and Ngaere) field and the Rimu/Kauri fields.

The TAWN field is located generally to the east of Stratford. Flow lines connect the various wells to the Waihapa Production Station located on Bird Road, where the oil and gas are separated and treated. Two pipelines run from the Waihapa Production Station to Port Taranaki in New Plymouth. These are used to export oil and to supply gas to the Contact Energy power stations at Stratford (TCC) and New Plymouth. LPG is also transported from the Waihapa Production Station by road tanker. The Waihapa Production Station is reliant on power supply from the Stratford Sub-Station to operate, with no back up power supply.

The Rimu and Kauri fields are located near Mokoia and Manutahi (south east of Hawera). Flow lines from the various wells run to the Rimu Production Station, which is located on Mokoia Road. Treated gas is piped to the nearby NGC transmission pipelines, while oil is transported by tanker to the Waihapa Production Station. LPG is also transported from the Production Station by road tanker. The Rimu Production Station has the ability to generate power for plant operations, as well as exporting power into the local Powerco network.

The McKee field is another oil and gas production field located on the Otaraoa Road, Waitara. Oil is shipped via pipeline to the Omata Tank Farm near New Plymouth for export, while the gas is compressed for gas-lifting the oil wells or for export to the gas reticulation network.

Gas distribution

The Powerco gas network in Taranaki supplies customers from Waitara in north Taranaki to Waverley in south Taranaki. Comprising approximately 730km of distribution mains, the network serviced approximately 20,700 gas customers (as at April 2002).

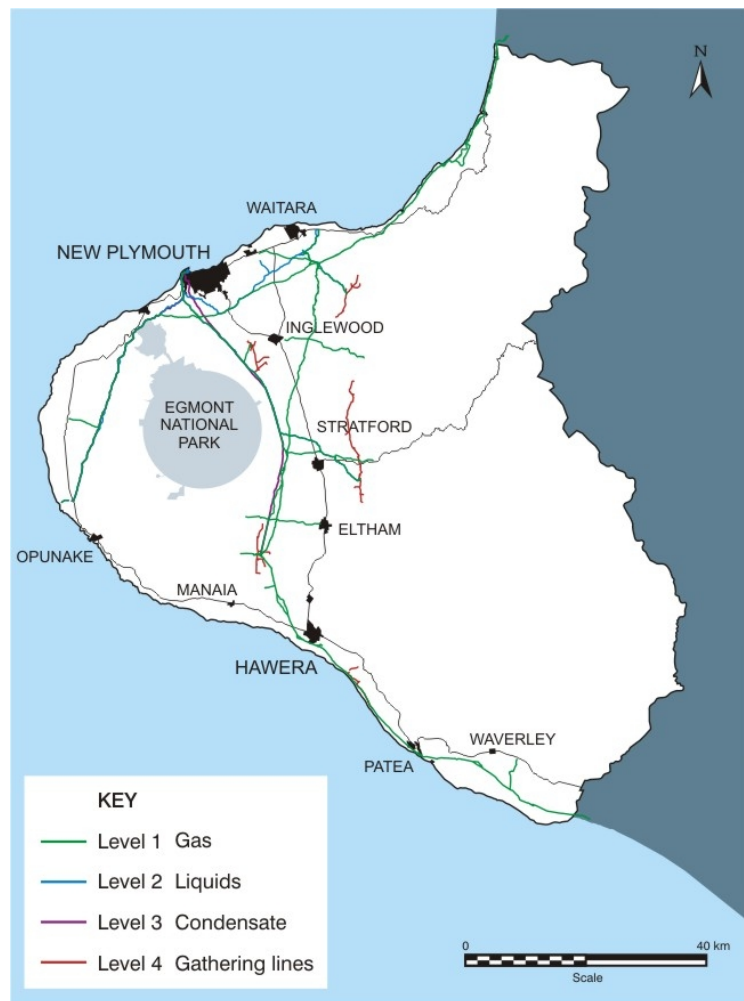
Powerco gas networks in Taranaki consist of polyethylene coated steel pipes and polyethylene pipes. The steel pipes are used for intermediate pressure gas networks operating pressures between 1200kPa – 1500kPa. Polyethylene pipes are generally used for medium pressure gas distribution networks operating pressures between 220kPa – 400kPa.

High pressure petroleum pipelines

NGC manages all the petroleum pipelines in Taranaki, some of which are owned by other companies. Figure 25 shows the approximate location of the pipelines and the products transported.

The pipeline system provides essential links both within the Taranaki oil and gas industry (linking production stations, processing plants, and storage and export facilities), as well as direct oil and gas distribution for national power generation and industry.

Taranaki gas is distributed via high pressure gas pipelines to the natural gas fuelled power stations at Southdown (Papakura), Otahuhu, Huntly, New Plymouth and Taranaki Combined Cycle (Stratford). River Power, Huntly Power Station by Genesis Power and the Otahuhu, New Plymouth and Stratford Power Station's by Contact Energy.



The Southdown Power Station is owned by Mighty

Figure 25 Schematic of pipelines in Taranaki

The major Taranaki industries (identified in Figure 25) that use oil and gas in their operations include:

- Taranaki By-Products Ltd rendering plant (gas)
- Methanex Waitara Valley Ltd methanol plant (methanol and gas)
- Methanex Motunui Ltd methanol production facility (methanol and gas)
- Ballance Agri-Nutrients Kapuni Limited ammonia urea plant (gas)

7.7.9 Telecommunications network

The telecommunication networks in Taranaki are consistent with the majority of the systems available throughout provincial New Zealand i.e. public switch telephone network, internet access and cellular coverage (provided in the more populated areas) etc.

With regard to Broadband access, a Telecom/Venture Taranaki/iTaranaki joint initiative has fast-tracked the installation of Asymmetric Digital Subscriber Line (ADSL) technology to 15 Taranaki telephone exchanges in order to provide broadband coverage to approximately 83% of all the regions subscribers. At the time of Group Plan preparation, Telecom was also partnering with Broadcast Communications Limited (BCL) to develop a wireless solution to the remaining 17% of customers in the more remote/rural areas.

Radio Telephone (RT) networks are also provided within Taranaki, with the bulk of commercially available RT services located on Mount Taranaki/Egmont. Emergency services RT networks are also based on Mount Taranaki, whilst the civil defence emergency management networks are not.

7.8 Services

7.8.1 Health services

A variety of health services operate in Taranaki, each of which have some role or responsibility with regard to civil defence emergency management. It is therefore important that the responsibilities of these organisations are clarified to reduce duplication of effort, as well as ensuring that a more co-ordinated approach to emergency management occurs.

Hospital services

The following hospitals offering general services in Taranaki include:

- Taranaki Base Hospital (TDHB)
- Hawera Hospital (TDHB)
- Southern Cross Hospital (Southern Cross)

Taranaki District Health Board (TDHB) funding

dictates that TDHB hospitals provide a first response in the event of a major incident or disaster. The Southern Cross Hospital may be called upon to assist the TDHB hospitals during a large scale emergency, as would other District Health Board facilities and private hospital facilities outside the region.

The ability of the Southern Cross Hospital to respond may be restricted by the availability of surgeons who have a dual role at both Southern Cross Hospital and any TDHB hospitals.

