



Agenda for a meeting of the Strategy & Finance Committee of the Waikato District Council to be held in the Council Chambers, District Office, 15 Galileo Street, Ngaruawahia on **TUESDAY 23 FEBRUARY 2016** commencing at **9.00am**.

Information and recommendations are included in the reports to assist the Committee in the decision making process and may not constitute Council's decision or policy until considered by the Committee.

1. APOLOGIES AND LEAVE OF ABSENCE

2. CONFIRMATION OF STATUS OF AGENDA ITEMS

Ms K Bredenbeck, representative from Huntly iSite will be in attendance from 9.00am to discuss item 6.1.

3. DISCLOSURES OF INTEREST

4. CONFIRMATION OF MINUTES 3

Meeting held on Monday 23 November 2015.

5. MATTERS ARISING FROM MINUTES

6. RECEIPT OF SUBCOMMITTEE MINUTES

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7. REPORTS

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GJ Ion

CHIEF EXECUTIVE

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Open Meeting

To	Strategy & Finance Committee
From	GJ Ion Chief Executive
Date	4 December 2015
Prepared By	LM Wainwright Committee Secretary
Chief Executive Approved	Y
DWS Document Set #	1106342
Report Title	Confirmation of Minutes

1. Executive Summary

The minutes of a meeting of the Strategy & Finance Committee held on Monday 23 November 2015 are submitted for confirmation.

2. Recommendation

THAT the report of the Chief Executive – (*Confirmation of Minutes*) - be received.

3. Attachments

S&F Minutes 23 November 2015



MINUTES of a meeting of the Strategy & Finance Committee held in the Council Chambers, District Office, 15 Galileo Street, Ngaruawahia on **MONDAY 23 NOVEMBER 2015** commencing at **1.00pm**.

Present

Cr JC Baddeley (Chairperson)
 His Worship the Mayor, Mr AM Sanson
 Cr R Costar
 Cr DW Fulton
 Cr JM Gibb
 Cr WD Hayes
 Cr SD Lynch
 Cr RC McGuire
 Cr LM Petersen
 Cr JD Sedgwick *[until 3.02pm, from 3.22pm to 3.33pm]*
 Cr NMD Smith *[until 2.46pm]*
 Cr MR Solomon
 Cr GS Tait

Attending

Mr GJ Ion (Chief Executive)
 Mr TG Whittaker (General Manager Strategy & Support)
 Ms S Duignan (General Manager Customer Support)
 Mr TN Harty (General Manager Service Delivery)
 Mrs L Wainwright (Committee Secretary)
 Mr K Abbot (Organisation Planning & Project Support Team Leader)
 Ms D Dalbeth (Business Analyst)
 Mr V Ramduny (Planning & Strategy Manager)
 Mr R MacCulloch (Regulatory Manager)
 Mr C Morgan (Economic Development Manager)
 Ms J Macartney (Senior Policy Planner)
 Ms A Diaz (Finance Manager)
 Ms K Newell (Local CDEM Co-ordinator)
 Mr S Thompson (Financial Operations Team Leader)
 Ms J Vernon (Strategic Planning & Resource Management Team Leader)
 Mr D Totman (Strategic Planning Project Manager)
 Ms M Devlin (Chairperson, Audit & Risk Committee)
 Members of staff

S&F1511/01 APOLOGIES AND LEAVE OF ABSENCE

Resolved: (Crs Costar/Lynch)

THAT an apology be received from and leave of absence granted to Cr Church.

CARRIED on the voices

S&F1511/02 CONFIRMATION OF STATUS OF AGENDA ITEMS

S&F1511/02/1 Resolved: (Crs Sedgwick/Gibb)

THAT the agenda for a meeting of the Strategy & Finance Committee held on Monday 23 November 2015 be confirmed and all items therein be considered in open meeting with the exception of those items detailed at agenda item 8 which shall be discussed with the public excluded.

CARRIED on the voices

S&F1511/03 DISCLOSURES OF INTEREST

There were no disclosures of interest.

S&F1511/04/1 CONFIRMATION OF MINUTES

Resolved: (His Worship the Mayor/Cr Tait)

THAT the minutes of a meeting of the Strategy & Finance Committee held on Monday 12 October 2015 be confirmed as a true and correct record of that meeting.

CARRIED on the voices

S&F1511/05 MATTERS ARISING FROM THE MINUTES

There were no matters arising from the minutes.

S&F1511/06

REPORTS

S&F1511/06/1

Placemaking Strategy
Item 6.1**Resolved: (Crs Gibb/Smith)****THAT** the report of the General Manager Strategy and Support-
Placemaking Strategy - be received;**AND THAT** the Committee recommends that the Placemaking
Strategy, together with the following documents, are adopted by
Council:

- Placemaking Implementation Plan
- Placemaking Project Plan
- Placemaking Guidelines and
- Placemaking Assessment Sheet.

CARRIED on the voices

S&F1511/06/2

Heritage Project Fund
Item 6.2**Resolved: (Crs McGuire/Costar)****THAT** the report of the General Manager Strategy and Support –
Heritage Project Fund - be received;**AND THAT** the Committee recommends that the Heritage
Project Fund Policy, together with the following documents, are
adopted by Council:

- Heritage Project Fund Application Form
- Heritage Project Fund Guidelines
- Heritage Project Accountability Form.

CARRIED on the voices

S&F1511/06/3

2015-2016 Quarterly Residents' Satisfaction Survey
Item 6.3**Resolved: (Crs Fulton/Sedgwick)****THAT** the report of the General Manager Strategy & Support –
2015-2016 Quarterly Residents' Satisfaction Survey - be received.**CARRIED on the voices**

S&F1511/06/4 Community Engagement update
Item 6.4

Resolved: (Crs Petersen/Gibb)

THAT the report of the General Manager Strategy & Support – *Community Engagement update* – be received.

CARRIED on the voices

S&F1511/06/5 Economic Development Strategy
Item 6.5

Resolved: (Crs McGuire/Gibb)

THAT the report of the General Manager Strategy and Support – *Economic Development Strategy* - be received;

AND THAT the Strategy and Finance Committee recommend the Economic Development Strategy to Council for adoption.

CARRIED on the voices

Cr Sedgwick requested her dissenting vote be recorded.

S&F1511/06/6 Resolution of Appeals to Variation 13 to Plan Change 14 (Prohibition of Transferable Rural Lot Rights across Territorial Boundaries)
Item 6.6

Resolved: (Crs Petersen/Hayes)

THAT the report of the General Manager Strategy & Support – *Resolution of Appeals to Variation 13 to Plan Change 14 - Prohibition of Transferable Rural Lot Rights across Territorial Boundaries* – be received;

AND THAT, pursuant to clause 20 in Schedule 1 of the Resource Management Act 1991, staff shall arrange a public notice that declares operative the provisions in Variation 13 to Plan Change 14, including the appellants' exception rules contained in the consent order issued by the Environment Court.

CARRIED on the voices

Cr Smith requested his abstention be recorded.

S&F1511/06/7 2015-2016 1st Quarter LTP KPI update
Item 6.7

Resolved: (Crs Hayes/Sedgwick)

THAT the report of the General Manager Strategy & Support – 2015-2016 1st Quarter LTP KPI update - be received.

CARRIED on the voices

S&F1511/06/8 Financial Review of Key Projects
Item 6.8

Resolved: (His Worship the Mayor/Cr Petersen)

THAT the report of the Chief Executive – *Financial Review of Key Projects* be received.

CARRIED on the voices

S&F1511/07 REPORTS – For Information

S&F1511/07/1 Local Government Funding Agency Annual Report 2015
Item 7.1

Resolved: (Crs McGuire/Sedgwick)

THAT the report of the General Manager Strategy & Support – *Local Government Funding Agency Annual Report 2015* – be received.

CARRIED on the voices

S&F1511/07/2 Approved Counterparty Review
Item 7.2

Resolved: (Crs Gibb/Hayes)

THAT the report of the General Manager Strategy & Support – *Approved Counterparty Review* - be received.

CARRIED on the voices

S&F1511/07/3 Summary of Movements in Discretionary Funds to 11 November 2015
Item 7.3

Resolved: (Crs Petersen/Costar)

THAT the report of the General Manager Strategy & Support – *Summary of Movements in Discretionary Funds to 11 November 2015* – dated 11 November 2015 be received.

CARRIED on the voices

S&F1511/07/4 Civic Assurance Half Yearly Accounts to 30 June 2015
Item 7.4

Resolved: (Crs Tait/McGuire)

THAT the report of the General Manager Strategy & Support – *Civic Assurance Half Yearly Accounts to 30 June 2015* – be received.

CARRIED on the voices

S&F1511/07/5 Community Response Master Plan
Item 7.5

Resolved: (Crs Gibb/Lynch)

THAT the report of the General Manager Customer Support - *Community Response Master Plan* - be received.

CARRIED on the voices

S&F1511/07/6 Hauraki Gulf Forum Minutes
Item 7.6

Resolved: (Cr McGuire/His Worship the Mayor)

THAT the report of the General Manager Strategy & Support – *Hauraki Gulf Forum Minutes and Annual Report* - be received.

CARRIED on the voices

S&F1511/08

EXCLUSION OF THE PUBLIC**Resolved: (Crs Costar/Smith)****THAT the public be excluded from the meeting during discussion on the following items of business:**

- 1. Confirmation of Minutes – 12 October 2015**
- 2. Annual Report – Strada Corporation Limited**
- 3. Strada Corporation Limited Quarterly Report**
- 4. Professional Negligence and Weathertight Homes claim – Six Monthly Report**
- 5. Rates Write Off – Unrecoverable Properties**
- 6. Ngaruawahia Structure Plan – Proposed Rezoning Plan Change**

This resolution is made in reliance on section 48(1)(a) of the Local Government Official Information and Meetings Act 1997 and the particular interest protected by section 7 of that Act which would be prejudiced by the holding of the relevant part of the proceedings of the meeting in public is as follows:

That the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information where the withholding of the information is necessary to:

- a. Protect members, or officers, or employees of any local authority, or any persons to whom section 2(5) of the Local Government Official Information and Meetings Act 1997 applies, from improper pressure or harassment;**
- b. Protect the privacy of natural persons, including that of deceased natural persons;**
- c. Prevent the disclosure or use of official information for improper gain or improper advantage;**

AND THAT the exclusion of the public from the whole or relevant part of the proceedings of the meeting is necessary to enable the local authority to deliberate in private on its decision or recommendation in any proceedings before the local authority where a right of appeal lies to any Court or Tribunal against the final decision of the local authority in those proceedings.

CARRIED on the voices

Resolutions S&F1511/09 – S&F1511/12 are contained in the public excluded section of these minutes.

Having resumed open meeting the following item was released into open meeting:

S&F1511/13**REPORTS (continued)**

S&F1511/13/1

Ngaruawahia Structure Plan - Proposed Rezoning Plan Change
Item PEX 3.5

It was resolved [Res S&F1511/13/1] during the public excluded section of the meeting that the following resolution be released into open meeting but the report remain confidential and unavailable to the public.

'Resolved: (His Worship the Mayor/Cr Gibb)

THAT the report of the General Manager Strategy and Support – Ngaruawahia Structure Plan - Proposed Rezoning Plan Change - be received;

AND THAT the Committee recommends that Council support the approach of a plan change for rezoning;

AND FURTHER THAT the recommendation be released into open meeting but the report remain confidential and unavailable to the public.

CARRIED on the voices'

S&F1511/13/2

Audit & Risk Committee Key Achievements
Item 6.9

Ms Devlin gave a verbal report and answered questions of the committee.

Resolved: (Crs Gibb/McGuire)

THAT the report of the General Manager Strategy & Support – Audit & Risk Committee Key Achievements – be received;

AND THAT the report be approved for presentation to the Strategy & Finance Committee.

CARRIED on the voices

There being no further business, the meeting was declared closed at 3.33pm.

Minutes approved and confirmed this

day of

2016.

JC Baddeley

CHAIRPERSON

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Open Meeting

To	Strategy & Finance Committee
From	GJ Ion Chief Executive
Date	3 February 2016
Prepared By	RJ Gray Council Support Manager
Chief Executive Approved	Y
DWS Document Set #	1144115
Report Title	Receipt of Audit & Risk Committee Minutes – 10 December 2015

1. Executive Summary

The minutes of a meeting of the Audit & Risk Committee held on Thursday 10 December 2015 are submitted for receipt.

2. Recommendation

THAT the minutes of a meeting of the Audit & Risk Committee held on Thursday 10 December 2015 be received and that the following recommendations become resolution of the Strategy & Finance Committee:

A&R1512/06/2 Review of Sensitive Expenditure Policy

THAT the Audit & Risk Committee supports the Sensitive Expenditure Policy referred to Council for approval and the existing policy rescinded.

A&R1512/06/5 Insurance Programme Update 2015

THAT the Audit & Risk Committee supports the renewal of Council's insurance programme, as detailed in the report.

A&R1512/07/2 Roading Alliance Risk Framework

THAT the Audit & Risk Committee notes the additional risk identified and included in the Risk Register.



MINUTES of a meeting of the Audit & Risk Committee of the Waikato District Council held in Committee Rooms 1 and 2, District Office, 15 Galileo Street, Ngaruawahia on **10 DECEMBER 2015** commencing at **1.00pm**.

Present Ms M Devlin (Chairperson)
 His Worship the Mayor Mr AM Sanson
 Cr JC Baddeley
 Cr J Gibb
 Cr WD Hayes
 Cr J Sedgwick

Attending Mr GJ Ion (Chief Executive)
 Mr TG Whittaker (General Manager Strategy & Support)
 Mrs RJ Gray (Council Support Manager)
 Ms A Diaz (Finance Manager)
 Mr K Abbott (Organisational Planning & Project Support Team Leader)
 Mr V Ramduny (Strategy & Planning Manager)
 Mrs J Whittaker (Quality Management Coordinator)
 Mrs K Jenkins (Project Management Advisor)
 Mr A Kuyper (Project Management Advisor)
 Mr M James (Technical Manager, Waikato District Alliance)
 Mr K Lockley (Zero Harm Manager)

A&R1512/01 APOLOGIES AND LEAVE OF ABSENCE

All members were in attendance.

It was noted that Mr Kotze and Mr Pieterse (Audit New Zealand) were unable to attend this meeting owing to attendance at another meeting. Mr Pieterse had provided feedback directly to the Chair ahead of the meeting.

A&R1512/02 CONFIRMATION OF STATUS OF AGENDA ITEMS

A&R1512/02/1 **Resolved: (Crs Sedgwick/Baddeley)**

THAT the agenda for a meeting of the Audit & Risk Committee held on Thursday 10 December 2015 be confirmed and all items therein be considered in open meeting with the exception of those items detailed at agenda item 8 which shall be discussed with the public excluded;

AND THAT in Accordance with Standing Order 3.7.2 the order of business be changed with agenda item 7.1 [*Strategic Risk Register*] considered as the first item followed by agenda item 6.7 [*Review of Sensitive Expenditure Policy*].

CARRIED on the voices

A&R1512/03

DISCLOSURES OF INTEREST

There were no disclosures of interest.

A&R1512/04

CONFIRMATION OF MINUTES

Resolved: (Crs Baddeley/Sedgwick)

THAT the minutes of a meeting of the Audit & Risk Committee held on 29 September 2015 be confirmed as a true and correct record of that meeting.

CARRIED on the voices

A&R1512/05

MATTERS ARISING FROM THE MINUTES

A&R1512/05/1

Procurement Policy & Manual [A&R1509/11/2]

The General Manager Strategy & Support advised that the Executive Team had reviewed the Procurement Strategy that would now go to Council for consideration by the members.

A&R1512/06

REPORTS – For Discussion and Decision

A&R1512/06/1

Strategic Risk Register Update
Agenda Item: 7.1

The Project Management Advisor took the report as read and noted that she had initiated meetings with stakeholders and over the next six months would establish a project where staff training packages are included and have the stakeholders more involved. An operational risk register should be established by July 2016.

The Chair summarised the discussion by advising that work was in progress, there was some way to go with plans in action to engage the business and driving the risk reporting culture. Formal planning of training packages over the next six months is part of the process now.

Resolved: (Crs Hayes/Gibb)

THAT the report of the General Manager Strategy & Support - Strategic Risk Register Update - be received.

CARRIED on the voices

A&R1512/06/2

Review of Sensitive Expenditure Policy

Agenda Item: 6.7

The Quality Management Coordinator took the report as read.

The General Manager Strategy & Support advised that the policy was of interest to Audit New Zealand where Audit New Zealand reviewed the current version of the policy as part of this year's audit. This revised policy will now go to the Remuneration Authority for review and then onto Council for approval.

Resolved: (Crs Baddeley/Sedgwick)

THAT the report of the General Manager Strategy & Support – Review of Sensitive Expenditure Policy - be received;

AND THAT the revised policy be referred to Council for approval and the existing policy rescinded.

CARRIED on the voices

A&R1512/06/3

Audit & Risk Committee Key Achievements

Agenda Item: 6.1

The General Manager Strategy & Support advised that the report reflected the presentation provided to Council.

Resolved: (Crs Gibb/Hayes)

THAT the report of the General Manager Strategy & Support – Audit & Risk Committee Key Achievements – be received.

CARRIED on the voices

A&R1512/06/4

Health & Safety Management Framework

Agenda Item: 6.2

The Zero Harm Manager took the report as read.

Key highlights from the report were:

- Executive Team was on board with the critical risks across the business.

- There was a good understanding of the risks.
- A number of zero harm workshops had been held with staff.
- Documentation had been sourced from other organisations and tailor-made to suit the risks across Council business.

The General Manager Strategy & Support confirmed, as evidenced in the report, that a significant amount of work is being carried out currently, and there had recently been training on the new legislation undertaken and coordinated by LASS. Most Councillors attended the training along with the 2nd and 3rd tier managers to get an understanding of what the new legislation means.

He also advised of an initiative to have a zero harm moment on a random monthly basis, by sending an email to all staff advising to spend a moment to think about something meaningful to them from a zero harm perspective.

The Chief Executive advised that some independent site audits had been undertaken last week and a report is currently being prepared for Council. More audits are planned for 2016 to cover a range of the Council activities, eg water treatment plants, offices, libraries, dog pounds and areas in Raglan.

He also advised that independent of those audits, some H&S conversations were being carried out and that the Executive Team had visited the dog pound in Ngaruawahia and discussed with them areas that needed attention.

It was noted that steps had been taken around libraries and offices where staff had been threatened, by providing training on dealing with difficult customers and mental health issues so they are better prepared for these events.

Reports have been provided on near misses and hazards, eg from Alliance and subcontractors. The goal set for staff around near miss reporting is to raise the level of awareness of health and safety. In the New Year, Bware software will be available to help engage staff with zero harm. All Council documentation will be updated for the pending new legislation. Once systems and processes are in place, training will commence. It was noted that a Risk Training Awareness Programme would be held in February 2016 for Councillors that will then cascade down through the business.

It was noted that a culture is starting to evolve driven by team leaders and the Executive and that near misses were being recorded. From a zero harm perspective, over speeds have dramatically reduced. Staff recorded on the list are made aware of any over speed.

Critical risks across the business are of utmost concern and it was good to see an emphasis placed on this area. The challenge is not to lose sight of what the critical risks are. The Roding Alliance is an area of high risk that we need to be aware of and the performance of contractors needs to be monitored carefully.

The Chair summarised the discussion and noted that Worksafe is currently working on producing the regulations to support the new legislation.

Council also needed to be aware of these and ensure that the new regulations were incorporated into the Health and Safety Management Framework. Positive comments had been received from the top of the organisation and the challenge now is to ensure that this culture is replicated throughout the organisation.

Resolved: (Crs Sedgwick/Gibb)

THAT the report of the Human Resource Manager – *Health & Safety Management Framework* – be received.

CARRIED on the voices

A&R1512/06/5

Insurance Programme Update 2015

Agenda Item: 6.3

The Finance Manager took the report as read and advised that there were savings expected in terms of premiums across the LASS umbrella, and to expect some movement with motor vehicle cover. She advised that overall a \$19,140 premium saving was achieved and funds would be used for other risk insurance items.

Resolved: (Crs Baddeley/Sedgwick)

THAT the report of the General Manager Strategy & Support – *Insurance Programme Update 2015* - be received;

AND THAT the Committee supports the renewal of Council's insurance programme, as detailed in the report.

CARRIED on the voices

A&R1512/06/6

Insurance Loss Modelling

Agenda Item: 6.4

The General Manager Strategy & Support provided an overview of the report. He advised that as a collective of LASS Councils, this work would improve the quality of the information in the risk assessment programmes. It had been commissioned with other councils to get a better understanding on what the true quantum of risks might be. The report shows the scope of works that Aon is undertaking for Council, with the outcome being a better perspective of our exposures and to continue to refine the programme to mitigate those risks.

He advised that the timing noted in the report due by 10 October 2015 had been extended and that the report had not been provided to date. The General Manager Strategy & Support advised he would confirm the report timing but expected it to be available soon.

It was noted that work like this is important given our changing environment risk profile. It will help Council remain current.

The General Manager Strategy & Support is to circulate the current fees paid to AON.

Resolved: (Crs Gibb/Hayes)

THAT the report of the General Manager Strategy & Support – Insurance Loss Modelling - be received.

CARRIED on the voices

A&R1512/06/7

Final Audit Management Report for Year End 30 June 2015

Agenda Item: 6.5

The Organisational Planning & Project Support Team Leader took the report as read. He advised that the final audit management reports and interim reports from Audit New Zealand had been received and that a lot of work had taken place against various items. He expected that in the next audit round these would be closed off.

As the Auditors were unable to attend the meeting the Chair read out to the members a note provided by Mr Pieterse that he was comfortable with responses received, and a good summary was provided as discussed with Mr Kotze and the Organisational Planning & Project Support Team Leader. The Chair expressed concern with the apparent lack of traction on some matters and she would like these addressed. The General Manager Strategy & Support advised that there are mitigation measures in place, that time is required and that he is confident that the next time Audit New Zealand review these items they will be removed, eg service request project, of which the benefits are being seen now.

It was acknowledged that further work was required with Council's Asset Valuers to drive the appropriate level of accountability to them with regard to quality.

The Finance Manager advised that her view of the audit process this year was much smoother and there was a very good working relationship with Audit New Zealand that seemed to improve each year.

Following discussion on the procedures for terminating users, the Information Management Manager advised that the issues had been resolved.

The Chair requested an action for the outstanding items to be addressed.

Resolved: (Crs Sedgwick/Baddeley)

THAT the report of the General Manager Strategy & Support - Final Management Report for Year Ended 30 June 2015 - be received.

CARRIED on the voices

A&R1512/06/8

Cyber Security Review
Agenda Item: 6.6

The General Manager Strategy & Support provided a brief overview advising that a detailed report had since been received and was currently being reviewed. Once the report had been responded to, it would be circulated to the next meeting along with the responses.

The Information Management Manager advised that the report was relatively positive however there was a need to focus on policy and procedures.

In response to ensuring that Council requirements had been defined, the Information Management Manager advised that being a Council under LGA and LGOIMA, requirements were different to other organisations. There are no firm standards or guidelines that can be applied therefore staff need to look at the information and handle it appropriately and confidently so that meets Council requirements.

The Chair advised that it was important to focus on the real risks of cyber security issues, eg password control and what actions we take on this. A key is to define what information Council could not afford to lose. She requested that the report be read and reviewed by management and provide responses where actions are necessary. She did not have complete confidence in the report that was commissioned and would have preferred to have seen the high points of risk identified, as risk must be managed and mitigated.

Resolved: (Crs Gibb/Baddeley)

THAT the report of the General Manager Strategy & Support – Cyber Security Review - be received.

CARRIED on the voices

A&R1512/07

REPORTS – Standing Items

A&R1512/07/1

Financial Delegations Review
Agenda Item: 7.2

The General Manager Strategy & Support advised that the electronic purchase order implementation was progressing and that the scope had been broadened to include mobility for use offsite.

In terms of other actions delivered on, a lot of training had been carried out, probity audits completed, and the internal audit programme established to continue to ensure processes were being honoured.

The Chair requested more work in the contract management area be completed, that Audit New Zealand continue to be exercised in this area and the need to demonstrate this is under control and that also a software solution may need to be considered.

Resolved: (Crs Gibb/Sedgwick)

THAT the report of the General Manager Strategy & Support – Financial Delegations Review – be received.

CARRIED on the voices

A&R1512/07/2

Roading Alliance Risk Framework

Agenda Item: 7.3

The Technical Manager, Waikato District Alliance took the report as read and answered questions from the members.

He confirmed that the risk of a non-performance reputation is being encapsulated, and that the building of the team is almost complete. The forming of the team and the reputation is at the forefront of everything they do. He advised that responses to service requests had improved relative to the targeted performance measures. Zero Harm auditing and getting the team integrated with the field crews was going well.

The Technical Manager, Waikato District Alliance, advised there was an impact on traffic services where a lot of work is required to get to the level of signage required and that the model allows for push and pull with supply partners who do other work as well as signage.

A request was made for appropriate risk related reports to the Principal's Group be provided also to the Audit & Risk Committee.

The Chair noted that from an operational perspective, the service appears to have improved, work had been carried out around financials and target return numbers to ensure financial benefits as well as operational benefits, traction on local suppliers, and support for the concept of having all staff together.

The Chief Executive advised that focus was around:

- i) Agreeing on overhead margin
- ii) target cost estimates
- iii) accommodation
- iv) to conclude the contract between Council and Downer.

Resolved: (Crs Hayes/Baddeley)

THAT the report of the General Manager Service Delivery - Roothing Alliance Risk Framework - be received;

AND THAT the Committee notes the additional risk identified

and included in the Risk Register.

CARRIED on the voices

A&R1512/07/3

Update on Internal Audit & Quality Improvement

Agenda Item: 7.4

The Organisational Planning & Project Support Team Leader took the report as read. He highlighted the work in the policy area that had been carried out, the new audit programme, the business resilience project and a reference group that had been set up. He advised that bylaw reviews are underway, with five being reviewed and that he is comfortable with the programme mitigating key risks to the business.

The Chair summarised the current work undertaken in this area, the rescinded policies have been substantial, but still a significant list to go through combining policies with Franklin and Council. An updated list will be provided to the Executive Team detailing the quantum and the time line.

Resolved: (Crs Gibb/Sedgwick)

THAT the report of the General Manager Strategy & Support - *Update on Internal Audit and Quality Improvement* - be received.

CARRIED on the voices

A&R1512/07/4

Zero Harm Dashboard

Agenda Item: 7.5

The General Manager Strategy & Support advised that this report needed to be read in conjunction with the Health & Safety Management Framework report in this agenda. A discussion is currently being held with the Zero Harm Manager to ensure all issues are reported on.

The Chair advised that she was pleased to receive the lead and lag indicators and capturing some culture processes in place and agreed that it was work in progress for some time yet.

Resolved: (Crs Gibb/Baddeley)

THAT the report of the Human Resource Manager – *Zero Harm Dashboard* – be received.

CARRIED on the voices

A&R1512/07/5

Customer Service Request Review – Project Closure

Agenda Item: 7.6

The General Manager Strategy & Support spoke of the closure of this review and advised that a financial recognition had been provided to the staff

involved for their efforts in being a really great integrated team that had delivered a great result. Positive feedback had been received and lessons learnt for other projects across the business.

Resolved: (Crs Hayes/Sedgwick)

THAT the report of the General Manager Strategy & Support - Customer Service Request Review – Project Closure - be received.

CARRIED on the voices

A&R1512/07/6

Update – Proposed Local Government Risk Agency

Agenda Item: 7.7

The Organisational Planning & Project Support Team Leader provided a brief overview and highlighted some key issues:

- Investigation on cost sharing arrangement.
- Business case.
- Workshop attendance.
- Self-assessment process.
- Natural hazards.

It was agreed that the Organisational Planning & Project Support Team Leader would keep the committee updated on this item.

Resolved: (Crs Sedgwick/Gibb)

THAT the report of the General Manager Strategy & Support – Update – Proposed Local Government Risk Agency - be received.

CARRIED on the voices

A&R1512/07/7

Future Work Plan

Agenda Item: 7.8

The Chair asked for confirmation from the committee that they were comfortable that the agenda items remained relevant and requested any other suggestions for agenda items for the future meetings. A suggestion was to include cyber security and project management.

Resolved: (Crs Hayes/Gibb)

THAT the report of the General Manager Strategy and Support – Audit & Risk Committee Future Work Plan – be received.

CARRIED on the voices

A&R1512/08

EXCLUSION OF THE PUBLIC**Resolved: (Crs Gibb/Baddeley)****THAT** the public be excluded from the meeting during discussion on the following items of business:

- 1 Confirmation of Public Excluded Minutes dated 29 September 2015**
- 2 Conflict of Interest Register – Elected Members, Staff**
- 3 Fraud Declaration.**

This resolution is made in reliance on section 48(1)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest protected by section 7 of that Act which would be prejudiced by the holding of the relevant part of the proceedings of the meeting in public is as follows:

That the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information where the withholding of the information is necessary to:

- a. Protect members, or officers, or employees of any local authority, or any persons to whom section 2(5) of the Local Government Official Information and Meetings Act 1987 applies, from improper pressure or harassment;**
- b. Protect the privacy of natural persons, including that of deceased natural persons;**
- c. Prevent the disclosure or use of official information for improper gain or improper advantage;**

AND THAT the exclusion of the public from the whole or relevant part of the proceedings of the meeting is necessary to enable the local authority to deliberate in private on its decision or recommendation in any proceedings before the local authority where a right of appeal lies to any Court or Tribunal against the final decision of the local authority in those proceedings;

CARRIED on the voices

Resolutions A&R1512/09 – A&R1512/12 are contained in the public excluded section of these minutes.

Having resumed open meeting and there being no further business, the meeting was declared closed at 3.04pm.

Minutes approved and confirmed this day of 2016.

M Devlin

CHAIRPERSON

Minutes2015/S&F/151210_A&R_M.docx

Open Meeting

To	Strategy & Finance Committee
From	TG Whittaker
Date	12 February 2016
Prepared By	DM Lee Executive Assistant
Chief Executive Approved	Y
DWS Document Set #	1148553
Report Title	Waikato Enterprise Agency Operational report for Waikato District i-Site and Raglan i-Site July 2015 to December 2015

1. Executive Summary

To advise the Committee that Kim Bredenbeck from the Waikato Enterprise Agency will be in attendance to present the Waikato Enterprise Agency operational report for the Waikato District i-Site Huntly and Raglan i-Site July 2015 to December 2015.

2. Recommendation

THAT the report of the General Manager Strategy & Support – Waikato Enterprise Agency Operational Report for Waikato District i-Site and Raglan i-Site July 2015 to December 2015 – be received.

Attachment: Waikato Enterprise Agency Operational Report for Waikato District i-Site and Raglan i-Site July 2015 to December 2015



2016

Six Month Report for Huntly and Raglan i-SITE's



Submitted by the Waikato Enterprise
Agency February 2016

Executive Summary

The following report outlines the operational activities for the Raglan and Huntly iSITE's. This report reflects the months of July to December 2015 encompassing 3 seasonal variations of low, medium and the start of high season.

(Low June – August, Medium September – November, High December – February)

New Zealand has experienced the best year ever for tourism in numbers and spend, it is the number one export income earner overtaking dairy, our district is most likely to feel the effects of a sluggish dairying market place so it is important that we work with and support all of our small tourism operators of which there are many located within the Waikato District.

The national tourism industry reflection of 2015 highlighted that;

Short-term visitor arrivals rose nine per cent to 177,000 in June from the same month a year earlier, led by gains in the Australian, Chinese, and American visitors.

Holiday arrivals rose 10 per cent to a record 2.99 million for the past 12 months, just 8,000 short of the three million mark according to Tourism New Zealand.

Tourism New Zealand chief executive Kevin Bowler said focusing efforts on improving arrivals growth in the shoulder seasons is key to continuing the trend. "These figures are brilliant news".

"It means more jobs and economic value, not just in the peak summer period but with benefits felt throughout the year." China was one of the leading drivers of the record figures with holiday arrivals spiking by 27 per cent, courtesy of increased services by Air Zealand and China Southern Air.

Australian arrivals jumped 12 per cent while German and American tourists also improved by 21 and 18 percent.

The sites at Huntly and Raglan generally track similar to these trends however Huntly tends to shadow international trends more than Raglan as it is a gateway site as opposed to a key destination.

Future thinking in relation to the highway realignment has seen the Hamilton Waikato team co-ordinate an Australian based team who facilitated a workshop to district based tourism stakeholders identifying tourism opportunities for the district. I am aware Clive Morgan and Kiri Goulter will provide progress reports.

However, I remain committed to Pokeno as the ideal site attached to the Queens Redoubt Trust Museum and Education Centre following the example that Raglan and the museum have shown. The process is a win/win for not for profit entities relying on volunteers to sustain a presence and it allows these wonderful assets to open 352 days of the year with no added staffing burden.

COMBINED VISITOR ACTIVITY FOR RAGLAN AND HUNTLY SITES

The sites hosted a combined total of **47,153** visitors that is a combined increase of + **2,969** on this time last year. The areas of market growth are in the Australian visitors with an increase of 3,938 a 70% increase, the Asian market also grew steadily from 8,599 to 10,741 an increase of +2142 showing 25% growth.

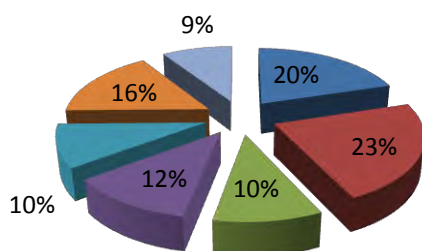
These numbers will continue to grow as the Asian travel market frees up for its citizens to travel and air travel capacity and consistency becomes well established. The Asian market is showing strong promise as their numbers grow in the free independent traveller's market place. We see this trending upwards as the generations of travellers from these countries come with better English and the confidence to do it for themselves. The Huntly i-SITE is providing a growing service to these customers in need of a place to stop and plan the rest of their time in New Zealand.

We did note that our American market was down compared to national trends this is a reflection of less cruise ships docking into Auckland our network has confirmed that the port of Tauranga and Wellington are also hosting Cruise Ships.

Visitor trends are identified and measured weather conditions impact on the choices and actions visitors make in particular the domestic market. Staff will continue to monitor and record daily events such as road works, accidents, storms and weather conditions as they impact on tourism activities. This will assist us to plan and manage the domestic tourism market.

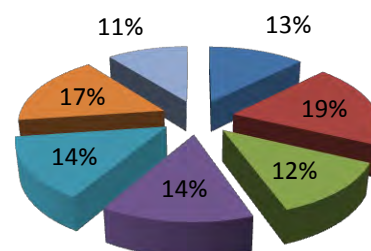
Total Visitors - Huntly and Raglan i-SITES July - Dec 2015

■ Australia ■ Asia ■ Europe/UK
■ USA / Canada ■ Other ■ Domestic
■ Local



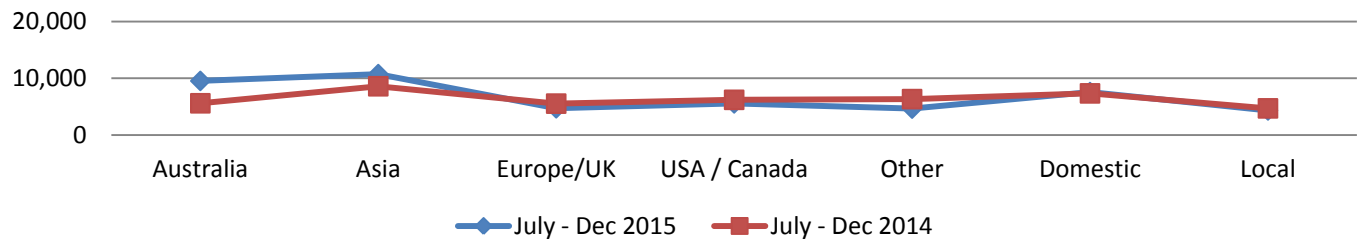
Total Visitors - Huntly and Raglan i-SITES July - Dec 2014

■ Australia ■ Asia ■ Europe/UK
■ USA / Canada ■ Other ■ Domestic
■ Local



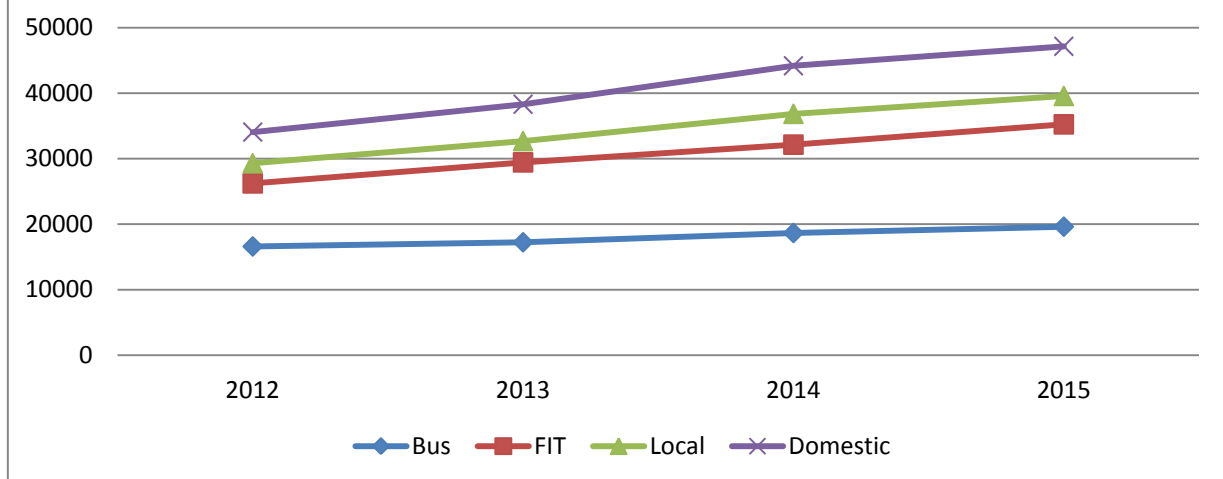
Australian market grew from 9% to 13%, Asian market from 19% to 23% the others stayed static or slightly less.

Combined Totals July - Dec 2015 and 2014 Huntly and Raglan i-SITE



The graph tracks Europe and USA as slightly down on last year with domestic and local users static.

Combined breakdown of visitors to Huntly and Raglan i-SITES 2012 - 2015



All areas projecting upwards shows our district is growing its appeal and reputation to visitors.

Key Highlights

- Huntly has tracked a 25% increase in bookings over this period aligned to the larger volume of free independent travellers stopping at Huntly on route to the central and lower North Island.
- Both i-SITES are continuing to process accommodation bookings in line with last year the economic value will be reported in the Annual Report.
- Activity based transactions are tracking slightly higher than last year with our members; the economic return will be reported in the Annual Report.

- **1511** people visited the museum an increase of **+132** on this time last year.
- Sales and services on-selling Intercity, Naked Bus (Now Mana), Interislander and Blue Bridge Ferries from the Huntly site totalled **126**.
- Huntly Speedway has hosted some large events a November meeting that has an annual fireworks display that is growing in reputation and this year it stopped traffic on state highway one. The gates were eventually closed with many thousands unable to get into the event.
- Raglan map, a good quality map has been designed to assist staff with providing directions to members and beaches etc.
- **105** tourism aligned businesses were paid members combined for this period with 18 new members signing up and 16 withdrawing for the following reasons; 6 sold their properties (most of those are counted as new members) 12 cancelled there membership due to renting property out to tenants or using as a family home over winter.
- **26** members have paid to be dual members to both Huntly and Raglan sites.
- The i-SITES have 3 work experience volunteers linked to Wintec Tourism Qualification Program.
- The websites and facebook pages continue to evolve the types of information, tools and services so that we can continue to support members as best we can within a competitive market place.
- Staff attended the annual industry conference in Whangarei and came back energised and full of new ideas and tools to continuously improve services.
- Raglan iSITE noticed a higher level of customers inquiring about Raglan either online or by phone, many came to Raglan to holiday before school had finished most came from recommendations made by friends and family.
- We are continuing to get feedback from visitors that had booked online for accommodation products they subsequently believed had been mis- represented sometimes it was the quality, location or services. We encourage all visitors to certainly use online to research their options but contact our team to seek confirmation prior to booking. Fortunately none of our members to date have been identified.

Raglan Museums Contribution to Residents and Visitors

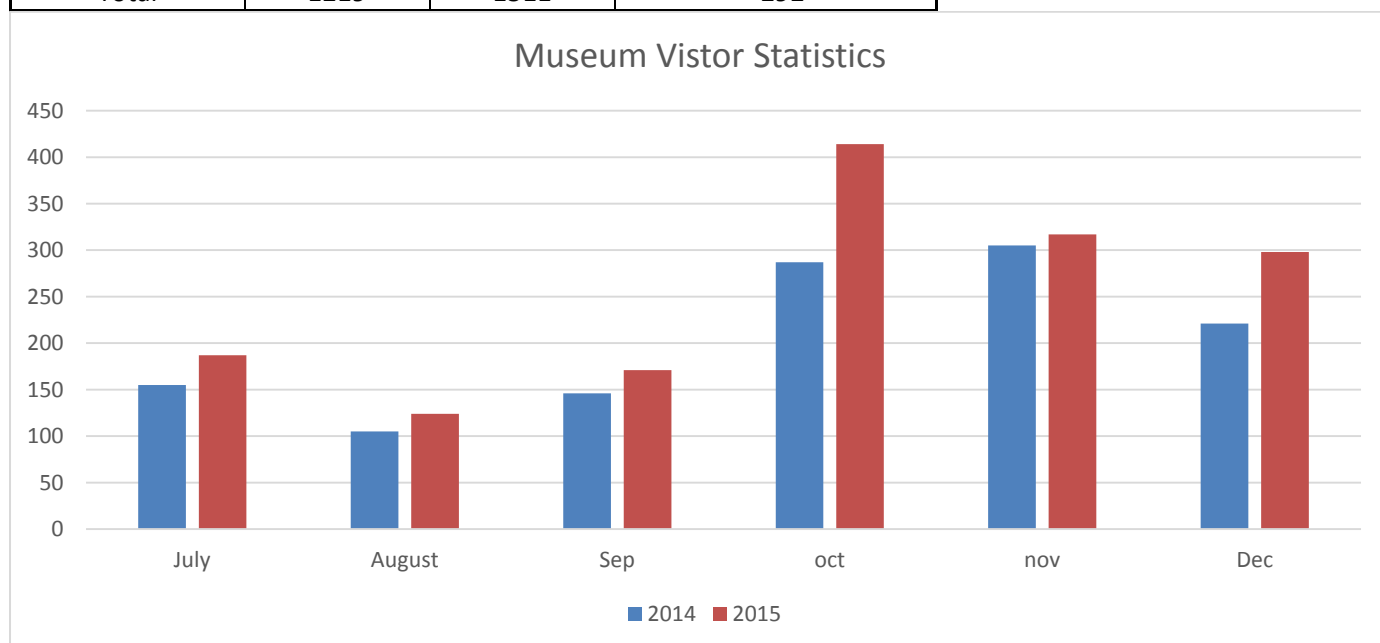
The Museum has been a wonderful asset to the Raglan i-SITE with good quality exhibitions like the Surfing exhibition, World War One exhibition and the new exhibition Te Horea which has been reported in the Waikato Times as well as the local chronicle.

<http://www.stuff.co.nz/national/73115609/Bird-family-collection-on-display-at-Raglan-Museum>

The exhibitions continue to bring customers in from all areas of the country in all age groups.



Museum Visitor Statistics			
Month	2014	2015	Difference
July	155	187	+32
August	105	124	+19
Sep	146	171	+25
Oct	287	414	+127
Nov	305	317	+12
Dec	221	298	+77
Total	1219	1511	+292

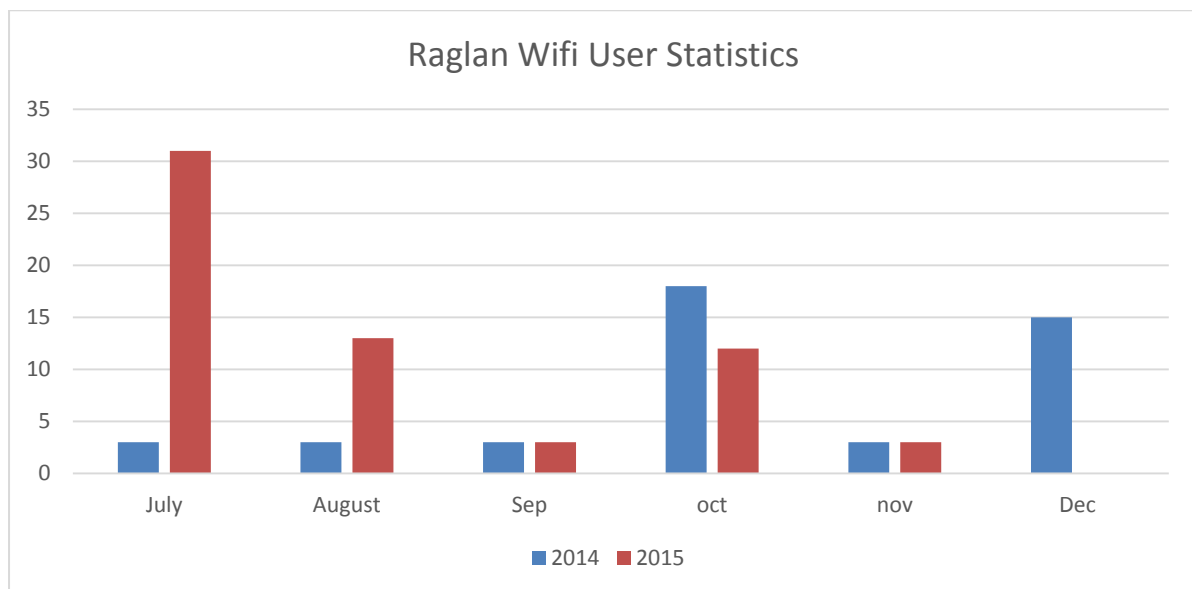


Raglan Visitor Market Analysis

Raglan has always had large domestic visitor numbers showing that many of the visitors to Raglan come from the greater Waikato and Auckland regions.

We have had staff start to have good conversations with many of these visitors to ascertain if particular events or other promotions were the catalyst to get people to go to Raglan. Feedback and research is on going however the following is a taste of themes and responses to date.

- Many reported they were on a tight budget but had always wanted to come to Raglan
- Many had been as children and were re-tracing there childhood memories
- Friends and family had raved about Raglan
- Came to see the museum
- Many had also been given feedback from tourists that had been and stayed in Raglan



There continues to be a high demand for free Wifi especially with the international market. In July we had an increase 82.35% following up to December.

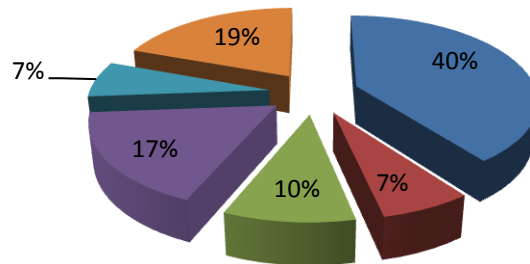
Wifi users were steady until December where the connection failed we are continuing to monitor the Wifi connection as we have noticed that since the summer holidays the internet connection to the Wifi has been slow.

During December we had customers who booked accommodation prior to coming to New Zealand. Unfortunately the accommodation they booked was nowhere near Raglan and then chose to book an accommodation through the Raglan i-SITE.

Social Media

Facebook hits by key countries Huntly and Raglan July - Dec 2015

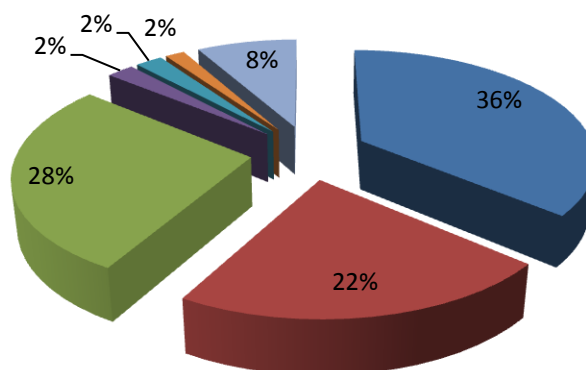
■ Australia ■ UK ■ USA/Canada ■ Thailand ■ Europe ■ India



Australia, India, Thailand, USA/Canada and UK are the highest ranked countries that have gone onto the Huntly and Raglan facebook pages however it is our belief this is being picked up as friends and family link any promotions or images through. However, facebook is a powerful promotional tool that can reach a global audience.

Facebook hits around New Zealand Huntly and Raglan July - Dec 2015

■ Hamilton ■ Other Waikato ■ Raglan ■ Tauranga ■ Wellington ■ Rotorua ■ Auckland



Raglan attracts large numbers of the domestic market and highlights the value it is providing to the greater Waikato utilising the beaches, walks and fishing activities. Facebook is a medium that staff in Raglan are strategically utilising to promote and highlight the features and benefits of Raglan.

Events and Activities of influence in our district and Region



Supporting our Waikato Regional Colleagues - Whitianga Famil

The famil was very exciting and enjoyable. We definitely have gained more knowledge about the Coromandel and will support the region with far more knowledge.



Te Aranui providing the Karanga for the Powhiri at the Whangarei Conference 2015

Huntly Placemakers Speedway November Meeting

The pits were full and the stands were bursting at the seams with all available parking spaces in the proximity of the venue totally full.



The Pink Walk- FANTASTIC EFFORT HUNTLY and North Waikato community and a big thumbs up to everyone who supported Huntly Ladies Allsortz Pink October



Sports Waikato Award Night

Sports Waikato acknowledges the 2015 sporting excellence in the Waikato.

Huntly i-SITE Donate the prize for the winner of 2015 Waikato District Sports Awards Administrator of the Year.



Huntly Christmas Parade /Huntly Family day



The Huntly Santa Parade features all the amazing pageantry, fun and surprises that have made this annual Huntly extravaganza a favourite.

Heralding the start of the Christmas season, this beloved holiday parade features grand floats representing the cultural diversity of today's Huntly, lively marching bands, amazing balloon characters, plus an appearance by Santa Claus.



Raglan Matariki Celebration and Festival:

The Matariki festival was complete with local markets, a bonfire, art exhibitions and domestic entertainment. It is a celebration which brings family and friends as well as communities together. Visitors appreciate being a part of this celebration and learning what Matariki means and what Matariki represents.



Karioi Classic:

This annual event is extremely popular, cyclists come to Raglan from far and wide, domestic and international simply to take part in this event. International visitors have either competed before or have heard from others about the event.



Christmas in the park:

Christmas in the Park is every 2nd year in the Kopua Domain. This year we had a special guest, Stan Walker perform the rain didn't dampen local supporters and visitors from enjoying a day of fun and entertainment.



New Year's Eve Parade:

Every year the Raglan Lions Club host the New Year's Eve Parade this year there was a plenty of support from the locals. The competition seeks a prize for the best float and prizes went to a variety of winners.

'Lions Club President Bob Macleod was very pleased with the overall involvement of the community and the respect paid to the "No water policy". The parade was watched by a very big enthusiastic crowd. Many had come out from Hamilton for the evening just to see the parade.'

Trip Advisor Visitor Feedback



Ron M
Brisbane, Queensland,
Australia

2 reviews

1 helpful vote

"Great knowledge and help"

Reviewed 30 September 2015

Lynley and Janelle were fantastic. They recommended and booked some great attractions for us, then changed them for us after we got lost and were late for everything. They even gave us follow-up phone calls to make sure everything was OK.

You couldn't go past these two ladies for excellent customer service. Thank you very much, Ron and Cheryl Morrison from Aussie land

Visited August 2015



91012131415
Hamilton, New Zealand

Level **3** Contributor

10 reviews

3 attraction reviews

2 helpful votes

"Helpful and Friendly."

Reviewed 9 October 2015

I wanted to find the way to Naike Caves and the staff inside were most helpful and showed me several maps and gave excellent directions. I would definitely ask their advice about the district and directions.

Visited December 2014

Helpful? 1 [Thank 91012131415](#)

Report



santo t
Auckland Region, New
Zealand

Level **6** Contributor

325 reviews

177 attraction reviews

128 helpful votes

"Helpful Information"

Reviewed 22 November 2015

Quick stop for break at Huntly and want to spend no more than 1 hours to see something interesting at Huntly, the lady at this i-Site suggest us to visit the Coal Museum and show the road map to this attraction. Well, we get something new to see and interesting in Huntly.

Thank you for the helpful Information from this i-Site.

Visited November 2015

[Less](#) ▲



lizlovescoffee
Christchurch, New Zealand

Level **2** Contributor

6 reviews

1 helpful vote

"SO helpful "

Reviewed 22 December 2015 via mobile

Janelle and Rangi had heaps of info on where to visit/eat/stay. Helped us workshop our trip to get the best from our time here. Even called around places to check for vacancies for us. Highly recommend a stop in this tiny place for great info on places to go in nth and sth islands.

Helpful? 1 [Thank lizlovescoffee](#)

Report

Open Meeting

To	Strategy & Finance Committee
From	G J Ion Chief Executive
Date	4 February 2016
Chief Executive Approved	Y
DWS Document Set #	1145641
Report Title	Financial Review of Key Projects

1. Executive Summary

To update the Committee on the monitoring and process that has been undertaken during 2015/2016 to ensure that the financial implications of projects are known at an early stage.

2. Recommendation

THAT the report of the Chief Executive – *Financial Review of Key Projects* be received.

3. Background

The Chief Executive, on an annual basis, provides details on a range of projects to be monitored and reported to the Strategy & Finance Committee. The projects are selected based on value, level of risk and other factors. A series of projects were identified for particular scrutiny during 2015/2016. Regular reports are provided on progress.

4. Discussion and Analysis of Options

Council has been kept fully informed of the financial consequences of the key projects that were identified at the start of the financial year. This is an interim report for the 2015/2016 financial year and supplements monthly reports to the Infrastructure Committee.

The table attached to this report gives an update on the specific projects that Council wished to be given special consideration. The list was based on the major non-roading projects which Council has planned to undertake for 2015/2016, including carry forwards.

Council has chosen not to reduce the upfront risk. This could have been done by investing in advance design work or other scoping work in advance of setting budgets.

It should also be noted that the nature of a number of these projects is that problems are only uncovered when Council undertakes the project. Reticulation issues, for example, are hidden until the pipes are exposed. Topographical and geotechnical issues can also arise in relation to a number of projects.

Councillors should also note that the purpose of this report is to identify progress with key projects from a financial perspective. This simply means that issues are identified earlier so that Council can make decisions before committing Council funds. It does not give certainty around the tender process as this is driven often by market forces, not by the project itself.

4.2 Options

This report is largely for information only. It is to update Councillors on progress with the financial implications of the key projects identified for the 2015/2016 financial year.

The report contains the latest forecast cost and a comparison to the budget allocation.

At this stage of the year, we are progressing well with a lot of work underway or nearing completion. Some projects are affected by customer uptake or land purchase negotiations.

Council may consider that other actions should be taken to control costs. The emphasis of the report and the requirement was to identify potential issues and to advise Council so that cost implication could be considered before work proceeds.

Improved reporting has been implemented to keep the Chief Executive and the various Committees informed of progress on the key projects.

Any technical questions about the projects or infrastructure requirements should be addressed at the Infrastructure Committee meeting, not as part of this report.

The following is a list of agreed projects for 2015/2016:

- Tamahere Reserve development
- Water asset condition assessment
- Wastewater asset condition assessment
- Hopuhopu to Huntly watermain connection
- Huntly Wastewater Treatment Plan Tertiary Treatment System
- Water reservoirs/storage renewals Hopuhopu
- Stormwater reticulation extensions – Raglan
- Wastewater scheme construction – Pokeno Stage 2

5. Considerations

5.1 Financial

All of the projects included in the list form part of the Long Term Plan for 2015/2016 or are carry forwards.

5.2 Legal

As part of undertaking the work, Council needs to ensure that the approach taken is consistent with the Purpose of Local Government.

Under this Act, good quality in relation to local infrastructure, local public services and performance of regulatory functions means infrastructure, services and performance that are efficient, effective and appropriate to present and anticipated future circumstances.

In other words, to meet the current and future needs of communities for good quality local infrastructure, local public services and performance of regulatory functions in a way that is most cost-effective for households and businesses.

5.3 Strategy, Plans, Policy & Partnership Alignment

A review of key projects was included in the Chief Executive's Performance Agreement.

The report is concerned with the community outcome of Thriving Waikato in relation to the economic importance of a number of the projects.

The report is also concerned with the economic wellbeing of residents in the district. If costs exceed budgets then alternative funding sources need to be found or elements of the project reviewed.

Projects such as water and wastewater schemes that impact on the Waikato River are of particular significance to Tangata Whenua. For example, discussions are ongoing with Iwi around the Hopuhopu to Huntly watermain connection.

5.4 Assessment of Significance

Councillors will review the list of key projects and identify any change in significance, where appropriate.

6. Consultation

The following stakeholders have been/or will be consulted:

Planned	In Progress	Complete	
		✓	Internal
	✓		Community boards/Community committees
	✓		Waikato-Tainui/Local iwi
	✓		Households
	✓		Business
			Other Please Specify

7. Conclusion

Staff believe that appropriate systems are in place to identify the cost implications of the various key projects that Council wished to ensure were given additional monitoring during the year. Council has been kept informed of cost implications as they arise. This report provides an update on progress with the key projects for the 2015/2016 financial year.

8. Attachments

Chief Executive's Key Projects report.

Open Meeting

To	Strategy & Finance Committee
From	S Duignan General Manager Customer Support
Date	23 Feb 2016
Chief Executive Approved	Y
DWS Document Set #	1148791
Report Title	CDEM Joint Committee Minutes

1. Executive Summary

This report provides Council with the minutes of the Civil Defence Emergency Management (CDEM) Group Joint Committee meeting of 4 September and 23 November 2015.

2. Recommendation

THAT the report of the General Manager Customer Support – CDEM Joint Committee Minutes - be received.

3. Joint Committee Minutes

It is a requirement that the Joint Committee minutes are reported to Council. The minutes of 4 September and 23 November (draft only) are attached. Meeting highlights are as follows:

- 3.1 There has been a comprehensive review of public alerting for the Waikato CDEM Group.
- 3.2 Waikato CDEM sent three staff in support of the Taranaki CDEM (one) and the Manawatu – Wanganui CDEM (two) during the floods.
- 3.3 Disaster media training has been completed for a number of the elected officials around the region with positive feedback.
- 3.4 The Joint Committee were advised of the successful efforts of the Community Resilience Coordinator with increasing public interaction and reach through social media.
- 3.5 The committee was provided with a summary of the Review of Public Alerting options with recommendations for the Waikato CDEM Group by GNS Science.
- 3.6 The Director of MCDEM (S Stuart-Black) overviewed the MCDEM report to the committee, including the work currently being undertaken in creating a new national strategy.
- 3.7 The Joint Committee received a presentation from Richard Woods, Head of Emergency Management Planning, Auckland Civil Defence Group, on the Chile Tsunami Research Deployment September 2015.

- 3.8 Lee Hazlewood presented the Group Controller's Report, which included an overview of the following:
- The current status of the All Hazards Centre
 - Civil Defence Centres and pending removal of historical signage
 - Acknowledgement and thanks to Waikato Police for including CDEM in a recent Police exercise
- 3.9 Greg Ryan presented a report updating the committee regarding the review of the Waikato CDEM Group Plan.
- 3.10 Suzanne Vowles presented the committee with an update on the current work being undertaken by MCDEM and it was noted that there will be a three day national Tsunami exercise happening in 2016. The following dates need to be set aside by all councils to enable full participation;

Phase 1 (Up to impact)	Phase 2 (Post impact)	Phase 3 (Transition to recovery)
Wednesday 31 August 2016	Wednesday 14 September 2016	Wednesday 28 September 2016
Full scale: Activation of NCMC, ECCs, and EOCs.	Table top: Discussion exercises across Groups, partner agencies, MCDEM, and national agencies.	Table top: Discussion exercises across Groups, partner agencies, MCDEM, and national agencies.

4. Local Civil Defence Update

Key activity this year is as follows:

- 4.1 The ITF Intermediate CDEM Course has now been rolled out and 20 staff members have participated to date, resulting in an overall increase in capability for Waikato District Council.
- 4.2 Welfare staff members have participated in training to support the delivery of welfare to the community in an emergency.
- 4.3 The removal of the historical Civil Defence Centre signs is scheduled to start at the end of February.

5. Conclusion

Progress is on track towards meeting Waikato District Council's emergency management requirements.

6. Attachments

Attachment(s) – *Joint Committee Minutes 4 September and 23 November (draft only)*

Exercise Tangaroa Warning Order

1 EXERCISE TANGAROA WARNING ORDER

The purpose of this warning order is to provide advance warning of Exercise Tangaroa, a Tier 4 (national) exercise under the National Civil Defence Emergency Management (CDEM) Exercise Programme. The exercise will be led by the Ministry of Civil Defence & Emergency Management (MCDEM) and will be conducted over three dates in 2016 (31 August, 14 September, and 28 September 2016). Your agency will be formally invited to participate in early 2016.

1.1 Overview

Exercise need

Clause 58 of the National Civil Defence Emergency Management (CDEM) Plan Order 2005 mandates the establishment of a National CDEM Exercise Programme.

Section 17 of the Guide to the National CDEM Plan sets out the details of the programme and recognises that exercising needs to occur at all levels of the CDEM structure. It identifies a four-tier approach, one of which is Tier 4: A national exercise (including the whole of New Zealand or part thereof, including central government).

A Tier 4 exercise, involving all of New Zealand, has not occurred since Exercise Tangaroa in 2010¹. Since 2010, there has been staff turnover at all levels of the CDEM structure, and implementation of new procedures and systems (such as the Emergency Management Information System (EMIS)). A Tier 4 exercise in 2016 will allow for new or updated procedures and systems to be tested, and provide an opportunity to review recommendations and lessons identified from previous exercises.

¹ New Zealand ShakeOut, a national earthquake drill, was conducted in 2012 and is considered more of a public education campaign than a national exercise.



Exercise aim

To test New Zealand's arrangements for preparing for, responding to, and recovering from a national tsunami impact.

Exercise location

All of New Zealand.

Exercise dates and type

Phase 1 (Up to impact)	Phase 2 (Post impact)	Phase 3 (Transition to recovery)
Wednesday 31 August 2016	Wednesday 14 September 2016	Wednesday 28 September 2016
Full scale: Activation of NCMC, ECCs, and EOCs.	Table top: Discussion exercises across Groups, partner agencies, MCDEM, and national agencies.	Table top: Discussion exercises across Groups, partner agencies, MCDEM, and national agencies.

Participation

Wide participation is expected, and includes, but is not limited to:

Ministry of Civil Defence & Emergency Management	Fast Moving Consumer Goods (FMCG)
CDEM Groups and local authorities	Ministry of Transport/New Zealand Transport Agency
New Zealand Police	New Zealand Customs Service
New Zealand Fire Service	NGOs – Red Cross
New Zealand Defence Force	Media (MoU Partners)
Ministry of Health (including Ambulance, and District Health Boards)	Bilateral partners – Federal Emergency Management Agency (FEMA – US), Australia
Ministry of Social Development	Rural Support Trust
Ministry for Primary Industries	EQC and the Insurance Council
GNS Science, including GeoNet and the Tsunami Experts Panel	Department of the Prime Minister and Cabinet
National Lifeline Utilities	Natural Hazards Research Platform
Ministry of Business, Innovation and Employment	Maritime New Zealand and the Rescue Coordination Centre
Ministry of Education	Coastguard
Ministry of Foreign Affairs and Trade	Accident Compensation Corporation
Surf Lifesaving New Zealand	

1.2 Formal invitations and further information

Formal invitations	Formal invitations will be sent out to agencies in early 2016.
Lead agency	Ministry of Civil Defence & Emergency Management (MCDEM)
Exercise Director	Jo Guard (MCDEM)
Exercise Coordinators	Jo Guard and Sara Leighton (MCDEM)



Governance Group

The already established National CDEM Exercise Programme Governance Group will act as a “board” for the exercise to ensure it is well run and well governed so that its value can be maximised.

The Governance Group is made up of members from all 16 CDEM Groups and one member of the New Zealand Lifelines Committee.

Steering Group

The Steering Group will be primarily responsible for assisting the Planning Group with the communication and implementation of exercise plans within and across agencies. This group is made up of representatives from GNS Science, the Joint Centre for Disaster Research, New Zealand Police, New Zealand Defence Force, New Zealand Fire Service, New Zealand Lifelines Committee, Ministry for Primary Industries, Ministry of Health and representatives from CDEM Groups and MCDEM.

Planning Group

The Planning Group will be primarily responsible for exercise design, conduct and evaluation. This group is made up of representatives from selected CDEM Groups and MCDEM. Further input may be provided from other agency subject matter experts where required.

Exercise enquiries

CDEMexercises@dpmc.govt.nz

Jo Guard (04 817 8582 or jo.guard@dpmc.govt.nz)

Sara Leighton (04 817 8588 or sara.leighton@dpmc.govt.nz)

WAIKATO CIVIL DEFENCE EMERGENCY MANAGEMENT GROUP JOINT COMMITTEE

Minutes of the meeting of the Waikato Civil Defence Emergency Management Group Joint Committee, held in the Council Chambers, Waikato Regional Council, 401 Grey Street, Hamilton East at 1.02pm on Monday 23 November 2015.

MEMBERS:

Waikato Regional Council
Cr Hugh Vercoe
Hamilton City Council Representative
Cr Leo Tooman
Hauraki District Council Representative
Mayor John Tregidga
Matamata Piako District Council Representative
Cr Brian Hunter
Otorohanga District Council Representative
Cr Robert Prescott
South Waikato District Council Representative
Cr Thomas Lee
Taupo District Council Representative
Cr Anna Park
Waikato District Council Representative
Cr Jacqui Church
Waipa District Council Representative
Cr Judy Bannon
Waitomo District Council Representative
Cr Allan Goddard

IN ATTENDANCE

Ministry of Civil Defence & Emergency Management
Suzanne Vowles

STAFF:

CEG Chair (Langley Cavers), Group Controller (Lee Hazelwood), Team Leader GEMO (Greg Ryan), Group Welfare Manager (Irving Young), Democracy Advisor (Jennie Cox)

APOLOGIES

Thames Coromandel District Council Representative
Cr Peter French /alt Mayor Glen Leach

Accepted

Confirmation of Agenda

(Agenda Item 1)

Cr Church moved/Cr Bannon seconded

RESOLVED

CD15/25

THAT with the inclusion of a presentation on “Chile Tsunami Research Deployment September 2015” by Richard Woods of the Auckland Civil Defence Group, the agenda of the Waikato Civil Defence Emergency Management Group of 23 November 2015 as circulated be confirmed as the business for the meeting.

The motion was put and carried (CD15/25)

Disclosures of Interest

(Agenda Item 2)

There were no disclosures of interest.

SCHEDULE A: (FOR RECOMMENDATION TO WAIKATO CDEM GROUP)**Minutes of Previous Meeting**

File: 03 04 18 (Agenda Item 3) Docs # 3496432

Cr Tooman moved/Cr Park seconded

RESOLVED

CD15/26

THAT the Minutes of the Waikato Civil Defence Emergency Management Group Joint Committee meeting of 4 September be received and approved as a true and correct record.

The motion was put and carried (CD15/26)

Chile Tsunami Research Deployment September 2015

File: 33 10 01

The Joint Committee received a presentation from Richard Woods, Head of Emergency Management Planning, Auckland Civil Defence Group, on the Chile Tsunami Research Deployment September 2015.

The presentation covered:

- After the magnitude 8.3 earthquake on 16 September 2015, the province of Coquimbo was subjected to overland flow depths up to 7 metres. For some communities waves arrived within 20 minutes of earthquake onset.
- A New Zealand research contingent travelled to Chile 10 days after the earthquake to undertake research on the lifeline impacts and subsequent emergency response to the event.
- There was a 50 year gap (1960 to 2010) between major incidents and earthquakes for the region. This meant that public preparedness was low in 2010 and resulted in 150 fatalities.
- In 2015, there were 15 fatalities.
- The government of Chile made improvements between 2010 and 2015 to public education, public knowledge of what action to undertake and effective, reliable cell broadcasting messaging system supported by 24 hour central government operations centres.
 - o Clearly marked evacuation routes and standard signage and routes marked on roads.
 - o Annual physical evacuation drills were conducted, with over 300,000 people now practicing annually.
 - o High level of public awareness to evacuate following natural or official warning.
 - o Significant investment in warning systems, allowing received notification to be sent within 6 minutes of earthquake occurring.
- It was proposed to implement an Auckland tsunami work programme, to be completed by June 2017, with public awareness and education of what necessary actions the public should take, a priority.

- Public education would include:
 - o Installation of nationally consistent signage.
 - o Where appropriate demarcation of routes and safe zones on roads.
 - o Annual physical evacuation drills in collaboration with community networks.

During questions, answers and related discussion, the Committee raised or noted the following matters:

- The deployment occurred 10 days post earthquake and at that stage it was too soon to determine what the recovery/rebuild would look like. It was surmised that due to the nature of the low socioeconomic community that any rebuild would be sporadic in nature.
- The Public education and tsunami drill would commence in Orewa with the help of the local Rotary. The intention is that training will be provided to Rotary and they would champion the education programme through schools.
- Investigations are underway to determine the impact of tsunami events for the Waikato with the Thames Coromandel District Council leading the way. The next focus for Waikato (following the completion of the current West Coast investigation) was the Firth of Thames.
- There was a move to update coastal inundation maps as global warming changes come in to effect.
- Part of the reviews in to tsunami effects would need to include road congestion between Auckland and the north or Waikato to the south.

Cr Vercoe moved/Mayor Tregidga seconded

RESOLVED

CD15/27

THAT the verbal presentation “Chile Tsunami Research Deployment September 2015” by Richard Woods of Auckland Civil Defence Group be received.

The motion was put and carried (CD15/27)

GEMO Report

File: 33 10 01 (Agenda Item 4) Doc # 3607606

Presented by Team Leader GEMO (Greg Ryan), the report provided a consolidated update on the work the Group Emergency Management Office is undertaking, including key projects and any additional matters for Joint Committee attention.

Members were introduced to the Group Welfare Manager Irving Young, who detailed for the committee some of his background including:

- Graduating from university with a Degree in Business
- Time spent in the South African Army including time in infantry and the armoured division.
- Working for the Ministry of Social Development as a Community Liaison Advisor and later Group Welfare Manager.
- Deployment to Christchurch in 2010-2011 to support welfare

The report was taken as read and there were no further questions.

Mayor Tregidga moved/Cr Lee seconded

RESOLVED

CD15/28

THAT the Waikato CDEM Group Joint Committee receive this report “GEMO Report” (Doc # 3607606, dated 13 November 2015) for information.

The motion was put and carried (CD15/28)

Group Controllers Report

File: 33 10 01 (Agenda Item 5) Doc # 3607613

Presented by Group Controller (Lee Hazelwood), the report provided the committee with an overview of the current priorities of the Group Controller.

During questions, answers and related discussion, the Committee raised or noted the following matters:

- Due to a change in Fire Service priorities the GEMO was considering alternative options for the All Hazards centre to include WRC assuming project lead. The project could move forward to meet the needs of the GEMO while still factoring in the inclusion of other agencies as it progressed.
- A contractor would be taken on to investigate the property management options. There was an opportunity to utilise the same company who was facilitating a similar project currently being undertaken by the Bay of Plenty CDEM Group.
- The conversation of co-location is continuing between the Director of the Ministry of Civil Defence and Emergency Management (MCDEM) and the Commissioner of Police and the Fire Service.
- It was noted that the Fire Service review currently underway may have an impact on investment decisions.
- The Emergency Management Information System was tested in an exercise in the Hawkes Bay recently. This was the first true test of the system with a reasonable number of users involved. The system did apparently have some issues though on the whole appeared to perform. The issues would be investigated further by the GEMO as to their operational impact. MCDEM explained from their point of view there were two instances of the system working very slowly, once these were rectified the system worked well.
- The Civil Defence Centre project aimed to clarify the function of Civil Defence Centres and the more expanded role the council had to play in their operation. It also defined the differences between Civil Defence Centres, that provide various government psychosocial support services, and Community led centres, which are community initiatives that typically provide basic care and comfort. Civil Defence was working through the timing of the communication and transition period for the region. The expectation was that the assortment of confusing historical signage currently present in the region would be removed and that this stage would commence in February 2016.
- There would be a database of locations for Civil Defence Centres and a database for Community led centres. The historical focus of a rural community on their school was still an idea for initial response, however research has identified that for recovery purposes having a school up and running as soon as possible after an incident was the ideal state.
- A marae as a focal point for a community would also be taken in to consideration under community response plans.

- The Group Controller thanked Waikato Police, particularly Superintendent Bruce Bird and Inspector Karen Henrikson for taking the initiative in the recent large scale table top exercise that included CDEM, a number of council and welfare staff. Civil Defence staff became integrated in to the Police CIMS structure and where appropriate assumed a lead role.
- It had been acknowledged at a national level that the Waikato exercise was the best coordinated to date.

Cr Prescott moved/Cr Lee seconded

RESOLVED

CD15/29

THAT the Waikato CDEM Group Joint Committee receive this report “Group Controllers Report” (Doc # 3607613, dated 13 November 2015) for information.

The motion was put and carried (CD15/29)

Summarised CEG Minutes

File: 33 10 01 (Agenda Item 6) Doc # 3607950, 3493447, 3499111

Presented by the CEG Chair (Langley Cavers), the report provided the committee with a summary of the matters raised and discussed at the last Coordinating Executive Group meeting.

During questions, answers and related discussion, the Committee raised or noted the following matters:

- The proposed Waikato CDEM Group Welfare Roles and Responsibilities Policy has been designed to be similar to the controller appointment and is formalising a process that is already in action.
- The process is for new appointments to the welfare role as all districts have a manager with the exception of South Waikato.
- The CEG recommendation to appoint Kelvin Powell to the role of Local Controller for Hamilton City is to replace the current controller Olly Te Ua as he is no longer an employee of Hamilton City Council.
- The ability for controllers to move from their council boundary in to another area for their role is not yet within policy. When the policy is updated there will be a rationalisation of roles and it will be determined which council prefers their own member as controller or will be happy to share a controller with a neighbouring district.

Cr Church moved/Cr Goddard seconded

RESOLVED

CD15/30

That the Waikato CDEM Group Joint Committee...

(a) ...receive this report “Summarised CEG minutes” (doc# 3607950, dated 13 November 2015) for information.

(b) ...adopt the proposed “Waikato CDEM Group Welfare Roles and Responsibilities Policy (CDC and EOC)”.

(c) ...appoint Kelvin Powell to the role of Local Controller for Hamilton City.

The motion was put and carried (CD15/30)

Waikato CDEM Group Annual Planning (2016/2017)

File: 33 10 01 (Agenda Item 7) Doc # 3608410

Presented by Team Leader GEMO (Greg Ryan), the report provided the details of the 2016/2017 annual plan for the GEMO, and request formal approval before inclusion in the Waikato Regional Council annual planning process.

During questions, answers and related discussion, the Committee raised or noted the following matters:

- Overall there had been a 1.7% increase in the projected costs for the work programme from the figures that were presented and approved through the Waikato Regional Council Long Term Plan. The updated projected costs would be submitted to the Waikato Regional Council for consideration in the 2016/2017 Annual Plan.
- It was questioned if the 1.7% increase was enough to trigger the significance policy, requiring Waikato Regional Council to undergo public consultation to alter the Long Term Plan. It was confirmed that, at the time, it was anticipated the Waikato Regional Council would be consulting on the 2016/2017 Annual Plan (for reasons additional to those noted above), but that this was still to be finally determined as part of ongoing annual plan development process.
- It was noted that the money allocated to CDEM activities had not been affected and that the change was attributed to allocated costs.

Mayor Tregidga moved/Cr Park seconded

RESOLVED

CD15/31

That the Waikato CDEM Group Joint Committee:

(a) ...receive this report “Waikato CDEM Group annual plan (2016/2017)”
(Doc # 3608410, dated 13 November 2015) for information.

(b) ...approve the proposed GEMO annual plan (2016/2017) for inclusion in the Waikato Regional Council annual planning process for 2016/2017.

The motion was put and carried (CD15/31)

Cr Tooman recorded his vote against the motion.

Waikato CDEM Group Plan Review

File: 33 10 01 (Agenda Item 8) Doc # 3610877

Presented by Team Leader GEMO (Greg Ryan), the report provided the committee with an update regarding the review of the Waikato CDEM Group Plan, including a focus on the review of the Waikato CDEM Group risk profile.

During questions, answers and related discussion, the Committee raised or noted the following matters:

- The work being completed on the review of risk profile was required by the Director guideline for CDEM Group Planning, although some changes had been made to the methodology to make the profile more useful for driving Waikato CDEM Group work programmes. There had been a number of discussions between Civil Defence and stakeholders and partner agencies

during the review, particularly with those who “own” certain hazards (e.g. Waikato DHB and human pandemic).

- The approach being put forward would allow the Waikato CDEM Group (i.e. local authorities, emergency services, welfare providers and lifeline utilities) to collectively discuss and agree on how to resolve common risk management issues (e.g. the need for land use decisions to be informed by readiness, response and recovery work areas).
- Concern was noted over where there was sufficient time allocated for the Joint Committee to provide input to the Group Plan Review and provide for public consultation before the review is required to be signed off.
- The involvement of the CDEM Group Plan was the management of land use was discussed, with some concern expressed around the potential for duplication of existing plans and processes. Team Leader GEMO noted that he did not expect the group plan would lead to this duplication, but would instead “join the dots” across everything that is contributing to the management of risk (with local authority plans being just one element).

Mayor Tregidga moved/Cr Hunter seconded

RESOLVED

CD15/32

That the Waikato CDEM Group Joint Committee receive this report “Waikato CDEM Group Plan review” (Doc # 3610877, dated 13 November 2015) for information.

The motion was put and carried (CD15/32)

MCDEM Report

File: 33 10 01 (Agenda Item 9) Doc # 3611733, 3593926, 3593930

Presented by Suzanne Vowles, the report provided the committee with an update regarding the work undertaken by the Ministry of Civil Defence and Emergency Management. The report was taken as read.

During questions, answers and related discussion, the Committee raised or noted the following matters:

- There would be a 3 day Tsunami exercise happening in 2016. This would be a national exercise and would affect all members of the Joint Committee and not only the coastal members. The warning order was contained within pages 56-59 of the Agenda for the meeting. This was a major undertaking for all members and partners of the Waikato CDEM Group, and the committee would be advised further regarding the work that would be required over the coming year in preparation.
- Consideration would be given to back up systems such as Mystery Creek for the purpose of the exercise.

Cr Tooman moved/Cr Prescott seconded

RESOLVED

CD15/33

That the Waikato CDEM Group Joint Committee receive this report “MCDEM work programme status report” (Doc # 3611733, dated 13 November 2015) for information.

The motion was put and carried (CD15/33)

Items for the next meeting

File: 03 04 18 (Agenda Item 10)

Next meeting is scheduled for 7 March 2016:

- Waikato CDEM Group Plan (first draft).

Meeting closed at 3.34pm.

Doc # 3615365

**WAIKATO CIVIL DEFENCE EMERGENCY MANAGEMENT GROUP
JOINT COMMITTEE**

Minutes of the meeting of the Waikato Civil Defence Emergency Management Group Joint Committee, held in the Council Chambers, Waikato Regional Council, 401 Grey Street, Hamilton East at 1.00pm on Friday 4 September 2015.

MEMBERS:

Waikato Regional Council
Cr H Vercoe
Hamilton City Council Representative
Cr L Tooman
Hauraki District Council Representative
Mayor JP Tregidga
Matamata Piako District Council Representative
Cr B Hunter
Otorohanga District Council Representative
Cr R Prescott
South Waikato District Council Representative
Cr T Lee
Taupo District Council Representative
Cr A Park
Waikato District Council Representative
Cr J Church
Waipa District Council Representative
Cr J Bannon
Waitomo District Council Representative
Cr A Goddard

IN ATTENDANCE

Ministry of Civil Defence & Emergency Management
S Stuart-Black
J Rollin

STAFF:

Director Community and Services (N Williams), CEG Chair (L Cavers), Group Controller (L Hazelwood), Team Leader GEMO (G Ryan), Democracy Advisor (J Cox)

APOLOGIES

Cr P French, Mayor G Leach, S Vowles

Accepted

Confirmation of Agenda

(Agenda Item 1)

Cr T Lee moved/Cr B Hunter seconded

RESOLVED

CD15/17

THAT the agenda of the Waikato Civil Defence Emergency Management Group of 4 September 2015 as circulated be confirmed as the business for the meeting.