Health and medical centres

There are five health centres located throughout the region - Stratford, Patea, Opunake, Waitara and Mokau.

Primary health care in the region is provided through various health and medical centres. In every town or city a medical practice has been identified to act as an Emergency Medical Centre in any emergency situation and is contracted to the TDHB to provide such services.



Figure 26 Key medical facilities in Taranaki

Pharmacies

Pharmacies are located throughout the region. TDHB maintains a current database of all pharmacies and will ensure that they have a business continuity plan to guide them through any emergency or major incident. In any major incident there will be the expectation by the community that pharmacies will open for primary health care and any business continuity plan should include this expectation. Furthermore, pharmacies need to meet the health care needs of people by:

- replacing missing medication;
- providing information and advice to the public; and
- providing limited health screening capabilities.

Long stay hospitals, rest homes and retirement homes

The TDHB maintains a database of privately managed facilities for long term hospital care, rest homes and retirement homes which are located throughout the region.

These facilities endeavour to maintain high occupancy rates. Their contingent capability to accommodate extra residents is therefore limited and must be ascertained at the time of need. Should any long stay hospital, rest home or retirement home be disabled in an incident, the public hospitals may only accept injured patients. Private facilities should also have adequate plans in place to transport non-injured patients to similar facilities in unaffected areas. A current strategy is to also deliver health care and home help to people (in need) in their own homes rather than moving people into long term residential care. In the event of a large scale emergency which restricts public mobility, emergency health care services may have to provide some service to this group of people.

Use of Resources

All private health facilities have the same status, in the eyes of the TDHB, as private homes and their resources will only be used when:

- a reciprocal agreement to do so has been reached between the private health facility and the TDHB; or
- a requisition has been made by the Group Controller.

Primary care in the community

After most major disasters, the majority of people injured will have non-acute symptoms or injuries from the event. This means that these people should and could be treated in their own community through primary care organisations, while hospitals are reserved for acute cases.

TDHB Public Health Service

The objective of public health protection is to protect the health of the affected population by environmental controls and maintenance of health standards. This is achieved by inspection, surveillance, co-ordination and advice by the local district health boards (i.e. the Taranaki District Health Board).

Public health protection in the event of an emergency is to provide advice and co-ordination for:

1. Rapid identification, evaluation and communication of present and potential health hazards that could arise from different types of disaster.

2. Measures to control or eliminate public health hazards and to protect affected populations.
3. Appropriate mobilisation and co-ordination of all public health facilities and services.
4. Maintenance and analysis of public health status information within the disaster area.

Taranaki District Health Board Mental Health Services

The TDHB Mental Health Services primary role is assisting with counselling in the community, as required and advised by the Child Young Persons and Family Service (CYF) who is the lead agency for co-ordination of counselling during a local emergency.

7.8.2 Emergency services

Emergency service departments have a specific role to play in CDEM planning and delivery and include the:

- New Zealand Fire Service
- New Zealand Police
- Ambulance Service

The functions and responsibilities of each of these emergency services are outlined below.

New Zealand Fire Service

The New Zealand Fire Service has been established pursuant to section 3 of the Fire Service Act 1975. The service provided, including the establishment of fire districts pursuant to section 26, is therefore defined in this statute.

There are 17 fire districts in Taranaki as shown in Figure 27. In addition to these fire districts, there are also two fire brigade auxiliary units in the rural areas of Toko and Rahotu, allowed for under section 35 of the Fire Service Act. The New Plymouth station is a paid station staffed 24-hours a day by professional fire fighters. All others are stations staffed by volunteer fire fighters.

The functions, powers and duties of the Chief Fire Officer during an emergency involving fire or hazardous substances are outlined in section 28 of the Fire Service Act 1975.

New Zealand Police

Policing in the Taranaki region is provided by the two policing areas of **New Plymouth** and **Taranaki Rural** (see Figure 28). The police officers duties include the response to emergency incidents, and also criminal and traffic policing. The officers work closely with

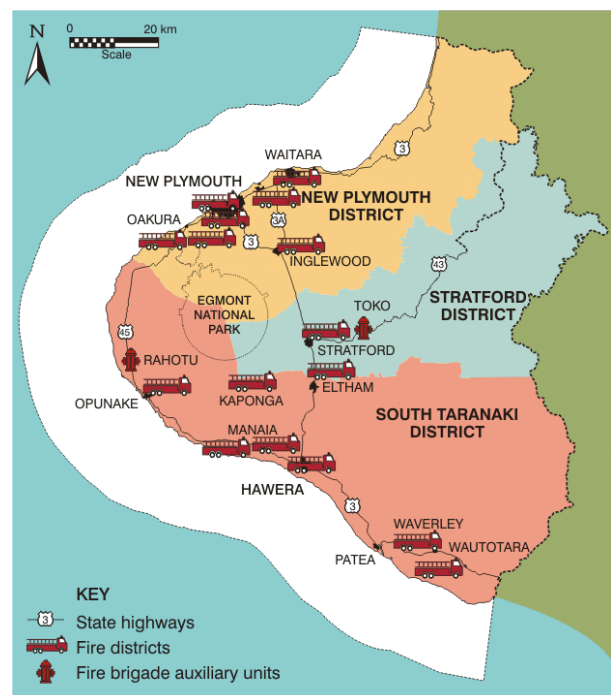
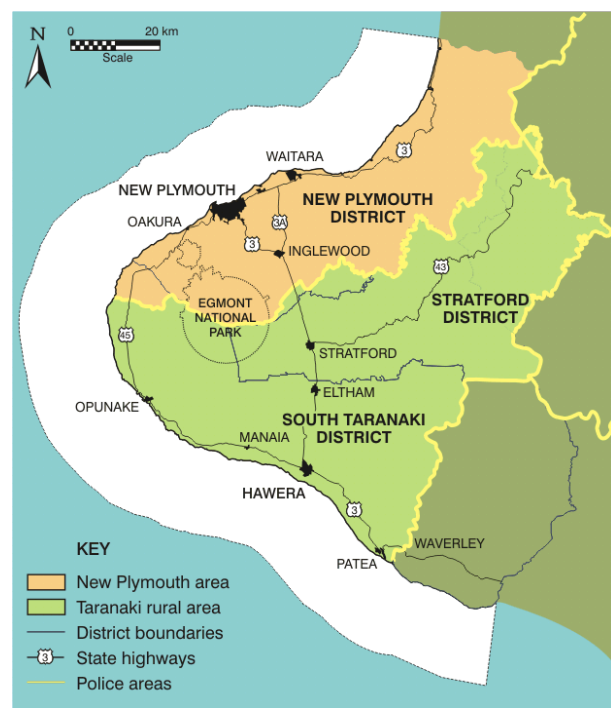


Figure 27 Taranaki fire districts and fire brigade auxiliary units



their communities and often work together with other emergency services within Taranaki.

The police staff in the New Plymouth area are assisted by both paid and voluntary civilian staff. The boundary of the New Plymouth police area follows to a large degree, that of the New Plymouth District Council with minor variations in the extreme north and south western areas. The main police station is located in central New Plymouth, with five other community police stations in the nearby city area. Other stations are also situated at Waitara, Mokau, Inglewood and Okato.