The motion was put and carried (CD15/17)

Disclosures of Interest

(Agenda Item 2)

There were no disclosures of interest.

SECTION A: (FOR RECOMMENDATION TO WAIKATO CDEM GROUP)**Minutes of Previous Meeting**

File: 03 04 18 (Agenda Item 3) Docs # 3417515

Cr B Hunter moved/Cr J Church seconded

RESOLVED

CD15/18

THAT the Minutes of the Waikato Civil Defence Emergency Management Group Joint Committee meeting of 8 June 2015 be received and approved as a true and correct record.

The motion was put and carried (CD15/18)

GEMO Report

File: 03 04 18 (Agenda Item 4) Doc # 3488786

Presented by Team Leader GEMO (G Ryan), the report provided a consolidated update on the work the Group Emergency Management Office is undertaking, including key projects and any additional matters for Joint Committee attention.

- The increase in June Group Emergency Co-ordination Centre (GECC) response and in the Welfare level of effort was as a result of assisting other regions with their emergency response.
- The increased level of the CDEM Project area reflects the conclusion of two major MCDEM Resilience Fund projects.
- The Welfare level of effort has increased through the year as the member has passed on the responsibility of the Lifeline.
- The labour budget has been under spent due to 7 month vacancy that has been reduced by commissioning an additional piece of work to review the website and develop a mobile friendly version.
- There have been a number of capable controllers trained for the region.
- There has been a comprehensive review of public alerting what will work, what might work and how to fill the gaps where technology is not so readily available.
- Foundational ITF training has become a part of the Council Induction training across much of the region.
- Successful coordination of the CIMS training across organisations.
- Built on the capability by having a way forward working with Volunteer organisations in times of emergency.
- A better understanding into the CDEM role within the group plan.

During questions, answers and related discussion, the Committee raised or noted the following matters:

- The focus up to now has been on building the group welfare plan. All Territorial Authorities can expect to see progress in the Welfare space in the coming year, the next step will be to appoint local Welfare managers and reach out to the local welfare agencies.
- Welfare involves numerous agencies and the CDEM role is to co-ordinate all these agencies together in an emergency.
- Every agency has a role in the Civil Defence Plan and each have been tasked to determine based on legislation who is responsible and which agency is best placed to deliver in these areas. As an example the Ministry of Primary Industries (MPI) holds the responsibility for animal welfare, and Ministry of Building – for shelter.
- Ellen Thomas was introduced to the Joint Committee as the new Business Support Specialist. She is a Team Leader of the New Zealand Red Cross Response Team for Waikato and is currently completing a Masters in Emergency Management.
- The Joint Committee were advised that the GEMO were now recruiting for a replacement Emergency Management Coordinator (ICT) and expected the process to be complete by the end of September 2015.
- As the budget for Civil Defence comes from a targeted rate from all of the regions ratepayers, the budget is specifically for Civil Defence and as such any under spend in budget is carried forward. It cannot be redistributed by Waikato Regional Council for any other function.

Cr J Bannon moved/Cr L Tooman seconded

RESOLVED

CD15/19

THAT the Waikato CDEM Group Joint Committee receive this report “GEMO Report” (Doc #3488786, dated 27 August 2015) for information.

The motion was put and carried (CD15/19)

SECTION B: (FOR RECOMMENDATION TO COUNCIL)

Group Controllers Report

File: 03 04 18 (Agenda Item 5) Doc # 3488787

Presented by the Group Controller (L Hazelwood), the report provided the Joint Committee with an overview of the current priorities of the Group Controller.

During questions, answers and related discussion, the Committee raised or noted the following matters:

- The All Hazards Centre is still a project under discussion. The Joint Committee were updated with the latest results from a meeting between the Chair of Waikato CDEM Joint Committee, the Group Controller and the Region 2 Fire Manager. As a result it was recommended that Council or CDEM appoint a property consultant that would be able to interact with the Fire Service property manager to look after the interests of the CDEM and come back to the Joint committee with figures and suggestions.

- The priority for a relocation rebuild for the Fire Service is changing and the latest information suggests that it may be as far as 5 years before a commitment is made.
- Discussion focussed on the matter of relocating CDEM from their temporary premises and co-locating with emergency services as soon as practically possible and that it should be progressed from the Waikato Regional Council as the administering authority for the CDEM. That CDEM should not wait for the Fire Services to be ready to come on board with the plan and should now lead the discussion.
- It was acknowledged that all of the agencies, via a Chief Executives Group including Police, Fire, Ambulance, MCDEM and Ministry of Health, are agreed that there will need to be a capital investment across the agencies from a Central Government level
- Police involvement has been determined as technology within an office and staff in times of emergency.
- The ideal location for the building from the Fire Service perspective is North Hamilton, as it will be the relocation of the Pukete station and a number of the services and training from the Anglesea Street station.

Mayor J Tregidga moved/Cr B Hunter seconded

RECOMMENDED

CD15/20

THAT Waikato Regional Council identify staff or retain a property consultant to work with the Emergency Services to negotiate on behalf of the Waikato CDEM Group for an All Hazards Centre.

The motion was put and carried (CD15/20)

- Waikato CDEM sent three staff in support of the Taranaki CDEM (one) and the Manawatu – Wanganui CDEM (two) during the floods in June.
- A number of points were learned from those regions by our team and bought back to the Waikato CDEM. As a result after the emergency a number of their decisions were analysed and resolutions were made to look at checklists and complete analysis for needs and determine the best course of action for support in the region in the future.
- Waikato CDEM has been invited to be participate in a large tabletop Police exercise. Recently training has been provided to Police command staff for large scale emergencies. This shows how the relationship between Police and CDEM has progressed over the years.
- Disaster media training was completed for a number of the elected officials around the region and members who attended felt it was beneficial for all of the regions Mayors to attend in the future. The focus was on how controllers and Mayors communicate in a disaster situation.
- Members were advised of two recent Controllers who have been nominated for appointment by their own councils. They have come through the controller appointment process, but their nomination is yet to be endorsed by their local councils. CEG have put their endorsement to the candidates for the Joint Committee approval.
- The Joint Committee heard from Sharon Robinson the nominated local controller on behalf of the South Waikato District. She provided the Committee with her council background.
- Councillor A Park was able to support the nomination of Ariell King for local controller for the Taupo District, and provided background to Ariell's role with the Council.

- Hamilton City Council will have another local controller nominated but Waikato CDEM was yet to be formally advised of the nomination.

Cr R Prescott moved/Cr J Bannon seconded

RESOLVED

CD15/21

THAT the Waikato CDEM Group Joint Committee:

- (a) ...receive this report “Group Controllers Report” (Doc # 3488787, dated 27 August 2015) for information.**
- (b) ...appoint Sharon Robinson to the role of Local Controller for the South Waikato District (subject to receiving an endorsement from the South Waikato District Council).**
- (c) ...appoint Ariell King to the role of Local Controller for the Taupo District (subject to receiving an endorsement from the Taupo District Council).**

The motion was put and carried (CD15/21)

SECTION A: (FOR RECOMMENDATION TO WAIKATO CDEM GROUP)

Summarised CEG Minutes

File: 03 04 18 (Agenda Item 6) Doc # 3488789

The minutes were taken as read. Group Controller (L Hazelwood) provided the Joint Committee with a summary of the matters raised and discussed at the last Coordinating Executive Group meeting on 21 August 2015.

During questions, answers and related discussion, the Committee raised or noted the following matters:

- The Joint Committee were advised of the efforts of the Community Resilience Coordinator with social media interaction. This has included increasing the profile of the Waikato CDEM through their Facebook page, Twitter account and Instagram. The new methods of engagement include cartoons providing a simple message in a way that appeals to a varied audience. With each simple message is a link to the formal information such as the Met Service reports.
- The new medium has increased the profile whereby posts from CDEM have gone from being viewed or shared by a few hundred people to over 240,000 people. This has gained national attention which is seen in the comments from the posts and One News interviewing Waikato CDEM about the social media updates.
- Members of the Joint Committee suggested that when posts are made by CDEM that each council be tagged in to the post, and they can then ensure that the message is shared on a wider scale again.
- Waikato CDEM has identified campaigns in preparation for NZ Shakeout 2015 and Get Ready Week. One is Disaster House working with the University student demographic and another working with school age students.
- Disaster House is a project being aimed at the student demographic of the community whereby actors will be put in to an emergency evacuation situation at a property for three days. The results of this will be shared

via social media. This is being advertised now on social media, posters and buses around Hamilton. The exercise is to demonstrate the importance of preparedness.

- The next project is working with year 12 and 13 students over a 24 hour period to consider what they would do in a situation with no power or water.

Presented by the former Emergency Management Co-ordinator (ICT) (D Phyn), the presentation provided the Joint Committee with a summary Review of Public Alerting options with recommendations.

- The Emergency Response System leaders are NZ Police and Ministry of Business, Innovation and Employment. They are working with partners being NZ Fire Service, St John Ambulance and Civil Defence.
- Consideration is being given to a geographically locatable function for emergency calls and targeted alerts based on a cell phone users' location. There are a number of applications already being used in New Zealand by different agencies. The decision around what kind and model of applications will be made in July 2016. It is important for consistency that it be a national system.
- Alternative solutions are being identified and explored for any of the gaps that a single App may not cover (reception, technology, mental or physical impairment).
- Public education for natural warnings is also another simple technique that can be widely employed.
- There have been a number of recommendations for the group and local territorial authorities. These are all contained within the report "Review of public alerting options with recommendations for the Waikato CDEM Group" available to all members through the website. <http://waikatocivildefence.govt.nz/Member-area/Joint-Committee/JC-documents/>.

Cr R Prescott moved/Cr A Park seconded

RESOLVED

CD15/22

THAT the Waikato CDEM Group Joint Committee receive this report "Summarised CEG minutes" (Doc # 3488789, dated 27 August 2015) for information and congratulate the Waikato Civil Defence Group for their Social Media work.

The motion was put and carried (CD15/22)

The Chair of the Joint Committee thanked Derek for his expertise and the work completed in his 3 years with the Waikato CDEM Group. The work he has put in to the latest public alerting project was valued and appreciated by CDEM and the Joint Committee.

Waikato CDEM Group Annual Planning (2016/2017)

File: 03 04 18 (Agenda Item 7) Doc # 3492132

Presented by the Group Controller (L Hazelwood), the report provided the Joint Committee with an initial opportunity to discuss the 2016/2017 annual planning process for the Waikato CDEM Group, including the GEMO work

programme and budget that will be presented to the Joint Committee in November for approval.

It was noted that the priorities will remain unchanged from what was confirmed in the Long Term Plan.

Mayor J Tregidga moved/Cr J Bannon seconded

RESOLVED

CD15/23

THAT the Waikato CDEM Group Joint Committee receive this report “Waikato CDEM Group annual plan (2016/2017)” (Doc #3492132, dated 27 August 2015) for information.

The motion was put and carried (CD15/23)

MCDEM Work Programme Status Report

File: 03 04 18 (Agenda Item 8) Doc # 3488788, 3477768

The item was taken as read. The Director of MCDEM (S Stuart-Black) outlined for the Joint Committee the work that is going on nationally.

- For the last 18 months MCDEM has been working towards the ambitious project of creating a new national strategy.
- CDEM is ready to start looking to the future.
- There will be a National Conference 1-3 June 2016 to which Joint Committee members, CEG chairs and CDEM staff of all levels are encouraged to attend and share good practice with their peers. Provides an opportunity to talk together and the Ministerial awards will be presented as a part of the Conference.

Cr B Hunter moved/Cr T Lee seconded

RESOLVED

CD15/24

THAT the Waikato CDEM Group Joint Committee receive this report “MCDEM work programme status report” (Doc # 3488788, dated 27 August 2015) for information.

The motion was put and carried (CD15/24)

Items for next meeting

File: 03 04 18 (Agenda Item 9)

There were no items indicated by the Joint Committee for the next meeting.

Meeting closed at 3.00pm

Doc # 3496432

Open Meeting

To	Strategy & Finance Committee
From	S Duignan General Manager Customer Support
Date	23 February 2016
Prepared By	K Newell
Chief Executive Approved	Y
DWS Document Set #	1148669
Report Title	CDEM National Capability Assessment Report – December 2015

1. Executive Summary

In 2015 the Ministry of Civil Defence Emergency Management (MCDEM) undertook a national capability assessment to understand the current level of performance of CDEM Groups across New Zealand. This required all members of each of the 16 CDEM groups across the country to complete the monitoring and evaluation assessment tool and participate in interviews by MCDEM representatives.

This was the second capability assessment undertaken by MCDEM. The first was completed in 2009 and resulted in the Waikato CDEM Group being identified as the second poorest performing group in New Zealand.

The results of the capability assessment have shown that the Waikato CDEM Group have made significant progress in their overall capability since the 2009 assessment in moving from 15th in the nation to 7th and one of the most improved groups overall. The assessment was undertaken after only 4 years rather than 5 and shows the commitment of the members of the Waikato CDEM Group to increasing our ability to support our communities in a disaster.

2. Recommendation

THAT the report of the General Manager Customer Support – CDEM National Capability Assessment Report December 2015 - be received.

Attachment(s) – *CDEM National Capability Assessment Report December 2015*



CDEM National Capability Assessment Report

December 2015



Ministry of Civil Defence
& Emergency Management
Te Rākau Whakamarumaru

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1. SUMMARY

The capability assessment process provides a national snapshot of Civil Defence Emergency Management CDEM capability across New Zealand. This is the second national capability assessment. Comparisons between 2015 and the first assessment report produced in 2012 show that there has been significant improvement in some of the delivery areas, although less improvements in others.

Scores show that there have been nationwide improvements across all four goals and two Enablers of the National CDEM Strategy with the strongest improvements in Goal 2 (risk reduction) and Enabler 1 (management and governance). However, there is a consistently weaker performance nationwide in Goal 4 (recovery).

This National Capability Assessment report uses as its evidence base the data and issues identified through each of the 16 CDEM Group Capability Assessments. The assessment process uses both quantitative (assessment tool) and qualitative (interview) processes. Using a 'maturity matrix' scale, each of the 16 CDEM groups is scored in a number of performance areas across 'unsatisfactory', 'developing', 'advancing' and 'mature' score areas. The findings have identified themes that illustrate some of the opportunities and barriers to improving CDEM performance.

All of the 16 CDEM Groups have scores in the 'advancing' or above category, which is a significant improvement from 2012. Each Group was set a performance target and 11 of the 16 met or came very close to their target. Six CDEM Groups made such significant gains that they increased their overall score between 17 and 26% on their 2012 score; three CDEM Groups scored in the 'mature' score category indicating their performance is at 80% or more. These are significant and impressive achievements for these CDEM Groups.

At a CDEM functional level, scores vary indicating a greater confidence in some aspects of delivery than others. Highest performing CDEM functions include Public Information Managers, Emergency Operations Centre facilities, warning systems and CDEM Management, suggesting that many aspects of CDEM Group response arrangements are strong. The weaker scoring CDEM functions include logistics and critical resource management, and those functions that are intended to enhance New Zealand's capability to recover from emergencies. These areas are less well practised and indicate weaker confidence by CDEM Groups.

Factors that influence the ability of the CDEM Groups and stakeholders to perform at the highest level were discussed in the 2012 National Capability Assessment report. This assessment round has found that many of these are still impeding high performance in 2015. In order to support future CDEM improvements there is a need for CDEM to shift its attention away from managing disasters to managing risk, and building resilience within organisations and communities.

Notwithstanding the need to sustain robust response arrangements, CDEM agencies are increasingly examining the need to have a greater focus on risk reduction and resilience building. A focus on understanding the hazards that affect New Zealand, acknowledging the exposure to them, and being cognisant of underlying societal vulnerabilities, would allow for work that protects the long term prosperity and wellbeing needed for communities to thrive.

Aligned to the concept of resilience is the need for better connectivity between the CDEM professionals and those facilitating improved CDEM outcomes at an organisational and community level. CDEM Groups have a history of strong collaboration between partner organisations during emergencies, but this needs to extend into day to day activity. Local authorities have a range of business functions delivering services that greatly improve the resilience of its communities. What is less obvious is any deliberate, interconnected approach to building resilience across local authorities, stakeholders / partners and communities.

Rather than being seen as something 'extra', CDEM Groups need to examine ways to leverage the "resilience dividend" that delivers benefit through day to day service delivery, rather than simply focusing on recovering from shocks.

2. BACKGROUND

In line with the previous Civil Defence Emergency Management (CDEM) Capability Assessment Report: Part 1¹, the rationale for conducting the monitoring and evaluation programme remains the same reflecting requirements for the Director CDEM to monitor and evaluate:

- the National CDEM Strategy (s8(2)(c));
- the National CDEM Plan (s8(2)(d)); and
- the performance of CDEM Groups and agencies with responsibilities under the CDEM Act (s8(2)(f)).

2.1. THE STRATEGIC FRAMEWORK

The National CDEM Strategy outlines the vision, values and principles for the delivery of CDEM in New Zealand. The strategy has four main goals underpinned by a number of objectives that describe the outcomes New Zealand aims to achieve. The capability assessment tool tests performance against each of these goals and objectives (see figure 1).

¹ CDEM Capability Assessment Report Parts 1 and 2, April 2012; Ministry of Civil Defence & Emergency Management

Goal One	Goal Two	Goal Three	Goal Four	Enabler One
Increasing community awareness, understanding, preparedness and participation in civil defence emergency management	Reducing the risks from hazards to New Zealand	Enhancing New Zealand's capability to manage civil defence emergencies	Enhancing New Zealand's capability to recover from civil defence emergencies	Ensuring all agencies have the structures and authorities to be able to reduce risks, be ready for, respond to and recover from civil defence emergencies
1A: Increasing the level of community awareness and understanding of the risks from hazards	2A: Improving the coordination, promotion and accessibility of CDEM research	3A: Promoting continuing and coordinated professional development in CDEM	4A: Implementing effective recovery planning and activities in communities and across the social, economic, natural and built envts	5A: Ensuring compliance with relevant legislative frameworks
1B: Improving individual and community preparedness	2B: Developing a comprehensive understanding of New Zealand's hazardscape	3B: Enhancing the ability of CDEM Groups to prepare for and manage emergencies	4B: Enhancing the ability of agencies to manage the recovery process	5B: Implementing effective organisational structures for CDEM
1C: Improving community participation in CDEM	2C: Encouraging all CDEM stakeholders to reduce the risks from hazards to acceptable levels			5C: Ensuring agencies have funding for CDEM
1D: Encouraging and enabling wider community participation in hazard risk management decisions				5D: Ensuring agencies are able to function to the fullest possible extent during and after an emergency

2012:
Capability
Assessment
Tool Goals and
objectives of
the National
CDEM Strategy
(with
additional
Enabler)

Goal One	Goal Two	Goal Three	Goal Four	Enabler One	Enabler Two
Increasing community awareness, understanding, preparedness and participation in civil defence emergency management	Reducing the risks from hazards to New Zealand	Enhancing New Zealand's capability to manage civil defence emergencies	Enhancing New Zealand's capability to recover from civil defence emergencies	Governance and management arrangements support and enable civil defence emergency management	Organisational resilience supports effective crisis management
1A: Increasing the level of community awareness and understanding of the risks from hazards	2A: Improving the coordination, promotion and accessibility of CDEM research	3A: Promoting continuing and coordinated professional development in CDEM	4A: Implementing effective recovery planning and activities in communities and across the social, economic, natural and built envts	5A: Implement effective organisational structures for CDEM	6A: Organisational resilience is developed through risk management and planned strategies
1B: Improving individual and community preparedness	2B: Developing a comprehensive understanding of New Zealand's hazardscape	3B: Enhancing the ability of CDEM Groups to prepare for and manage emergencies	4B: Enhancing the ability of agencies to manage the recovery process	5B: CDEM Group culture positively influences the effective delivery of CDEM	6B: Organisational resilience is developed through adaptive capacity
1C: Improving community participation in CDEM	2C: Encouraging all CDEM stakeholders to reduce the risks from hazards to acceptable levels			5C: Ensure agencies have funding for civil defence emergency management	
1D: Encouraging and enabling wider community participation in hazard risk management decisions					

2015:
Capability
Assessment
Tool Goals and
objectives of
the National
CDEM Strategy
(with
additional 2
Enablers)

Figure 1: 2012 and 2015 capability assessment tool frameworks

2.2. CAPABILITY ASSESSMENT TOOL REVIEW AND PROGRAMME OUTPUTS

Prior to starting this round of capability assessments, the capability assessment tool was reviewed resulting in a number of minor amendments made to improve the quality of the tool, alongside some more substantial changes to reflect current CDEM delivery.. In summary, the key changes made to the tool were:

- New content was added in Goal 1 to assess Group progress in building community resilience;
- Goal 2 (risk reduction) was amended to clarify the actions that progressively contribute towards a reduction of hazards;
- Content within Goal 3 (managing emergencies) was amended to reflect revised thinking in Emergency Operation Centre arrangements, controllers, critical resources, welfare and lifelines;
- Enabler 1 (management and governance) had new measures added to capture emergency management culture and leadership;
- Enabler 2 (organisational resilience) was created to capture the adaptive and planned functions that organisations undertake to support effective crisis management.

The capability assessment process however, has remained largely unchanged. Each of the CDEM Groups participated in:

- a quantitative component (self-assessment using the capability assessment tool);
- a qualitative component that includes the review of key CDEM Group doctrine; and
- interviews with key personnel across governance, management and CDEM delivery which informally explored CDEM Group performance from the perspective of those involved.

A core monitoring and evaluation team of two staff provided consistency in the approach for scoring, conducting interviews and generating reports across most of the 16 CDEM Group assessments.

The outputs of the capability assessment process are somewhat changed. CDEM Groups each received shorter reports, focussing on verified areas of strength and improvement opportunities across each of the four goals and two enablers. Reports make only one recommendation, asking each CDEM Group to prepare a corrective action plan based on the report and data, which is approved by its Joint Committee and is subsequently lodged with MCDEM. The corrective action plans will be used by CDEM Groups when reviewing its CDEM Group Plan, and developing annual work programmes. Collectively, the corrective action plans may inform future areas of focus for MCDEM in its business planning.

In addition to a CDEM Group-level capability assessment report, each CDEM Groups is provided with its collective capability assessment tool data. This data includes CDEM Group self-assessment scores alongside the scores moderated by MCDEM. Following feedback from the first round of capability assessments, CDEM Groups also now receive self-assessment data from the local authority (which is unmoderated by MCDEM). This data can further support the CDEM Group in identifying particular territorial authorities that are strong in areas of CDEM, and opportunities to leverage good practice across the CDEM Group.

2.3. SCORING

This section describes how the score for each CDEM Group is obtained and how this information contributes to the national picture of CDEM performance.

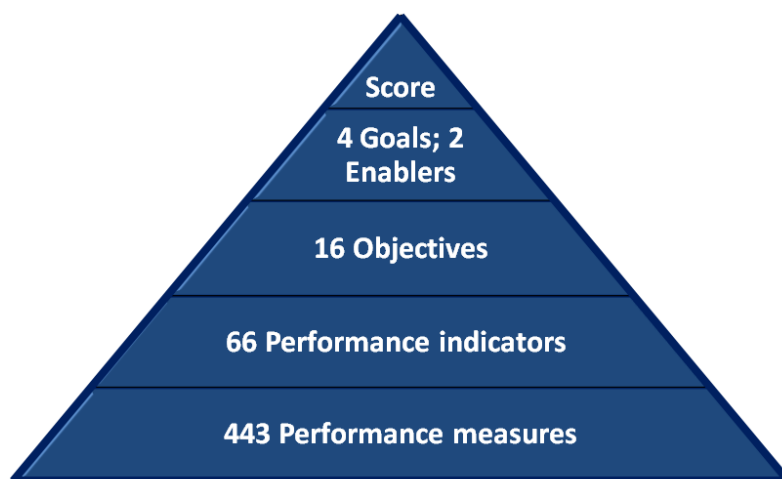


Figure 2: Framework of goals, objectives, indicators and measures that comprises the CDEM Capability Assessment Tool

The Capability Assessment Tool is comprised of goals/enablers and objectives ('the strategic framework', as derived from the National CDEM Strategy), which are broken down into performance indicators and measures ('capability criteria') – illustrated in Figure 1.

CDEM Groups are evaluated and scored at the performance measure level. These scores are then aggregated upwards into indicator, objective and goal-level scores. A final overall CDEM Group score provides a broad overview of performance.

Goals/enablers (and objectives, indicators, and measures) have weighted contributions towards the overall score, and this remains largely unchanged from the previous CDEM Capability Assessment Tool. Figure 2 shows the proportional contribution from each goal and enabler.

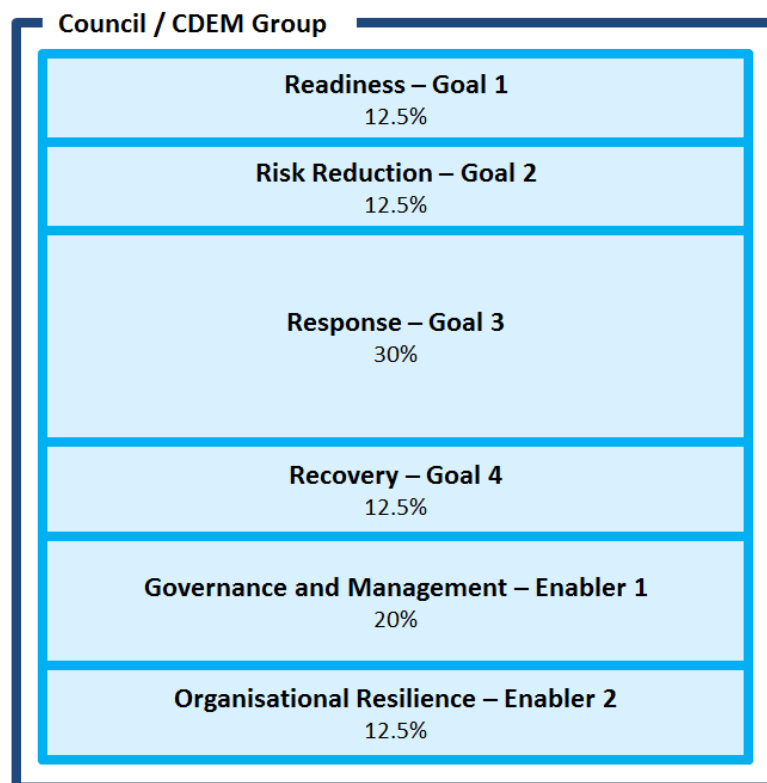


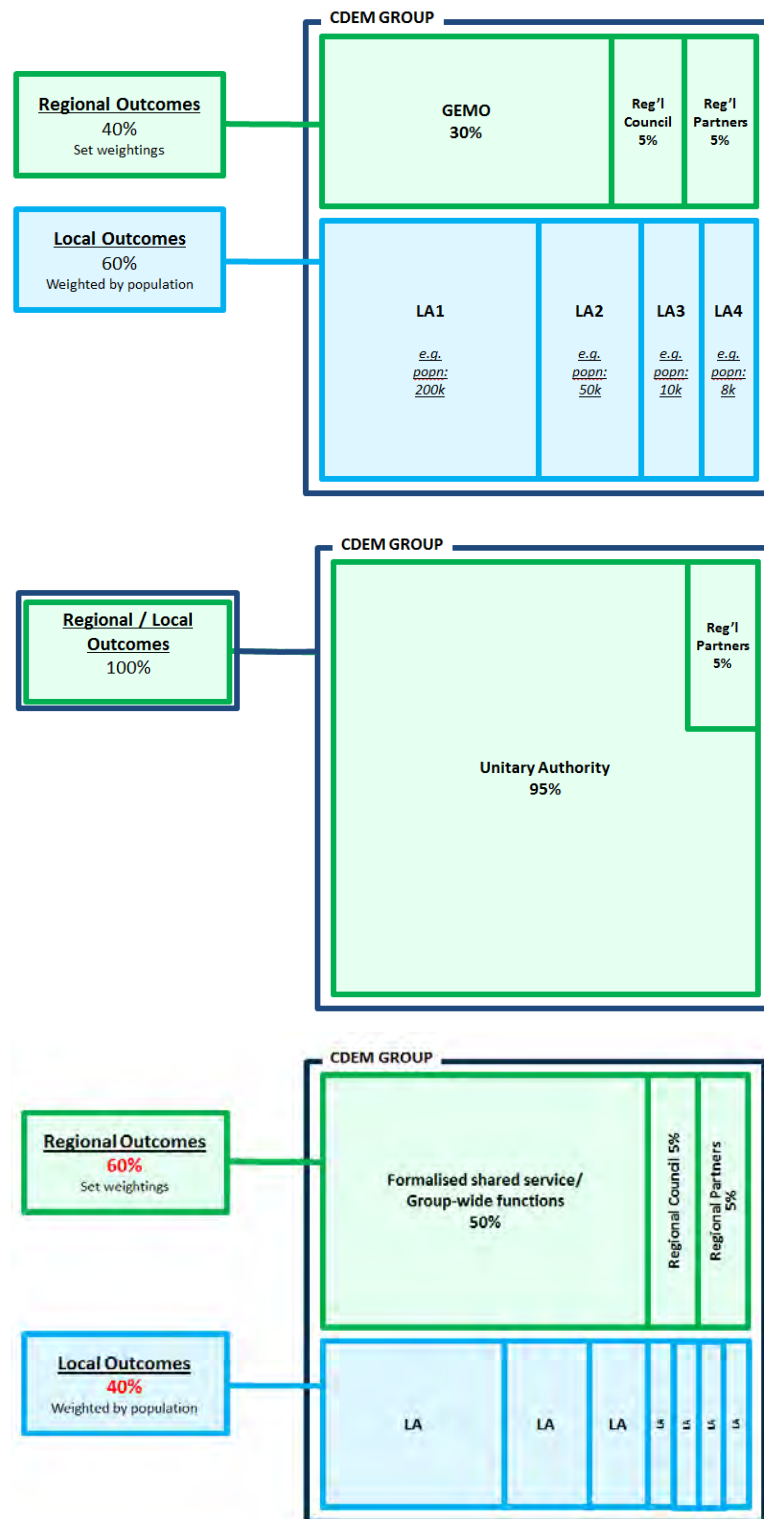
Figure 3: Weighted contribution to scores

A 'maturity index' was introduced in the first National Capability Assessment report, which categorises performance as 'unsatisfactory', 'developing', 'advancing' or 'mature'. These categories describe achievement across measures, indicators, objectives and goals in the Capability Assessment Tool.

Unsatisfactory	Developing		Advancing	Mature	
0 – 19%	20 – 39%	40 – 59%	60 – 79%	80 – 89%	90 – 100%

Figure 4: CDEM Group scoring framework ('maturity matrix')

Minor changes were made in the way CDEM Group (collective) scores were constructed for this capability assessment round. Allowing for structural variations in CDEM Groups (particularly for unitary authorities or those with shared service models) was important. In a 'traditional' CDEM Group model comprised of several member local authorities, a 'local component' represents 60% of the overall score, with each of the member territorial authorities having a weighted proportion based on population size. A regional component represents 40% and is made up of the Group Emergency Management Office, regional council and regional partners. For unitary councils that provide local and regional services, these are combined and there is only one level (100% of the score). For shared service models, a hybrid of weighting was applied to reflect the delivery arrangements. Figure 5 shows these scoring constructs.



Traditional CDEM Group score construct comprised of regional outcomes (40%) delivered by a Group Emergency Management Office (along with Regional Council and Regional partners), and a local outcome component (60%) delivered by Local Authorities (weighted by population).

Unitary Council construct where both regional and local outcomes are delivered by one unitary authority alongside regional partners (100%).

Formalised shared service delivery model where the majority of CDEM functions (60%) are delivered from one centralised team (supported by the Regional Council and regional partners), alongside local delivery outcomes (40%) delivered by local authorities (weighted by population)

Figure 5: Scoring constructs for traditional CDEM Groups, unitary authorities and formalised shared service arrangements.

2.4. CDEM CONTEXT

Since the first National Capability Assessment Report, CDEM Groups and stakeholders have reflected on the experiences and early lessons from the Canterbury earthquakes of September 2010 and February 2011. With the completion of the corrective action plan arising from the *Review of the Civil Defence Emergency Management Response to the 22 February Christchurch Earthquake*, revised approaches in a number of functional areas (such as welfare arrangements) will be reflected in CDEM Group-level corrective action plans and subsequently through revised CDEM Group plans.

Additionally there is growing recognition of the need to consider the role of risk² in the management of disasters. The second extended *United Nations International Strategy for Disaster Risk Reduction (ISDR)*, the *Sendai Framework for Disaster Risk Reduction 2015 – 2030*³ and notably its ‘priorities for action’⁴ places a greater emphasis on those activities that are conducted ahead of emergencies, rather than those solely focused on response management. This has informed this round of capability assessments and the revisions to the capability assessment tool.

The findings from this report will support MCDEM in its ongoing conversations with the CDEM Groups and stakeholders, as well as providing an invaluable input into the upcoming revision of the National CDEM Strategy. In particular, integrating professionalisation across CDEM Groups and stakeholders and moving from managing disasters to managing risk, are key areas for improvement (discussed further in section 4).

² Examples include: *Protecting New Zealand from Hazards (October 2014)*; *Insurance Council of New Zealand; Managing natural hazard risk in New Zealand – towards more resilient communities (October 2014)*; and *Local Government New Zealand*. There are many other examples.

³ See http://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf

⁴ Priorities are: (1) Understanding disaster risk, (2) Strengthening disaster risk governance to manage disaster risk, (3) Investing in disaster risk reduction for resilience and (4) Enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction.

3. 2015 CDEM CAPABILITY SNAPSHOT

3.1. HIGH LEVEL PROGRESS ON THE NATIONAL CDEM STRATEGY

3.1.1. National level overview

Figure 6 shows steady progress has been made by the CDEM Groups since 2012 with performance improvements across all goals and enablers. National CDEM performance is determined by the average score across each of the 16 CDEM Groups. At a goal /enabler level, comparisons of the scores between 2012 and 2015 show that improvements in CDEM performance have been made across the board, with the most notable improvements in Goal 2 and Enabler 1. Enabler 1 is the most improved area suggesting that strengthened management and governance of CDEM has significantly contributed to improvements in all areas.

2015	72.4	69.7	72.2	56.8	77.5	66.2	70.3
2012	62.9	57.6	67.5	46.8	58.1	n/a	58.8
	Goal 1	Goal 2	Goal 3	Goal 4	Enabler 1	Enabler 2	National Score

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

- Goal 1: Increasing community awareness, understanding, preparedness and participation in civil defence emergency management
- Goal 2: Reducing the risks from hazards to New Zealand
- Goal 3: Enhancing New Zealand's capability to manage civil defence emergencies
- Goal 4: Enhancing New Zealand's capability to recovery from civil defence emergencies
- Enabler 1: Governance and management arrangements support and enable civil defence emergency management
- Enabler 2: Organisational resilience supports effective crisis management

Figure 6: High level comparison of Goal/Enabler scores in 2015 and 2012.

3.1.2. CDEM Group level overview

Figure 7 shows the distribution of CDEM Group scores in 2015 and 2012. The delineation between the 'developing' and 'advancing' score categories shows that in 2015, all 16 CDEM Groups attained a performance ranking of advancing or higher. This is a significant improvement on the 2012 scores, where only nine CDEM Groups scored in the advancing score category. The red and green arrows indicate the 'clusters' of CDEM Group scoring in both 2015 and 2012. In 2015, the largest proportion of CDEM Groups sit within the 60 – 69% cluster.

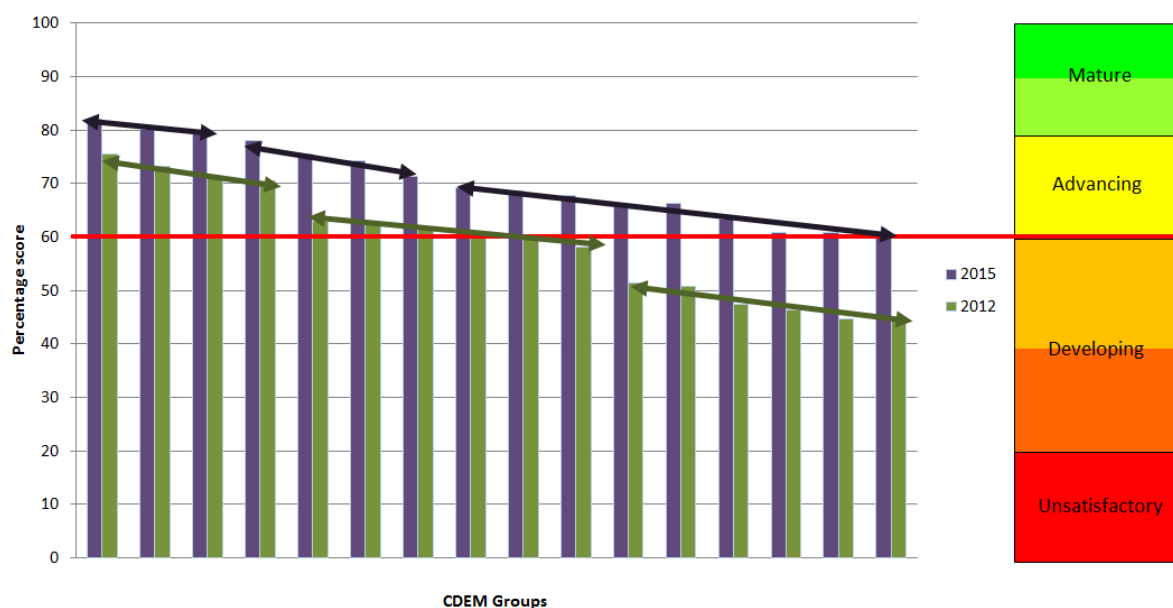


Figure 7: 2015 and 2012: Distribution of CDEM Group scores

A comparison of goal and objective level performance in 2015 and 2012 can be seen in figure 8. The lower scoring areas from the 2012 assessment can be seen in the orange coloured boxes, namely objectives 1C; 1D; 2B; 2C, 5D and all of Goal 4. In 2015, these show improvements in all areas (excluding Goal 4), having moved from the ‘developing’ into the ‘advancing’ score category. In addition, objectives that scored in the ‘advancing’ category in 2012 have increased their scores further in the 2015 data.

Although the national average scores provide a broad brush indication of CDEM performance in New Zealand, there are significant variations in performance scores between CDEM Groups. These are for a range of reasons that are discussed further in section 4.

To illustrate this variation, the highest and lowest scoring CDEM Groups are compared in Figure 9.

Similarly, within each of the objectives, there are also variations of higher and lower performing indicators at both CDEM Group and local authority level that illustrate trends in the uptake of CDEM at a more operational level (see sub-section ‘Performance Improvements by CDEM Indicator’).