The Taranaki Rural Area Commander for the Police is stationed at Hawera and is supported by police staff and also a number of paid and voluntary civilian staff. The boundary of the Taranaki Rural police area follows to a large extent, the South Taranaki (with the variation that it does not include Waverley) and Stratford District Council boundaries. Police stations in this area are also situated at Stratford, Eltham, Manaia, Patea and Opunake.

Figure 28 Taranaki policing areas

Taranaki District Health Board Ambulance Service

The Ambulance Service consists of both paid staff and volunteer Ambulance Officers throughout the CDEM Group area. Ambulance stations are based at New Plymouth, Inglewood, Stratford, Hawera, Opunake and Patea. There are also Ambulance First Responder teams at Waitara, Urenui and Whangamomona.

The vehicle fleet typically consists of road ambulances, a 4WD Rescue Ambulance, a 10 seater transport van and Executive/Paramedic fully equipped response cars at New Plymouth and road ambulances at Inglewood, Stratford, Hawera, Patea and Opunake. There is also a first response car at Waitara and another volunteer response team at both Urenui and Whangamomona.

The ambulance service operates as a regional resource, centred on a Communications Centre at Taranaki Base Hospital which (at the time of Group Plan preparation) receives all 111 calls for the TDHB district. The National Multiple Casualty Incident Plan can only be activated by the Ambulance Service which enables additional ambulance and air rescue resources from neighbouring districts to assist in an emergency. The TDHB has a Memorandum of Understanding with the Taranaki Rescue Helicopter Trust to utilise the twin engine Squirrel rescue helicopter. The helicopter provides single patient transport only, but allows fast and remote access in emergencies.

A Memorandum of Understanding also exists between the TDHB and the Order of St John Taranaki Community Services to enable the use of their services and first aid vehicles (approximately five) in an emergency.

TDHB has the PRIME (primary response in medical emergency) service in operation. This service ensures general practitioners in the rural areas of Inglewood, Stratford, Eltham, Opunake and Hawera are available and trained to assist in the pre hospital emergency care arena. These doctors are paid to be available to attend emergencies when required which improves the expertise offered in these areas.

7.8.3 Search and rescue

Search and rescue operations in New Zealand are separated into three main categories as follows:

- land searches;
- small area sea searches close to shore; and
- wide area sea/air searches.

The first two categories are the responsibility of the New Zealand Police, who may use their own resources or call on volunteer assistance. Separate volunteer organisations also exist for the land (New Zealand Land Search and Rescue) and sea (Royal New Zealand Coastguard) operations. Wide area searches (and those for aircraft within NZ) are the responsibility of the Civil Aviation Authority.

New Zealand Land Search and Rescue

New Zealand Land Search and Rescue (NZLSAR) was formed in 1994 and replaced the Federated Mountain Clubs Search and Rescue (SAR) subcommittee. This has led to the formation of regional SAR committees of New Zealand Police and volunteers.

New Zealand Land Search and Rescue Inc. is made up of the following organisations:

- Federated Mountain Clubs of New Zealand;
- New Zealand Speleological Society;
- Mountain Safety Council;
- New Zealand Police;
- Department of Conservation; and
- regional representatives from the regional SAR committees.

New Zealand Urban Search and Rescue

New Zealand Urban Search and Rescue (NZ USAR) is a multi-agency operational framework administered by the New Zealand Fire Service and Ministry of Civil Defence & Emergency Management. Urban Search and Rescue (USAR) involves the mobilisation of resources to locate and remove trapped and often injured victims from collapsed structures or environments, bringing together an integrated response of personnel, equipment, communications and logistical support.

New Zealand's USAR national operational capability is made up of Regional Response Teams and a national NZ USAR Task Force with teams based in Palmerston North, Christchurch and Auckland (i.e. a rapid-response national resource). The New Zealand Task Force teams are for 'medium rescue'.

Alternatively, the New Zealand Response Teams deal with 'light rescue' and can also be used as a national resource from a nation wide call out system. There are currently nine rescue teams with a further six to be registered, including one in Taranaki. The USAR programme also integrates specialists such as engineers and search dog capabilities'.

Royal New Zealand Coastguard

The Royal New Zealand Coastguard provides New Zealand's primary maritime search and rescue service. The Coastguard operates from a network of 65 affiliated units, strategically located around the coastline and major lakes of New Zealand. There are four affiliated units in Taranaki, including:

- Coastguard Air Patrol Taranaki Flight;
- Cape Egmont;
- South Taranaki; and
- Taranaki.

Coastguard search and rescue resources are split into three major areas – rescue vessels on the water, radio operators on the marine VHF channels and air patrol units who provide vital air search services.

The Coastguard Air Patrol's main task is air surveillance during a marine search and rescue incident. The New Plymouth Coastguard Air Patrol is one of nine air patrols based in strategic locations around New Zealand. The Air Patrol operates out of the New Plymouth Aero Club and utilises their planes.

7.8.4 Taranaki Rescue Helicopter Trust

The Taranaki Rescue Helicopter Trust operates a rescue helicopter, based at Taranaki Base Hospital and is on call 24 hours a day, 365 days per year. The helicopter normally responds with a pilot, paramedic and crewman, although this configuration can change, depending on the mission. The crew are alpine and marine trained, and are capable of flying up to 100 miles offshore and to most locations onshore. The helicopter can also transport both stretcher or seated patients.

The Trust also leases an aeroplane from Air New Plymouth for inter hospital transfers. This is known as the TET Air Ambulance and can also transport both stretcher or seated patients. This service operates out of a hangar at the New Plymouth Airport.

7.8.5 Government departments

Government departments have a specific role to play in civil defence emergency management planning and delivery. The following (in alphabetical order) have key roles:

Child, Youth and Family

Child, Youth and Family staff manage a wide range of services to carry out statutory and preventative social work practice. This includes working with families and whanau, community agencies and other professionals to:

- protect children;
- manage young offenders;
- ensure that children in need are secure and cared for;
- help families maintain and strengthen their child-rearing role; and
- facilitate the adoption process.

Child, Youth and Family also fund and support a wide range of community-based social services, with a focus on children, young people and families in need of support. Child, Youth and Family have regional offices in New Plymouth and Hawera and two family homes in New Plymouth.

Child, Youth and Family services have accepted the mandate for the co-ordination of counselling services in the event of an emergency.

Department of Conservation

The Department of Conservation (DOC) is the government organisation charged with conserving the natural and historic heritage of New Zealand on behalf of, and for the benefit of, present and future New Zealanders. The Department of Conservation's mission is "to conserve New Zealand's natural and historic heritage for all to enjoy now and in the future".

The Department manages or administers on behalf of New Zealanders national and conservation parks, reserves and conservation areas, protected indigenous forests, protected inland waters, scenic rivers, indigenous/native wildlife, non-commercial freshwater fisheries, historic places on conservation land and marine reserves. Taranaki forms part of the Wanganui conservancy with area offices in both New Plymouth and Stratford. The main conservancy office is in Wanganui.

Should any civil defence emergency event occur in either the Egmont National Park or Sugar Loaf Islands Marine Protected area DOC will be involved in any CDEM planning and response as managers of those areas. DOC also has a representative on the Egmont Volcano Advisory Group.

Housing New Zealand Corporation

Housing New Zealand Corporation provides access to homes, helping New Zealanders manage their own circumstances and contribution to community life. The Corporation was established in July 2001 and has two key roles:

- to deliver housing assistance to those in greatest need; and
- to be the principal adviser to the Government on housing and housing policy.

A Housing New Zealand Corporation Neighbourhood Unit is located in New Plymouth, with a Heartland Service Centre in Hawera. Housing Corp has a national mandate for the co-ordination of housing needs in the event of civil defence emergency.

Inland Revenue Department

The Inland Revenue Department (IRD) collects the bulk of the revenue Government needs to fund its programmes and has the responsibility of collecting taxes on behalf of, and for, the community. As a result, the IRD has the responsibility to safeguard the community's interests by ensuring taxpayers contribute by paying the correct amount of tax.

Inland Revenue have offices in New Plymouth and Hawera. Their mandate in the event of an emergency is to maintain essential services for the assessment, forecasting and collection of Crown revenue and provide an assessment of the impact of the event on Crown revenue collection, as well as to arrange for the continuation of Family Support and Child Support payments to the public.

Local Government

The functions and objectives for local government are established under the Local Government Act 2002. Under section 10 of this statute the purpose of local government is

defined as follows:

- to enable democratic local decision-making and action by, and on behalf of, communities; and
- to promote the social, economic, environmental, and cultural well-being of communities, in the present and for the future.

Local government organisations in New Zealand can be split up into regional councils, district councils and unitary authorities. In Taranaki this includes the Taranaki Regional, New Plymouth District, South Taranaki District and Stratford District Councils.

In general, the responsibilities of the Taranaki Regional Council include the:

- resource management of water, land, air and the coast;
- pest management for both animal and plant pests;
- pollution monitoring and response;
- hazard and emergency management;
- transport planning and passenger transport;
- river control and flood protection;
- improvement, promotion and protection of public health within its district;
- coastal navigation and safety; and
- port company ownership.

For each of the district councils, responsibilities include the:

- integrated management of the effects of land use, development, or protection;
- hazard avoidance or mitigation;
- control of the storage, use, disposal or transportation of hazardous substances;
- control of the subdivision of land;
- noise control and mitigation;
- control of surface water activities in rivers and lakes; and
- provision of community services and utilities.

Each of these four local government organisations also provide extensive local knowledge and experience to the general public, as and when required. This is largely due to their involvement in various community services and development (e.g. roading, swimming pools, libraries etc.).

Maritime Safety Authority of New Zealand

The Maritime Safety Authority of New Zealand (MSA) is a Crown entity established to promote a safe and clean maritime environment at reasonable cost. The key role of MSA is to:

- develop and monitor compliance with maritime safety and environmental protection standards;
- issue seafarer licences;
- provide coastal aids to navigation and maritime distress and safety radio services;
- investigate and analyse the causes of maritime accidents; and
- to prevent and respond to marine oil pollution incidents in NZ waters.

The MSA have a New Plymouth district office at Port Taranaki. Their mandate in the event of an emergency is to:

- Provide maritime related transport advice to the Ministry of Transport at a national level during an emergency.
- Rapidly identify and locate maritime transport resources available.
- Make available any communications capacity available in and contracted to the Maritime Safety Authority, and on vessels suitably equipped and willing to co-operate.
- Assist in logistics planning as required.
- Make available to CDEM organisations any equipment which could be useful in emergencies.
- Provide representation as required at the National Emergency Operations Centre (NEOC), and when requested, to CDEM organisations.

Ministry of Agriculture and Forestry

The Ministry of Agriculture and Forestry (MAF) provides the Government and rural sectors with information, analysis and advice on agricultural and forestry issues. There are four branches of MAF – MAF Biosecurity Authority, MAF Forest Management Group, MAF Policy and MAF Quarantine Service.

MAF Quarantine Services have an office in New Plymouth.

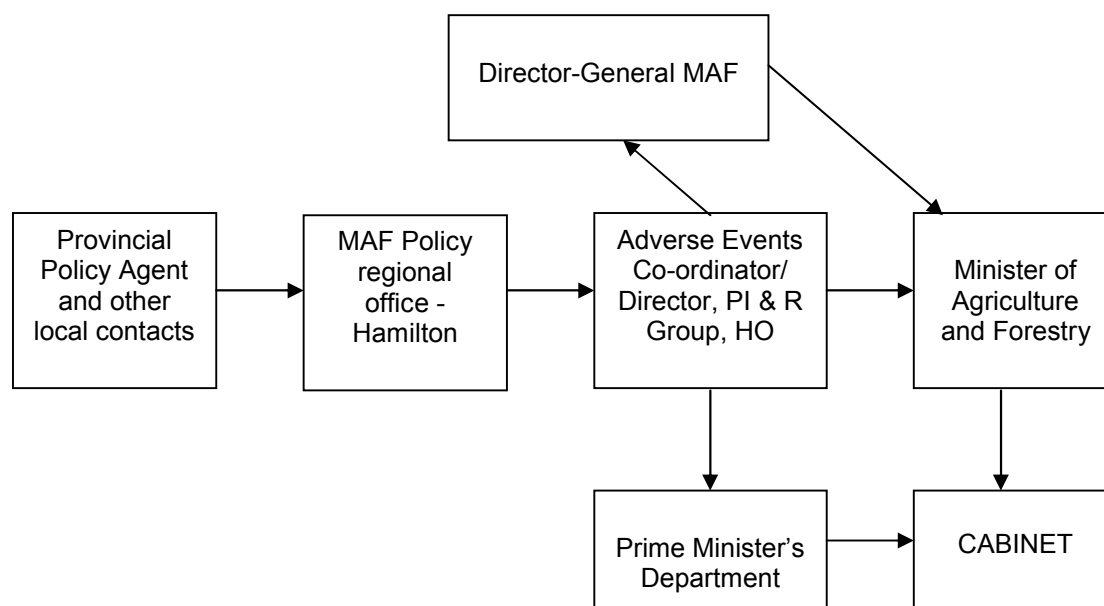


Figure 29 MAF policy emergency management reporting structure

MAF has a key role in CDEM response and co-ordination in rural areas or where there are effects on agriculture and forestry. Their policy emergency management reporting structure is identified in Figure 29.

Ministry of Education

The Ministry for Education's purpose is 'Empowering Education'. The Ministry's role is to therefore facilitate education that enables people to gain knowledge, skills and attitudes so that they can participate fully (socially and economically) in the community. The Ministry aims to create an education system that can respond quickly and effectively to wider social and economic impacts and the needs of different communities, society and employers.

The district office of the Ministry of Education is in Wanganui, with Special Education district offices in both New Plymouth and Hawera. In the event of an emergency the

Ministry, in conjunction with education governing bodies, is to make available resources (for example, the use of buildings) within or close to the affected area to enable CDEM organisations to care and account for victims.