Goal One	Goal Two	Goal Three	Goal Four	Enabler One
Increasing community awareness, understanding, preparedness and participation in civil defence emergency management	Reducing the risks from hazards to New Zealand	Enhancing New Zealand's capability to manage civil defence emergencies	Enhancing New Zealand's capability to recover from civil defence emergencies	Ensuring all agencies have the structures and authorities to be able to reduce risks, be ready for, respond to and recover from civil defence emergencies
1A: Increasing the level of community awareness and understanding of the risks from hazards	2A: Improving the coordination, promotion and accessibility of CDEM research	3A: Promoting continuing and coordinated professional development in CDEM	4A: Implementing effective recovery planning and activities in communities and across the social, economic, natural and built envts	5A: Ensuring compliance with relevant legislative frameworks
1B: Improving individual and community preparedness	2B: Developing a comprehensive understanding of New Zealand's hazardscape	3B: Enhancing the ability of CDEM Groups to prepare for and manage emergencies	4B: Enhancing the ability of agencies to manage the recovery process	5B: Implementing effective organisational structures for CDEM
1C: Improving community participation in CDEM	2C: Encouraging all CDEM stakeholders to reduce the risks from hazards to acceptable levels			5C: Ensuring agencies have funding for CDEM
1D: Encouraging and enabling wider community participation in hazard risk management decisions				5D: Ensuring agencies are able to function to the fullest possible extent during and after an emergency

2012:
Average national CDEM performance across goals and objectives

Goal One	Goal Two	Goal Three	Goal Four	Enabler One	Enabler Two
Increasing community awareness, understanding, preparedness and participation in civil defence emergency management	Reducing the risks from hazards to New Zealand	Enhancing New Zealand's capability to manage civil defence emergencies	Enhancing New Zealand's capability to recover from civil defence emergencies	Governance and management arrangements support and enable civil defence emergency management	Organisational resilience supports effective crisis management
1A: Increasing the level of community awareness and understanding of the risks from hazards	2A: Improving the coordination, promotion and accessibility of CDEM research	3A: Promoting continuing and coordinated professional development in CDEM	4A: Implementing effective recovery planning and activities in communities and across the social, economic, natural and built envts	5A: Implement effective organisational structures for CDEM	6A: Organisational resilience is developed through risk management and planned strategies
1B: Improving individual and community preparedness	2B: Developing a comprehensive understanding of New Zealand's hazardscape	3B: Enhancing the ability of CDEM Groups to prepare for and manage emergencies	4B: Enhancing the ability of agencies to manage the recovery process	5B: CDEM Group culture positively influences the effective delivery of CDEM	6B: Organisational resilience is developed through adaptive capacity
1C: Improving community participation in CDEM	2C: Encouraging all CDEM stakeholders to reduce the risks from hazards to acceptable levels			5C: Ensure agencies have funding for civil defence emergency management	
1D: Encouraging and enabling wider community participation in hazard risk management decisions					

2015:
Average national CDEM performance across goals and objectives

Unsatisfactory	Developing		Advancing	Mature	
0 – 19%	20 – 39%	40 – 59%	60 – 79%	80 – 89%	90 – 100%

Figure 8: Comparison of performance by goal and objective in 2012 and 2015

Goal One	Goal Two	Goal Three	Goal Four	Enabler One	Enabler Two
Increasing community awareness, understanding, preparedness and participation in civil defence emergency management	Reducing the risks from hazards to New Zealand	Enhancing New Zealand's capability to manage civil defence emergencies	Enhancing New Zealand's capability to recover from civil defence emergencies	Governance and management arrangements support and enable civil defence emergency management	Organisational resilience supports effective crisis management
1A: Increasing the level of community awareness and understanding of the risks from hazards	2A: Improving the coordination, promotion and accessibility of CDEM research	3A: Promoting continuing and coordinated professional development in CDEM	4A: Implementing effective recovery planning and activities in communities and across the social, economic, natural and built envts	5A: Implement effective organisational structures for CDEM	6A: Organisational resilience is developed through risk management and planned strategies
1B: Improving individual and community preparedness	2B: Developing a comprehensive understanding of New Zealand's hazardscape	3B: Enhancing the ability of CDEM Groups to prepare for and manage emergencies	4B: Enhancing the ability of agencies to manage the recovery process	5B: CDEM Group culture positively influences the effective delivery of CDEM	6B: Organisational resilience is developed through adaptive capacity
1C: Improving community participation in CDEM	2C: Encouraging all CDEM stakeholders to reduce the risks from hazards to acceptable levels			5C: Ensure agencies have funding for civil defence emergency management	
1D: Encouraging and enabling wider community participation in hazard risk management decisions					

2015:
Highest
scoring
CDEM
Group

Goal One	Goal Two	Goal Three	Goal Four	Enabler One	Enabler Two
Increasing community awareness, understanding, preparedness and participation in civil defence emergency management	Reducing the risks from hazards to New Zealand	Enhancing New Zealand's capability to manage civil defence emergencies	Enhancing New Zealand's capability to recover from civil defence emergencies	Governance and management arrangements support and enable civil defence emergency management	Organisational resilience supports effective crisis management
1A: Increasing the level of community awareness and understanding of the risks from hazards	2A: Improving the coordination, promotion and accessibility of CDEM research	3A: Promoting continuing and coordinated professional development in CDEM	4A: Implementing effective recovery planning and activities in communities and across the social, economic, natural and built envts	5A: Implement effective organisational structures for CDEM	6A: Organisational resilience is developed through risk management and planned strategies
1B: Improving individual and community preparedness	2B: Developing a comprehensive understanding of New Zealand's hazardscape	3B: Enhancing the ability of CDEM Groups to prepare for and manage emergencies	4B: Enhancing the ability of agencies to manage the recovery process	5B: CDEM Group culture positively influences the effective delivery of CDEM	6B: Organisational resilience is developed through adaptive capacity
1C: Improving community participation in CDEM	2C: Encouraging all CDEM stakeholders to reduce the risks from hazards to acceptable levels			5C: Ensure agencies have funding for civil defence emergency management	
1D: Encouraging and enabling wider community participation in hazard risk management decisions					

2015:
Lowest
scoring
CDEM
Group

Unsatisfactory	Developing		Advancing	Mature	
0 – 19%	20 – 39%	40 – 59%	60 – 79%	80 – 89%	90 – 100%

Figure 9: Illustrating the variation in CDEM performance - highest and lowest scoring CDEM Groups (2015)

Whilst the CDEM Group scores contribute towards a national picture of improved CDEM performance, some CDEM Groups have made greater improvements than others.

With a vision of continuous improvement, MCDEM set performance targets for each of the CDEM Groups after the first National Capability Assessment Report to encourage a consistent rise in performance across the country. Greater levels of improvement were required for the lower performing CDEM Groups, with lower performance improvements required for the already high performing CDEM Groups.

Figure 10 compares the scores from the 2012 capability assessment round against scores from the 2015 round, alongside the target score set by MCDEM. The greatest levels of improvement are shown by those CDEM Groups that have the most diverging scores between 2012 and 2015.

The 2015 data shows that 11 of the 16 CDEM Groups met or came close to their target score (half exceeding their performance targets, and a further three CDEM Groups only narrowly missing their target by less than 2%). The six most improved CDEM Groups increased their overall score between 17 and 26% on their 2012 score. Three CDEM Groups scored 80% or more in their capability assessments with these scores sitting in the 'mature' score category. These are significant and impressive achievements for these CDEM Groups.



Figure 10: 2015 and 2012 Capability Assessment scores and target by CDEM Group

3.2. PERFORMANCE IMPROVEMENTS BY CDEM INDICATORS

Within each of the objectives of the National CDEM Strategy, there are clusters of performance indicators and measures that illustrate the functional delivery of CDEM (e.g. public education, controllers, capability development, recovery planning etc.). As part of the analysis of these functional areas, it became apparent that much of this activity sat within the 'advancing' category. Whilst the capability assessment tool had only one broad scoring area of between 60 – 79% for the advancing category, for the purposes of national granularity, this has been split into two sub scoring areas to better illustrate where the vast majority of CDEM delivery areas lie.

The scoring areas and percentage ranges used during the analysis of national data are illustrated below which excludes the unsatisfactory score category as no national data fell in this range.

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

Figure 11: Maturity matrix scoring used for this national report

Figure 12 shows the range in performance across the maturity matrix for the varying CDEM functional areas across the scoring range.

Developing	Advancing		Mature
Logistics Critical resources Recovery planning Recovery managers Recovery implementation Community resilience monitoring	Volunteers Investment in social capital Community resilience programmes Community preparedness Reducing risk from hazards Welfare planning / delivery Planned organisation resilience	Public education Public information management Availability of hazard info. Public awareness of hazards Hazard research Capability development EOC staffing Exercising Multi agency collaboration Controllers Lifeline utilities CDEM planning & monitoring Adaptive organisational resilience CDEM Governance	Public Information Managers EOC facilities Warning systems CDEM management

Figure 12: Maturity matrix overview of indicators 2015

3.2.1. Mature score indicators (80 – 89%)

CDEM functional areas that sit within the mature scoring category include Public Information Managers (PIMs); Emergency Operations Centre (EOC) facilities, warning systems, and management and governance. These four functional areas are consistently stronger within most CDEM Groups.

Scores for public information management were consistently high across the country. This was one of the few areas illustrating the effect of good CDEM integration within local authority service delivery. Most PIMs tended to be communications professionals with well-established networks and practices for communicating with the public. With some supplementary training for transitioning this into emergencies, the PIM function tends to be well connected to the emergency management team and is generally quick to fulfil the role as emergencies unfold.

EOCs and warning systems are two of the response functions that are the most regularly activated and tested, with strong scores across the CDEM Groups indicating confidence in these areas.

The strong scores within CDEM management specifically considers the performance of the Coordinating Executive Groups. A key theme identified in the 2012 National Capability Assessment Report was the need to build better foundations for CDEM – namely the leadership, structure, funding and culture of CDEM Groups – in order to drive progress. Coordinating Executive Groups have assumed a greater responsibility for overseeing CDEM activity, with a number of CDEM Groups reviewing their management and governance arrangements in the intervening years. Coordinating Executive Groups have ensured a greater engagement and accountability for CDEM performance, and have in general assumed a more active leadership role. This change has contributed to noticeably improved performance in those CDEM Groups that took action, which is reflected in the much improved scoring in this area nationally.

3.2.2. Advancing score indicators (60 – 79%)

There are a number of CDEM functions that sit at the upper end of the advancing category that have strengthened to a greater or lesser degree since the previous national capability assessment report. Notable gains have been made in building the capability and capacity of controllers, EOC staffing and multi-agency collaboration.

Gains in these areas are in part due to collaboration across CDEM in building response capability through the Controller Development Programme and the Integrated Training Framework (ITF). The ITF is led by CDEM Groups and supported by MCDEM, and has created a tiered approach to building capability across a range of response functions. Although a work in progress, it has contributed significantly to the growing skill base within the EOC environment. In addition, stewardship by Coordinating Executive Groups to ensure that the right number of EOC staff are identified, trained and exercised is growing which also supports an enhanced response performance. The inclusion of multi-agency staff in capability building creates foundations for connectivity between agencies during emergencies. These are still areas of progress and continued investment in them will yield stronger gains over time.

Other areas that sit within the upper end of the advancing category include:

- public education;
- the public's awareness of hazards;
- the availability of hazard information and hazard research;
- CDEM planning and monitoring;
- adaptive organisational resilience;
- lifeline utilities; and
- CDEM governance.

At the lower end of the advancing score category are a number of emerging functions that are gaining traction across CDEM Groups. The growing acknowledgement that the community is a vital component of response management means CDEM Groups are investing in community response planning. Some CDEM Groups are moving beyond having communities simply 'prepared' for disasters. They are working alongside communities to enhance 'networks of networks' that can support communities beyond response and into recovery. By understanding the existing community fabric of an area and their particular vulnerabilities, CDEM Groups can support communities in planning to manage these vulnerabilities. This is discussed further in section 4.

Business continuity planning scored poorly in the first National Capability Assessment Report. This area has been split into two key areas (see enabler 2), that considers the formalised, planned strategies and work programmes that organisations implement, alongside the more adaptive, cultural aspects that help organisations navigate crisis situations. Whilst measures that consider the more 'intuitive behaviours' of crisis management score well (upper end of advancing), the elements of planned organisational resilience are still a work in progress for most CDEM Groups.

Welfare planning and delivery, and reducing hazards are also at the lower end of the advancing score category. Although there is a growing acknowledgement of the need to shift the focus away from response management and into risk reduction, these performance areas still require further development.

Many local authorities have programmes of work that support reducing risk, for example within their asset management and regulatory services, but the connectedness of this activity with the wider remit of CDEM remains weak.

Overall accountability for welfare planning and delivery has yet to bed down across New Zealand and planning is still in the early stages. Despite some shifts in leadership for the respective welfare sub-functions, these responsibilities are not new. Generally the weaker scores across welfare planning and delivery reflect CDEM's enhanced understanding of what constitutes effective welfare delivery following the Canterbury earthquakes. There is much to do and CDEM Groups and stakeholders need a more focused programme of work that supports communities that are affected in the short, medium and long term following significant emergencies. In-roads in welfare planning will also support improved recovery outcomes and this is discussed further in section 4.

3.2.3. Developing score indicators (40 – 59%)

At the lower end of the national scoring picture are logistics management, management of critical resources, recovery planning, recovery managers, recovery implementation, and community resilience monitoring.

Logistics management and critical resources are functions of response management that are not often well practised, with many CDEM Groups feeling less confident in these areas. The recent publication of the Director's Guideline *Logistics in CDEM: Director's Guideline for Civil Defence Emergency Management Groups [DGL 17/15]* is timely and can support CDEM Groups to better understand and plan for these critical response functions, and in turn gain more confidence in these areas. This will be supported in the future by the development of logistics management training as part of the ITF.

The three functional areas relating to recovery (namely recovery planning, recovery managers and recovery implementation) are consistently weak across CDEM and reflect an anticipation of change within the recovery discipline following the Canterbury earthquakes. Recovery managers lack formalised professional development, and current recovery capability focuses more on the production of recovery plans than the activities that bring these to life. The subject of recovery is discussed further in section 4.

Community resilience is an emerging CDEM function and while scores for its delivery sit in the lower end of advancing, how to usefully monitor the effectiveness of these programmes of work is still an area of development.

4. KEY THEMES

1.1. 2012 CDEM CAPABILITY ASSESSMENT KEY THEMES: REVIEW AND UPDATE

Following the first capability assessments (2009 – 2012), the 2012 National Capability Assessment Report identified five key themes. This section reviews those findings and provides a short update on their relevance to the 2015 Capability Assessment Report.

4.1.1. The Challenges of Undertaking CDEM

This theme examined the priority afforded to CDEM: who delivers it, how CDEM is perceived, and the challenges smaller councils face in meeting their obligations under the CDEM Act 2002.

Since 2012, the role of the traditional emergency management officer (EMO) ‘being all things to all people’ with a somewhat dated focus on response, has shifted. Smaller rural local authorities have sought partnerships with their neighbours to share this critical resource, and the concept of crisis management has become everyone’s business rather than the EMO’s to sort out.

However challenges remain in 2015 as local authorities have an ever-increasing statutory responsibility across a broad spectrum of legislation. What remains clear is that where a local authority experiences challenges in its business *prior* to an emergency, these challenges are unlikely to improve *following* an emergency. The ongoing professionalisation of CDEM Groups and stakeholders in respect of response management has provided confidence for local authorities, with a general feeling that they are able to support their communities through an emergency.

4.1.2. Integrating Emergency Management in Councils

This theme explored the breadth and depth of CDEM (as per the CDEM Act 2002) and the wide range of activities delivered by local authorities and partner agencies – with a particular focus on how this wider contribution was poorly understood. CDEM was seen as an activity that ‘sat on the edge’ of council business that was largely forgotten until an emergency. This theme explored the activities beyond traditional EOC-focused readiness and response, highlighting risk reduction and recovery planning as the ‘poor’ and ‘poorer’ cousins of CDEM delivery.

Whilst in 2015 neither of these areas is ‘solved’, there is a growing understanding of how both risk reduction and recovery planning strategically inform council business and make good business sense.

4.1.3. Getting the Foundation Right: Leadership; Structure; Funding and Culture

This theme examined some of the key success factors of higher performing CDEM Groups in 2012. Attributes such as an engaged leadership that is cognisant of its role and responsibilities; structures that interface well with each other; funding arrangements that are transparent and drive accountability, and a strong cultural tempo that reflects aspirations of continuous improvement, deliver tangible CDEM outcomes for the organisation and the community. Those CDEM Groups that scored lowest had the least number of these attributes, with some having almost none.

In 2015 there are a number of CDEM Groups that have clearly reflected on this theme and have proactively sought to address it – these are the CDEM Groups who have made the most significant performance improvements in 2015, which is a clear reinforcement of the importance of this theme.

4.1.4. Partnerships in CDEM

This theme identified the critical need for strong partnerships with a broad range of agencies for successful CDEM delivery. It examined the extent to which partner agencies contribute, where they engage (if at all); and the role CDEM has as a supporting rather than lead agency.

In 2012, the most successful CDEM Groups had partners that were far and wide reaching (particularly in welfare, lifelines, and community preparedness). Successful CDEM Groups had emergency services represented at Coordinating Executive Group from a management and governance perspective and led strong Emergency Service Coordinating Committees with an emphasis on response planning.

In 2015 this is still very much the case. Strong emergency services relationships at a CDEM Group level are supported by practical engagement by local stations at a local authority level. Relationships are built and collaborative training and exercising occurs. However, this level of performance varies significantly between CDEM Group to CDEM Group and over time, as much of this relies heavily on individuals rather than systemic policy – and points of contact with the emergency services change fairly frequently.

A further issue raised in this theme was the role that CDEM plays as a lead or support agency. In 2012, few CDEM Groups fully understood the contribution they make as a support agency. The publication of the second edition of the Coordinated Information Management System (CIMS) manual in 2014 clearly articulated the concepts of ‘lead’ and ‘support’ agency during a response. In 2015, particularly with the changes in welfare delivery, the value that CDEM Groups bring as a support agency is more widely understood by partner agencies and local authorities.

4.1.5. The New Way to Approach Community Engagement

This theme considered the maturing of CDEM since the CDEM Act 2002. Whilst in 2012 some CDEM Groups were still very much focused on response management in a lead agency environment, many were considering wider functions. The concept of CDEM Group performance in the context of

‘developing’, ‘advancing’ and ‘mature’ score zones examined what CDEM delivery might look like across a range of functions. It introduced approaches for engaging the community in CDEM and how this might best be achieved, and sowed seeds of an idea of community resilience as a significant contributing factor to successful CDEM outcomes.

In 2015, the performance categories formed the basis of the Capability Assessment Tool with CDEM Groups focused on raising their previous performance scores. This has been realised with all CDEM Group scoring 60% or more (advancing score category), including three Groups scoring within the lower end of the mature score category (80% or greater). The term resilience has been used extensively to describe a range of states – predominantly with a focus on preparations that allow communities or organisations to absorb shocks, adapt to a new normal and thrive in the face of change.

4.2. 2015 CAPABILITY ASSESSMENT KEY THEMES AND CONSTRAINTS

During the course of interviewing and through the analysis of CDEM Group data, there were a number of recurring themes that seemed to be either constraints to or enablers of effective delivery of CDEM. These are explained below.

4.2.1. From Response to Risk and Resilience

Scores across Goal 3 (the capability to manage civil defence emergencies), generally indicate that some 13 years on from the introduction of the CDEM Act 2002, there is a strong confidence across CDEM Groups of their response arrangements. Whilst this varies somewhat between the 16 CDEM Groups (predominantly based on response capacity and an absence of regular emergencies or ‘testing’), CDEM Groups have collectively been exposed to managing small and medium-sized emergencies and, since the Canterbury earthquakes of 2010 and 2011, larger emergencies.

The need for multi-agency collaboration, clear response arrangements and engagement with communities has driven the majority of CDEM work programmes for many years. This environment has changed over time, with many CDEM Groups adjusting their operational arrangements in favour of shared service models aiming to provide a layer of professionalism across the range of activities that CDEM Groups undertake. This has in turn galvanised further collaborative work that will enhance the capability of key role holders through the introduction of the Controller Development Programme, and the development and implementation of the Integrated Training Framework; both aiming to define minimum competency standards.

However, data in 2015 suggests that the effort invested in building this response capability may have had detrimental effects on other areas within the 4Rs⁵; namely the areas of risk reduction and recovery. A range of ‘think pieces’ (see footnote 2), and work at a national level have aligned and reinforced the view that ‘being ahead of the curve’ and shifting the focus from managing disasters to managing risk may yield greater benefit over time.

In order to test the temperature of CDEM Groups with respect to risk reduction, the capability assessment tool for Goal 2 (reducing the risks from hazards) was revised in an attempt to see where risk reduction efforts are currently applied at a local and Group level. Data suggested that whilst as a nation we are fairly good at investing effort in research, the ability to directly translate that knowledge into risk management was less obvious (with some exceptions where emergencies have occurred in the past).

Even where CDEM Groups or local authorities explore the tension between infrastructure improvement options (for example stop-banks; larger storm water drainage) and other management options (such as special land management policies; public purchase of specific at-risk properties), there is an inconsistent approach in consulting with affected communities to identify appropriate risk treatment options. In addition, there is almost no work that re-quantifies the residual risk post-

⁵ The 4Rs are Reduction, Readiness, Response and Recovery.

intervention, nor any deliberate transference or 'hand off' of that residual risk to emergency management professionals for preparedness planning (figure 13).

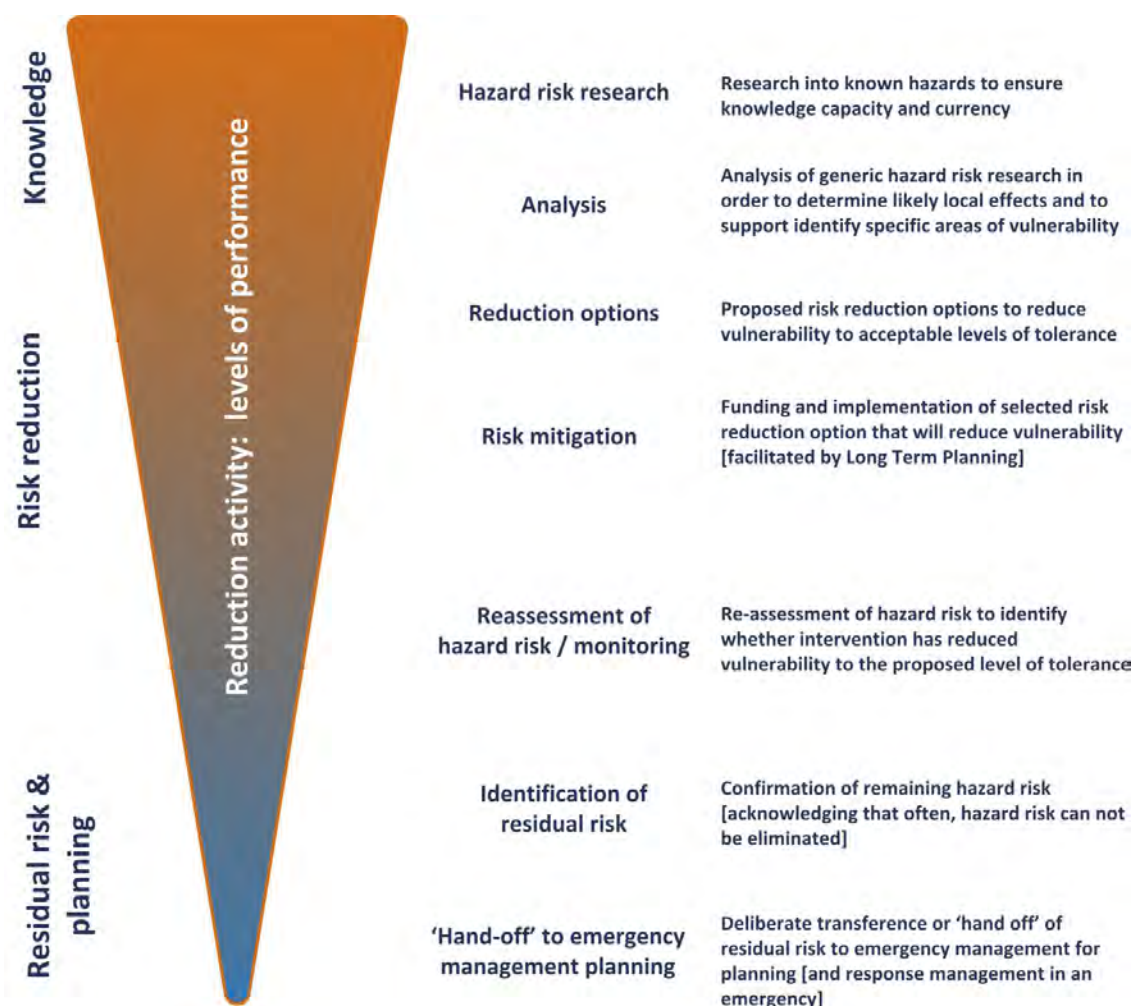


Figure 13: Reduction activity: levels of performance in New Zealand (schematic)

There are some notable examples where this linear approach to risk reduction is working well within local authorities; however, the Coordinating Executive Group rarely owns progress in this area. This suggests that whilst a risk management approach may well exist, it tends to occur at a local authority level without much collective risk reduction oversight at a CDEM Group level.

Aligned to risk reduction are the efforts in building 'resilience' at a community level. There is much discussion and activity around the development of Community Response Plans which generally provide for arrangements at a community level in the event of an emergency. Community response planning occurs in a range of settings (usually driven by the community) and has had the greatest traction in more rural areas, or those areas with an obvious hazard (i.e. coastal communities and tsunami risk).

Many CDEM Groups are delivering community response plans to or with the community, but often without an overarching consideration as to the purpose. Community response plans are usually supported by CDEM professional staff, often without engagement from other partners or stakeholders and tend to be focused on early provision of community level support (self-help and/or

community led centres), and an ability to be the on the ground eyes and ears for Emergency Operations Centres.

Some CDEM Groups have expanded the community response plan concept to have a more 'community resilience' focus (rather than preparedness). This means an emphasis on building contacts with neighbours and connecting networks within neighbourhoods for ongoing benefit (a community development approach rather than a response planning one). However, resilience in its broadest sense doesn't stop there. If 'being ahead of the curve' is beneficial, it may also be appropriate to look at how a resilience building approach affects a range of interventions at differing levels; i.e. at individual, household, community, government, business (asset) and societal levels.

During the capability assessment interview process, if the interview team asked interviewees not to talk specifically about their response arrangements, most were often confused as to what the interview team wanted to hear. When asked to talk about the work their organisation did to strengthen resilience, most were able to talk at length about the range of activity that was already underway. This suggests that resilience building in its broadest context is not necessarily a new idea for many organisations – it's just that perhaps this focus is not currently seen as a core outcome of CDEM.

4.2.2. The Effect of 'Reach' on CDEM Performance

Reach relates to the value CDEM Groups get from strong connections across council business units, partner agencies and ultimately the community. Although many local authorities have sought to combine CDEM resources through shared service models, there is an ongoing assumption by many CDEM Groups that CDEM is delivered primarily by a handful of 'CDEM professionals'. The challenges identified within the theme of 'Integrating Emergency Management in Councils' (2012 National Capability Assessment Report) still exist in 2015.

Interviews indicated that the majority of CDEM work plans consist mainly of core readiness and response activities delivered by CDEM professional staff. The topics below are featured regularly in reporting to Coordinating Executive Groups and Joint Committees (the mandated management and governance entities):

- Public education and preparedness;
- EOC maintenance and testing;
- Capability development and exercising;
- Lifelines; and
- Welfare

Interviewees were asked to consider how other council business units (or partner agencies) support in the delivery of CDEM outcomes. Most indicated that the responsibility for the delivery of CDEM rested predominantly with the CDEM professional staff, rather than it being embedded horizontally across the organisation as a core function. There were some good examples where the 'reach' afforded by engaging more widely with partners and stakeholders was better understood. The contribution by CDEM stakeholders in the delivery of welfare and lifelines was often cited, but in

many cases these were two of the least accountable and least discussed areas at the Coordinating Executive Group.

The purpose section of the CDEM Act 2002, clearly describes CDEM more broadly than response management, and is quite specific about the need for the coordination of planning and activities ‘across a wide range of agencies and organisations’.

Those CDEM Groups that demonstrated the greatest reach were not necessarily the highest scoring during the capability assessment programme. Those CDEM Groups that are already working across various local authority business units, and with CDEM stakeholders in meeting the vision of a ‘Resilient New Zealand’ or region, have many levers to pull.

Although the alignment of this activity may still be work in progress, connecting relevant work streams across councils and CDEM stakeholders may yield the greatest opportunity for improvement. An oversight of this activity by the Coordinating Executive Group will ensure that all agencies share the responsibility.

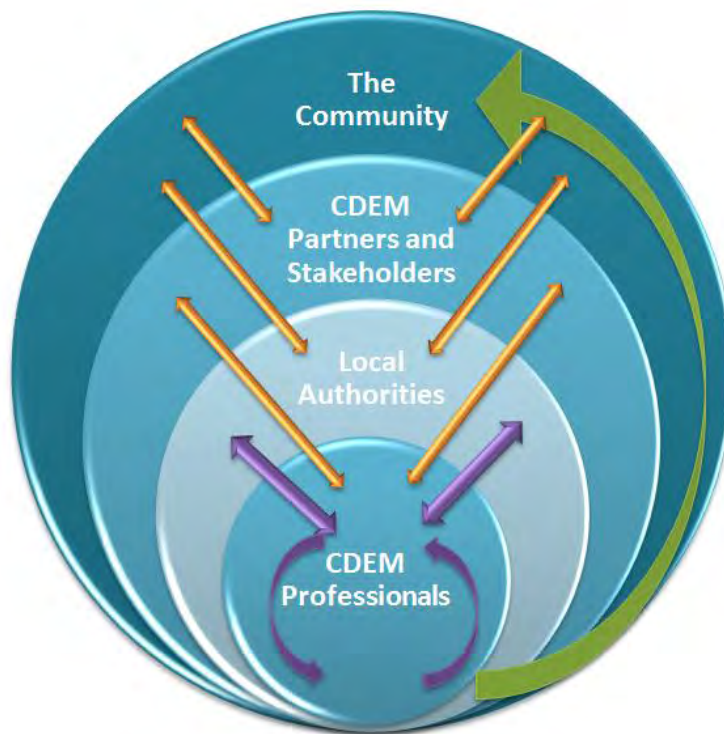


Figure 14 outlines that for some CDEM Groups, the activities of CDEM professional staff and some local authority business units was the extent considered when scoring the capability assessment tool (purple lines), with perhaps some direct engagement with the community (green line). For other CDEM Groups, scoring considered the benefits afforded by engaging across each of the circles (orange lines).

Figure 14: Expanded CDEM “reach” afforded by concentric circles of activity

Although this approach is more complicated to account for, recognition of the breadth of activity across CDEM stakeholders in building more resilient communities better reflects the intention of the CDEM Act.

The Coordinated Executive Group’s ownership of a more integrated approach and a facilitation of strategic discussions with CDEM stakeholders could ensure that this connected approach is seen as a priority, which could in turn help join up work that is delivering similar outcomes.

4.2.3. Considering Exposure and Vulnerability, Scale and Complexity

One issue that was raised throughout the capability assessment process was that many local authorities (and hence CDEM Groups) felt that their circumstances were different from other local authorities. Some of this ‘uniqueness’ was described as differing hazards, exposure to hazards, and social fabric of its communities.

What became clear was that there isn’t a ‘one-size-fits-all’ approach for CDEM. For each CDEM Group and their respective local authorities, different considerations were needed to address risk, exposure and vulnerability.

Whilst the individual elements that create risk may vary across New Zealand, the risks CDEM Groups face are comprised of the same basic components; hazards, exposure and vulnerability (figure 15). It is the variance in these components that creates different levels of risk.



Figure 15: Understanding our risk

Understanding the hazard scape was nearly always cited as an important factor informing CDEM planning. However, this was most often articulated as understanding the *types* of hazards that could eventuate, and the *probability* of them occurring. Understanding the range of likely consequences of different hazards – in terms of exposure and vulnerability of communities and their assets – was cited far less, and it was not clear whether this was really understood as a critical factor in understanding overall risk (and ability to prioritise work as a result). Within each CDEM Group there are council business units and/or agencies that understand the hazard scape, there are others that understand their exposure, and others that understand their vulnerabilities. What appeared to be less obvious, in most cases, was any mechanism to examine all three components together.

There were notable examples in the more rural councils where potentially affected communities cope better. They understand how likely it is that electricity or that telecommunications can be disrupted (hazard consequences), and tend to adapt their lives accordingly. There appeared to be a better community connectedness and an inherent resilience at a rural level. However, the implications of electricity or communication outages within urban environments (particularly CBD areas) seemed to be more acute, with urban populations having less well established coping mechanisms. There also appeared to be additional layers of complexity afforded by commerce,

fragile and interdependent infrastructure, tourists and transient populations - all of which are rarely systemically addressed by CDEM.

Further to this is the issue of scale. For many CDEM Groups, planning considerations address known or likely consequences – generally those that have been experienced in previous emergencies. The Canterbury earthquakes in 2010 and 2011 provided an insight and catalyst for CDEM Groups to consider a more catastrophic ‘what if’ consequence for their own communities. For New Zealand’s larger cities, scale and complexity are already factors informing the way forward, including resilience programmes and intergenerational infrastructure investment. For other local authorities, particularly smaller city council areas, attempts to apply CDEM approaches that are more successful in rural areas may not be an appropriate solution for urban environments. A better understanding of local exposure and vulnerability may inform prioritisation of work that seeks to redress this.

4.2.4. Recovery Planning: Planning to Thrive?

Recovery is the weakest scoring area within the capability assessment tool by national average. The tool examines two main objective areas: the structures and arrangements in place to steward recovery, and the functions or approaches that Groups would undertake during recovery. Neither scores more strongly than the other.

Where individual CDEM Groups scored above the national average for recovery, these tended to be CDEM Groups that had recently experienced an emergency or had emergencies fairly regularly. In these instances, the events tended to be at the small-to-medium scale. Nevertheless, this provided opportunity to ‘test’ arrangements more frequently than those CDEM Groups that had not experienced an emergency in the recent past.

Figure 16 illustrates the recovery parameters influenced by the severity and duration, and the size of the affected area. Very few emergencies within New Zealand have occurred on the right hand side of the diagram. Impacts of the types of events that sit on the right hand side are generally poorly understood by local authorities, as are the subsequent impacts on long term planning.

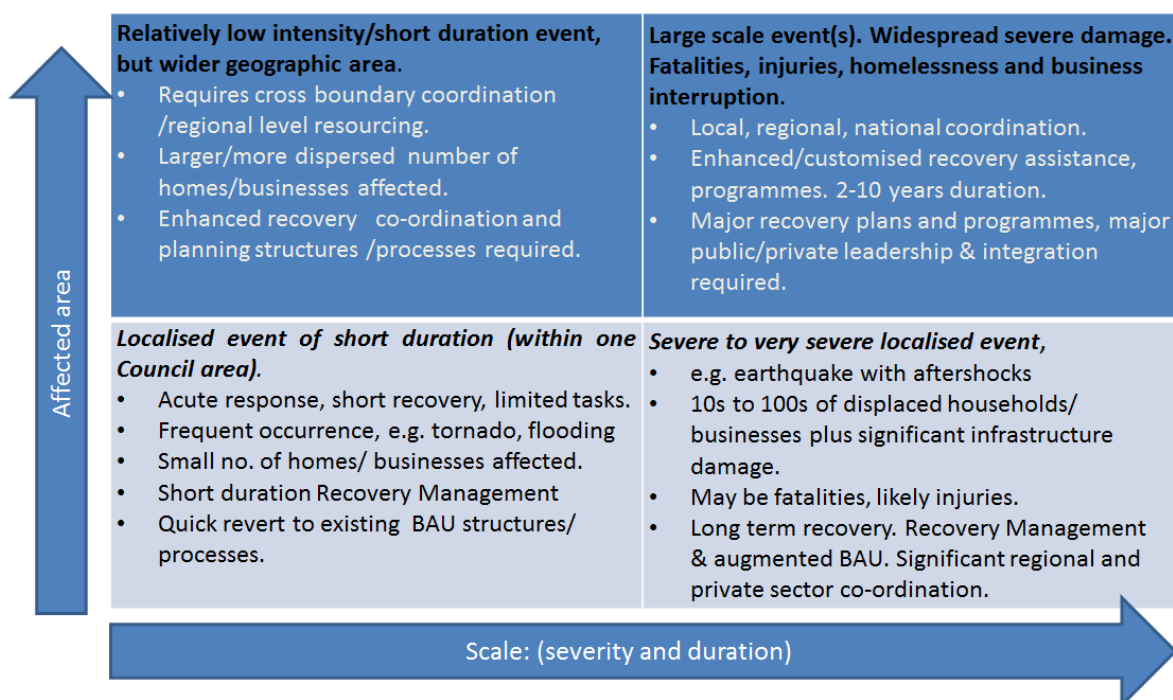


Figure 16: Recovery impacts from increased scale or affected area (*adapted from Simon Markham, Manager Strategy & Engagement (and Recovery Manager), Waimakariri District Council*).

During interviews, most respondents were clear that their recovery capabilities needed to improve, particularly around any aspect of recovery that was not focused on assets. During discussions there was a feeling that Recovery Managers themselves felt un-prepared for the role and had little opportunity for training or exercising. Generally, having recovery added onto their already busy role meant that the relationships needed for effective recovery planning and delivery were rarely established. A lack of confidence, a reliance on a recovery plan that often had no real implementation plan behind it and a general disinterest at an organisational level contributes to the poor performance within recovery. In summary, recovery has not been considered a priority.

When the issue of recovery planning was raised during interviews, senior managers generally felt that there was an appropriate level of insurance, and that access to emergency funds would support effective recovery. Very seldom did any interviewee discuss the potential effects of recovery on long-term planning or the potential fiscal impact on the council or business community. Recovery was very much seen as a ‘dust-pan and brush’ activity after the emergency itself. Strategic discussions about risk appetite, risk management, intergenerational investment through risk reduction and resilience approaches such as ‘build back better’ or retreat were generally thought of as ‘too difficult’ and an unlikely consequence.

Alongside the strategic considerations, there was little activity within the social recovery space. In addition to the impacts of the emergency itself, there appears to be little planning for the ongoing shocks and stressors that recovery can present (e.g. changing schools, unemployment, navigating insurance companies and EQC) and the effects of these on individuals along with the compounding effects this may have on the management of social recovery. Coordinating Executive Groups have

yet to connect the extensive 'Welfare Services in an Emergency'⁶ reform work with successful social recovery outcomes. A failure to effectively steward welfare planning is likely to have repercussions during recovery following a significant emergency where communities are greatly affected. The work of the Canterbury Earthquake Recovery Authority (CERA) through its wellbeing index examines a breadth of indicators that take a 'temperature gauge' of how people are coping post-earthquake. Over time, this data has attempted to provide evidence for nimble adaptation of interventions to help people recover from the ongoing and cumulative effects of recovery. CDEM Groups could consider the areas of the wellbeing index⁷ as part of their own social recovery planning.

Recovery options are complex, expensive and require strategic discussions, without which, CDEM Groups potentially face raising expectation about future environments or creating a 'menu without prices'. There were examples during the interviews where local authorities were able to cite investment in asset renewal programmes that leverage from technological advances. These 'betterment' programmes are likely to yield improved recovery outcomes from an asset perspective. These are incremental but will provide benefit to the end user over time through minimising the risk of disruption. Rarely does the Coordinating Executive Group have a collective oversight of this cumulative risk reduction.

At the time of writing this report, legislative changes are proposed that will provide for extra powers in recovery and require CDEM Groups to have appointed a recovery manager (akin to requirements for Group Controller), alongside a requirement to have prepared a strategic recovery plan. It is the implementation of these changes, however, that will, in part, be critical to supporting improved recovery arrangements. Notwithstanding the fact that over the coming years, lessons from the Canterbury earthquakes will inform recovery thinking, for now, Coordinating Executive Groups and CDEM stakeholders may like to consider how the breadth of its normal business functions would be delivered rapidly to support rebuilding communities that thrive, not simply survive.

⁶ Welfare Services in an Emergency; Director's Guideline for Civil Defence Emergency Management Groups and agencies with responsibilities for welfare services in an emergency [DGL 11/15].

⁷ The CERA wellbeing index considers the areas of: social connectedness, knowledge and skills, economic wellbeing, housing, health, mental wellbeing and safety. <http://cera.govt.nz/recovery-strategy/social/canterbury-wellbeing-index>

5. SUMMARY AND CONCLUSIONS

The capability assessment process has identified some areas where efforts over the last five years have yielded solid improvements for CDEM. Response functions, a general focus on accountability and good customer service have raised the profile of CDEM across all agencies. There is good evidence of the connectivity between response partners and their engagement, not only during emergencies, but in shaping the future of CDEM at the Coordinating Executive Group table.

The collaborative effort to raise the standard of the capability needed to effectively manage emergencies has leveraged expertise across New Zealand. Supported by a range of guidance documentation developed after the Canterbury earthquakes, our response arrangements have matured. However, there are some areas that CDEM Groups need to address to ensure that this response capability is strong in all areas; specifically logistics management and recovery.