Ministry of Health

The Ministry of Health is the Government's principal agent and advisor on health and disability. It develops policy advice for the Government on the following:

- health and disability issues;
- administers health regulations and legislation;
- funds health and disability support services;
- plans and maintains nationwide frameworks and specifications of services;
- monitors sector performance; and
- provides information to the wider health and disability sector, as well as the public.

The New Zealand Public Health and Disability Act 2000 is the key statute directing Ministry responsibility for the health of local populations, and for ensuring that the needs of individuals and communities are represented at a local level. The Taranaki District Health Board (refer to section 5.4.7) is the mechanism by which the Ministry both funds primary health care services and provides hospital services in the Taranaki community.

New Zealand Customs Service

The New Zealand Customs Service (Customs) is the government agency responsible for protecting the community from potential risks arising from international trade and travel, while facilitating the legitimate movement of people and goods across the border.

Customs exist to protect and enhance the interests of the New Zealand community by:

- minimising the risks to the country arising from international trade and travel;
- facilitating legitimate movement of people and goods across our borders; and
- collecting Customs and excise revenue.

Customs work closely with the other border agencies, the Ministry of Agriculture and Forestry Quarantine Service, and the Immigration Service to maintain and advise on border protection and import/export controls. In the event of an emergency they are to also make available customs protection resources and assist with the expeditious customs clearance of relief aid from overseas. A Customs office is located in New Plymouth, with Customs Officers working closely with Westgate Transport Ltd at Port Taranaki.

New Zealand Defence Force

The mission for the New Zealand Defence Force is to secure New Zealand against any external threat, to protect our sovereign interests (including the Exclusive Economic Zone), and to be able to take action to meet likely contingencies in New Zealand's area of strategic interest.

The Defence Act 1990 provides for armed forces to be raised and maintained for:

- the defence of New Zealand and the protection of its interests;
- the contribution of forces under collective security treaties, agreements or arrangements; and
- the contribution of forces to the United Nations, other organisations or states for operations in accordance with the principles of the United Nations Charter.

The Defence Act also allows the Armed Forces to be made available for the performance of public services and assistance to the CDEM Group in time of emergency, either in New Zealand or elsewhere.

The New Zealand Defence Force includes the Royal New Zealand Navy, New Zealand Army and Royal New Zealand Air Force all operating as 'Three Services - One Force'.

Work and Income

The role of Work and Income New Zealand is to help people find work – and to provide income support when it's needed.

Work and Income works with local communities and client groups to ensure it meets the diverse range of needs of local labour markets. Work and Income operates under a model of regional flexibility - local solutions to local needs. This means that different programmes and pilots may be offered in particular parts of the country or to particular client groups.

Work and Income has a regional office in New Plymouth, managed by a Regional Commissioner. There are also service centres in Hawera, New Plymouth, Stratford and Waitara. In the event of an emergency they will arrange for the continuation of normal benefits and pensions, co-ordinate emergency payments and other emergency financial assistance, identify labour for response and recovery purposes, and provide (on request, advice on welfare issues and activities to the NEOC and CDEM organisations.

7.8.6 Welfare groups

With the separation of the traditional civil defence activities into two clear aspects, strategic advice and direction by the Group Controller and the provision of a co-ordinated emergency welfare response by the Welfare Manager, it is appropriate to provide an overview of the lead non-government organisations (NGO's) involved in welfare response. The following NGO's have accepted national mandates for emergency welfare functions.

New Zealand Red Cross

New Zealand Red Cross is dedicated to the protection of human life and dignity by the alleviation of suffering. Red Cross provides emergency social services during an emergency event. These include maintaining essential supplies and running a national disaster victim enquiry service, together with other activities set out in their emergency management policy.

New Zealand Red Cross operates from a Wellington based national office and six regional offices. The East-West region covers Taranaki, Manawatu/Horowhenua, Wanganui and Hawkes Bay with the Regional Director based in Palmerston North. There is also a Red Cross centre in New Plymouth.

Salvation Army

The Salvation Army is a worldwide church and social services organisation, modelled on quasi-military lines. The territorial headquarters for the Salvation Army, Fiji and Tonga is located in Wellington and the Territorial Commander is the leader responsible for all Salvation Army operations within those geographical boundaries.

'Divisions' and 'corps' operate below territorial level, with the Hawera, Central Taranaki and North Taranaki Corps reporting to the Midland Division in Hamilton. Salvation Army

have accepted the national mandate to, where possible, co-ordinate and provide catering facilities during an emergency.

7.9 Key Features of Taranaki for CDEM

In summary, the following are key features of Taranaki with regard to civil defence emergency management:

- A variety of landforms, physical features and a temperate climate - with few climatic extremes.
- Reliance of the Taranaki economy on natural resources – agriculture, oil and gas (which are of national importance), forestry etc.
- The importance of surface water resources for community water supply, industry and agriculture, in Taranaki.
- A concentration of population in north Taranaki, but also a dispersed rural population and a number of small rural service towns.
- Taranaki's relative geographic isolation, which makes the region more vulnerable to disruptions from hazards.
- A well established civil defence emergency management system with good working relationships between relevant agencies and organisations.
- A well developed infrastructure of: road, rail, urban water supply, sewerage and stormwater systems, electricity generation and transmission, telecommunications, oil and gas production and distribution, deep water port and airport.
- A range of locally based health and emergency services, as well as other services provided by central government departments, local government organisations and welfare groups.

8. Monitoring

8.1 Introduction

Measuring the content and outputs of the Civil Defence Emergency Management Group Plan for Taranaki is essential in determining whether it is achieving the desired outcomes and goals for the community. As this is the first Group Plan developed for Taranaki under the new Civil Defence Emergency Act 2002, the structure for this section has followed advice provided by the Ministry of Civil Defence & Emergency Management's in their guidelines for developing a CDEM Group Plan.

Monitoring within the Group Plan will therefore occur at four different levels as follows:

1. CDEM Group Plan monitoring
2. CDEM Group Plan review
3. Legislative compliance monitoring
4. External monitoring of the Taranaki CDEM Group

The first three of these levels will be undertaken by the Taranaki CDEM Group, whilst the fourth will be completed by the Ministry for Civil Defence & Emergency Management.

8.2 CDEM Group Plan monitoring

Specific actions and targets (refer to section 4 of the Group Plan) have been developed to provide a means by which to progress towards dealing with identified hazards, within the context of community outcomes and Group Plan goals (as identified in section 1 of the Group Plan). CEG will therefore report to the CDEM Group on a regular basis to inform them of progress made in achieving these, or whether there are recognised difficulties in completing any of the actions identified.

In reporting to the CDEM Group, CEG will use the following procedures to measure progress towards meeting the goals of the Group Plan:

1. Identify progress in achieving the Group Plan's targets and actions through annual monitoring reports.
1. Ensure currency and adequacy of the Group Plan through five yearly reviews, or in the interim if necessary.
2. Identify the effectiveness of targeted actions in the Group Plan through the annual business planning process.
3. Gather information and feedback from organisations, groups and individuals involved in civil defence emergency management planning and activity in Taranaki to determine the effectiveness of the Group Plan.

The Taranaki CDEM Group's annual business plans will be the mechanism used to report to the CDEM Group and measure progress in achieving the objectives of the Group Plan.

8.3 CDEM Group Plan review

The Civil Defence Emergency Management Act 2002 requires that the Taranaki CDEM Group must review the Group Plan if it has been operative for five years or more, and it has been more than five years since the Group Plan was last reviewed (section 56).

The Taranaki CDEM Group also has the ability to review the Group Plan (in full or in part) earlier if necessary. Such a review can determine whether assumptions and/or statements made in this Group Plan, and the overall direction taken, continue to be relevant. It would also enable any gaps or inconsistencies to be identified, especially with regard to the coverage of hazards described. Where necessary, any amendments suggested through a Group Plan review process can be made subject to the requirements of sections 56-57 of the Act.

Any review of the Group Plan should include the following:

- Ensure the accuracy of information outlined in the Plan – this may include accuracy of supporting documents, references to organizations and specific components of the Group Plan that are structured in a prescribed manner.
- Assess the practicality of the document – are the targets and actions identified feasible and obtainable?
- Assess the coverage of the document and ascertain whether there are any gaps or deficiencies – this could include reassessing the significant hazards identified, management mechanisms described or the linkages established between the Group Plan and participating organizations.
- Ensure that the document provides for the effective co-ordination of CDEM agencies and organizations within Taranaki – are the roles and responsibilities of different agencies and organizations clearly identified and defined?

8.4 Legislative compliance monitoring

The Taranaki CDEM Group has a statutory requirement (section 17(1)(g) of the Act) to promote and raise awareness of compliance with the Civil Defence Emergency Management Act and legislative provisions relating to the purpose of this Act (i.e. other statutes). This includes, but is not limited to:

- Biosecurity Act 1993;
- Building Act 1991;
- Fire Service Act 1975;
- Forest and Rural Fires Act 1977;
- Hazardous Substances and New Organisms Act 1996;
- Health Act 1956;
- Health and Safety in Employment Act 1992;
- Local Government Act 1974 and 2002;
- Maritime Transport Act 1994;
- Resource Management Act 1991; and
- any enactment passed in amendment of or substitution for any of the Acts identified above.

The main purpose of this compliance monitoring process is to assess each of the statutes having a bearing upon emergency management outcomes, identify any weaknesses in the arrangements for CDEM in Taranaki and work to collaboratively improve them. As statutes can change and the responsibility for civil defence emergency management can subsequently alter, it is important that awareness and regular monitoring of these changes by the CDEM Group occurs. Should any gaps and inconsistencies be identified in this process, consultation on the issues and options available is to occur with lead agencies and organizations.

The CDEM Group is also required to monitor and report on compliance within Taranaki with the specific requirements of the Civil Defence Emergency Management Act 2002 and legislative provisions relevant to the purpose of this Act (section 17(1)(h) of the Act).

8.5 External monitoring of the Taranaki CDEM Group

Pursuant to section 8 of the Act, the Director of the Ministry of Civil Defence & Emergency Management has the function to 'monitor the performance of the CDEM Groups and persons who have responsibilities under this legislation'. Key components of this monitoring requirement have therefore been identified by the Ministry as:

1. Progress monitoring against the development or planning milestones of each CDEM Group Plan – regular updates to the Ministry by the Taranaki CDEM Group will ensure that that this information is disseminated in a collaborative and informative manner.
2. The quality of outputs achieved – this may involve the Ministry evaluating the Taranaki CDEM Groups intentions, activity and quality of output.

Effective mechanisms for providing up-to-date information to the Ministry on these issues include:

- the Taranaki CDEM Annual Action Plan and Business Plan reports;
- the State of the Environment report for Taranaki – natural hazards section;
- Long Term Council Community Plan reports; and
- training records of the CDEM Group.

APPENDICES

Appendix 1: Hazardous Substances Technical Liaison Committee terms of reference

The Hazardous Substances Technical Liaison Committee (HSTLC) shall be an advisory group to the Taranaki Civil Defence Emergency Management Group, through the Co-ordinating Executive Group. The HSTLC will be chaired by the New Zealand Fire Service and administered by the Taranaki Regional Council.

Composition

The composition of the HSTLC shall be divided into two distinct groups. The first group (tier 1) comprises emergency services and the principal statutory agencies that will attend regular meetings of the HSTLC. The second group (tier 2) comprises agencies that may provide specialist advisors for initial response and emergency planning/training.

Tier 1	Tier 2	
New Zealand Fire Service	Land Transport Safety Authority	Westgate Transport Ltd
New Zealand Police	Maritime Safety Authority	Dynea NZ Ltd
TDHB Ambulance Service	Civil Aviation Authority	Ballance Agri-Nutrients Ltd
TDHB Public Health	NZMP	NGC New Zealand Ltd
Occupational Safety and Health	Shell Todd Oil Services	Contact Energy
New Plymouth District Council	Methanex New Zealand Ltd	Tranz Rail Ltd
Stratford District Council	TDHB Medical Advisor	Taranaki Regional Council
South Taranaki District Council	Dow Agro Sciences	
Taranaki Regional Council	New Zealand Police - CVIU	

Functions

The functions of the HSTLC are to:

1. Provide a specialist response group capable of providing expert advice for the safe and effective management of hazardous substance emergencies.
2. Provide a forum for discussion of issues relevant to hazardous substances and the provision of advice, including planning and review to the Co-ordinating Executive Group.
3. Assist with the development of hazardous substance incident action plans deemed necessary by the CDEM Group.
4. Assist with the development of the Taranaki Civil Defence Emergency Management Group Plan.

Meetings

The HSTLC will meet on a quarterly basis to conduct routine business. Working groups may be established, within the HSTLC, to address matters of specific concern (e.g. training, exercises, contingency planning etc.). If requested by any agency with statutory responsibility, the Taranaki Regional Council will arrange for an incident debrief to be conducted outside the normal meeting schedule.

Appendix 2: Rural Advisory Group terms of reference

The Taranaki Rural Advisory Group (RAG) will be an advisory group to the Taranaki Civil Defence Emergency Management Group, through the Co-ordinating Executive Group.

The Taranaki Rural Advisory Group will be administered by the Taranaki Regional Council.

Composition

Membership will comprise appropriate representatives from:

AgriQuality
Wrightson Solutions Ltd.
Road Transport Association
Federated Farmers
Taranaki Farmers
Livestock Improvement Corporation
Ravensdown Fertiliser Co-operative
Meat Industry Association
Fonterra
Taranaki Branch Veterinarians Association
Tegel Processing Plant
Department of Conservation
Parininihi Ki Waitotara Inc (PKW)
Taranaki Rural Fire Association (Chair)
MAF Policy
Taranaki Regional Council

Functions

1. Provide advice on rural issues across the 4 R's to the Taranaki CDEM Group.
2. Provide a forum for planning across the sector in terms of continuity plans.
3. Assist with the development of the Taranaki Civil Defence Emergency Management Plan.
4. To represent the rural sector with regard to civil defence emergency management matters in Taranaki.

Meetings

The Taranaki Rural Advisory Group will meet no more than four times per year, whilst the initial CDEM Plan work is being undertaken. These will be scheduled prior to the Co-ordinating Executive Group (CEG) meetings, to allow for reports to be presented.