A number of think pieces over the last few years have emphasised that a continued focus on the management of emergencies does not reduce the risk of them occurring in the future. Risk is not static. The effects of New Zealand's hazards, our exposure to them and the increasing vulnerabilities of our communities means that new approaches are needed. CDEM is not starting from scratch in this regard.

If the current CDEM focus broadens from the almost exclusive activities of a few CDEM professionals to also consider the many other staff who work to reduce risk and improve resilience, a more comprehensive picture of activity is revealed. With some high level analysis of what is being delivered by local authorities and stakeholders as part of normal business (and under the CDEM banner), there may be opportunities to better connect activity, have an oversight of what is already being done, and spot opportunities to strengthen resilience. CDEM Groups may like to consider this approach as part of, or as a lead into, the revision of its Group Plan.

At a national level, the themes raised in this report will inform thinking when developing the National Resilience Strategy (due in 2017), and will guide the implementation of recently completed work (for example, Welfare in an emergency; Logistics management; and the Guide to the National Plan).

5.1. WHAT NEXT? THINGS YOU CAN DO TODAY

In order to improve New Zealand's CDEM performance, CDEM Groups and stakeholders could consider how each of the key themes raised in this report affects current contribution towards CDEM delivery, and factor what can be done to strengthen performance into strategic planning. The CDEM Group planning process may be one avenue.

The table overleaf provides a prompt for agencies to examine the themes highlighted in this report against potential future opportunities. Step 1 suggests an analysis of current activity. Step 2 challenges CDEM agencies to consider what actions could be undertaken immediately with no additional funding or dedicated resources – this is about spotting real opportunities to connect activities or consider things differently. A cross analysis of agency feedback at a CDEM Group level may provide some strategic oversight of where opportunities to strengthen delivery may exist.

DISCUSSION EXERCISE TEMPLATE



- Step 1:** Review current performance and identify factors that contribute to CDEM delivery (positive or negative).
- Step 2:** Consider how delivery could change in the short term to support building capacity.
- Step 3:** Consider what the ideal outcome might be and assign a priority

	Step one	Step two	Step three
	<i>How does this theme apply to current CDEM delivery?</i> <i>(some example questions to consider)</i>	<i>What can you do to improve in the <u>short term</u>?</i> <i>(no more resources; no more dedicated staff)</i>	<i>What might ideal look like and is it important?</i>
	Diagnosis	Analysis of opportunity	Priority
From response to risk and resilience	• What proportion of our work is focused on response planning/management vs risk and resilience? • Is risk reduction activity connected to CDEM and is there any collective oversight? • Is the current focus on resilience building or preparedness planning?		
The effect of 'reach' on CDEM performance	• Can we grow our partner base? • Do our partners support CDEM delivery? • Do we define co-benefits when we work with partners? • Is CDEM delivery integrated across council and partners?		
Considering exposure and vulnerability, scale and complexity	• Do we understand our exposure and vulnerability as much as our hazards? • Do we consider the drivers of risk (e.g. building stock, demographics, community connectedness etc.?)		
Recovery Planning: Planning to thrive?	• Who owns and drives our recovery relationships? • Are we building resilience into our asset management? • Are we having strategic conversations about how we would approach recovery? And/or the hard conversations about our approach to issues like managed retreat? • Do we consider recovery implications on our communities, or how we would or could engage communities on matters of recovery		

Open Meeting

To	Strategy & Finance Committee
From	S Duignan General Manager Customer Support
Date	23 February 2016
Prepared By	K Newell
Chief Executive Approved	Y
DWS Document Set #	1148850
Report Title	Public Alerting Options

1. Executive Summary

Local authorities, as part of their Civil Defence Emergency Management (CDEM) obligations under the CDEM Act 2002 are responsible for public alerting to at risk communities prior to and during emergency events.

Considerable research has been conducted in New Zealand since 2006 to evaluate the appropriateness of systems used internationally for implementation in New Zealand. The Waikato CDEM Group has capitalised on this research to develop a warning system strategy which includes a goal to review and update public alerting mechanisms across the region.

This report overviews the results of the public alerting workshop facilitated by the Group Emergency Management Office and GNS Science in 2015. The overall project included a complete review of warning systems across the Waikato CDEM Group, and workshops with each local authority within the Waikato CDEM Group to gain local information.

This information was evaluated and considered by experts, and entered into the Public Alerting Options Decision Support Tool to determine the most appropriate options for public alerting for each territorial authority and the region overall.

The public alerting tools recommended in this report also require the support of public education, increased community resilience through preparedness and the development of community response plans.

2. Recommendation

THAT the report of the General Manager Customer Support – Public Alerting Options - be received.

3. Background Public Alerting in the Waikato CDEM Group

In 2014 the Waikato CDEM Group undertook a review of warning systems across the region. This review identified that warning systems are not widely or consistently implemented across the region and subsequently the Waikato Warning Systems Strategy 2014-2020 was created to guide the use of warning systems across the Waikato CDEM

Group. The strategy recognises the need to continuously improve warning systems, raise public awareness and work towards integrated systems.

To support the implementation of the strategy GNS Science undertook research including a number of workshops with each local authority across the region to review, assess and recommend appropriate public alerting options based on local knowledge and expertise.

The GNS report provides recommendations and cost estimates for each local authority and coordination options for the wider CDEM group.

4. Recommendations for the Waikato District

The following recommendations were made specifically in respect of the Waikato district.

4.1 Participation in regionally coordinated alerting systems:

- Mobile alerting that is regionally coordinated using a consistent platform
- Additional pocket coverage that include telephone auto-diallers
- SMS phone number database
- Television arrangements
- Arrangements with local and regional radio stations
- Use of Social Media to communicate consistent messaging and reduce duplication of efforts
- Independent, self-maintained networks and alerting to large institutions

4.2 Locally implemented Systems

- Mobile PA Systems for targeting specific pockets of the community (recognising that third party owners may have other priorities for use in an emergency)
- Existing phone trees that could be triggered by an auto-dialler
- Key contacts database that can be utilised to apply to auto-diallers, telephone trees and/or SMS alerts
- Any sirens should be consistent with the Waikato Warning Systems Strategy and the national tsunami siren standard, and should include voice capability.
- Maintaining any systems currently in-place
- Where camp operators and other institutions (e.g rest homes) have been identified, a key contacts database developed with each would maximise the applicability of auto-diallers, telephone trees and/or SMS alerts.

4.3 Further options

The Waikato CDEM Group is considering a number of public alerting solutions such as those outlined by the GNS report. These include a national public alerting solution that is currently in development along with one or more existing solutions such as the Red Cross Hazards App.

5. Conclusion

The report recommendations will be integrated into the work programme over the next 24 months.

6. Attachments

Attachment(s) – *Review of public alerting options with recommendations for the Waikato CDEM Group*

**Review of public alerting options with
recommendations for the Waikato CDEM Group**

K.C. Wright
D.G.L. Phyn

G.S. Leonard
M.A. Coomer

**GNS Science Report 2015/41
August 2015**

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EXECUTIVE SUMMARY

This report covers the results of a public alerting options assessment project developed under the Waikato CDEM Group Warning Systems Strategy 2014–2020. The project includes an evaluation of current and potential public alerting systems for Waikato CDEM Group, and utilises the recently updated (2014) Public Alerting Options Decision Support Tool. The evaluation includes considerations of relatively new options for public alerting such as mobile device applications, mobile device broadcasting and social media, alongside more established options.

The evidence-based decision support tool was applied in each Territorial Authority (TA) that is a member of the Waikato CDEM Group and at a regional level to determine the most effective options for public alerting. Local information on demographics, hazards, institutions, infrastructure and budget was sought to populate the tool inputs. Cost-benefit tables are presented for public alerting options in each TA and across the Group. Locally implemented (by each TA), regionally coordinated, and potential nationally available options are evaluated.

Baseline data about the above local information was collected on each TA and then ten workshops were held (one at each TA) with local CDEM professionals, emergency services, local government and community representatives to validate and collect necessary information specifically on:

- Existing options in use, their effectiveness and other options of interest
- Limitations or unsuitability of specific alerting options
- Independent self-maintained networks in each TA
- Institutions with people in their care that need alerting
- Geographic pockets and ‘vulnerable’ groups that need specific alerting
- Ranking of hazards that need to be warned for
- Budget available (if any).

For each TA alerting options are grouped and ranked in terms of their effectiveness. The options available for whole TA areas, or for the entire Group, are severely limited by their cost. However, several high scoring options are potentially cost-effective if targeted at location ‘pockets’ and public ‘groups’ that have specific alerting needs. Options that cannot rapidly reach 70% of the population across any one community should be used with caution. Without any effectiveness score multipliers changed, and independent of hazard type or the at-risk community, the more-highly effective options are as follows:

Systems with the highest effectiveness scores (all greater than 80%) for use Group-wide and that are currently available or will be available in the near future include:

- Mobile device applications (apps)
- Tone activated alert radio
- Radio announcements.

Other systems reviewed that were considered to be effective in reaching communities of people in geographic pockets, or with special alerting needs include:

- Mobile PA loud-speakers (assumes no FTE cost)
- Route alert (door-to-door knocking)
- Telephone trees
- Telephone auto-diallers
- Television announcements.

For local source tsunami the only warning method that is timely and reliable is the public understanding and acting appropriately to *natural warnings* such as long or strong earthquake shaking and/or unusual behaviour of the ocean.

Recommendations:

We are strongly recommending a tiered approach.

Most of the populations in all Territorial Authorities (TA) will be able to be reached quickly via one or more of the new public alerting apps, coming online in the next 12 months. Note that some people who are not covered by the mobile network will still have app coverage if they have their phones connected to wifi at home. This should be promoted.

TAs will need to identify pockets and groups that are subject to residual risk from hazards and are not covered by the app and need supplementary alerting. We have made a substantial first effort to identify these pockets and groups that are potentially not covered by the mobile app via the workshops and the notes in Appendix A1. This contains a detailed list of geographic pockets, special groups and institutions with people in their care that may need supplementary alerting.

Once the app(s) are up and running (currently estimated to be in 6 to 12 months) and testable by TAs, only then will TAs really be able to ascertain the specific people that need supplementary alerting.

Coastal TAs must focus on public education to trigger spontaneous self-evacuation to earthquakes longer than a minute, OR hard to stand up in, because of the potential for local source tsunami. The public must not wait for any official warning in this circumstance.

For supplementary alerting we recommend:

- Continue to use existing options where they are proven to be effective
- Explore feeding alerts into the listed independent self-maintained networks (both TA specific, and Group-wide)
- Explore feeding alerts into institutions with large amounts of people in their care (both TA-specific, and Group-wide)
- Explore mobile phone and landline Voice Over Internet Protocol (VOIP) auto-dialler options with the CDEM Group IT department (including a database of contact numbers). Two supplier costs are supplied to indicate both the low and high ends of the cost range.

Further supplementary alerting can be achieved via:

- Mobile PA systems – but note that FTE effort is needed to maintain readiness here, and there is direct cost too. It is also limited by the availability of on-demand staff and vehicles.
- VHF or HF radio into pockets, probably to trigger a local response tree (to save on equipment costs) – but note there is a substantial hardware (EOC, repeaters and receivers), training, and upkeep cost to this, particularly if radio is not being used by the EOC.
- SMS-PP may have some additional coverage beyond the mobile app to current non-smartphone users (such as the elderly and farmers), but this is likely to rapidly drop off as smartphone uptake continues to rapidly rise.

Other additional options are listed in Section 6.3.

KEYWORDS

Public alerting, warning systems, Waikato, civil defence emergency management, CDEM, decision support tool

GLOSSARY AND ACRONYMS

<i>Alerting</i>	A 'public alert' is a warning heads-up and/or message delivered to the public. An official public alert may be a noise on a smartphone, the signal a siren makes, etc. A public alert may be a simple text or voice message, or it may be a rich message that includes mixed media such as maps, video, images, etc. An advisory or warning provided by an alerting agency provides instruction information (depending on the system) to the public that a hazard threat is present and what action is, or could be required. A public alert ideally contains both heads-up and instruction information.
<i>CAP</i>	Common Alerting Protocol; a standardised format for public alerts to be input and transmitted across multiple alerting options.
<i>CAU</i>	Census Area Unit; a statistical area used for aggregating census data.
<i>CDEM</i>	Civil Defence Emergency Management.
<i>CEG</i>	Coordinating Executive Group.
<i>Early Warning Systems</i>	This often refers to the hardware, electronics and communications used, together with the planning and processes necessary to generate and notify a hazard warning. Often abbreviated as EWS and in current international usage can include hazard monitoring equipment and/or notification equipment.
<i>GIS</i>	Geographic Information Systems; a layered, geo-referenced mapping tool useful for viewing and analysis of spatial information for people, infrastructure and the environment.
<i>GEMO</i>	The Waikato CDEM Group Emergency Management Office.
<i>Group</i>	A number of people within a community with a shared requirement for special consideration with regards to receiving, understanding and acting on alerts. For example those with English as a second language, sight impairments, hearing impairments, or visitors from NZ or overseas (transients) are considered special interest groups. Groups such as those described are sometimes referred to as "vulnerable populations" in CDEM literature. Groups may be dispersed among a community or within a geographic 'pocket'. Note in this report the term 'Group' (with a capital G) is often used and refers to the Waikato CDEM Group, whilst 'group' (with a lower case g) refers to groups as defined above.
<i>Hazchem</i>	Hazardous chemical substances (often used in industrial processing).

<i>Heads-up</i>	The ability of an alerting method to get the attention of a person regardless of what they are doing, where they are or time of day.
<i>Instruction</i>	That part of a public alert that provides the recipient with information on what the threat is and what response is appropriate.
<i>MCDEM</i>	Ministry of Civil Defence and Emergency Management.
<i>Pockets</i>	Populations that do not necessarily have similar characteristics but are located within a defined geographic area and share a special requirement with regards to alerting. For example a community located in a particular valley with poor radio reception or mobile phone coverage.
<i>Public alerting option</i>	Public alerting options are those methods/systems/mechanisms by which a member of the public is directly alerted. The triggering of these options may utilise a public alerting platform if more than one option needs to be triggered at the same time semi- or fully-autonomously.
<i>Residual Risk</i>	The risk remaining to the population after common risk reduction mitigation methods such as land use planning, physical structures, policies, laws and codes have been applied to reduce hazard risk.
<i>SWOT</i>	‘Strengths, Weaknesses, Opportunities and Threats’; an analysis method for evaluating activities or planning.
<i>VOIP</i>	Voice Over Internet Protocol. The delivery of multi-media services to mobile and/or landline over the public internet rather than Public Switched Telephone Network systems.
<i>Warning</i>	A term often used to describe an alert, but also used to describe monitoring systems of natural events. For clarity, in this report we use the term alert throughout to describe information provided to the public from alerting agencies.

1.0 INTRODUCTION

Local Authorities, (LAs) as part of their Civil Defence Emergency Management (CDEM) functions under the CDEM Act (2002) are responsible for public alerting to at-risk communities prior to and during emergency events. Selection and implementation of public alerting options has occurred in a non-standardised and somewhat ad-hoc manner throughout New Zealand. In the past, this was partially due to a lack of guidance on evidence-based, alerting system effectiveness.

From 2006 onwards considerable research has been conducted in New Zealand to assess existing alerting systems, and evaluate the appropriateness of systems used internationally for implementation in New Zealand. CDEM Groups throughout the country are now seeking and have applied the available research and guidance to improve their alerting capability and capacities through integrated systems and strategic decision making.

Waikato CDEM Group is able to capitalise on the update of the public alerting decision support tool which incorporates this guidance (Leonard et al 2008, Wright et al 2014). The Group has developed a Warning Systems Strategy (Waikato CDEM Group, 2014) which has been approved by the Coordinating Executive Group (CEG). The strategy includes a goal to review and update public alerting mechanisms across the region. The strategy goals are to:

1. evaluate existing warning systems;
2. decide on an optimal suite of public alerting systems;
3. implement agreed public alerting systems;
4. increase public awareness and understanding;
5. build warning system resilience.

1.1 REPORT PURPOSE

This report describes the activities and results of a project to review, assess and recommend public alerting options for the Waikato CDEM Group. The project was designed to:

- support evidence-based decision making for public alerting across the Group;
- incorporate local knowledge and expertise into the assessment, *including local public alerting in use, demographics, local hazards, institutions, infrastructure, budget, and information on at-risk communities;*
- deliver recommendations and options for locally implemented and regionally coordinated alerting options;
- take into consideration national initiatives, standards and guidelines in those recommendations.

The project involved facilitating a series of 11 public alerting workshops; one for coordination then one for each Territorial Authority (TA) in the Waikato CDEM Group. This report delivers recommendations for each TA and also for the CDEM Group as a whole (Group-wide) in terms of regionally coordinated options. Any decision on implementation of systems should be subsequently made by the CDEM Group and respective TAs based on this and any other applicable information (e.g., budgets, existing systems).

The project also included an evaluation and cost estimate for the most suitable suppliers of options against the public alerting tool criteria. This estimate was done for selected options, with high effectiveness scores, that were not currently being used for alerting. Any decision on implementation of suppliers should be subsequently made by the CDEM Group based on this and any other applicable information.

1.2 REPORT STRUCTURE

This report includes the following Sections:

- Section 2: an overview of the principles of public alerting effectiveness and effective early warning systems. This section described the basis upon which individual alerting options may be evaluated and compared.
- Section 3: provides the context for public alerting requirements and options for Waikato CDEM Group; considering the structure of the Group and the hazardscape across the Group.
- Section 4: briefly describes the methodology and activities undertaken to: assess existing alerting systems in use, identify public alerting needs in the various Waikato TAs, evaluate existing and potential alerting options available (nationally, regionally and locally) and produce recommendations that will assist Waikato CDEM agencies with public alerting decision-making and planning.
- Section 5: provides the specific information on each TA that has been input into the decision support tool along with results. The input data is sourced from statistical sources and TA workshops. This information includes demographic data about special groups, access to telecommunications (mobile and landline), transient populations, and the importance of institutions and large industries. Each chapter also includes information on existing alerting systems and alerting options of interest and budget. Results are tabled as information on effectiveness, cost and application of specific alerting applications, sourced from system suppliers.
- Section 6: delivers recommendations for national, regional and local alerting options for Waikato CDEM Group and its member TAs.

2.0 OVERVIEW OF EARLY WARNING SYSTEMS AND PRINCIPLES OF EFFECTIVE PUBLIC ALERTING

For a more detailed explanation of much of the content in this chapter see Wright et al. (2014) and Leonard et al. (2008).

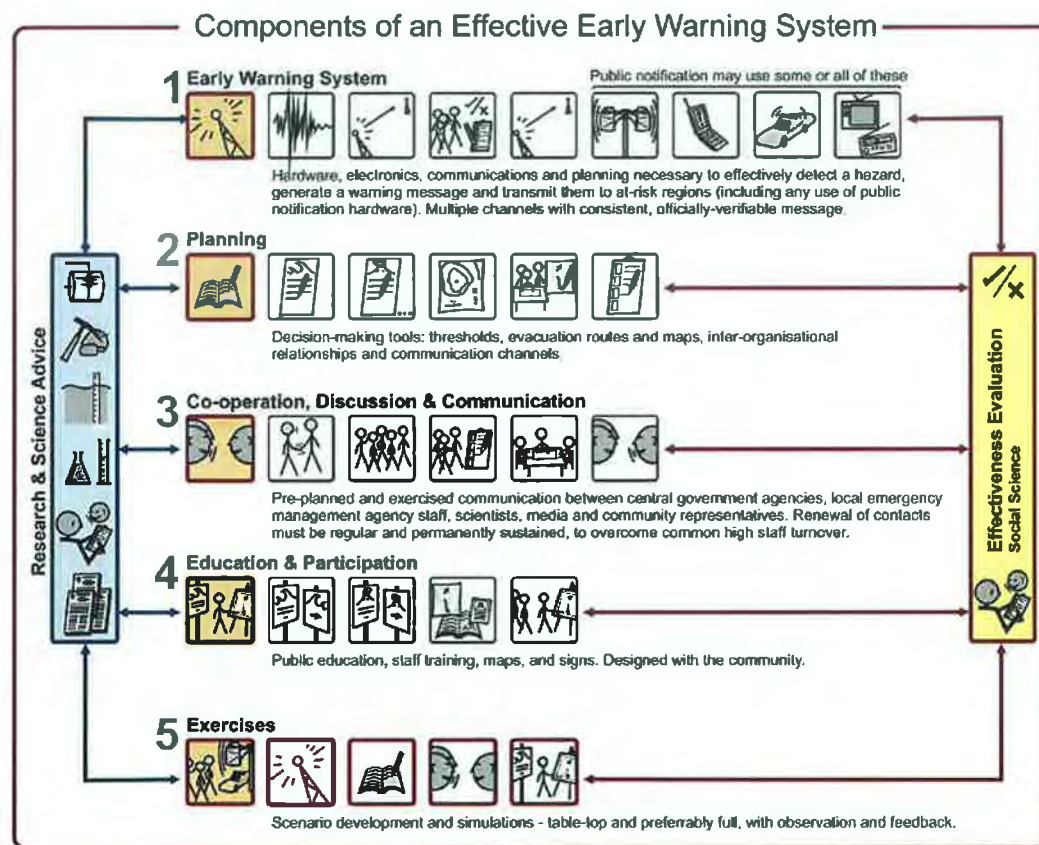


Figure 1 Components of effective early warning systems (Leonard, 2008).

An effective early warning system includes the wider set of actions necessary to ensure that a hazard is not only detected and recognised, but also that the warning message to those at risk is not only delivered, but also acted upon in an appropriate way. Early warning systems encompass a broad range of technologies, behaviours and planning (Figure 1). Public alerting systems are only one component of an effective early warning system (EWS).

2.1 MULTI-HAZARD EFFECTIVENESS

For maximum cost-benefit in a complex hazardscape (as exists in Waikato), public alerting options that are appropriate for use during different types of emergencies are recommended. Many alerting options have the functionality to provide *Instruction* as well as 'Heads-Up' (see Section 2.5), and this makes them more flexible for use in multi-hazard environments because the response and safety actions for different hazards can differ, so different alerting information needs to be delivered.

2.2 NATURAL, OFFICIAL, AND INFORMAL WARNINGS

There are three main types of warnings: natural, official and informal. Natural warnings are phenomena experienced by people that could indicate that a hazard threat is imminent. Natural warnings can be thought of as triggers that can prompt those at-risk to take the correct actions if adequate understanding of the hazard and appropriate response is already established. Natural warnings are not available for all types of hazards but for some hazards they are the most reliable alerts available (e.g., earthquake shaking for local source tsunami threat). Natural warnings require considerable public education effort to be effective as they are *Heads-Up* only, and the associated threat often has a very rapid onset.

Official warnings are those delivered using public alerting mechanisms by agencies with a legal duty to maintain and use warning systems in emergencies as described in the CDEM Act 2002.

Informal warnings are those received from non-official sources, such as friends, family, overseas media channels, or (non-official) social media. They may be official warnings that are being passed on, or they may be from a less authoritative source. Informal warnings may be valid, and for life safety situations it is recommended that they be acted on if the threat could be immediate and then verified after safety actions have been taken.

2.3 MULTIPLE SYSTEMS AND MINIMUM DESIRED REACH

Research into alerting effectiveness has indicated that if official warnings reach at least two thirds of the population, they have highly effective coverage (Mileti and Sorenson, 1990, Mileti and Kuligowski, 2008). This is because of the power of informal warnings. Informal warnings are passed on by those who receive official warnings. Research into warning delivery and receipt has shown that one out of three people will receive their first warning about an emergency as an informal warning. It is recommended that at least one official public alerting system reach at least two thirds (ideally >70%) of the population.

It is important to understand that the 70% of people reached by the alerts must be distributed throughout the impacted population to allow for the informal warning. We recommend that the same warning message is delivered using as many different systems as are available. This provides redundancy should one system fail or be non-operative. All TAs in Waikato agreed that a minimum of 70% reach for at least one official system was the desired goal for their population, and additional reach and multiple systems were ideal.

2.4 MESSAGE CONTENT

An official public alert should provide clear and concise information on the nature of the hazard threat, and the appropriate response to this threat. The alert should come from a single verified and trusted source and be delivered in a timely manner that allows those at-risk to respond effectively.

2.5 EFFECTIVENESS EVALUATION AND THE PUBLIC ALERTING OPTIONS DECISION SUPPORT TOOL

There is a wealth of information on the effectiveness of public alerting systems based on case studies from a range of hazard types and locations both national and international, as well as theory-based research applying psychology principles. The evidence for what constitutes an effective alerting system has been summarised and used to develop an effectiveness evaluation methodology for alerting systems in New Zealand (Leonard et al., 2005, 2006, 2008; Wright et al., 2014). The effectiveness of each option is determined using a range of criteria, with an evidence-based scoring system. This scoring system forms the basis for a Public Alerting Decision Support Tool. The tool contains base effectiveness scores and these are modified as more detailed information on local hazards and demographics are input to the tool.

The tool also applies an estimated cost for each alerting system, which provides for cost effectiveness comparisons of systems. The range of criteria used to determine effectiveness of each alerting system is shown in Table 1. The 'showstoppers' (most critical considerations for effectiveness) are highlighted in red and explained in Section 2.5.1.

Table 1 Evaluation Criteria for Determining Effectiveness in the Public Alerting Decision Support Tool.

Evaluation Criteria	Explanation, implications
Activation time – Fast or nothing	Alerting and action time available
For fast onset, localised	Hazard, alerting and action time available
For fast onset, widespread	Hazard, alerting and action time, cost
For slow onset, localised	Hazard, alerting and action time available
For slow onset, widespread	Hazard, alerting and action time available, cost
Heads-up	Reach people whatever they are doing
Hearing impaired	Vulnerable groups, receipt of message
High pop density	Cost, economy of scale, reach of system
Immobile	Vulnerable groups, action esp. evacuation
Institutions	Vulnerable groups, dependent
Instruction	Provides appropriate action information
Language	Vulnerable groups, understanding of message
Low pop density	Cost, economy of scale, reach of system
Mental capacity	Vulnerable groups, understanding of message
On-going effect (ability to update message)	Change in at-risk area or required action
Opt-in required	At risk population must subscribe and cannot unsubscribe
Relies on (landline) telephony	Potential point of failure
Relies on electricity	Potential point of failure
Relies on internet connection	Potential point of failure
Robustness/resilience	Maintenance required, hazard resistant
Sight impaired	Vulnerable groups, receipt of message
Terrain	Topographic constraints on alert delivery
Time to reach all	Congestion of networks, delivery time
Transients/Visitors	Unfamiliar with local hazards, alerting systems and required actions

2.5.1 Heads up and instruction, and other ‘showstoppers’

To produce the correct response from at-risk citizens during emergency events, both *Heads-Up* and *Instruction* are important for effective alerting. Heads-up is the ability to inform a person that something unusual is occurring, regardless of where they are and what they are doing. It is something that inescapably grabs the attention.

Instruction is the content of the alert which informs the recipient not only that something is happening (heads-up), but provides detail on what is happening, where and when it is happening and what action is appropriate in response to the threat. For example a hazardous chemical (hazchem) leak may require a different response (e.g., stay indoors and seal doors and windows) than a regional source tsunami (evacuate tsunami hazard zones) therefore *Instruction* is a critical part of the alerting message.

Opt-in highlights the need for the public to subscribe to, or install an alerting system to be able to receive alerts. An example of a subscription-based opt-in is signing up to an email, telephone-tree, telephone auto-dialler, or SMS-text alert distribution list. Opt-in systems that require installation include mobile device applications (apps), power mains messaging systems (ripple control) and tone activated alert radio. If people are required to subscribe to or install an alerting system this creates a potential barrier to uptake, particularly if there is a cost involved or requirement for technological proficiency. If a system is Opt-in then it is also likely to be able to be ‘Opt-out’, meaning at-risk citizens have the capability to modify the heads-up or instruction, or turn it off completely. This presents additional risk.

Timely warnings are essential to maximising appropriate responses. The time to activate a system and create and deliver an alert to all of those at-risk is an important consideration.

2.5.2 Information required to populate the decision support tool

The Public Alerting Decision Support Tool requires information to be input to determine the effectiveness of each system for specific communities, such as towns, cities, districts or regions. Some of the information is available from the NZ Census on the Statistics NZ website. Other information is best sought from local CDEM practitioners or local authority and community representatives. The following information is necessary to apply the tool:

- Population count – low and high density population counts for the area of interest; high density = >200 people/km²)
- Demographics – information about groups of citizens who might have increased barriers to receiving certain types of alerts (e.g., communities with many elderly people, possibly having higher levels of sight or hearing impairment and lower rates of mobile device ownership). The tool asks for information on groups with sight, hearing, mobility or intellectual impairments, and those with English as a second language
- Telephone coverage; mobile and fixed – many alerting systems require telecommunications through either mobile or landline networks
- Transient populations – this includes the number of visitors to the area (tourists and others from outside the location such as seasonal workers) who may be unfamiliar with the local hazards and the local alerting systems
- Those in the care of institutions – this includes the number of citizens who are housed in institutions such as hospitals and prisons; those who are temporarily in care such as pre-school, school and tertiary students; and those working in large campuses or workplaces. These people are likely to require an alert to be delivered to them via the institution in which they are housed

- Hazards of interest – hazards are grouped into four classes based on the lead-in time from hazard trigger to impact and the range or extent of impact. Classes are as follows: short lead-in time localised impact, short lead-in time widespread impact, long lead-in time localised impact and long lead-in time widespread impact.
- Budget – each alerting system requires some budget resource, which could be in the form of staff time for education and exercises, resources for education, financial input for purchase, installation and maintenance of dedicated systems, and/or licenses or charges to use third party systems. Costs are determined on a per-thousand population basis and are separated into start-up (establishment) and on-going.

Nearly forty alerting options are included in the decision support tool, including some options not yet readily available in NZ that are used overseas. These are categorised into third-party systems, dedicated hardware, natural warnings and independent self-maintained networks.

- Third-party systems are owned and operated by non CDEM agencies but can be used for alerting, e.g., TV, radio, mobile phone networks.
- Dedicated hardware is owned and operated by the CDEM agency e.g., PA systems or sirens.
- Natural warnings are those phenomena which are produced by the event that could indicate a hazard threat (e.g., strong or long shaking near the coast could indicate tsunamis; heavy rainfall could indicate landslides or flooding).
- Independent self-maintained networks are non-CDEM agencies in contact with the public that could deliver an alert message to the public if agreements and arrangements are in place (e.g., surf-lifesaving groups, park rangers, neighbourhood watch etc). The decision support tool allows users to select which alerting options to include and exclude in any evaluation.

3.0 CONTEXT FOR ALERTING IN THE WAIKATO

3.1 OVERVIEW OF WAIKATO CIVIL DEFENCE EMERGENCY MANAGEMENT STRUCTURE

Waikato CDEM Group members comprise ten territorial authorities (TAs) and the Waikato Regional Council. The TAs in alphabetical order, are:

- Hamilton City;
- Hauraki District;
- Matamata-Piako District;
- Otorohanga District;
- South Waikato District;
- Thames-Coromandel District;
- Taupo District;
- Waikato District;
- Waipa District; and
- Waitomo District.

Local operational CDEM areas include two emergency operating areas (EOAs); (Thames Valley and Western Waikato-comprising three TAs and two TAs respectively) and Waikato District, Hamilton City, South Waikato District and Taupo District (Figure 2).

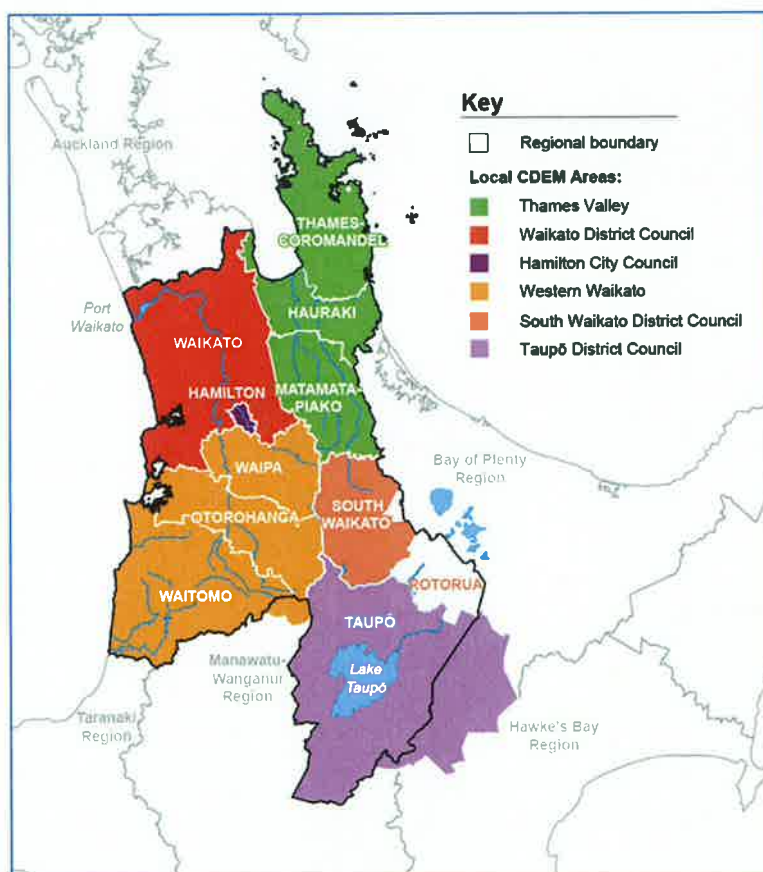


Figure 2 Waikato Civil Defence Emergency Management Group boundaries, district boundaries, regional boundaries and local CDEM areas. Note all of Taupo and Waitomo districts are included in Waikato CDEM Group and all of Rotorua District is excluded (Waikato CDEM Group, 2015).

The Coordinating Executive Group (CEG) provides senior executive direction and resources to develop and implement emergency management policies and plans. The members of Waikato's CEG are the local authorities discussed above, plus the following emergency services:

- New Zealand Police
- New Zealand Fire Service
- Waikato District Health Board
- St John Ambulance

Responsibilities for public alerting fall to members of CDEM Groups under the National CDEM Plan Order 2005. The order states:

"CDEM Groups;

- must maintain arrangements to respond to warnings (s60(5));
- Are responsible for (s62(6)):
 - a. *Disseminating national warnings to local communities; and*
 - b. *Maintaining local warning systems"*

The budgeting and decision making lies at the political level, with advice from CDEM professionals; while the operational implementation of alerting systems occurs at the local or Group-wide level if applicable.

3.2 WAIKATO HAZARDSCAPE

Waikato is a geographically diverse region; the range of natural hazards present include active volcanism in the south and ashfall from remote volcanoes, low lying flood plains, heavy rainfall zones, active faults, geothermal and geophysical processes (landslides, subsidence), coastal hazards (tsunami, storm surge, erosion), windstorms, drought and rural fire. Waikato's agricultural economy and population health is at risk from biological hazards such as animal or human epidemics. The Waikato Region also contains many major industrial sites and lifeline utilities including major state highways, rail corridors, gas lines, power generation sites and power corridors. The threat from hazchem incidents during transportation along arterial routes or at point sites must be considered. Waikato River has several large dams upstream of established communities.

In general three main options are available to local authorities to manage the risks from hazards.

1. Modify the hazard (e.g., river stopbanks – can protect against smaller events but always have design limits which can be exceeded).
2. Modify human behaviour (e.g., land-use planning to avoid hazardous locations).
3. Accept some risks and use warnings to protect life (and to some degree, property).

Hazards that are managed using Options One or Two are still likely to create some residual risk and if there is a life safety threat from extreme events, warnings will be necessary. Therefore the purpose of public alerting as part of effective warnings systems is to complement the other hazard risk management activities used by local authorities.

When considering the CDEM planning, preparedness and response for the wide range of hazards present in Waikato, public alerting options should ideally be capable of delivering warnings for multiple potential hazards, natural and non-natural. Each TA has its own hazardscape and the need for rapid, localised or widespread alerts differs between TAs. This is discussed in more depth in Section 5 of this report.

3.2.1 Critical hazards

With regards to public alerting, life safety is typically the main priority, with protection of moveable property also important (Table 2). Some hazards are therefore more critical in terms of the need for rapid alerting.

Table 2 Hazards applicable to the Waikato CDEM Group and the requirement for rapid warnings for life safety.

Hazards requiring rapid warnings for life safety (short-onset, less than 3 hours)	Hazards NOT requiring rapid warnings for life safety but still appropriate for alerting	Hazards which currently cannot be warned for
Near source* tsunami Regional source tsunami Serious Hazchem incident Flash flooding/debris flow	River flooding Distant source tsunami Storm surge Volcanic eruption Animal or human epidemic Drought Coastal erosion Windstorms Rural fire Large-scale lifelines failure	Earthquakes Extreme geothermal events Landslides Localised subsidence

*Natural warnings are the only possible warnings

4.0 METHODOLOGY

This project uses the Public Alerting Options Decision Support Tool (see Section 2.5). To successfully use the decision support tool to evaluate alerting options for Waikato communities, a considerable amount of local information is required. The methodology to collect this information and populate and use the tool is described below.

4.1 IMPORTANCE OF LOCAL INPUT IN DECISION MAKING

Following a preparatory meeting with local civil defence emergency management professionals and a review of available information on local hazards, demographics and alerting systems, workshops were held with each TA.

The Group Emergency Management Office (GEMO) recognised that local CDEM stakeholders, community representatives and emergency service staff have invaluable local knowledge and experience of their communities, their hazards and other essential information that could influence alerting effectiveness. It was also noted that workshops would be valuable in educating locals about alerting options and help decision makers to make well informed decisions about warning systems in the future. GEMO developed a process to ensure meaningful input into the evaluation process from the TAs within the Group.

4.2 BASELINE DATA

To prepare for local discussions, baseline data was collated with the expectation that local information provided in workshops would expand and where necessary provide corrections.

The following was collected as baseline data (more information on the source and analysis of this data is available in Appendix 2.0).

- Population data (high and low density).
- Elderly populations (an indicator for hearing, sight and mobility impaired populations).
- Residents who spoke languages other than English (as indicator for potentially those with English as a second language).
- Telephone access: landline and mobile ownership.
- Telephone coverage: reception of mobile phone network.
- Hazards of importance to each TA.

4.3 TERRITORIAL AUTHORITY WORKSHOPS

Nine half-day workshops were held throughout the region; one for each TA except for a combined workshop for Waitomo and Otorohanga District Councils. The purpose of the workshops was twofold:

- to provide background on the evidence basis for evaluation of alerting systems using the public alerting decision support tool; and,
- to enhance the baseline information by capturing local knowledge and experiences.

Representatives of key local organisations were invited to the workshops; the organisations included:

- territorial authority councillors (particularly Mayors and those with a responsibility or interest in CDEM) and community board members;
- council officers (particularly CEG representatives, CDEM professionals and others with a responsibility for, or interest in CDEM); and,
- emergency services (police, fire, health).

MCDEM representatives (regional advisors) also attended some of the workshops, largely in an observer capacity and they provided input on request.

Following presentations from GNS Science and GEMO, a facilitated discussion was conducted using the baseline data as a prompt. These discussions were lively, invaluable and in every instance greatly improved the knowledge of local systems, demographics and benefits and limitations of existing systems. The key discussion topics are shown in Figure 3 as an example.

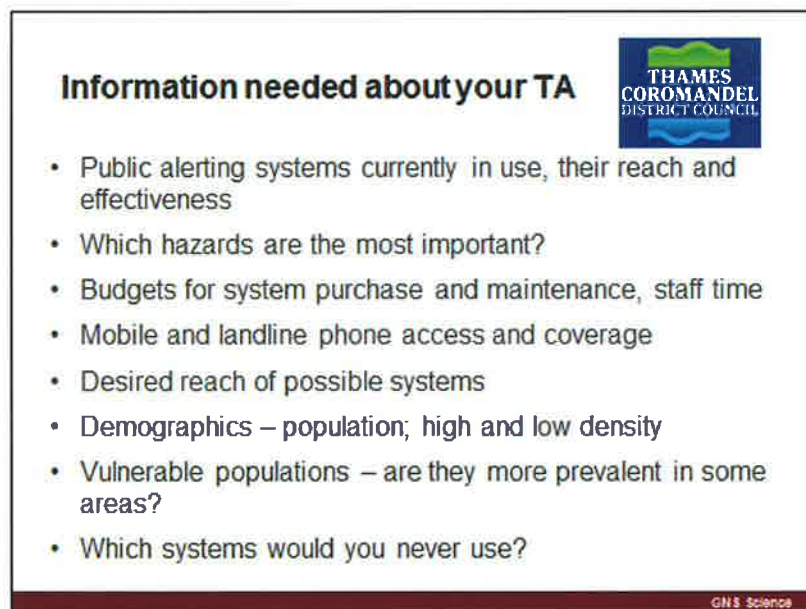


Figure 3 Introduction to the facilitated workshop discussion on local inputs to the decision support tool.

The results of the workshop discussion were used to refine the inputs to the decision support tool for each TA analysis (Figure 4). The tool allows for options to be switched off (removed from consideration) for hazard classes and alerting options that are not of interest. The tool also allows the use of multipliers to enhance the importance of hazard classes and demographic groups requiring special consideration (e.g., transient populations in areas with high tourism numbers). The specific multipliers applied for each TA (if any) are listed in the results section (Section 5).

Budget is essential for determining the cost benefit of any alerting system and budgets for specific systems can vary significantly when calculated for high and low density populations, and when considering establishment and on-going costs. Most TAs had no budget allocated for alerting systems or staff time specifically dedicated to public alerting (see Section 5), therefore an effectiveness evaluation was undertaken of all systems. Recommendations will be based on affordability of local systems to reach groups or pockets and where regional or national systems can be employed as cost-effective measures for local alerting. The Waikato CDEM Group has some budget allocated to alerting and this is taken into consideration for alerting options that are appropriate for Group-wide coordination or management. For TAs with no budget – cost estimates were sought and an indication of cost is given for high benefit options. Free options can be applied with no budget.

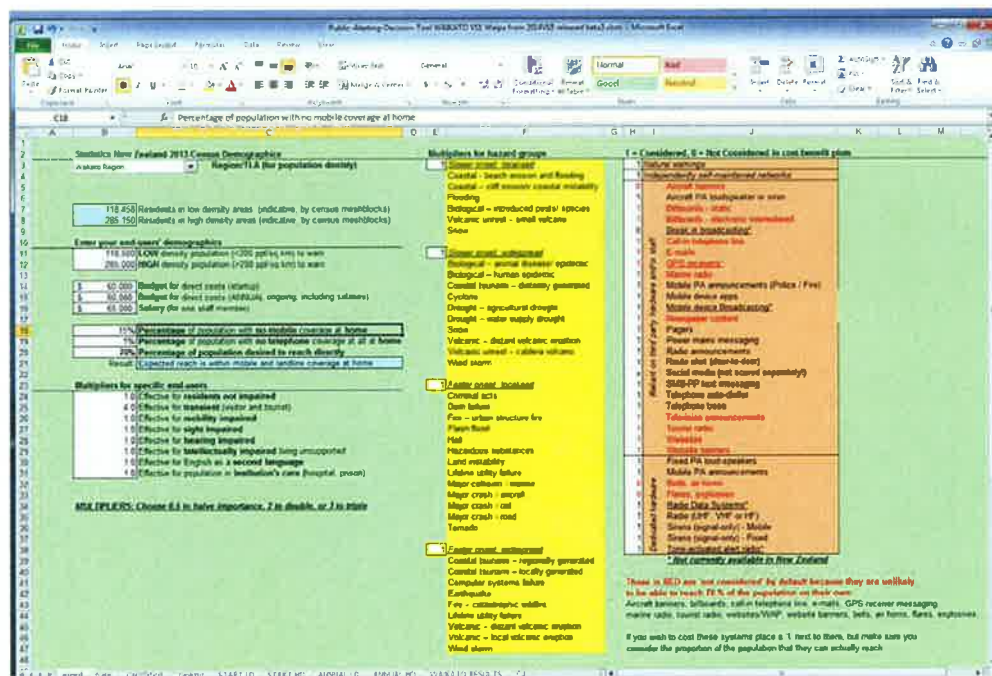


Figure 4 Input page for the decision support tool. Left: information about demographics, budget and multipliers for special groups; Centre: Hazard classes as described in Section 2.5.2; Right: alerting options included for consideration in the tool.

4.3.1 Alerting options included in tool

A summary of the systems most used or most of interest (all TAs combined) is provided in Figure 5.

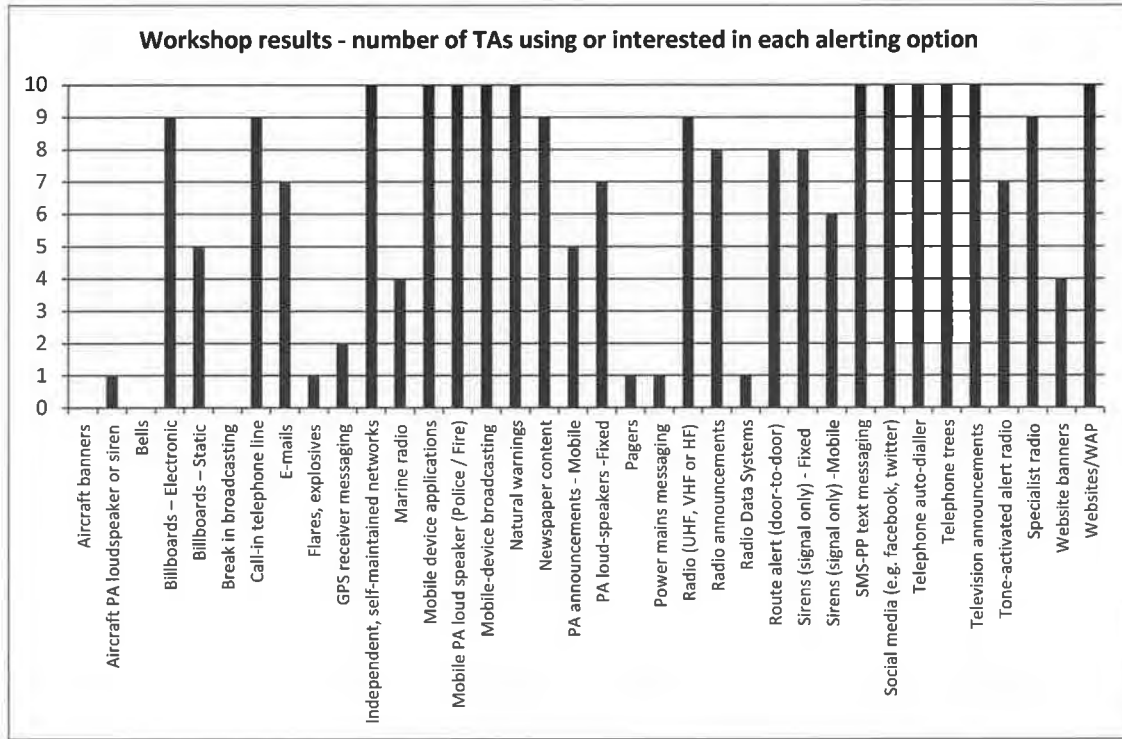


Figure 5 Systems currently used or level of interest in inclusion for options evaluation (all TAs combined).

A regional evaluation (see Section 5.1) was conducted as well as individual TA evaluations (Sections 5.2–5.11). When applying the decision support tool to individual TAs, all systems of interest to the respective TA and/or currently in use locally (e.g., mobile PA systems), regionally (e.g., Regional Council flood warning system) or nationally (e.g., television) were included.

4.4 NATIONAL INITIATIVES

Several national mobile communications-based alerting options have also been considered.

MCDEM is exploring telecommunications-based public alerting options. A business case has been provided to Government. The business case advises on options and investment required for a national (all of government) telecommunications-based emergency alerting capability to facilitate a decision in this regard.

MBIE and Police are leading the emergency response system (ERS) application project – which includes both 111 calling and location-based alerting (service to be established by July 2016).

CloudM and the Auckland CDEM Group have developed a native Apple iOS and Android app called Civil Defence New Zealand Application. In addition, both Google Public Alerts via the Google Now app, and a Red Cross app, have also been mooted by these suppliers for use nationally in New Zealand. Google is working directly with GeoNet, MetService and MCDEM, and Red Cross is piloting its app with Wellington Region Emergency Management Office.

It is envisioned that at least one (and probably all) of these options will be available for the Waikato CDEM Group within the 2015/16 financial year. All four app developers are discussing the implementation of Common Alerting Protocol (CAP) as part of a standard New Zealand implementation for all apps, ideally with a single input platform for emergency managers to enter public alerts securely into, which will then go to all apps.

5.0 RESULTS

The results of each Territorial Authority (TA) workshop and the application of the public alerting decision support tool using this information are presented in Sections 5.2–5.11.

5.1 REGIONAL

This section summarises existing Group-wide public alerting systems and costs, opportunities and issues for implementation of future systems across the Group as a whole.

5.1.1 Key points

The Group is subject to a broad range of natural, technological and biological hazards although some areas are more prone to risk from these hazards than other areas. Population totals some 405,000 individual residents as at 2013, although density varies considerably from high density in some parts of Hamilton City to very sparse in remote rural areas and conservation land. Population in Thames-Coromandel and Taupo Districts can at least double during the peak summer holiday season.

Many independent and self-maintained networks are utilised across the Group and the importance of institutions with individuals in their care varies from district to district although education institutions are prominent in all districts. Unique pockets or groups of populations that may need targeted alerting are detailed for each TA in the applicable sections below. Generally, geographical pockets of poor mobile phone coverage are common in sparsely populated rural, conservation and coastal areas. The elderly and tourists are two groups that may especially need consideration in some districts.

A variety of warning systems are already utilised across the Group, the use of media releases, social media and websites is common. However, some systems are not widely or consistently implemented. Some districts have many systems implemented while others have very few. Most districts have limited or no budget allocated towards warning systems. All districts chose not to consider the following (available) systems:

- Aircraft banners
- Break in broadcasting
- Bells, air horns
- Flares, explosives

Tsunami natural warnings education needs to be targeted towards applicable areas and it is not logical or cost effective for the whole Group in a blanket approach.

Existing Group-wide systems

All available public alerting options have opportunities, advantages and issues associated with them. Please refer to Appendix 1 of The Public Alerting Options Assessment: 2014 update (Wright et al., 2014).

Waikato Regional Council maintains:

- Flood warning SMS and auto-dialler system for applicable landholders and stakeholders
- Websites (Waikato Regional Council and BUSIT!)
- RSS Feed

- Facebook (2056 likes)
- Twitter (1354 followers)
- YouTube (34 subscribers)
- Email subscription service
- TV and Radio – Media releases

Waikato CDEM Group maintains:

- Website (CDEM Group)
- Facebook (2295 likes)
- Twitter (433 followers)
- Email subscription service
- TV and Radio – Media releases

Phone coverage

Phone coverage throughout this report is based on 2013 census household phone access data as a proxy. While network operators' coverage maps have been referred to in Appendix A1.0 this data not been used as input because they are the providers' estimation of coverage and there is no reason to expect these are a more accurate approximation of real coverage than the census access data.

Telephone household (usually occupied private dwellings) access statistics for Waikato Region from 2013 census:

- Percent of households with access to mobile phones: 79%
- Percent of households with access to landline phones: 78%
- Percent of households with no access to telecommunications: 2%
- Percent of households with internet access 69%

The main access problems throughout the Group are:

- Spatial areas (pockets) without coverage: See TA sections for more detail
- Demographic groups without access: Elderly and some – especially to smartphones. See TA-specific groups for more detail.

Note that some people who are not covered by the mobile network will still have app coverage if they have their phones connected to wifi at home. This should be promoted.

5.1.2 Budget and costs

Budget for Waikato CDEM Group

\$40,000 start-up

\$84,000 annual = \$60,000 direct costs (licenses, enhancements, support, maintenance, testing) + 0.3 FTE dedicated to group-wide warning system planning, implementation, testing and coordination.)

System costs

Modifications from the options tool default have been made for all TAs as follows:

Telephone auto-diallers are calculated at a cost of \$200/1000 people, with an additional 0.1 FTE cost per 100,000 people at TA level to populate and maintain a contact database.

For SMS-PP service – \$740 start-up, and then \$540 annual subscription cost for the Group. The SMS-PP cost is \$0.13 cost per SMS message. We have calculated TA and Group costings at one message per year being distributed across the whole population.

5.1.3 Pockets and groups

Pockets and groups are analysed in detail in the TA sections below. Pockets are populations that do not necessarily have similar characteristics but are located within a defined geographic area and share a special requirement with regards to alerting. Groups are a number of people within a community with a shared requirement for special consideration with regards to receiving, understanding and acting on alerts (e.g., hearing impaired people or non-English speakers). Groups such as those described are sometimes referred to as “vulnerable populations” in CDEM literature. Groups may be dispersed among a community or within a geographic ‘pocket’.

Group-wide coordination of TA-implemented options to reach pockets and groups is probably the most effective strategy. It should be noted that new subdivisions don’t necessarily have landline telephone infrastructure as residents opt for mobile phone and/or fibre only internet connections.

People in at-risk areas in transit, particularly on State Highways, were of concern for many TAs. There are several ways they could be targeted for alerts during emergencies. A message can be delivered via a mobile app if mobile phone coverage is available in the transit location and drivers are able to monitor their mobile phones. A regional relationship should be developed and coordinated with NZTA to allow for the ready use of electronic billboards on the State Highway networks. An agreement or MOU should be developed at Group level, acknowledging that requests for use of these electronic billboards could come from TAs or the Group depending on the emergency. These systems are limited in message length but are easily updated. People in transit typically have access to radio networks. If they are actively listening to the radio they will receive any emergency alerts delivered via radio.

5.1.4 Effectiveness scores and multipliers

Table 3 shows the effectiveness scores and estimated costs for all systems, if they were to be applied across the entire Waikato Group population. Important considerations for this table include:

- The results are budget and resource independent; i.e., the results assume no constraint on staff numbers or budget.
- Therefore options that might require very high personnel numbers (e.g., door to door route alert) are not deemed less effective.
- Blue text indicates systems where start up and annual costs are within the budget of the applicable area.
- This table provides an indication of which systems are most appropriate to be funded and implemented at the Group level.

No multipliers were changed for the region as a whole. Options that may not be highly effective when implemented at a TA-wide or Group-wide scale may still be highly effective for small pockets. Especially – self-maintaining networks, route alert, mobile-PA, SMS and VOIP auto-diallers. HF Radio is expensive if implemented for each individual or household but may be cost effective to implement for groups who have a single point of HF radio contact that then can trigger a communication process such as a phone tree or route alert.

5.1.5 Recommendations for Waikato CDEM Group

- Engage with the national CAP and mobile alerting app development processes and ensure that Waikato CDEM Group needs are included at the earliest reasonable stage, expected to be within the 2015/16 financial year.
- Liaise with the Waikato Local Authorities to support them to use the national public mobile alerting app(s). Represent the Group's interests as these options evolve and develop over time.
- Investigate options to reach pockets and groups not covered by mobile apps. These will depend on the cost structure between the Group and Local Authorities and the total number of people each Local Authority needs to reach. VOIP-based autodialer systems for landlines should be investigated as the first priority. Then further fall-back systems as needed as persistent gaps in both mobile and land-line coverage are identified (Sections 6.2 and 6.3).
- Liaise with independent self-maintaining networks and large institutions with people in their care that span more than one TA to facilitate alerting agreements into these networks for the region.
- Develop and maintain (or support consistency across TAs at least for) a database structure that Local Authorities can use to store and access auto-dialler, phone tree and self-maintaining network contact lists and details. Ideally the functionality of the database of phone numbers and emails addresses would allow the public to register their details through a web interface and would include a regular (six-monthly or annual) email or SMS-PP text reminder to check and update phone numbers. The database would then be used to generate distribution lists for alerts based on geographic location.

Table 3 Relative effectiveness scores for selected alerting options, with indicative costs if implemented across the Waikato CDEM Group.

	Score	For Low Density Areas		For High Density Areas		Total		Limitations and notes
Total Population:		120k		290k		410k		Blue text indicates systems where start up and annual costs are within the budget of the applicable area
When 70% of population targeted:		84k		203k		287k		
		Start-up costs	Annual costs	Start-up costs	Annual costs	Start-up costs	Annual costs	
		\$k	\$k	\$k	\$k	\$k	\$k	
SYSTEMS...								
With Rapid Widespread Coverage:								
Mobile device apps	85%	16	16	39	39	55	55	
Mobile device broadcasting (1)	84%	10,337	337	10,814	814	21,150	1,150	Cheaper with national implementation
Tone-activated alert radio (1)	82%	6,007	7	14,516	16	20,523	23	Cheaper with national implementation
Fixed PA loud-speakers	68%	10,279	679	6,222	422	16,501	1,101	Maintenance, telemetry and testing
That can reach 70% of the pop.								
High effectiveness:								
Radio announcements	82%	3	3	8	8	11	11	No heads up, slow to reach 70%
Mobile PA loud-speakers (2)	74%	1203	1	298	2	1501	2	# vehicles & staff; time required, GOOD FOR POCKETS ONLY
Route alert (door-to-door)	71%	6,720	6,720	16,240	16,240	22,960	22,960	# staff available and time to walk/drive, Slow to reach 70%
Moderate effectiveness:								
Power mains messaging	66%	2,401	1	5,802	2	8,202	2	Heads up only – slow response
Natural warnings	66%	353	353	853	853	1205	1205	Only for a few hazards GOOD FOR COAST
Telephone trees	65%	270	270	652	652	921	921	Slow to reach 70%
Radio (UHF, VHF or HF)	64%	3,042	42	7,352	102	10,394	144	Reaches only houses/buildings
Telephone auto-dialler	64%	24	24	57	57	80	80	Slow to reach 70% GOOD FOR POCKETS
Helicopter PA loudspeaker	64%	226	673	138	22	364	695	Slow to reach 70% due to # aircraft
SMS-PP text messaging	63%	23	18	48	43	70	60	Slow to reach 70% GOOD FOR POCKETS
Pagers	62%	319	132	771	318	1,090	450	Slow to reach 70%, phasing out
Lower effectiveness:								
Sirens (signal-only) - Mobile	56%	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Cheaper than PA, but slow response
Radio Data Systems (1)	52%	3,042	42	7,352	102	10,394	144	No heads up, slow to reach 70%
Call-in telephone line	47%	1,750	1,730	4,202	4,182	5,952	5,912	Very slow to reach 70%
Sirens (signal-only) - Fixed	44%	14,246	706	8,851	487	23,097	1,193	Heads up only – slow response
That cannot reach 70% of the pop.: (3)								
Television announcements	73%	3	3	8	8	11	11	GOOD BACKUP
Website banners	66%	603	3	1458	8	2061	11	
Independent self-maint networks	66%	18	18	43	43	60	60	GOOD FOR POCKETS
Mobile PA loud speaker (Police/Fire)	66%	3	3	8	8	11	11	# vehicles & staff; time required GOOD FOR POCKETS
E-mails	59%	33	18	58	43	90	60	
Newspaper content	58%	1	1	2	2	2	2	
GPS receiver messaging (1)	57%	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Not internationally implemented
Websites	56%	612	12	1478	28	2090	40	
Marine radio	53%	3	3	8	8	11	11	
Tourist/Iwi radio	49%	3	3	8	8	11	11	
Billboards - static	47%	375	135	228	83	603	218	
Billboards - electronic telemetered	45%	1	1	2	2	2	2	GOOD FOR POCKETS

(1) Systems not yet readily available in New Zealand.

(2) No FTE is costed for the use of mobile PA loud-speakers as it is assumed these will be operated by council staff or volunteers, if there is a salary cost this option will become more expensive.

(3) Systems that cannot reach 70% of people for short lead time hazards should be used with caution and ideally on of the options above should also reach at least 70% of people in every location.

5.2 HAMILTON CITY

5.2.1 Key points from workshops

Note more detailed notes from this workshop can be found in Appendix A1.1

Hamilton has had a relatively low frequency and severity of impacts from hazards in the past which may relate to a relatively low profile for CDEM and public alerting. Population is estimated at ~150,000 individual residents as at 2015 with densities in excess of 3,000 people per km² in some areas, although densities can be relatively low in some of the urban fringe. The population turnover is relatively high; as at 2013 43% of residents in Hamilton City had moved into the district in the last five years. This creates challenges for education regarding hazards, and for familiarity and understanding of warnings and appropriate actions.

Significant hazards identified were potential dam failures events on the Waikato River (short-time frame for warnings), human pandemic, and industrial or transported hazchem incidents within or under (rail network) the city. Hamilton has also experienced locally damaging tornadoes and can be affected by extreme weather events. Short time frame localised hazards are important. Longer time frame localised and widespread hazards are also relevant.

Several independent self-maintained networks were noted although the strength of those relationships is uncertain. The following established networks are noted but not currently utilised by Hamilton CDEM:

1. CBD Association
2. Neighbourhood Support
3. Local Welfare Committee
4. Rotary
5. Lions
6. Amateur Radio Emergency Communications (AREC)
7. Māori Wardens

Existing systems primarily focus on using media releases, social media and websites via Hamilton City Council. The low rate of past alerts means that there has been little testing of arrangements. Hamilton City Council currently has no budget allocated towards warning systems.

The following public alerting systems are already in use or available for use In Hamilton City:

- Media releases via radio, and potentially TV
 - Local radio stations are available in Hamilton to use.
- Social media platforms (via HCC and Hamilton NZ Facebook (>20,000 likes combined) and HCC twitter (>2,000 followers) – managed and monitored using HootSuite).
- Over 20 websites, including HCC
 - Ability to activate dedicated CDEM website in place of HCC website.
- The GECC has one mobile PA/siren available, however with very limited reach.
- No rural fire but some volunteer networks.
- Council email subscription service, used for all types of message.
- Consider NZTA fixed digital signs on highways.

There are no significant issues with telecommunications access in Hamilton City.

5.2.2 Budget

Start-up \$0

On-going \$0

5.2.3 Pockets and Groups that need specific alerting

Large employers, tertiary education and large event facilities were identified as institutions with significant populations in their care that needed consideration. Several pockets are detailed in Appendix A1.1 either for their high proportion of elderly, large daily migration, cultural diversity or poorer access to telecommunications. Generally mobile coverage across Hamilton is good. Three groups that were identified for special consideration across the district are non-Europeans (Hamilton is very culturally diverse), transients (tourists and those on the highways) and new residents (high migration). Many pockets and groups could, in theory, be reached via independent self-maintained networks. The highways could be reached via NZTA fixed electronic signs.

5.2.4 Effectiveness scores

No multipliers were changed for Hamilton. Table 4 provides start-up and on-going annual cost indications for the selected alerting options for this TA.

5.2.5 Recommendations for Hamilton City

5.2.5.1 Regionally coordinated systems

- Any mobile alerting option should be regionally coordinated. The installation (when available) of one or more of the mobile apps discussed in Section 4.4 by residents should be strongly encouraged by Hamilton CDEM using public education and potentially incentives to install. Note that some people who are not covered by the mobile network will still have app coverage if they have their phones connected to wifi at home. This should be promoted.
- Additional pocket coverage should also be regionally coordinated for options that are used by multiple TAs (e.g., telephone auto-diallers, full list Section 6.2).
- Implementation within a TA of a regionally supported system needs an FTE component locally budgeted for local aspects. For example, to populate and maintain a telephone auto-dialler or SMS-PP phone number database.
- Television arrangements could be coordinated through the region or at a TA level. This needs to be discussed between the TAs and Group office.
- Radio arrangements should be planned for at a TA level, not just Group-wide.
- It is important that Social Media alerting is managed to reduce duplication of effort and increase consistency across TAs, and with the CDEM Group. There is a 24/7 regional response in place and TAs can utilise this.
- Use of independently self-maintained networks and alerting to large institutions with people in their care; some networks or institutions may require or are appropriate for regional coordination, to avoid duplication of effort at TA level.

5.2.5.2 Locally implemented systems

- Large employers and public meeting places e.g., shopping malls (institutions) should be identified and a key contacts database developed with each, to maximise the applicability of auto-diallers, telephone trees and/or SMS alerts for use in Hamilton City.
- Alerting to people in the care of institutions (e.g., rest homes) should be arranged at a TA level.
- Connections should be made with local self-maintained network groups described above to determine their capacity and willingness to assist with public alerting and whether they are local to Hamilton or part of a wider network.
- Mobile PA systems are highly effective, but not as rapid or affordable as apps and mobile device options across the entire area. They should be considered for targeting specific pockets. Considerations are needed for activation (e.g., phone calls) of PA operations staff, and having them 'on-call' for expected/agreed periods. These must be agreed and documented in an SOP.
- Mobile PA systems owned by third parties (e.g., emergency services) are valuable but these parties may have other priorities in an emergency.
- Existing phone trees could be triggered by a Group-coordinated auto-dialler.
- Existing systems that are not in the above recommendations but are already in place and are proving effective should be maintained. Note: "proving effective" means evidence is available to show that the systems have performed well in previous emergencies or that they will reach at-risk communities in a timely manner and that the public understands the system and knows the appropriate response actions.
- Additional systems available and effective for reaching pockets and groups are listed in Section 6.3.

Table 4 Relative scores for selected alerting options, with indicative costs for Hamilton City.

	Score	For Low Density Areas		For High Density Areas		Total	Limitations and notes	
Total Population:		1.6k		140k		141.6k		
70% of population targeted:		1.1k		98k		99.1k		
		Start-up costs	Annual costs	Start-up costs	Annual costs	Start-up costs	Annual costs	
		\$k	\$k	\$k	\$k	\$k	\$k	
SYSTEMS...								
With Rapid Widespread Coverage:								
Mobile device apps	83%	0	0	18	18	18	18	
Mobile device broadcasting (1)	84%	10,004	4	10,393	393	20,397	397	Cheaper with national implementation
Tone-activated alert radio (1)	82%	120	0	7,006	6	7,127	7	Cheaper with national implementation
Fixed PA loud-speakers	68%	137	9	3,002	202	3,139	211	Maintenance, telemetry and testing
That can reach 70% of the pop.								
High effectiveness:								
Radio announcements	82%	0	0	3	3	3	3	No heads up, slow to reach 70% # vehicles & staff; time required, GOOD FOR POCKETS ONLY
Mobile PA loud-speakers (2)	74%	16	0	143	1	159	1	
Route alert (door-to-door)	71%	73	73	6,370	6,370	6,443	6,443	# staff available and time to walk/drive
Moderate effectiveness:								
Natural warnings	66%	4	4	353	353	357	357	Only for a few hazards GOOD FOR COAST
Telephone trees	65%	3	3	256	256	259	259	Slow to reach 70%
Radio (UHF, VHF or HF)	64%	40	0	3,542	42	3,582	42	Reaches only houses/buildings
Telephone auto-dialler	64%	0	0	26	26	26	26	Slow to reach 70% GOOD FOR POCKETS
SMS-PP text messaging	63%	5	0	24	19	29	19	Slow to reach 70% GOOD FOR POCKETS
Lower effectiveness:								
Call-in telephone line	47%	43	23	2,039	2,019	2,082	2,042	Very slow to reach 70%
That cannot reach 70% of the pop.: (3)								
Television announcements	73%	0	0	3	3	3	3	GOOD BACKUP
Website banners	66%	8	0	703	3	711	3	
Independent self-maint networks	66%	0	0	18	18	18	18	GOOD FOR POCKETS
Mobile PA loudspeaker (Police/Fire)	66%	0	0	3	3	3	3	# vehicles & staff; time required GOOD FOR POCKETS
E-mails	59%	15	0	32	17	47	17	
Newspaper content	58%	0	0	1	1	1	1	
GPS receiver messaging (1)	57%	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Not internationally implemented
Websites	56%	8	0	713	13	721	13	
Tourist/lwi radio	49%	0	0	3	3	3	3	
Billboards - electronic telemetered	45%	0	0	1	1	1	1	GOOD FOR POCKETS

(1) Systems not yet readily available in New Zealand.

(2) No FTE is costed for the use of mobile PA loud-speakers as it is assumed these will be operated by council staff or volunteers, if there is a salary cost this option will become more expensive.

(3) Systems that cannot reach 70% of people for short lead time hazards should be used with caution and ideally one of the options above should also reach at least 70% of people in every location.

5.3 HAURAKI DISTRICT

5.3.1 Key points from workshops

Note more detailed notes from this workshop can be found in Appendix A1.2

Hauraki District has a population of approximately 17,800 residents. There is a history of flooding in Hauraki and stopbank protection is now in place in many previously flooded areas. A failure or overtopping of the stopbanks was considered to be potentially catastrophic. Other hazards of significance in the district include: coastal erosion, storm surge, tsunami, ashfall (distant source), earthquake (Kerepehi Fault), rural fire, geothermal, animal epidemics and lifeline utility failure or hazchem incidents. All traffic to the Coromandel Peninsula passes through the District, as well as all traffic travelling between Auckland and the Northern Bay of Plenty.

Hauraki District Council has a strong ward system providing “grass roots” linkages from the community to the council. Hauraki also maintains a contact database of independent self-maintained networks that could potentially be contacted for alerting support purposes in an CDEM activation. However, no formal arrangements are in place to utilise any of these groups to support alerting. There are too many stakeholders to list but can be grouped as:

- Councillors and Council Staff
- Returned Services Association
- Emergency Services
- Bands
- Schools
- Community Groups
- Services
- Churches
- MP's

Hauraki identified that they currently use or could use the following alerting systems:

- Media Releases (Radio, less likely TV)
 - Iwi radio (Nga Iwi)
- Hauraki DC Website
- Hauraki DC Facebook (470 likes)
- Thames Valley C.D. Twitter (863 followers)
- Fire service Mobile PA (Whiritoa)
- Actively promote natural warnings
- Phone tree in Kaiaua – calls landlines and mobile phones
 - Currently testing as only established one year ago
- Route alert (door knocking) for storm surge events (council staff and rural fire)
- Emergency services PA
- Regional council flood SMS-PP and email system for flood alerts
- Mass text system is used for rural school buses and could potentially be used for alerts with agreements with provider
- E-text full school database (possible)
- Possibly an arrangement could be made with Newmont Gold to utilise tone-alert radio systems in place in Waihi during emergency events

Hauraki generally has good telecommunications access although network coverage is patchy in some areas such as the Karangahake Gorge. It was estimated that approximately 10% of the District's population experienced poor mobile phone coverage.

5.3.2 Budget

Start-up \$0

On-going \$ 0

Staff time is provided mainly through the Thames Valley Zone arrangements for CDEM which combines effort for some activities for the following three districts Hauraki, TCDC and Matamata-Piako.

5.3.3 Pockets and groups that need specific alerting

Institutions with people in their care identified in Hauraki include industrial sites, large employers, special schools and retirement homes. Geographic pockets requiring special consideration include coastal tourist areas (e.g., Whiritoa), the higher proportion of elderly residents in Kaiaua, large festivals and events, and people travelling in, or visiting, the Karangahake Gorge.

5.3.4 Effectiveness scores and multipliers

Table 5 provides start-up and on-going annual cost indications for the selected alerting options for this TA. No multipliers were changed for Hauraki.

5.3.5 Recommendations for Hauraki District

5.3.5.1 Regionally coordinated systems:

- Any mobile alerting option should be regionally coordinated. The installation (when available) of one or more of the mobile apps discussed in Section 4.4 by residents should be strongly encouraged by Hauraki CDEM using public education and potentially incentives to install. Note that some people who are not covered by the mobile network will still have app coverage if they have their phones connected to wifi at home. This should be promoted.
- Additional pocket coverage should also be regionally coordinated for options that are used by multiple TAs (e.g., telephone auto-diallers, full list Section 6.2).
- Implementation within a TA of a regionally supported system needs an FTE component locally budgeted for local aspects. For example, to populate and maintain a telephone auto-dialler or SMS-PP phone number database.
- Television arrangements should be coordinated through the region.
- Radio arrangements should be planned for at a TA level, not just Group-wide.
- It is important that Social Media alerting is managed to reduce duplication of effort and increase consistency across TAs, and with the CDEM Group. There is a 24/7 regional response in place and TAs can utilise this.
- Use of independently self-maintained networks and alerting to large institutions with people in their care; some networks or institutions may require or are appropriate for regional coordination, to avoid duplication of effort at TA level.

5.3.5.2 Locally implemented systems

- Natural warnings for tsunami are important and affordable in terms of education for both residents and tourists if targeted at coastal locations and key institutions and tourism providers.
- Alerting to people in the care of institutions should be arranged at a TA level.
- Mobile PA systems are highly effective, but not as rapid or affordable as apps and mobile device options across the entire area. They should be considered for targeting specific pockets. Considerations are needed for activation (e.g., phone calls) of PA operations staff, and having them 'on-call' for expected/agreed periods. These must be agreed and documented in an SOP.
- Mobile PA systems owned by third parties are valuable but may have other priorities in an emergency.
- Existing phone trees could be triggered by a Group-coordinated auto-dialler.
- Existing systems that are not in the above recommendations but are already in place and are proving effective should be maintained. Note: "proving effective" means evidence is available to show that the systems have performed well in previous emergencies or that they will reach at-risk communities in a timely manner and that the public understands the system and knows the appropriate response actions.
- Additional systems available and effective for reaching pockets and groups are listed in Section 6.3.

Table 5 Relative scores for selected alerting options, with indicative costs for Hauraki District.

	Score	For Low Density Areas		For High Density Areas		Total	Limitations and notes	
Total Population:		8.3k		9.5k		17.8k		
70% of population targeted:		5.8k		6.7k		12.5k		
		Start-up costs	Annual costs	Start-up costs	Annual costs	Start-up costs	Annual costs	
		\$k	\$k	\$k	\$k	\$k	\$k	
SYSTEMS...								
With Rapid Widespread Coverage:								
Mobile device apps	83%	1	1	1	1	2	2	
Mobile device broadcasting (1)	84%	10,023	23	10,027	27	20,050	50	Cheaper with national implementation
Tone-activated alert radio (1)	82%	415	0	475	0	891	1	Cheaper with national implementation
Fixed PA loud-speakers	68%	711	47	204	14	915	61	Maintenance, telemetry and testing
That Can reach 70% of the pop.								
High effectiveness:								
Radio announcements	82%	0	0	0	0	0	0	No heads up, slow to reach 70%
Mobile PA loud-speakers (2)	74%	83	0	10	0	93	0	# vehicles & staff; time required, GOOD FOR POCKETS
Route alert (door-to-door)	71%	378	378	432	432	810	810	# staff available and time to walk/drive
Moderate effectiveness:								
Natural warnings	66%	21	21	24	24	45	45	Only for a few hazards GOOD FOR COAST
Telephone trees	65%	15	15	17	17	33	33	Slow to reach 70%
Radio (UHF, VHF or HF)	64%	210	2	240	3	450	5	Reaches only houses/buildings
Telephone auto-dialler	64%	2	2	2	2	3	3	Slow to reach 70% GOOD FOR POCKETS
SMS-PP text messaging	63%	6	1	6	1	12	2	Slow to reach 70% GOOD FOR POCKETS
Pagers (triggering 200 people)	62%	22	9	25	10	47	20	Slow to reach 70%, phasing out
Lower effectiveness:								
Sirens (signal-only) - Mobile	56%	0	0	0	0	0	0	Cheaper than PA, but slow response
Call-in telephone line	47%	140	120	157	137	297	257	Very slow to reach 70%
That cannot reach 70% of the pop.: (3)								
Television announcements	73%	<1	<1	<1	<1	<1	<1	GOOD BACKUP
Website banners	66%	42	0	48	0	89	0	
Independent self-maint networks	66%	1	1	1	1	2	2	GOOD FOR POCKETS
Mobile PA loudspeaker (Police/Fire)	66%	0	0	0	0	0	0	# vehicles & staff; time required
E-mails	59%	16	1	16	1	32	2	
Newspaper content	58%	0	0	0	0	0	0	
GPS receiver messaging (1)	57%	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Not internationally implemented,
Websites	56%	42	1	48	1	91	2	
Tourist/lwi radio	49%	0	0	0	0	0	0	
Billboards - static	47%	26	9	7	3	33	12	
Billboards - electronic telemetered	45%	0	0	0	0	0	0	GOOD FOR POCKETS

(1) Systems not yet readily available in New Zealand.

(2) No FTE is costed for the use of mobile PA loud-speakers as it is assumed these will be operated by council staff or volunteers, if there is a salary cost this option will become more expensive.

(3) Systems that cannot reach 70% of people for short lead time hazards should be used with caution and ideally on of the options above should also reach at least 70% of people in every location.

5.4 MATAMATA-PIAKO DISTRICT

5.4.1 Key points from workshops

Note more detailed notes from this workshop can be found in Appendix A1.3

Matamata-Piako District has a population of approximately 31,500 residents. There are a number of hazardous chemical (Hazchem) and large industrial sites to consider alongside the hazards of flooding, strong winds (the 'Kaimai Buster'), ashfall (distant source), geothermal, earthquakes and animal epidemics. State Highways run through the district and people in transit on these routes should be considered.

Some independent self-maintained networks were identified by MPDC as potential opportunities for public alerting including the Lions, Rotary, Te Mana Whenua and the Rural Support Trust. There are many more that MPDC could potentially engage with but these have not been identified to date.

The workshop highlighted that MPDC is interested in nationally consistent alerting. The following options were highlighted in terms of existing public alerting systems in use or available for use:

- Media Releases (Radio, less likely TV)
 - EMO mostly release info to main networks
 - Community radio stations are operating in the area
- MPDC Website
- Thames Valley CD Website
- MPDC Facebook (1,866 likes)
- Thames Valley C.D. Twitter (863 followers)
- Email subscription service "email updates" >1000 people subscribed
- Forwards emails from Metservice to businesses and Emergency Services
- Police email to text service for rural support network
- Text subscription service "Civil Defence Alerts" via MPDC website
- Emergency Services PA (audibility not strong)
- There is a fixed siren that goes at 8, 12, 1 and 5 in Te Aroha. Ex-factory clock, has been misinterpreted as civil defence alarm.
- Regional council flood alerts SMS-PP and email to stakeholders
- Natural warnings, good understanding of flood hazard among locals
- Route alert – council staff
- Use flyers/brochures for emergency info

Telecommunications coverage and access was generally considered to be good across the District; however, Waharoa has very low (56%) telephone landline ownership and coverage is patchy around the Hobbiton tourist attraction.

5.4.2 Budget

Start-up \$0

On-going \$0

Staff time is provided mainly through the Thames Valley Zone arrangements for CDEM which combines effort for some activities for the following three districts: Hauraki, TCDC and Matamata-Piako.

5.4.3 Pockets and groups that need specific alerting

“Institutions with people in their care” was identified as a special alerting requirement in MPDC. This includes being able to reach many workers on industrial sites who may not have access to telecommunications during work hours, and visitors and transients at large events or tourist locations (e.g., Hobbiton). This category also includes those in rest homes and schools. Although there are proportionally higher numbers of elderly than the national average in some locations throughout the District, hearing or mobility impairments were not considered to require special consideration.

5.4.4 Effectiveness scores and multipliers

Table 6 provides start-up and on-going annual cost indications for the selected alerting options for this TA. The MPDC analysis includes effectiveness score multiplier set high (x4) for people in an institution’s care.

Note that the following systems are somewhat better scoring with this multiplier set, but they do not move up whole categories (e.g., from moderate to high effectiveness): Mobile device broadcasting, Tone-activated alert radio, Radio announcements (especially effective if this is on throughout the day in a given institution), Telephone trees, SMS-PP, independent self-maintained networks and websites. These all score better because they are either options people within an institution are likely to be using, or they are a good way of contacting the institution itself (e.g., telephone trees and independent self-maintaining networks contacting a representative at an institution). Note that in specific cases institutions might be best contacted by any one of these mechanisms, depending on the way that institution operates.

5.4.5 Recommendations for Matamata-Piako DC

5.4.5.1 Regionally coordinated systems

- Any mobile alerting option should be regionally coordinated. The installation (when available) of one or more of the mobile apps discussed in Section 4.4 by residents should be strongly encouraged by Matamata-Piako CDEM using public education and potentially incentives to install. Note that some people who are not covered by the mobile network will still have app coverage if they have their phones connected to wifi at home. This should be promoted.
- Additional pocket coverage should also be regionally coordinated for options that are used by multiple TAs (e.g., telephone auto-diallers, full list Section 6.2).
- Implementation within a TA of a regionally supported system needs an FTE component locally budgeted for local aspects. For example, to populate and maintain a telephone auto-dialler or SMS-PP phone number database.
- Television arrangements should be coordinated through the region.