Appendix 3: Welfare Advisory Group terms of reference

The Taranaki Welfare Advisory Group (WAG) will be an advisory group to the Taranaki Civil Defence Emergency Management Group, through the Co-ordinating Executive Group.

The Taranaki Welfare Advisory Group will be administered by the Taranaki Regional Council.

Composition

Membership will comprise appropriate representatives from:

- Taranaki Regional Council (3 members)
- Child Youth and Family Services (2 members)
- Department of Work and Income (1 member)
- Red Cross (1 member)
- North Taranaki Neighbourhood Support (1 member)
- Salvation Army, New Plymouth (1 member)
- Salvation Army, Stratford (1 member)
- Salvation Army, Hawera (1 member)
- Housing NZ New Plymouth and Wanganui (2 members)
- Taranaki District Health Board (1 member)
- Victim Support, New Plymouth (1 member)
- Victim Support, Stratford (1 member)
- Victim Support, Hawera (1 member)
- ADRACare (1 member)
- Taranaki Lifeline (1 member)
- Department of Work and Income Wanganui (1 member)

Functions

1. Provide advice on welfare related issues across the 4 R's to the Taranaki CDEM Group.
2. Provide a forum for planning across the sector in terms of continuity plans.
3. Assist with the development of the Taranaki Civil Defence Emergency Management Plan.

Meetings

The Taranaki Welfare Advisory Group will meet no more than four times per year, whilst the initial CDEM Plan work is being undertaken. These will be scheduled prior to the Co-ordinating Executive Group (CEG) meetings, to allow for reports to be presented.

Appendix 4: Lifelines Advisory Group terms of reference

The Taranaki Lifelines Advisory Group (LAG) shall be an advisory group to the Taranaki Civil Defence Emergency Management Group, through the Co-ordinating Executive Group. The Lifelines Advisory Group will be administered by the Taranaki Regional Council.

Composition

Membership will comprise appropriate representatives from:

Transportation

New Plymouth District Council
Stratford District Council
South Taranaki District Council
Transit New Zealand
Toll Rail
Westgate Transport
New Plymouth Airport

Energy

Powerco
Contact Energy
TrustPower
TransPower
Methanex
Swift Energy
Shell Todd Oil Services
NGC New Zealand

Communications

Telecom
Broadcast Communications Ltd

Water and Waste

New Plymouth District Council

Functions

The functions of the Lifelines Advisory Group are to:

1. Provide technical advice on lifeline issues across the 4 R's to the Taranaki CDEM Group.
2. Provide a lifeline forum to address integrated CDEM planning and preparedness.
3. Assist with the development of the Taranaki Civil Defence Emergency Management Group Plan.

Meetings

The Taranaki Lifelines Advisory Group will meet no more than four times per year, whilst the initial CDEM Plan work is being undertaken. These meetings will be scheduled prior to the Co-ordinating Executive Group (CEG) meetings, to allow for reports to be presented.

Appendix 5: Egmont Volcano Advisory Group terms of reference

The Egmont Volcano Advisory Group (EVAG) shall be an advisory group to the Taranaki Civil Defence Emergency Management Group, through the Co-ordinating Executive Group (CEG). The EVAG will be chaired by a member of the EVAG on a two-yearly rotational basis and administered by the Taranaki Regional Council.

Composition

The composition of the EVAG will be determined by the CDEM Group in order to provide expert scientific advice on readiness, reduction, response and recovery issues relating to the Egmont Volcano. The CDEM Group may also co-opt members as required.

Membership will comprise appropriate representatives from:

Taranaki Regional Council	(2 members)
Institute of Geological and Nuclear Sciences	(2 members)
Massey University.....	(2 members)
University of Auckland	(2 members)
Department of Conservation.....	(1 member)

Functions

The functions of the Egmont Volcano Advisory Group are to:

1. Provide a forum for discussion of issues relevant to volcanic hazard and the provision of advice to the Co-ordinating Executive Group or Group Controller as appropriate.
2. Assist with the development of volcanic hazard planning documents deemed necessary by the CDEM Group.
3. Assist with the development of the Taranaki Civil Defence Emergency Management Group Plan.
4. Assist with the development and implementation of volcano awareness outreach programmes and educational resources.
5. Members should also advise the Taranaki Regional Council if research activities being undertaken on the volcano are drawn to their attention.
6. Provide expert comment on the Taranaki Volcano – Seismic Network annual report.

Meetings

The EVAG will meet on an annual basis to conduct routine business. Members may also request additional meetings of the EVAG, through the Taranaki Regional Council, if required.

Appendix 6: Declaration of a state of local emergency

Pursuant to section 68 of the Civil Defence Emergency Management Act 2002,

I, _____
[full name]

declare that a state of local emergency exists in

[name of the Civil Defence Emergency Management Group area, district or ward]

This state of local emergency comes into force on the date of this declaration *(or omit final words and substitute a specified later date)*

_____ on _____
[time] [date]

This state of local emergency shall terminate on the commencement of the seventh day after the date on which it was declared *(or omit final words and substitute a specified earlier date and time)*

_____ on _____
[time] [date]

In the absence or unavailability of the Group Controller, for whatever reason, the following Alternative Group Controllers are identified in order of precedence:

- | | |
|----------|----------|
| 1) _____ | 3) _____ |
| 2) _____ | 4) _____ |

Declared by: _____

Designation: _____

Time and date of declaration: _____

Public notice of this declaration must be given forthwith by such means as reasonably practicable and it must be published in the Gazette as soon as practicable.

Appendix 7: Declaration extending a state of local emergency

Pursuant to section 71 of the Civil Defence Emergency Management Act 2002,

I, _____
[full name]

extend the state of local emergency declared in respect of

[name of the Civil Defence Emergency Management Group area, district or ward]

on _____
[specify date of declaration]

until _____ on _____
[specify the time and date, which must not be later than the commencement of the seventh day after the date of this declaration]

Declared by: _____

Designation: _____

Time and date of declaration: _____

Public notice of this declaration must be given forthwith by such means as reasonably practicable and it must be published in the Gazette as soon as practicable.

Appendix 8: Declaration terminating a state of local emergency

Pursuant to section 72 of the Civil Defence Emergency Management Act 2002,

I, _____
[full name]

terminate the state of local emergency declared in respect of

[name of the Civil Defence Emergency Management Group area, district or ward]

The termination of the state of local emergency takes effect from

[date]

Declared by: _____

Designation: _____

Time and date of declaration: _____

Public notice of this declaration must be given forthwith by such means as reasonably practicable and it must be published in the Gazette as soon as practicable.