- Radio arrangements should be planned for at a TA level, not just Group-wide.
- It is important that Social Media alerting is managed to reduce duplication of effort and increase consistency across TAs, and with the CDEM Group. There is a 24/7 regional response in place and TAs can utilise this.
- Use of independently self-maintained networks and alerting to large institutions with people in their care; some networks or institutions may require or are appropriate for regional coordination, to avoid duplication of effort at TA level.

5.4.5.2 Locally implemented systems

- Mobile PA systems are highly effective, but not as rapid or affordable as apps and mobile device options across the entire area. They should be considered for targeting specific pockets. Considerations are needed for activation (e.g., phone calls) of PA operations staff, and having them 'on-call' for expected/agreed periods. These must be agreed and documented in an SOP.
- Mobile PA systems owned by third parties are valuable but may have other priorities in an emergency.
- Alerting to people in the care of institutions should be arranged at a TA level.
- Existing phone trees could be triggered by a Group-coordinated auto-dialler.
- Existing systems that are not in the above recommendations but are already in place and are proving effective should be maintained. Note: "proving effective" means evidence is available to show that the systems have performed well in previous emergencies or that they will reach at-risk communities in a timely manner and that the public understands the system and knows the appropriate response actions.
- Additional systems available and effective for reaching pockets and groups are listed in Section 6.3.
- Large employers and public attractions e.g., Hobbiton (institutions) should be identified (see Appendix 1.3 for more information) and a key contacts database developed with each, to maximise the applicability of auto-diallers, telephone trees and/or SMS alerts.

Table 6 Relative scores for selected alerting options, with indicative costs for Matamata-Piako District.

	Score	For Low Density Areas		For High Density Areas		Total	Limitations and notes	
Total Population:		13.4k		18.1k		31.5k		
70% of population targeted:		9.4k		12.7k		22.1k		
		Start-up costs	Annual costs	Start-up costs	Annual costs	Start-up costs	Annual costs	
		\$k	\$k	\$k	\$k	\$k	\$k	
SYSTEMS...								
With Rapid Widespread Coverage:								
Mobile device apps	80%	2	2	2	2	4	4	
Mobile device broadcasting (1)	84%	10,038	38	10,051	51	20,088	88	Cheaper with national implementation
Tone-activated alert radio (1)	84%	671	1	906	1	1,576	1	Cheaper with national implementation
Fixed PA loud-speakers	65%	1,148	76	388	26	1,536	102	Maintenance, telemetry and testing
That Can reach 70% of the pop.								
High effectiveness:								
Radio announcements	82%	0	0	0	0	1	1	No heads up, slow to reach 70%
Mobile PA loud-speakers (2)	75%	134	0	19	0	153	0	# vehicles & staff; time required, GOOD FOR POCKETS
Route alert (door-to-door)	75%	610	610	824	824	1,433	1,433	# staff available and time to walk/drive
Moderate effectiveness:								
Power mains messaging	68%	268	0	362	0	630	0	Heads up only – slow response
Natural warnings	63%	34	34	46	46	79	79	Only for a few hazards GOOD FOR COAST
Telephone trees	69%	24	24	33	33	58	58	Slow to reach 70%
Radio (UHF, VHF or HF)	66%	339	4	458	5	797	9	Reaches only houses/buildings
Telephone auto-dialler	66%	2	2	3	3	6	6	Slow to reach 70% GOOD FOR POCKETS
SMS-PP text messaging	65%	7	2	7	2	14	4	Slow to reach 70% GOOD FOR POCKETS
Lower effectiveness:								
Sirens (signal-only) - Mobile	54%	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Cheaper than PA, but slow response
Radio Data Systems (1)	51%	339	4	458	5	797	9	No heads up, slow to reach 70%
Call-in telephone line	51%	213	193	281	261	494	454	Very slow to reach 70%
Sirens (signal-only) - Fixed	42%	1,588	78	549	29	2,137	108	Heads up only – slow response
That cannot reach 70% of the pop.: (3)								
Television announcements	69%	0	0	0	0	1	1	GOOD BACKUP
Website banners	68%	67	0	91	0	158	1	
Independent self-maint networks	70%	2	2	2	2	4	4	GOOD FOR POCKETS
Mobile PA loudspeaker (Police/Fire)	68%	0	0	0	0	1	1	# vehicles & staff; time required
E-mails	64%	17	2	17	2	34	4	
Newspaper content	58%	0	0	0	0	0	0	
GPS receiver messaging (1)	55%	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Not internationally implemented,
Websites	58%	68	1	92	2	160	3	
Billboards - electronic telemetered	42%	0	0	0	0	0	0	GOOD FOR POCKETS

(1) Systems not yet readily available in New Zealand.

(2) No FTE is costed for the use of mobile PA loud-speakers as it is assumed these will be operated by council staff or volunteers, if there is a salary cost this option will become more expensive.

(3) Systems that cannot reach 70% of people for short lead time hazards should be used with caution and ideally on of the options above should also reach at least 70% of people in every location.

5.5 OTOROHANGA DISTRICT

5.5.1 Key points from workshops

Note more detailed notes from this workshop can be found in Appendix A1.4

Otorohanga District has a population of just over 9,000 residents. The population turnover is relatively high; as at 2013 over 40% of residents in Otorohanga District had moved into the district in the last five years. This creates challenges for education regarding hazards, and for familiarity and understanding of warnings and appropriate actions.

The district is for the most part land-locked but has a small coastal boundary in the west which could experience tsunami hazard or coastal erosion. Localised flooding is the most prevalent hazard. Most hazard events are relatively slow onset. Following the flooding in 1958 there were new stopbanks built which have greatly reduced the risk in the area. SH3 is a key transport link to New Plymouth (with no alternative route from the north) and to the lower North Island; the Rail network has a similar vulnerability.

No specific independent self-maintained networks were identified. A public education programme was run last year where all urban and rural homes got a get ready get through booklet delivered. All areas in Otorohanga were covered.

The following public alerting options are currently in use or available for use:

- Media Releases (Radio, less likely TV)
- Council Websites
- Otorohanga DC RSS (News) Feed
- Phone trees for most areas are in the development phase.
- Kawhia say they will use the fire service siren for tsunami alerts – all marshals head to police station
- Given this is a regional to distant source tsunami situation only, this may suffice to alert responders but is not consistent with the national siren standard and does not provide instruction to the public
- Radio signal must run out to Rangitoto Range and then on to Kawhia to make sure the signal reaches Kawhia.
- Also in the process of identifying areas where VHF radio connections can be put in, but there is poor radio coverage in some areas so considering HF as a better option.
- The Regional Council flood alerting system (SMS and email) works well for residents in flood prone areas.

Telecommunications coverage and access is reasonable across the district with some isolated areas (e.g., eastern and western hill country) of patchy coverage.

5.5.2 Budget

Start-up \$0

On-going \$0

One CDEM professional FTE is shared across Waipa, Otorohanga and Waitomo districts.

5.5.3 Pockets and groups that need specific alerting

Kawhia/Aotea has a high proportion of elderly, many transients, is culturally diverse, hosts large events, has patchy mobile coverage and is prone to being isolated. There is one high school and several rest homes in the District. Transients on highways and the high proportion of new residents are two groups that may need specific alerting.

5.5.4 Effectiveness scores and multipliers

Table 7 provides start-up and on-going annual cost indications for the selected alerting options for this TA. No multipliers were applied to Otorohanga.

5.5.5 Recommendations for Otorohanga DC

5.5.5.1 Regionally coordinated systems

- Any mobile alerting option should be regionally coordinated. The installation (when available) of one or more of the mobile apps discussed in Section 4.4 by residents should be strongly encouraged by Otorohanga CDEM using public education and potentially incentives to install. Note that some people who are not covered by the mobile network will still have app coverage if they have their phones connected to wifi at home. This should be promoted.
- Additional pocket coverage should also be regionally coordinated for options that are used by multiple TAs (e.g., telephone auto-diallers, full list Section 6.2).
- Implementation within a TA of a regionally supported system needs an FTE component locally budgeted for local aspects. For example, to populate and maintain a telephone auto-dialler or SMS-PP phone number database.
- Television arrangements should be coordinated through the region.
- Radio arrangements should be planned for at a TA level, not just Group-wide.
- It is important that Social Media alerting is managed to reduce duplication of effort and increase consistency across TAs, and with the CDEM Group. There is a 24/7 regional response in place and TAs can utilise this.
- Use of independently self-maintained networks and alerting to large institutions with people in their care; some networks or institutions may require or are appropriate for regional coordination, to avoid duplication of effort at TA level.
- Existing phone trees could be triggered by a regionally-coordinated auto-dialler.

5.5.5.2 Locally implemented systems

- Mobile PA systems are highly effective, but not as rapid or affordable as apps and mobile device options across the entire area. They should be considered for targeting specific pockets. Considerations are needed for activation (e.g., phone calls) of PA operations staff, and having them 'on-call' for expected/agreed periods. These must be agreed and documented in an SOP.
- Mobile PA systems owned by third parties are valuable but may have other priorities in an emergency.
- Alerting to people in the care of institutions should be arranged at a TA level
- Iwi radio should be considered as an additional method to reach the high Māori population in the west of the district
- Existing phone trees could be triggered by a Group-coordinated auto-dialler.

- Large employers (institutions) should be identified and a key contacts database developed with each, to maximise the applicability of auto-diallers, telephone trees and/or SMS alerts.
- Existing HF/VHF should be aligned within a new regional VHF framework, as the HF systems is being phased out
- Consistent with the Waikato CDEM Group (2014) Warning Systems Strategy section 1.3.1, all PAs/sirens should comply with the national tsunami siren standard (MCDEM, 2014).
 - Existing sirens should use a consistent tone (i.e., all sirens should sound the same across the district, preferably using the nationally recommended tone for best audibility);
 - Existing tone-only sirens should be promoted as meaning 'seek further information';
 - New sirens, if desired, should be voice capable (i.e., PAs).
- Existing systems that are not in the above recommendations but are already in place and are proving effective should be maintained. Note: "proving effective" means evidence is available to show that the systems have performed well in previous emergencies or that they will reach at-risk communities in a timely manner and that the public understands the system and knows the appropriate response actions.
- Additional systems available and effective for reaching pockets and groups are listed in Section 6.3.

Table 7 Relative scores for selected alerting options, with indicative costs for Otorohanga District.

	Score	For Low Density Areas		For High Density Areas		Total		Limitations and notes
Total Population:		6.3k		2.8k		9.1k		
70% of population targeted:		4.4k		2.0k		6.4k		
		Start-up costs	Annual costs	Start-up costs	Annual costs	Start-up costs	Annual costs	
		\$k	\$k	\$k	\$k	\$k	\$k	
SYSTEMS...								
With Rapid Widespread Coverage:								
Mobile device apps	83%	1	1	0	0	1	1	
Mobile device broadcasting (1)	84%	10,018	18	10,008	8	20,026	26	Cheaper with national implementation
Tone-activated alert radio (1)	82%	315	0	140	0	455	0	Cheaper with national implementation
Fixed PA loud-speakers	68%	540	36	60	4	600	40	Maintenance, telemetry and testing
That Can reach 70% of the pop.								
High effectiveness:								
Radio announcements	82%	0	0	0	0	0	0	No heads up, slow to reach 70%
Route alert (door-to-door)	71%	287	287	127	127	414	414	# staff available and time to walk/drive
Moderate effectiveness:								
Natural warnings	66%	16	16	7	7	23	23	Only for a few hazards GOOD FOR COAST
Telephone trees	65%	12	12	5	5	17	17	Slow to reach 70%
Radio (UHF, VHF or HF)	64%	159	2	71	1	230	3	Reaches only houses/buildings
Telephone auto-dialler	64%	1	1	1	1	2	2	Slow to reach 70% GOOD FOR POCKETS
Helicopter PA loudspeaker	64%	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Slow to reach 70% due to # aircraft
SMS-PP text messaging	63%	6	1	5	0	11	1	Slow to reach 70% GOOD FOR POCKETS
Lower effectiveness:								
Sirens (signal-only) - Mobile	56%	0	0	0	0	0	0	Cheaper than PA, but slow response
Radio Data Systems (1)	52%	159	2	71	1	230	3	No heads up, slow to reach 70%
Call-in telephone line	47%	111	91	60	40	171	131	Very slow to reach 70%
Sirens (signal-only) - Fixed	44%	747	37	85	5	831	41	Heads up only – slow response
That cannot reach 70% of the pop.: (3)								
Television announcements	73%	0	0	0	0	0	0	GOOD BACKUP
Website banners	66%	32	0	14	0	46	0	
Independent self-maint networks	66%	1	1	0	0	1	1	GOOD FOR POCKETS
Mobile PA loudspeaker (Police/Fire)	66%	0	0	0	0	0	0	# vehicles & staff; time required
Newspaper content	58%	0	0	0	0	0	0	
GPS receiver messaging (1)	57%					0	0	Not internationally implemented,
Websites	56%	32	1	14	0	46	1	
Marine radio	53%	0	0	0	0	0	0	
Tourist/lwi radio	49%	0	0	0	0	0	0	
Billboards - static	47%	20	7	4	1	24	8	
Billboards - electronic telemetered	45%	0	0	0	0	0	0	GOOD FOR POCKETS

(1) Systems not yet readily available in New Zealand.

(2) No FTE is costed for the use of mobile PA loud-speakers as it is assumed these will be operated by council staff or volunteers, if there is a salary cost this option will become more expensive.

(3) Systems that cannot reach 70% of people for short lead time hazards should be used with caution and ideally on of the options above should also reach at least 70% of people in every location.

5.6 SOUTH WAIKATO DISTRICT

5.6.1 Key points from workshops

Note more detailed notes from this workshop can be found in Appendix A1.5

SWDC has a population of just over 22,000 residents. The district is land-locked with no coastal hazards to consider. Hazards of most importance include hazchem incidents, ashfall (distant source), rural fire and biological hazards such as human or animal pandemic. State Highway 1 runs through the district and lifelines failures were also noted as being a potential hazard.

Institutions with people in their care that were noted were:

- Lichfield Dairy Factory
- Kinleith Pulp and Paper Mill
- Forestry Companies
- Waratah NZ
- Schools and some camps along the Waikato River

Community groups (independent self-maintained networks) including neighbourhood watch were identified as potentially being useful to deliver public alerts but no arrangements are currently in place.

The following public alerting systems are in use or potentially available for use:

- Media Releases (Radio, less likely TV)
- Radio Raukawa, Cruise, Classic Hits, Pacific Island Radio could all be used
- South Waikato DC Website
- Facebook
 - South Waikato DC (1,166 likes)
 - Dedicated CDEM (196 likes)
 - Tokoroa News (3,358likes) administered independently of council
- South Waikato DC Twitter (172 followers)
- Sirens
 - Dedicated CDEM Siren (Council Building, Tokoroa)
 - Fire siren could be used in theory but it is confusing
- Three mobile PA systems – Emergency Services or Council?
- Contractors for road blocks/warnings
- Have access to mobile electronic billboards – NZTA or Council?
- Community groups (self-maintained) including neighbourhood watch

Telecommunications access and coverage within the district is reasonable although Tokoroa Central and Stanley Park have relatively low access (excluding mobile phones). Areas with poor mobile coverage are mostly rural farmland, exotic forestry or conservation estate to the east, west and south of the district. Most of these areas have a relatively low density population although the Waikato River Trails are increasing in popularity with transients and has patchy to no coverage in places. There is a low likelihood of flash flooding in some of these areas.

5.6.2 Budget

Start-up \$0

On-going \$0

0.5 FTE is currently assigned for all CDEM topics

5.6.3 Pockets and groups that need specific alerting

Several rest homes are located in the district and some rural and remote locations have limited mobile coverage but these factors were not considered significant for alerting purposes. Also some areas are culturally diverse (Māori/Pacific Peoples).

5.6.4 Effectiveness scores and multipliers

Table 8 provides start-up and on-going annual cost indications for the selected alerting options for this TA.

5.6.5 Recommendations for South Waikato DC

5.6.5.1 Regionally coordinated systems

- Any mobile alerting option should be regionally coordinated. The installation (when available) of one or more of the mobile apps discussed in Section 4.4 by residents should be strongly encouraged by South Waikato CDEM using public education and potentially incentives to install. Note that some people who are not covered by the mobile network will still have app coverage if they have their phones connected to wifi at home. This should be promoted.
- Additional pocket coverage should also be regionally coordinated for options that are used by multiple TAs (e.g., telephone auto-diallers, full list Section 6.2).
- Implementation within a TA of a regionally supported system needs an FTE component locally budgeted for local aspects. For example, to populate and maintain a telephone auto-dialler or SMS-PP phone number database.
- Television arrangements should be coordinated through the region.
- Radio arrangements should be planned for at a TA level, not just Group-wide.
- It is important that Social Media alerting is managed to reduce duplication of effort and increase consistency across TAs, and with the CDEM Group. There is a 24/7 regional response in place and TAs can utilise this.
- Use of independently self-maintained networks and alerting to large institutions with people in their care; some networks or institutions may require or are appropriate for regional coordination, to avoid duplication of effort at TA level.

5.6.5.2 Locally implemented systems

- Alerting to people in the care of institutions should be arranged at a TA level.
- Mobile PA systems are highly effective, but not as rapid or affordable as apps and mobile device options across the entire area. They should be considered for targeting specific pockets. Considerations are needed for activation (e.g., phone calls) of PA operations staff, and having them 'on-call' for expected/agreed periods. These must be agreed and documented in an SOP.

- Mobile PA systems owned by third parties are valuable but may have other priorities in an emergency.
- Existing phone trees could be triggered by a Group-coordinated auto-dialler.
- Large employers should be identified and a key contacts database developed with each, to maximise the applicability of auto-diallers, telephone trees and/or SMS alerts.
- Consistent with the Group (2014) Warning Systems Strategy section 1.3.1, all PAs/sirens should comply with the national tsunami siren standard (MCDEM, 2014).
 - Existing sirens should use a consistent tone (i.e., all sirens should sound the same across the district, preferably using the nationally recommended tone for best audibility)
 - Existing tone-only sirens should be promoted as meaning 'seek further information'
 - New sirens, if desired, should be voice capable (i.e., PAs).
- Existing systems that are not in the above recommendations but are already in place and are proving effective should be maintained. Note: "proving effective" means evidence is available to show that the systems have performed well in previous emergencies or that they will reach at-risk communities in a timely manner and that the public understands the system and knows the appropriate response actions.
- Additional systems available and effective for reaching pockets and groups are listed in Section 6.3.

Table 8 Relative scores for selected alerting options, with indicative costs for South Waikato District.

	Score	For Low Density Areas		For High Density Areas		Total	Limitations and notes	
Total Population:		5.4k		16.7k		22.1k		
70% of population targeted:		3.8k		11.7k		15.5k		
		Start-up costs	Annual costs	Start-up costs	Annual costs	Start-up costs	Annual costs	
		\$k	\$k	\$k	\$k	\$k	\$k	
SYSTEMS...								
With Rapid Widespread Coverage:								
Mobile device apps	83%	1	1	2	2	3	3	
Mobile device broadcasting (1)	84%	10,015	15	10,047	47	20,062	62	Cheaper with national implementation
That Can reach 70% of the pop.								
High effectiveness:								
Radio announcements	82%	0	0	0	0	1	1	No heads up, slow to reach 70%
Route alert (door-to-door)	71%	246	246	760	760	1,006	1,006	# staff available and time to walk/drive
Moderate effectiveness:								
Natural warnings	66%	14	14	42	42	56	56	Only for a few hazards GOOD FOR COAST
Telephone trees	65%	10	10	31	31	40	40	Slow to reach 70%
Radio (UHF, VHF or HF)	64%	137	2	422	5	559	7	Reaches only houses/buildings
Telephone auto-dialler	64%	1	1	3	3	4	4	Slow to reach 70% GOOD FOR POCKETS
SMS-PP text messaging	63%	6	1	7	2	13	3	Slow to reach 70% GOOD FOR POCKETS
Lower effectiveness:								
Sirens (signal-only) - Mobile	56%	0	0	0	0	0	0	Cheaper than PA, but slow response
Radio Data Systems (1)	52%	137	2	422	5	559	7	No heads up, slow to reach 70%
Call-in telephone line	47%	98	78	261	241	359	319	Very slow to reach 70%
Sirens (signal-only) - Fixed	44%	640	31	506	27	1,146	59	Heads up only – slow response
That cannot reach 70% of the pop.: (3)								
Television announcements	73%	0	0	0	0	1	1	GOOD BACKUP
Website banners	66%	27	0	84	0	111	1	
Independent self-maint networks	66%	1	1	2	2	3	3	GOOD FOR POCKETS
Mobile PA loudspeaker (Police/Fire)	66%	0	0	0	0	1	1	# vehicles & staff; time required
E-mails	59%	16	1	17	2	33	3	
Newspaper content	58%	0	0	0	0	0	0	
Websites	56%	28	1	85	2	113	2	
Tourist/lwi radio	49%	0	0	0	0	1	1	
Billboards - electronic telemetered	45%	0	0	0	0	0	0	GOOD FOR POCKETS
Billboards - electronic telemetered	45%	0	0	1	1	1	1	GOOD FOR POCKETS

(1) Systems not yet readily available in New Zealand.

(2) No FTE is costed for the use of mobile PA loud-speakers as it is assumed these will be operated by council staff or volunteers, if there is a salary cost this option will become more expensive.

(3) Systems that cannot reach 70% of people for short lead time hazards should be used with caution and ideally on of the options above should also reach at least 70% of people in every location.

5.7 TAUPO DISTRICT

5.7.1 Key points from workshops

Note more detailed notes from this workshop can be found in Appendix A1.6

The population of Taupo District is approximately 32,400 residents although this number swells by the tens of thousands (mostly New Zealand) transients in the peak tourist season. Forty percent of homes in the district are holiday homes. The population turnover is relatively high; as at 2013 38% of residents in the Taupo District had moved into the district in the last five years. This creates challenges for education regarding hazards, and for familiarity and understanding of warnings and appropriate actions.

The district has no exposure to coastal hazards but it is home to active and potentially reawakening volcanoes and calderas. Other hazards of significance include meteorological events, flooding, geophysical hazards (landslides and subsidence), earthquakes and geothermal activity.

Taupo District attempt to geo-target all alerts to applicable areas. They already utilise a wide variety of systems and have strong relationships with at-risk communities. There are strong networks with stakeholders. Transients (tourists and domestic holiday homes) are very significant in Taupo District. Targeting tourists and domestic holiday homes via radio is most important. There is a huge new electronic billboard at the Great Lake Centre in Taupo CBD that can be utilised for alerting.

Taupo District have identified a range of independent self-maintained networks that could be approached and the potential capacity and willingness for delivering alerts discussed. These include community service groups, transport operators networks, neighbourhood societies, Iwi networks and civil defence emergency management community volunteers.

The following public alerting options are in use or were identified as potentially available for use in Taupo District (note considerable detail on each of these systems is available in Appendix A.1.6):

- Natural warnings – actively promoted
- Websites (Taupo DC, Chamber of Commerce, Enterprise Great Lake Taupo)
- Email distribution lists
- Independent Self Maintained Networks
- Electronic Billboards
- Helicopter PA
- Mobile PAs
- Radio
- Taupo DC Facebook (1453 likes)
- Dedicated CDEM Facebook (682 likes)
- Dedicated CDEM Twitter (574 followers) – Used for alerts only
- Stakeholder text distribution lists
- Phone Trees
- Fax to schools
- Dedicated CDEM Siren (Waihi Village)
- Marine radio
- Direct links to DIA Harbourmaster

Taupo uses a wide range of existing systems and this requires careful coordination and documentation. There is the potential for Taupo DC to mentor other districts with some options or share their success stories.

Telecommunications access and coverage is generally high across most of the district's population. However there are large areas of poor or no mobile network coverage in some rural and forestry areas and conservation estate and along some highways. These areas have been listed in Appendix A1.6.

5.7.2 Budget

Start-up = \$0

On-going = \$0 some, especially FTEs and maintenance

5.7.3 Pockets and groups that need specific alerting

There are several large institutions with people in their care (prisons, large industries, hospital, event facilities and schools). It was not considered that these groups have specific alerting needs different to the general population. Also, a considerable concern is the large numbers of tourists visiting the district, with fewer links to local networks and less familiarity with local hazards. There are many locations popular with tourists and these sometimes coincide with limited mobile phone coverage.

5.7.4 Effectiveness scores and multipliers

Table 9 provides start-up and on-going annual cost indications for the selected alerting options for this TA when considering the usually resident population. Transients are identified as a special group requiring a multiplier for determining costs and effectiveness of systems for Taupo. Because the tourist influx is strongly seasonal Table 10 includes expected maximum tourist numbers.

Both tables include the multiplier set high (x4) for people in an institution's care, primarily due to the significance and size of events held in Taupo and the number of transients under the care of tourist operators. Note that the following systems are somewhat better scoring with this multiplier set, but they do not move up whole categories (e.g., from moderate to high effectiveness): Mobile device broadcasting, tone-activated alert radio, radio announcements (especially effective if this is on throughout the day in a given institution), Telephone trees, SMS-PP, independent self-maintained networks and websites. These all score better because they are either options people within an institution are likely to be using, or they are a good way of contacting the institution itself (e.g., telephone trees and independent self-maintaining networks contacting a rep at an institution). Note that in specific cases institutions might be best contacted by any one of these mechanisms, depending on the way that institution operates.

With maximum tourist numbers included (Table 10) and the multiplier also set high (x4) for transients, the systems that are better scoring change a little to include Mobile device broadcasting, Telephone trees, Helicopter PA loudspeakers, Mobile PA loudspeaker (Police/Fire) Websites and Tourist radio. This is because systems that will reach people irrespective of whether they opt in to a system score better.

5.7.5 Recommendations for Taupo DC

5.7.5.1 Regionally coordinated systems

- Any mobile alerting option should be regionally coordinated. The installation (when available) of one or more of the mobile apps discussed in Section 4.4 by residents should be strongly encouraged by Taupo CDEM using public education and potentially incentives to install. Note that some people who are not covered by the mobile network will still have app coverage if they have their phones connected to wifi at home. This should be promoted.
- Additional pocket coverage should also be regionally coordinated for options that are used by multiple TAs (e.g., telephone auto-diallers, full list Section 6.2).
- Implementation within a TA of a regionally supported system needs an FTE component locally budgeted for local aspects. For example, to populate and maintain a telephone auto-dialler or SMS-PP phone number database.
- Television arrangements should be coordinated through the region.
- Radio arrangements should be planned for at a TA level, not just Group-wide.
- It is important that Social Media alerting is managed to reduce duplication of effort and increase consistency across TAs, and with the CDEM Group. There is a 24/7 regional response in place and TAs can utilise this.
- Use of independently self-maintained networks and alerting to large institutions with people in their care; some networks or institutions may require or are appropriate for regional coordination, to avoid duplication of effort at TA level.
- Alerting to people in the care of institutions should otherwise be arranged at a TA level.

5.7.5.2 Locally implemented systems

- Natural warnings for ashfall might be worth focussing on.
- Mobile PA systems are highly effective, but not as rapid or affordable as apps and mobile device options across the entire area. They have been used and should continue to be used for targeting specific pockets. Considerations are needed for activation (e.g., phone calls) of PA operations staff, and having them 'on-call' for expected/agreed periods. These must be agreed and documented in an SOP.
- Mobile PA systems owned by third parties are valuable but may have other priorities in an emergency.
- Other districts may want to engage with Taupo to learn how they engage with neighbourhood support, Fleetlink (based on Trunked Mobile Radio technology that allows radios to talk to one another anywhere in the country where there is coverage) and NZTA for fixed digital billboards.
- Existing phone trees could be triggered by a Group-coordinated auto-dialler.
- Explore the link to the Harbourmaster, marine radio, and alerting boaties.
- Existing VHF should be aligned within a new Group VHF framework.

- GeoZone Apps that are designed to provide tourism information in up to four foreign languages to international tourists and then track and report on their movements have been trialled during Cyclone Pam. This suite of apps could potentially provide a low cost (but not official) additional method to reach travelling foreign language tourists in districts where tourism is significant such as Taupo.
- Existing systems that are not in the above recommendations but are already in place and are proving effective should be maintained. Note: “proving effective” means evidence is available to show that the systems have performed well in previous emergencies or that they will reach at-risk communities in a timely manner and that the public understands the system and knows the appropriate response actions.
- Additional systems available and effective for reaching pockets and groups are listed in Section 6.3.

Table 9 Relative scores for selected alerting options, with indicative costs for Taupo District usually resident population.

	Score	For Low Density Areas		For High Density Areas		Total	Limitations and notes	
Total Population:		8.0k		24.9k		32.9k		
70% of population targeted:		5.6k		17.4k		23.0k		
		Start-up costs	Annual costs	Start-up costs	Annual costs	Start-up costs	Annual costs	
		\$k	\$k	\$k	\$k	\$k	\$k	
SYSTEMS...								
With Rapid Widespread Coverage:								
Mobile device apps	80%	1	1	3	3	4	4	
Mobile device broadcasting (1)	84%	10,022	22	10,070	70	20,092	92	Cheaper with national implementation
Tone-activated alert radio (1)	84%	400	0	1,246	1	1,647	2	Cheaper with national implementation
That Can reach 70% of the pop.								
High effectiveness:								
Radio announcements	82%	0	0	1	1	1	1	No heads up, slow to reach 70%
Mobile PA loud-speakers (2)	75%	80	0	25	0	106	0	# vehicles & staff; time required GOOD FOR POCKETS
Route alert (door-to-door)	75%	364	364	1,133	1,133	1,497	1,497	# staff available and time to walk/drive
Moderate effectiveness:								
Natural warnings	63%	20	20	63	63	83	83	Only for a few hazards GOOD FOR COAST
Telephone trees	69%	15	15	45	45	60	60	Slow to reach 70%
Radio (UHF, VHF or HF)	66%	202	2	630	7	832	10	Reaches only houses/buildings
Telephone auto-dialler	66%	1	1	5	5	6	6	Slow to reach 70% GOOD FOR POCKETS
Helicopter PA loudspeaker	62%	65	45	22	2	87	47	Slow to reach 70% due to # aircraft
SMS-PP text messaging	65%	6	1	8	3	14	4	Slow to reach 70% GOOD FOR POCKETS
Lower effectiveness:								
Call-in telephone line	51%	135	115	379	359	514	474	Very slow to reach 70%
That cannot reach 70% of the pop.: (3)								
Television announcements	69%	0	0	1	1	1	1	GOOD BACKUP
Independent self-maint networks	70%	1	1	3	3	4	4	GOOD FOR POCKETS
Mobile PA loudspeaker (Police/Fire)	68%	0	0	1	1	1	1	# vehicles & staff; time required
E-mails	64%	16	1	18	3	34	4	
Newspaper content	58%	0	0	0	0	0	0	
GPS receiver messaging (1)	55%	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Not internationally implemented,
Websites	58%	41	1	127	2	168	3	
Marine radio	49%	0	0	1	1	1	1	
Tourist/lwi radio	45%	0	0	1	1	1	1	
Billboards - electronic telemetered	42%	0	0	0	0	0	0	GOOD FOR POCKETS

(1) Systems not yet readily available in New Zealand.

(2) No FTE is costed for the use of mobile PA loud-speakers as it is assumed these will be operated by council staff or volunteers, if there is a salary cost this option will become more expensive.

(3) Systems that cannot reach 70% of people for short lead time hazards should be used with caution and ideally on of the options above should also reach at least 70% of people in every location.

Table 10 Relative scores for selected alerting options, with indicative costs for usually resident population and approx. maximum tourists. This is estimated as an increase of 50,000 in high density areas and 15,000 in low density areas (estimate sourced from Great Lake Taupo).

	Score	For Low Density Areas		For High Density Areas		Total	Limitations and notes	
		15k		50k		65k		
70% of population targeted:		10.5k		35k		45.5k		
		Start-up costs	Annual costs	Start-up costs	Annual costs	Start-up costs	Annual costs	
		\$k	\$k	\$k	\$k	\$k	\$k	
SYSTEMS...								
With Rapid Widespread Coverage:								
Mobile device apps	82%	2	2	6	6	8	8	
Mobile device broadcasting (1)	83%	10,042	42	10,140	140	20,182	182	Cheaper with national implementation
Tone-activated alert radio(1)	77%	751	1	2,502	2	3,253	3	Cheaper with national implementation
That Can reach 70% of the pop.								
High effectiveness:								
Radio announcements	77%	0	0	1	1	1	1	No heads up, slow to reach 70%
Mobile PA loud-speakers (2)	75%	150	0	51	0	201	0	# vehicles & staff; time required GOOD FOR POCKETS
Route alert (door-to-door)	75%	683	683	2,275	2,275	2,958	2,958	# staff available and time to walk/drive
Moderate effectiveness:								
Natural warnings	61%	38	38	126	126	164	164	Only for a few hazards GOOD FOR COAST
Telephone trees	64%	27	27	91	91	119	119	Slow to reach 70%
Radio (UHF, VHF or HF)	61%	379	4	1,265	15	1,644	19	Reaches only houses/buildings
Telephone auto-dialler	61%	3	3	9	9	12	12	Slow to reach 70% GOOD FOR POCKETS
Helicopter PA loudspeaker	63%	108	84	24	4	132	88	Slow to reach 70% due to # aircraft
SMS-PP text messaging	63%	7	2	12	7	19	9	Slow to reach 70% GOOD FOR POCKETS
Lower effectiveness:								
Call-in telephone line	48%	236	216	741	721	977	937	Very slow to reach 70%
That cannot reach 70% of the pop.:(3)								
Television announcements	66%	0	0	1	1	1	1	GOOD BACKUP
Independent self-maint networks	65%	2	2	6	6	8	8	GOOD FOR POCKETS
Mobile PA loudspeaker (Police/Fire)	69%	0	0	1	1	1	1	# vehicles & staff; time required
E-mails	59%	17	2	21	6	38	8	
Newspaper content	59%	0	0	0	0	0	0	
GPS receiver messaging (1)	51%	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Not internationally implemented,
Websites	57%	76	1	255	5	331	6	
Marine radio	46%	0	0	1	1	1	1	
Tourist/Iwi radio	47%	0	0	1	1	1	1	
Billboards - electronic telemetered	42%	0	0	0	0	0	0	GOOD FOR POCKETS

(1) Systems not yet readily available in New Zealand.

(2) No FTE is costed for the use of mobile PA loud-speakers as it is assumed these will be operated by council staff or volunteers, if there is a salary cost this option will become more expensive.

(3) Systems that cannot reach 70% of people for short lead time hazards should be used with caution and ideally on of the options above should also reach at least 70% of people in every location.

5.8 THAMES-COROMANDEL DISTRICT

5.8.1 Key points from workshops

Note more detailed notes from this workshop can be found in Appendix A1.7

Thames Coromandel District has a population of approximately 27,500 residents. It is a popular tourist destination for New Zealanders and overseas visitors with the population swelling by tens of thousands in the summer months. Thames-Coromandel has a complicated hazardscape and distributed population with diverse alerting challenges. Many of the homes on the Coromandel are holiday homes with absentee owners. The population turnover is relatively high; as at 2013 36% of residents in the Thames-Coromandel District had moved into the district in the last five years. This creates challenges for education regarding hazards, and for familiarity and understanding of warnings and appropriate actions. Thames-Coromandel has a higher than average elderly population, particularly in townships.

Hazards that are life threatening, with a short lead-in time such as local and regional source tsunami and flash flooding are high priorities for alerting in Thames-Coromandel. Other significant hazards include severe weather, floods, storm surge and coastal erosion, landslides/debris flows, and earthquakes. With regards to non-natural hazards, lifeline infrastructure failure is a reasonably frequent occurrence, particularly disruption to the electricity supply. Outages in the electricity network can then cascade into problems with radio transmission from repeater stations, or for mobile phone towers. Isolation can be a problem for communities as roads can be cut off by landslides and flooding.

A range of independent, self-maintained networks have been identified as potentially able to be used to deliver alerts to the public. These include coastal organisations such as the Coastguard and surf lifesavers, neighbourhood support groups, service groups, religious organisations, schools networks, emergency response groups (e.g., land search and rescue) and Iwi organisations.

The following public alerting systems are in use or are available for potential use (note see Appendix A1.7 for detail):

- Radio stations (various)
- Websites (TCDC, Thames Valley CD)
- Facebook (TCDC, 2257 likes)
- Twitter (Thames Valley CD 863 followers)
- Email subscription service
- SMS-PP subscription
- Fixed tone only sirens (most owned by NZFS/VRFF, 27 of 30).
- Emergency services PA, only on rural fire trucks
- Regional flood warning system (SMS-PP and email)
- Route Alert (CDEM and council staff undertake limited area door-knocking)
- Natural warnings – public education materials (“Know the signs”)
- Use VHF and UHF – links to DOC
- Mobile PAs
- Rural fire

Thames-Coromandel District Council (TCDC) has access to a substantial range of existing systems, but these need alignment with the national standard, and expectations need to be clarified on how these systems are maintained and used.

Telecommunications access is reasonable across the district, with rates similar to the national average. However, mobile phone coverage is poor in most rural and conservation areas including places along SH25 and 25A, and also in most sparsely populated coastal areas, including some that are popular with transients such as Cathedral Cove.

5.8.2 Budget

Start-up = \$60k per annum for 3 years has been allocated for mobile PA systems

Ongoing = \$0

Staff time is provided mainly through the Thames Valley Zone arrangements for CDEM which covers combines effort for some activities for the following three districts Hauraki, TCDC and Matamata-Piako.

5.8.3 Pockets and groups that need specific alerting

Because of the significant elderly population, sight, hearing and mobility impairment are considered important factors for alerting in Thames-Coromandel. The large number of transients (particularly tourists) is also considered of particular importance for alerting. Many tourists choose to travel as 'Freedom Campers', staying away from official campsites. They are a concern as they are somewhat 'off the radar'.

There are some large employers and learning institutions in Thames-Coromandel but these are not considered to have special alerting needs.

5.8.4 Effectiveness scores and multipliers

Table 11 provides start-up and on-going annual cost indications for the selected alerting options for this TA. Table 12 includes expected maximum tourist numbers. Multipliers for fast onset, local and widespread hazards, and for elderly – mobility/sight/hearing impaired have been increased for both Tables. The multiplier for transients has also been increased in Table 12 to account for the changing costs and effectiveness of systems when tourists are present.

Table 11 Relative scores for selected alerting options, with indicative costs for Thames-Coromandel usually resident population.

Total Population: <u>70% of population targeted:</u>	Score	For Low Density Areas 9.5k 6.7k		For High Density Areas 16.8k 11.8k		Total 26.3k 18.5k		Limitations and notes Blue text indicates systems where start up and annual costs are within the budget of the applicable area
		Start-up costs \$k	Annual costs \$k	Start-up costs \$k	Annual costs \$k	Start-up costs \$k	Annual costs \$k	
SYSTEMS...								
With Rapid Widespread Coverage:								
Mobile device apps	82%	1	1	2	2	3	3	
Mobile device broadcasting (1)	86%	10,027	27	10,047	47	20,074	74	Cheaper with national implementation
Tone-activated alert radio (1)	81%	475	0	841	1	1,316	1	Cheaper with national implementation
Fixed PA loud-speakers	69%	814	54	360	24	1,174	78	Maintenance, telemetry and testing
That Can reach 70% of the pop.								
High effectiveness:								
Radio announcements	81%	0	0	0	0	1	1	No heads up, slow to reach 70%
Mobile PA loud-speakers (2)	72%	95	0	17	0	112	0	# vehicles & staff; time required GOOD FOR POCKETS
Route alert (door-to-door)	70%	432	432	764	764	1,197	1,197	# staff available and time to walk/drive
Moderate effectiveness:								
Natural warnings	62%	24	24	42	42	66	66	Only for a few hazards GOOD FOR COAST
Telephone trees	66%	17	17	31	31	48	48	Slow to reach 70%
Radio (UHF, VHF or HF)	64%	240	3	425	5	665	8	Reaches only houses/buildings
Telephone auto-dialler	64%	2	2	3	3	5	5	Slow to reach 70% GOOD FOR POCKETS
SMS-PP text messaging	61%	6	1	7	2	14	4	Slow to reach 70% GOOD FOR POCKETS
Lower effectiveness:								
Sirens (signal-only) - Mobile	54%	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Cheaper than PA, but slow response
Radio Data Systems (1)	47%	240	3	425	5	665	8	No heads up, slow to reach 70%
Call-in telephone line	47%	157	137	262	242	419	379	Very slow to reach 70%
Sirens (signal-only) - Fixed	38%	1,126	55	509	27	1,635	83	Heads up only – slow response
That cannot reach 70% of the pop:(3)								
Television announcements	73%	0	0	0	0	1	1	GOOD BACKUP
Independent self-maint networks	62%	1	1	2	2	3	3	GOOD FOR POCKETS
Mobile PA loudspeaker (Police/Fire)	64%	0	0	0	0	1	1	# vehicles & staff; time required
E-mails	58%	16	1	17	2	33	3	
Newspaper content	56%	0	0	0	0	0	0	
GPS receiver messaging (1)	58%	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Not internationally implemented,
Websites	54%	48	1	86	2	134	2	
Marine radio	49%	0	0	0	0	1	1	
Tourist/lwi radio	45%	0	0	0	0	1	1	
Billboards - static	43%	30	11	13	5	43	15	
Billboards - electronic telemetered	42%	0	0	0	0	0	0	GOOD FOR POCKETS

(1) Systems not yet readily available in New Zealand.