Appendix 9: Matrix of responsibilities – response and recovery

Agency	Responsibility																																														
	Evacuation	Law and Order	Firefighting urban	Firefighting rural	SAR urban	SAR marine	SAR land	Medical/health management	Water supplies	Electricity	Gas distribution/transmission	State highways	Local highways and roads	Storm water	Sewerage	Telephone landline	Telephone cellular	Radio communications	Railway	Airport facilities	Air traffic control	Port	Inter-service communications	Animal welfare	Damage limitation	Warnings	Registration	Welfare Co-ordination	Housing	Counselling/support	Emergency feeding	Clothing	Temporary shelter	Public enquiries	Pubic information	Media co-ordination	Emergency grants etc.	Labour management	Response Co-ordination	Flood protection works	Coastal protection woks	Disaster Relief Fund					
Airways Corporation																						P																									
Alpine Cliff Rescue Team					S		S	S																																							
Amateur Radio Emergency Corps					S	S	S											S					S																								
Automobile Association												S	S																																		
Broadcast Communications Ltd																	S	S	P																												
Child Youth and Family																											S	S		P							S										
Church groups																																															
Contact Energy										P							S																														
Department of Conservation				P		S	S																S	S																							
Federated Farmers																								S																							
Fonterra					S																			S																							
Forestry owners				S																																											
Housing New Zealand																													P					S													
Institute of Geological and Nuclear Sciences																											P																				
Lifeline Taranaki																															S																
Local GP's/medical centres								S																																							
Local print media																																															
Local radio media																																															
MetService																											P																				
Ministry of Agriculture and Forestry ⁴⁶																								P																							
Ministry of Civil Defence & Emergency Management																							S				P		S									S	P	P							
Ministry of Health								S																				P																			
National media																																															
National Rural Fire Authority				S	S																							P																			
Neighbourhood Support																															S																
New Plymouth District Council				P					P			S	P	P	P																																
New Plymouth District Council (Airport Authority)																					P																										
New Zealand Defence Force	S	S																							S																						
New Zealand Fire Service	S		P	S	P				S														S		P	P																					
New Zealand Police	P	P			S	P	P	S															S				P											S									
NGC											P																																				
Order of St John								S																																							
Powerco										P	P																																				
Local roading contractors												S	S																																		
Red Cross					S			S																									P		P												

⁴⁶ The primary role/responsibility of the Ministry of Agriculture and Forestry associated with animal welfare relates only to the recovery phase and not response.

Agency	Responsibility																																												
	Evacuation	Law and Order	Firefighting urban	Firefighting rural	SAR urban	SAR marine	SAR land	Medical/health management	Water supplies	Electricity	Gas distribution/transmission	State highways	Local highways and roads	Storm water	Sewerage	Telephone landline	Telephone cellular	Radio communications	Railway	Airport facilities	Air traffic control	Port	Inter-service communications	Animal welfare	Damage limitation	Warnings	Registration	Welfare Co-ordination	Housing	Counselling/support	Emergency feeding	Clothing	Temporary shelter	Public enquiries	Pubic information	Media co-ordination	Emergency grants etc.	Labour management	Response Co-ordination	Flood protection works	Coastal protection woks	Disaster Relief Fund			
Road Transport Association												S	S																																
Salvation Army																															P														
Service clubs																															S	S	S												
South Taranaki District Council				P				P				S	P	P	P																			S		P	P	S							
Southern Cross							S		P																									S	P	P									
State highway contractors												S	S																																
Stratford District Council				P				P				S	P	P	P																			S		P	P	S							
Taranaki CDEM Group																						P				S	P	P	S	S	S	S	S	P	P	P	P		S	P					
Taranaki Coastguard						S							S			S																													
Taranaki Disaster Relief Trust Fund Trustees																																													P
Taranaki District Health Board								P	S					S	S					S		S				P				S												P	P		
Taranaki Regional Council					S																	S				P			S					S								P	P		
Taranaki Rescue Helicopter Trust					S	S	S	S																																					
Telecom																P	P																												
Transit New Zealand												P																																	
Toll NZ																			P																										
Veterinarians Association																								S																					
Victim Support																													S																
Vodafone																	P																												
Westgate Transport Ltd						S																P																			P	P			
Work and Income																																								P	S				

Note: the shaded lines in this table have been included to make it easier to read across the lines.

Appendix 10: Recovery Facilitator's terms of reference

The Taranaki Civil Defence Emergency Group confirms the active appointment of:

_____ (full name)

as Taranaki Civil Defence Emergency Management Group Recovery Facilitator. The active appointment is effective from:

_____ (day, date, time)

and will cease at (unless amended earlier):

_____ (day, date, time)

Where the appointee is not an employee of a member of the Taranaki Civil Defence Emergency Management Group, a contract for services will be entered into between the appointee (or their employer) and the administering authority.

Where the appointee is not a person named in section 0 of the Taranaki Civil Defence Emergency Management Group Plan, the appointee must first be approved by a full meeting of the Taranaki Civil Defence Emergency Management Group.

Functions and duties

The specific duties of the Recovery Facilitator are to:

- Establish an appropriate management structure for the co-ordination of recovery efforts across the Taranaki Civil Defence Emergency Management Group area, consistent with the Taranaki Civil Defence Emergency Management Group Plan.
- Establish an office for the co-ordination of recovery efforts in consultation with the administering authority and agencies with a primary role in recovery
- Ensure the collection, collation, and analysis of impact assessments undertaken by agencies during the response.
- Identify and seek to resolve gaps in the impact assessment(s) if necessary.
- Plan and implement recovery options in conjunction with agencies and the affected community.
- Establish priorities for recovery works and deadlines.
- Identify whether adequate statutory or regulatory authorities exist to aid recovery.
- Consider resource requirements including equipment, facilities, personnel, and funding for the recovery management function.
- Actively promote donations that are consistent with the needs of the community.
- Identify and establish systems through the Taranaki Disaster Relief Trust Fund for equitable distribution of relief funds and donated goods made available to the Recovery Facilitator.
- Disseminate information to agencies and the affected community.
- Identify and establish systems for financial accountability of the recovery operation in line with the Civil Defence Emergency Management administering authority.

- Inform and advise the Taranaki Civil Defence Emergency Management Group on a regular basis.
- Inform and advise the Ministry of Civil Defence & Emergency Management on a regular basis.

Management structure

The management structure is outlined in section 6.4 of the Group Plan. The Recovery Facilitator must recognise the considerations of the day and adapt the structure below the position of Recovery Facilitator accordingly.

Financial delegation

Financial delegations are outlined in section 0 of the Group Plan. Where the appointee is a staff member of the administering authority, the financial delegation for day-to-day business, or the Recovery Facilitator financial delegation (whichever is the greater) will be recognised.

Reporting

The Recovery Facilitator will report to the Taranaki Civil Defence Emergency Management Group through the administering authority on an as required basis.

I, _____ (*full name*), hereby accept the appointment described above as Recovery Facilitator for the term outlined above. I further understand that the appointment is dedicated full time to the Taranaki Civil Defence Emergency Management Group.

(*signed and dated*)

Signed on behalf of the Taranaki Civil Defence Emergency Management Group:

(*Chief Executive, Taranaki Regional Council*)

Appendix 11: Minor amendments and corrections

The Taranaki Civil Defence Emergency Management Group may under section 57 of the Civil Defence Emergency Management Act 2002 make minor amendments to this Plan, provided they will have no effect or no likely effect on the rights of any person.

The following minor amendments and corrections have been made to the Plan since it was approved:

Section	Amendment	Date
5.5.3	Okato College deleted, Okato Area School inserted	
5.5.3	Opunake Primary School deleted, Opunake High School inserted.	