(2) No FTE is costed for the use of mobile PA loud-speakers as it is assumed these will be operated by council staff or volunteers, if there is a salary cost this option will become more expensive.

(3) Systems that cannot reach 70% of people for short lead time hazards should be used with caution and ideally on of the options above should also reach at least 70% of people in every location.

Table 12 Relative scores for selected alerting options, with indicative costs for usually resident population and approx. maximum tourists during summer peak season, 140,000 people in high density areas and 10,000 in low density. (Source TCDC).

	Score	For Low Density Areas		For High Density Areas		Total		Limitations and notes
Total Population:		19.5k		156.8k		176.3k		Blue text indicates systems where start up and annual costs are within the budget of the applicable area
70% of population targeted:		13.7k		109.8k		121.5k		
		Start-up costs	Annual costs	Start-up costs	Annual costs	Start-up costs	Annual costs	
		\$k	\$k	\$k	\$k	\$k	\$k	
SYSTEMS...								
With Rapid Widespread Coverage:								
Mobile device apps	83%	2	2	20	20	23	23	
Mobile device broadcasting (1)	85%	10,055	55	10,440	440	20,494	494	Cheaper with national implementation
Tone-activated alert radio (1)	77%	976	1	7,847	7	8,823	8	Cheaper with national implementation
Fixed PA loud-speakers	70%	1,670	110	3,363	227	5,033	337	Maintenance, telemetry and testing
That Can reach 70% of the pop.								
High effectiveness:								
Radio announcements	78%	0	0	4	4	4	4	No heads up, slow to reach 70%
Mobile PA loud-speakers (2)	72%	195	0	160	1	356	1	# vehicles & staff; time required GOOD FOR POCKETS
Route alert (door-to-door)	71%	887	887	7,134	7,134	8,022	8,022	# staff available and time to walk/drive
Moderate effectiveness:								
Natural warnings	60%	49	49	395	395	444	444	Only for a few hazards GOOD FOR COAST
Telephone trees	63%	36	36	286	286	322	322	Slow to reach 70%
Radio (UHF, VHF or HF)	61%	493	6	3,967	47	4,460	52	Reaches only houses/buildings
Telephone auto-dialler	61%	4	4	29	29	33	33	Slow to reach 70% GOOD FOR POCKETS
SMS-PP text messaging	59%	8	3	26	21	34	24	Slow to reach 70% GOOD FOR POCKETS
Lower effectiveness:								
Sirens (signal-only) - Mobile	52%	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Cheaper than PA, but slow response
Radio Data Systems (1)	45%	493	6	3,967	47	4,460	52	No heads up, slow to reach 70%
Call-in telephone line	45%	301	281	2,281	2,261	2,582	2,542	Very slow to reach 70%
Sirens (signal-only) - Fixed	37%	2,311	114	4,753	255	7,064	369	Heads up only – slow response
That cannot reach 70% of the pop.: (3)								
Television announcements	70%	0	0	4	4	4	4	GOOD BACKUP
Independent self-maint networks	59%	2	2	20	20	22	22	GOOD FOR POCKETS
Mobile PA loudspeaker (Police/Fire)	65%	0	0	4	4	4	4	# vehicles & staff; time required
E-mails	55%	17	2	34	19	51	21	
Newspaper content	56%	0	0	1	1	1	1	
GPS receiver messaging (1)	55%					0	0	Not internationally implemented,
Websites	53%	99	2	799	15	898	16	
Marine radio	47%	0	0	4	4	4	4	
Tourist/lwi radio	46%	0	0	4	4	4	4	
Billboards - static	42%	61	22	123	45	184	67	
Billboards - electronic telemetered	41%	0	0	1	1	1	1	GOOD FOR POCKETS

(1) Systems not yet readily available in New Zealand.

(2) No FTE is costed for the use of mobile PA loud-speakers as it is assumed these will be operated by council staff or volunteers, if there is a salary cost this option will become more expensive.

(3) Systems that cannot reach 70% of people for short lead time hazards should be used with caution and ideally on of the options above should also reach at least 70% of people in every location

The following analysis of cost **for usual resident population** is possible for Thames-Coromandel District because they have provided a budget figure.

For rapid widespread coverage:

- Only the mobile device app is affordable to start up.
- All four effective systems are affordable to maintain, but the non-app options would need to be started up with an external (national) budget.

For options that can reach 70% of the population over time:

- Radio announcements are the most effective option that can be started up.
- In terms of moderate effectiveness scores, the following can be started up: Natural warnings, telephone trees, telephone auto-diallers, SMS-PP text messaging.
- Radio UHF/VHF/HF could be maintained, but is too expensive to start up.
- These are all slow to reach 70%, but all could be good for pockets or groups.

This includes multipliers set high (x4) for elderly aspects (hearing, mobility and sight impairment), and fast onset hazards. Note that the following systems are somewhat better scoring with these multipliers applied, but they do not move up whole categories (e.g., from moderate to high effectiveness): GPS receiver messaging, Mobile PA loudspeaker (Police/Fire), telephone auto diallers, radio (UHF/VHF/HF), telephone trees, and mobile device broadcasting. This is because of specific limitations to systems such as long activation or notification time, or systems being opt-in and requiring considerable database maintenance. However, for pockets and groups such systems can be more effective.

When allowing for **maximum tourists** the following changes to affordability occur:

- Only apps and tone-activated alert radio could be maintained.
- In terms of moderate effectiveness scores, the following can be established: telephone auto-diallers, SMS-PP text messaging.
- Natural warnings and telephone trees become unaffordable (due to staff time needed for education or database maintenance). We have no evidence to show that holiday home residents are frequent, repeat visitors so cannot assume they are as likely to receive education messages as permanent residents.

5.8.5 Recommendations for Thames-Coromandel District

5.8.5.1 Regionally coordinated systems

- Any mobile alerting option should be regionally coordinated. The installation (when available) of one or more of the mobile apps discussed in Section 4.4 by residents should be strongly encouraged by Thames Coromandel CDEM using public education and potentially incentives to install. Note that some people who are not covered by the mobile network will still have app coverage if they have their phones connected to wifi at home. This should be promoted.
- Additional pocket coverage should also be regionally coordinated for options that are used by multiple TAs (e.g., telephone auto-diallers, full list Section 6.2).
- Implementation within a TA of a regionally supported system needs an FTE component locally budgeted for local aspects. For example, to populate and maintain a telephone auto-dialler or SMS-PP phone number database.

- Television arrangements should be coordinated through the region.
- Radio arrangements should be planned for at a TA level, not just Group-wide.
- It is important that Social Media alerting is managed to reduce duplication of effort and increase consistency across TAs, and with the CDEM Group. There is a 24/7 regional response in place and TAs can utilise this.
- Use of independently self-maintained networks and alerting to large institutions with people in their care; some networks or institutions may require or are appropriate for regional coordination, to avoid duplication of effort at TA level.

5.8.5.2 Locally implemented systems

- Natural warnings for tsunami are important and affordable in terms of education for both residents and tourists if targeted at coastal locations and key institutions and tourism providers.
- Mobile PA systems are highly effective, but not as rapid or affordable as apps and mobile options across the entire area. They should be considered for targeting specific pockets. The per unit cost basis for Taupo District should be considered as it is much cheaper than the current vendor for Thames-Coromandel. Considerations are needed for activation (e.g., phone calls) of PA operations staff, and having them 'on-call' for expected/agreed periods. These must be agreed and documented in an SOP.
- Mobile PA systems owned by third parties are valuable but may have other priorities in an emergency.
- Large employers/tourist operators should be identified and a key contacts database developed with each, to maximise the applicability of auto-diallers, telephone trees and/or SMS alerts.
- Alerting to people in the care of institutions should be arranged at a TA level.
- Upgrade of Mediaworks repeaters.
- Existing VHF should be aligned within a new regional VHF framework
- Consistent with the Group (2014) Warning Systems Strategy section 1.3.1, all PAs/sirens should comply with the national tsunami siren standard (MCDEM, 2014).
 - Existing sirens should use a consistent tone (i.e., all sirens should sound the same across the district, preferable using the nationally recommended tone for best audibility)
 - Existing tone-only sirens should be promoted as meaning 'seek further information'
 - New sirens if desired should be voice capable (i.e., PAs).
- Pockets without mobile coverage generally have landlines, these should be prioritised for auto-dialler or telephone tree networks. This option is also recommended for those without smart phones.
- GeoZone Apps that are designed to provide tourism information in up to four foreign languages to international tourists and then track and report on their movements have been trialled during Cyclone Pam. This suite of apps could potentially provide a low cost (but not official) additional method to reach travelling foreign language tourists in districts where tourism is significant such as Thames-Coromandel

- Existing systems that are not in the above recommendations but are already in place and are proving effective should be maintained. Note: “proving effective” means evidence is available to show that the systems have performed well in previous emergencies or that they will reach at-risk communities in a timely manner and that the public understands the system and knows the appropriate response actions.
- Additional systems available and effective for reaching pockets and groups are listed in Section 6.3.

5.9 WAIKATO DISTRICT

5.9.1 Key points from workshops

Note more detailed notes from this workshop can be found in Appendix A1.8

Waikato District has a population of 63,300 residents. The population turnover is relatively high; as at 2013 41% of residents in Waikato District had moved into the district in the last five years. This creates challenges for education regarding hazards, and for familiarity and understanding of warnings and appropriate actions. The district is exposed to a wide range of natural and non-natural hazards. The district is exposed to tsunami, flooding, earthquake, ashfall (distant source) and storm hazards. Some coastal communities have the potential to be isolated. Non-natural hazards in the district include potential dam failure (Karapiro), mine fires or collapse of mines or industrial incidents at Huntly power station.

Waikato District Council has a different boundary to the DHB and Emergency Services boundaries. In the northern end of the district, the Emergency Services are from Auckland. The population also affiliates toward Auckland rather than considering itself part of Waikato. It is a significant travelling distance from Ngaruawahia to the northern towns.

Independent self-maintained networks have been used successfully in previous hazard events (e.g., surf lifesaving for tsunami alert in 2004). Tsunami warning and evacuation has been discussed with communities. There has been positive community stakeholders discussion about the “Blue-line” initiative (Wellington) being adopted in Raglan. The Raglan fire siren is generally not regarded as a good option for public alerting for tsunami.

Waikato District has lots of pockets, some with poor mobile coverage and relatively low access to telecommunications. The elderly are a group that needs special consideration. Culturally diverse pockets are significant. Lifelines are critical in Waikato District as they all feed into and out of Auckland.

The following public alerting systems are in use or available for use:

- Media Releases (Radio, less likely TV)
 - Utilise local radio stations, Radio Tainui, Raglan Radio
- Websites: Waikato DC
- Facebook:
 - Waikato DC (1,566 likes)
 - Port Waikato, Meremere, Te Kauwhata community sites
- Independent self-maintained networks
- Fire serviceman all have pagers for alerts

- Sirens – tone only
 - NZFS/VRFF Raglan siren – has never been used for a non-fire alert and – causes stress and confusion to tourists
 - Port Waikato has a siren
 - Ngaruawahia has a siren
- Public Education needed around the use of sirens
- Port Waikato considered a flag system but rejected it
- Self-maintained networks – surf lifesaving clubs (Raglan has been used it worked well in 2004)
- Fonterra has a text message network with suppliers – could be used with agreement.
- No email subscription service from council but various email lists for different community and stakeholder groups could be used

In Waikato DC there was strong recognition of the importance of public education for all systems – suggestions include fridge magnets, laminated sheets, facebook, and radio. The local Emergency Services have expressed interest in using the (Auckland) CDEM app.

Telecommunications access is good throughout Port Waikato but coverage for mobile phones is limited or non-existent in some locations including Port Waikato, Miranda, Glen Murray, Pukemiro, Waikaretu, Glen Afton, Raglan – Whale Bay, and Mangatangi.

5.9.2 Budget

Start-up \$0

On-going \$0

5.9.3 Pockets and groups that need specific alerting

In Waikato DC there are many examples of institutions with people in their care, including campgrounds and school camps, large industrial employers, large public events, Turangawaewae Marae, and several rest homes. However, because they are not located in areas subject to short-lead in time hazards, it was agreed that these groups did not have specific alerting needs different to that of the general public. Transients are significant along the highways year round and also visitors to Raglan in the summer season.

5.9.4 Effectiveness scores and multipliers

Table 13 provides start-up and on-going annual cost indications for the selected alerting options for this TA. No multipliers were applied for Waikato DC.

5.9.5 Recommendations for Waikato District

5.9.5.1 Regionally coordinated systems

- Any mobile alerting option should be regionally coordinated. The installation (when available) of one or more of the mobile apps discussed in Section 4.4 by residents should be strongly encouraged by Waikato District CDEM using public education and potentially incentives to install. Note that some people who are not covered by the mobile network will still have app coverage if they have their phones connected to wifi at home. This should be promoted.

- Additional pocket coverage should also be regionally coordinated for options that are used by multiple TAs (e.g., telephone auto-diallers, full list Section 6.2).
- Implementation within a TA of a regionally supported system needs an FTE component locally budgeted for local aspects. For example, to populate and maintain a telephone auto-dialler or SMS-PP phone number database.
- Television arrangements should be coordinated through the region.
- Radio arrangements should be planned for at a TA level, not just Group-wide.
- It is important that Social Media alerting is managed to reduce duplication of effort and increase consistency across TAs, and with the CDEM Group. There is a 24/7 regional response in place and TAs can utilise this.
- Use of independently self-maintained networks and alerting to large institutions with people in their care; some networks or institutions may require or are appropriate for regional coordination, to avoid duplication of effort at TA level.

5.9.5.2 Locally implemented systems

- Alerting to people in the care of institutions should be arranged at a TA level.
- Mobile PA systems are highly effective, but not as rapid or affordable as apps and mobile device options across the entire area. They should be considered for targeting specific pockets. Considerations are needed for activation (e.g., phone calls) of PA operations staff, and having them 'on-call' for expected/agreed periods. These must be agreed and documented in an SOP.
- Mobile PA systems owned by third parties are valuable but may have other priorities in an event.
- Existing phone trees could be triggered by a regionally-coordinated auto-dialler.
- Many camp operators and other institutions (e.g., rest homes) have been identified by workshop attendees. These organisations should be identified and a key contacts database developed with each, to maximise the applicability of auto-diallers, telephone trees and/or SMS alerts.
- Consistent with the GROUP (2014) Warning Systems Strategy section 1.3.1, all PAs/sirens should comply with the national tsunami siren standard (MCDEM, 2014).
 - Existing sirens should use a consistent tone (i.e., all sirens should sound the same across the district, preferable using the nationally recommended tone for best audibility)
 - Existing tone-only sirens should be promoted as meaning 'seek further information'
 - New sirens if desired should be voice capable (i.e., PAs).
- Existing systems that are not in the above recommendations but are already in place and are proving effective should be maintained. Note: "proving effective" means evidence is available to show that the systems have performed well in previous emergencies or that they will reach at-risk communities in a timely manner and that the public understands the system and knows the appropriate response actions.
- Additional systems available and effective for reaching pockets and groups are listed in Section 6.3.

Table 13 Relative scores for selected alerting options, with indicative costs for Waikato District.

	Score	For Low Density Areas		For High Density Areas		Total	Limitations and notes	
Total Population:		40.8k		22.5k		63.3k		
Minimum desired reach (%)		80%		70%		(mixed %)		
Population budgeted for:		32.6k	15.8k	48.4k		Start-up costs	Annual costs	
		Start-up costs	Annual costs	Start-up costs	Annual costs	Start-up costs	Annual costs	
		\$k	\$k	\$k	\$k	\$k	\$k	
SYSTEMS...								
With Rapid Widespread Coverage:								
Mobile device apps	83%	6	6	3	3	9	9	
Mobile device broadcasting (1)	84%	10,131	131	10,063	63	20194	194	Cheaper with national implementation
Tone-activated alert radio (1)	82%	2,042	2	1,126	1	3168	3	Cheaper with national implementation
That Can reach 70% of the pop.								
High effectiveness:								
Radio announcements	82%	1	1	1	1	2	2	No heads up, slow to reach 70%
Route alert (door-to-door)	71%	2,122	2,122	1,024	1,024	3146	3146	# staff available and time to walk/drive
Moderate effectiveness:								
Natural warnings	66%	118	118	57	57	175	175	Only for a few hazards GOOD FOR COAST
Telephone trees	65%	85	85	41	41	126	126	Slow to reach 70%
Radio (UHF, VHF or HF)	64%	1,034	14	569	7	1603	21	Reaches only houses/buildings
Telephone auto-dialler	64%	9	9	4	4	13	13	Slow to reach 70% GOOD FOR POCKETS
SMS-PP text messaging	63%	11	6	8	3	19	9	Slow to reach 70% GOOD FOR POCKETS
Lower effectiveness:								
Sirens (signal-only) - Mobile	56%	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Cheaper than PA, but slow response
Call-in telephone line	47%	692	672	344	324	1036	996	Very slow to reach 70%
Sirens (signal-only) - Fixed	44%	4,873	272	682	37	5555	309	Heads up only – slow response
That cannot reach 70% of the pop.: (3)								
Television announcements	73%	1	1	1	1	2	2	GOOD BACKUP
Independent self-maint networks	66%	6	6	3	3	9	9	GOOD FOR POCKETS
Mobile PA loudspeaker (Police/Fire)	66%	1	1	1	1	2	2	# vehicles & staff; time required
E-mails	59%	21	6	18	3	39	9	
Newspaper content	58%	0	0	0	0	0	0	
Websites	56%	208	4	115	2	323	6	
Tourist/twi radio	49%	1	1	1	1	2	2	
Billboards - static	47%	134	52	18	6	152	58	
Billboards - electronic telemetered	45%	0	0	0	0	0	0	GOOD FOR POCKETS

(1) Systems not yet readily available in New Zealand.

(2) No FTE is costed for the use of mobile PA loud-speakers as it is assumed these will be operated by council staff or volunteers, if there is a salary cost this option will become more expensive.

(3) Systems that cannot reach 70% of people for short lead time hazards should be used with caution and ideally on of the options above should also reach at least 70% of people in every location.

5.10 WAIPA DISTRICT

5.10.1 Key points from workshops

Note more detailed notes from this workshop can be found in Appendix A1.9

Waipa District has a population of approximately 46,700 residents. The population turnover is relatively high; as at 2013 37% of residents in the Waipa District had moved into the district in the last five years. This creates challenges for education regarding hazards, and for familiarity and understanding of warnings and appropriate actions. The district includes a large-event location – Mystery Creek. This is the largest event venue in the region. Hamilton Airport is also in Waipa. There are considerable numbers of transients (tourists, commuters, commercial traffic) on State Highways 1, 3 and 39. Waipa District hosts many large national scale sporting events (e.g., rowing, kayaking, outrigger canoeing, track and road cycling, BMX, trotting, equestrian).

Waipa District was agreed by workshop attendees to not be particularly exposed to hazards (natural or non-natural). Severe weather events and localised flooding are the most likely hazards but the consequences are usually not significant. Earthquakes, distant-sourced ashfall and animal disease are plausible hazards. Lifeline utility failures in this district could be nationally significant for power, road, rail and gas as they feed the upper North Island. Hazchem incidents on the state highways or main trunk rail line are also plausible. It was reported that there is only one power line to Te Awamutu at present; however, this is being addressed.

Independent self-maintained networks operating in Waipa include Neighbourhood Watch/support; they are developing phone trees and back up contact systems and are actively engaged with CDEM. Fonterra have a large database for text messaging milk suppliers – it was suggested that could have an arrangement to utilise this database but this is not currently arranged.

The following public alerting systems are already in use or available for potential use:

- Media Releases (Radio, less likely TV)
 - VHF link to radio stations (24/7)
- Waipa DC Website and web banners
- Waipa DC RSS Feed
- Waipa DC Facebook (1,936 likes)
- Waipa_DC and WaipaNZ Twitter (158 and 86 Followers)
- Electronic billboards
- Emergency services route alert/PA
- Neighbourhood watch/support – developing phone trees and back up contact system for when power and phone are out
- Newspapers
- Posters
- RSS feeds
- Electronic billboard – fixed
- Natural warnings (don't do a lot of engagement but support national messaging)
- Marine radio

- Fixed siren in Te Awamutu – more than five signals = seek further information (historic use)
 - Low awareness/understanding of fixed sirens, confusion of signal
 - Locals don't like them because they can't sleep at night
- There is a key stakeholder email list but not currently used for alerting
- Fonterra have a large database for text messaging suppliers – could have an arrangement to utilise this
- Phone trees for most areas are in the development phase.
- Stakeholder email list
- Contact list for clubs and associations
- “Neighbourly” app

Telecommunications access is good in Waipa, particularly mobile phone ownership. However, there is patchy coverage for the Vodafone network in Cambridge, and Owairaka Valley (rural, somewhat remote) has patchy coverage on all networks. In rural parts of Waipa it is sometimes the case that there is mobile network coverage on roads but not at houses.

5.10.2 Budget

Start-up \$0

On-going \$0

Part of one CDEM professional's FTE is spread across three districts (Waipa, Otorohanga, Waitomo).

5.10.3 Pockets and groups that need specific alerting

People in transit on the state highways, especially visitors to the District are the prime concern for Waipa DC. At any time there could be thousands of travellers in vehicles on the road networks and there are also frequent large events for visitors. It was agreed these visitors had special alerting needs.

Some areas had higher than the New Zealand average populations of elderly residents but because of the low hazard environment, it was not considered they had any specific alerting requirements.

5.10.4 Effectiveness scores and multipliers

Table 14 provides start-up and on-going annual cost indications for the selected alerting options for this TA.

5.10.5 Recommendations for Waipa District

5.10.5.1 Regionally coordinated systems

- Any mobile alerting option should be regionally coordinated. The installation (when available) of one or more of the mobile apps discussed in Section 4.4 by residents should be strongly encouraged by Waipa CDEM using public education and potentially incentives to install. Note that some people who are not covered by the mobile network will still have app coverage if they have their phones connected to wifi at home. This should be promoted.

- Additional pocket coverage should also be regionally coordinated for options that are used by multiple TAs (e.g., telephone auto-diallers, full list Section 6.2).
- Implementation within a TA of a regionally supported system needs an FTE component locally budgeted for local aspects. For example, to populate and maintain a telephone auto-dialler or SMS-PP phone number database.
- Television arrangements should be coordinated through the region.
- Radio arrangements should be planned for at a TA level, not just Group-wide.
- It is important that Social Media alerting is managed to reduce duplication of effort and increase consistency across TAs, and with the CDEM Group. There is a 24/7 regional response in place and TAs can utilise this.
- Use of independently self-maintained networks and alerting to large institutions with people in their care; some networks or institutions may require or are appropriate for regional coordination, to avoid duplication of effort at TA level.
- Alerting to people in the care of institutions should otherwise be arranged at a TA level.

5.10.5.2 Locally implemented systems

- Mobile PA systems are highly effective, but not as rapid or affordable as apps and mobile device options across the entire area. They should be considered for targeting specific pockets. Considerations are needed for activation (e.g., phone calls) of PA operations staff, and having them 'on-call' for expected/agreed periods. These must be agreed and documented in an SOP.
- Mobile PA systems owned by third parties are valuable but may have other priorities in an emergency.
- Existing phone trees could be triggered by a regionally-coordinated auto-dialler.
- Consistent with the Group (2014) Warning Systems Strategy Section 1.3.1, all PAs/sirens should comply with the national tsunami siren standard (MCDEM, 2014).
 - Existing sirens should use a consistent tone (i.e., all sirens should sound the same across the district, preferable using the nationally recommended tone for best audibility)
 - Existing tone-only sirens should be used only for 'seek further information'
 - New sirens if desired should be voice capable (i.e., PAs).
- Large event hosts should be identified and a key contacts database developed with each, to maximise the applicability of auto-diallers, telephone trees and/or SMS alerts.
- Existing systems that are not in the above recommendations but are already in place and are proving effective should be maintained. Note: "proving effective" means evidence is available to show that the systems have performed well in previous emergencies or that they will reach at-risk communities in a timely manner and that the public understands the system and knows the appropriate response actions
- Additional systems available and effective for reaching pockets and groups are listed in Section 6.3.

Table 14 Relative scores for selected alerting options, with indicative costs for Waipa District.

	Score	For Low Density Areas		For High Density Areas		Total		Limitations and notes
Total Population:		17.5k		29.2k		46.7k		
70% of population targeted:		12.3k		20.4k		32.7k		
		Start-up costs	Annual costs	Start-up costs	Annual costs	Start-up costs	Annual costs	
SYSTEMS...		\$k	\$k	\$k	\$k	\$k	\$k	
With Rapid Widespread Coverage:								
Mobile device apps	85%	2	2	4	4	6	6	
Mobile device broadcasting (1)	84%	10,049	49	10,082	82	20,131	131	Cheaper with national implementation
Tone-activated alert radio (1)	75%	876	1	1,461	1	2,337	2	Cheaper with national implementation
Fixed PA loud-speakers	69%	1,499	99	626	42	2,125	141	Maintenance, telemetry and testing
That Can reach 70% of the pop.								
High effectiveness:								
Radio announcements	77%	0	0	1	1	1	1	No heads up, slow to reach 70%
Mobile PA loud-speakers (2)	75%	175	0	30	0	205	0	# vehicles & staff; time required GOOD FOR POCKETS
Route alert (door-to-door)	72%	796	796	1,329	1,329	2,125	2,125	# staff available and time to walk/drive
Moderate effectiveness:								
Power mains messaging	61%	350	0	584	0	934	0	Heads up only – slow response
Natural warnings	63%	44	44	74	74	118	118	Only for a few hazards GOOD FOR COAST
Telephone trees	60%	32	32	53	53	85	85	Slow to reach 70%
Radio (UHF, VHF or HF)	59%	443	5	739	9	1,181	14	Reaches only houses/buildings
Telephone auto-dialler	59%	3	3	5	5	9	9	Slow to reach 70% GOOD FOR POCKETS
SMS-PP text messaging	61%	7	2	9	4	16	6	Slow to reach 70% GOOD FOR POCKETS
Lower effectiveness:								
Radio Data Systems (1)	48%	443	5	739	9	1,181	14	No heads up, slow to reach 70%
Call-in telephone line	44%	272	252	441	421	713	673	Very slow to reach 70%
Sirens (signal-only) - Fixed	42%	2,074	102	885	48	2,959	150	Heads up only – slow response
That cannot reach 70% of the pop.: (3)								
Television announcements	69%	0	0	1	1	1	1	GOOD BACKUP
Website banners	63%	88	0	147	1	235	1	
Independent self-maint networks	61%	2	2	4	4	6	6	GOOD FOR POCKETS
Mobile PA loudspeaker (Police/Fire)	68%	0	0	1	1	1	1	# vehicles & staff; time required
E-mails	55%	17	2	19	4	36	6	
Newspaper content	58%	0	0	0	0	0	0	
Websites	54%	89	2	149	3	238	4	
Billboards - static	46%	55	20	23	8	78	28	
Billboards - electronic telemetered	45%	0	0	0	0	0	0	GOOD FOR POCKETS

(1) Systems not yet readily available in New Zealand.

(2) No FTE is costed for the use of mobile PA loud-speakers as it is assumed these will be operated by council staff or volunteers, if there is a salary cost this option will become more expensive.

(3) Systems that cannot reach 70% of people for short lead time hazards should be used with caution and ideally on of the options above should also reach at least 70% of people in every location.

5.11 WAITOMO DISTRICT

5.11.1 Key points from workshops

Note more detailed notes from this workshop can be found in Appendix A1.10

Waitomo District has a population of approximately 8,800 residents. Within the District is the Waitomo Caves tourist destination which receives tens of thousands of visitors each year. Most hazards are slower onset. Hazards identified for Waitomo include: localised flooding, landslides, ashfall (distant source), lifelines failures/incidents, tsunami and coastal erosion. Following the flooding in 1958 there were new stopbanks built which have greatly reduced the risk in the area.

SH3 is a key transport link to New Plymouth with no alternative route from the north but is vulnerable to accidents, landslides and flooding. There are frequent slips at Awakino Gorge. NZTA are looking at alternative routes but no information on the progress with this project was available. The Rail network has a similar vulnerability.

No independent self-maintained networks have been identified for Waitomo DC. A public education programme was run last year where all urban and rural homes got a get ready get through booklet delivered. All areas in Waitomo were covered. There is a remote private community in Waitomo (Taharoa), and among workshop attendees not much information was known about this community.

The following public alerting systems are already in use or are potentially available for use:

- Media Releases (Radio, less likely TV)
- Council websites
- Waitomo DC Facebook (830 likes)
- Marokopa has a response plan with a phone tree but this may be out of date.
- Phone trees for most areas are in the development phase.
- Also in the process of identifying areas where VHF radio connections can be put in, but there is poor radio coverage in some areas so considering HF as a better option.
- Mobile phone coverage is also a problem in Waitomo. Three years ago it was reported that Waitomo had low uptake in internet connection. No more recent updates available on this. Waitomo has lots of small communities that are isolated;
- Mokau is very isolated. Radio system to Mokau must go through New Plymouth. Radio connection to the media is the only communication method tested.
- The Regional Council flood alerting system (SMS-PP and email) works well for residents in flood prone areas.

Waitomo has the lowest mobile phone access and coverage rates in the Region. It was suggested that 50% of residents had no mobile phone coverage, and in any case only 70% of households owned a mobile phone. The mobile phone access and coverage rates indicate that any mobile phone or mobile device based options would not be appropriate for many in Waitomo. However, landline ownership is reasonably good (81%) and when considered together with mobile ownership, the overlap results in only 4% of households reporting no access to telephone communication systems.

5.11.2 Budget

Start-up \$0

Ongoing \$0

Part of one CDEM professional's FTE is spread across three districts (Waipa, Otorohanga, Waitomo).

5.11.3 Pockets and groups that need specific alerting

Groups and pockets identified as present in Waitomo included workers on industrial sites (some overseas, non-English speaking), the thousands of visitors to Waitomo Caves, tourists in remote areas, including coastal areas and other transients (travellers/commuters/freight) on the highways. However, none of these pockets or groups warranted changes to multipliers in the decision tool.

5.11.4 Effectiveness scores and multipliers

Table 15 provides start-up and on-going annual cost indications for the selected alerting options for this TA.

5.11.5 Recommendations for Waitomo District

5.11.5.1 Regionally coordinated systems

Recommendations to Waipa District, in terms of regional support for local systems:

- Any mobile alerting option should be regionally coordinated. The installation (when available) of one or more of the mobile apps discussed in Section 4.4 by residents should be strongly encouraged by Waitomo CDEM using public education and potentially incentives to install. However it must be noted that due to patchy mobile coverage, this option will be less effective in Waitomo than in other districts. Note that some people who are not covered by the mobile network will still have app coverage if they have their phones connected to wifi at home. This should be promoted in particular in Waitomo District.
- Additional pocket coverage should also be regionally coordinated for options that are used by multiple TAs (e.g., telephone auto-diallers, full list Section 6.2).
- Implementation within a TA of a regionally supported system needs an FTE component locally budgeted for local aspects. For example, to populate and maintain a telephone auto-dialler or SMS-PP phone number database.
- Television arrangements should be coordinated through the region.
- Radio arrangements should be planned for at a TA level, not just Group-wide.
- It is important that Social Media alerting is managed to reduce duplication of effort and increase consistency across TAs, and with the CDEM Group. There is a 24/7 regional response in place and TAs can utilise this.
- Use of independently self-maintained networks and alerting to large institutions with people in their care; some networks or institutions may require or are appropriate for regional coordination, to avoid duplication of effort at TA level.
- Alerting to people in the care of institutions should otherwise be arranged at a TA level.

5.11.5.2 Locally implemented systems

- Natural warnings for tsunami are important and affordable in terms of education for both residents and tourists if targeted at coastal locations and key institutions and tourism providers.
- Mobile PA systems are highly effective, but not as rapid or affordable as apps and mobile options across the entire area. They should be considered for targeting specific pockets. Considerations are needed for activation (e.g., phone calls) of PA operations staff, and having them 'on-call' for expected/agreed periods. These must be agreed and documented in an SOP.
- Mobile PA systems owned by third parties are valuable but may have other priorities in an event.
- Existing phone trees could be triggered by a regionally-coordinated auto-dialler.
- Large employers/tourist operators should be identified and a key contacts database developed with each, to maximise the applicability of auto-diallers, telephone trees and/or SMS alerts.
- Existing HF/VHF should be aligned within any new regional VHF framework
- Existing systems that are not in the above recommendations but are already in place and are proving effective should be maintained. Note: "proving effective" means evidence is available to show that the systems have performed well in previous emergencies or that they will reach at-risk communities in a timely manner and that the public understands the system and knows the appropriate response actions.
- Additional systems available and effective for reaching pockets and groups are listed in Section 6.3.

Table 15 Relative scores for selected alerting options, with indicative costs for Waitomo District.

	Score	For Low Density Areas		For High Density Areas		Total	Limitations and notes
Total Population:		4.3k		4.5k		8.8k	
70% of population targeted:		3.0k		3.2k		6.2k	
		Start-up costs	Annual costs	Start-up costs	Annual costs	Start-up costs	Annual costs
		\$k	\$k	\$k	\$k	\$k	\$k
SYSTEMS...							
With Rapid Widespread Coverage:							
Mobile device apps	83%	1	1	1	1	1	1
Mobile device broadcasting (1)	84%	10,012	12	10,013	13	20,025	25
Tone-activated alert radio (1)	82%	215	0	225	0	440	0
Fixed PA loud-speakers	68%	368	24	97	7	465	31
That Can reach 70% of the pop.							
High effectiveness:							
Radio announcements	82%	0	0	0	0	0	0
Route alert (door-to-door)	71%	196	196	205	205	400	400
Moderate effectiveness:							
Natural warnings	66%	11	11	11	11	22	22
Telephone trees	65%	8	8	8	8	16	16
Radio (UHF, VHF or HF)	64%	109	1	114	1	223	3
Telephone auto-dialler	64%	1	1	1	1	2	2
SMS-PP text messaging	63%	6	1	6	1	11	1
Lower effectiveness:							
Sirens (signal-only) - Mobile	56%	0	0	0	0	0	0
Radio Data Systems (1)	52%	109	1	114	1	223	3
Call-in telephone line	47%	82	62	85	65	167	127
Sirens (signal-only) - Fixed	44%	510	25	136	7	646	32
That cannot reach 70% of the pop.: (3)							
Television announcements	73%	0	0	0	0	0	0
Website banners	66%	22	0	23	0	44	0
Independent self-maint networks	66%	1	1	1	1	1	1
Mobile PA loudspeaker (Police/Fire)	66%	0	0	0	0	0	0
Newspaper content	58%	0	0	0	0	0	0
Websites	56%	22	0	23	0	45	1
Marine radio	53%	0	0	0	0	0	0
Tourist/lwi radio	49%	0	0	0	0	0	0
Billboards – static	47%	13	5	5	1	18	6
Billboards - electronic telemetered	45%	0	0	0	0	0	0

(1) Systems not yet readily available in New Zealand.

(2) No FTE is costed for the use of mobile PA loud-speakers as it is assumed these will be operated by council staff or volunteers, if there is a salary cost this option will become more expensive.

(3) Systems that cannot reach 70% of people for short lead time hazards should be used with caution and ideally on of the options above should also reach at least 70% of people in every location.

5.12 COST AND ABILITY TO PAY

Full cost-benefit analysis for most TAs cannot be completed because there is no budget allocated. Instead indicative costs for all options selected are shown for consideration in future budgets.

The cost basis in the tables for each TA above are indicative based on the population in low and high densities across the whole district. The costs of reaching the total number of individual pockets and groups will need refining once the coverage of any possible Group-wide systems can be fully ascertained and tested.

It is critical to allow enough salary in budgets to pay for staff to work on warnings, across planning, engagement, education, exercises, maintenance and testing of systems. The salary cost of linking with self-maintaining networks and institutions with people in their care will vary depending on the detail of the arrangements that develop with each specific network and institution.

6.0 RECOMMENDATIONS

We are strongly recommending a tiered approach to public alerting in the Waikato Region.

6.1 NATIONAL OPTIONS

As the first and primary tier Waikato CDEM Group should adopt national initiatives around mobile device based alerting (Section 4.4). The Group should (as stated in Section 5.1.5) engage with the national CAP and mobile alerting app development processes and ensure that Waikato Group members' needs are included at the earliest reasonable stage, expected to be within the 2015/16 financial year.

The Group should liaise with TAs to support them to use the national public mobile alerting app(s). The Group should continue over time to represent the TA's interests at a national level as these options evolve and develop. TAs should use the mobile alerting option(s) as their primary alerting option to reach everyone within mobile coverage (as stated in the recommendations section for each TA in Section 5). Note that smartphone uptake is rapidly increasing and 3G network coverage along with it. Rural wireless is also burgeoning, e.g., Lightwire in the Waikato region (see Appendix A3.1). Community education and engagement efforts around alerting will need to be focussed on making sure all of the public have a suitable app installed and operational.

A mobile device broadcasting business case lead by MCDEM is still in development, if this is funded this option should be adopted along with the app option above.

The Group should continue to engage with the MCDEM public education team and leverage off of their activities, especially around natural warnings for tsunamis.

Opportunities for alerting via the national radio and TV broadcasting MoU should also be fully incorporated into alerting planning by the Group and the TAs.

6.2 REGIONAL OPTIONS

This section provides recommendations for regionally implemented or coordinated public alerting adoption, in terms of options both managed and maintained by the CDEM Group, for use both regionally and locally.

Access to the national mobile app (above) to generate alerts should be coordinated and advocated for on behalf of the TAs by the Group. The Group should help to set it up and help TAs promote it, but any TA can and should use it for alerting when required.

An additional layer of regionally-coordinated alerting is also needed for people and areas (groups and pockets) that are without mobile phone coverage or smartphone access. These will depend on the cost structure between the Group and Local Authorities and the total number of people each Local Authority needs to reach. The following high-scoring relatively low-cost systems should be coordinated at a regional level and made available for CDEM Group members to use:

- VOIP auto-dialler system – should be investigated as a first priority
- Potentially tone-activated alert radio - if available (in development with Auckland now) – note the unit cost is high (Auckland have found it beneficial to explore opportunities for third party funding of units).

These should at least be able to reach the following types of pocket, which were each specified by more than one TA:

- Geographically isolated communities without mobile phone coverage
- Large employers/industries
- Schools
- Large events
- Rest homes
- Shopping malls
- Isolated tourist locations
- Those on highways via electronic billboards - triggered by contacting NZTA (this could be a high priority personal call rather than VOIP)
- School camps
- Marae

And the following groups, again specified by more than one TA:

- Elderly
- English as a second language (for example would need to be implemented with a separate VOIP list and recording for each language)
- Transients (domestic and international)

The Group and TAs should engage with independent self-maintained networks. The following were either suggested by multiple TAs or have clear applicability across multiple TAs. The Group should facilitate and initiate discussion and ideally agreement with the following networks to then allow TAs to directly use them:

- Neighbourhood Watch/support/societies
- Community service groups/Rotary/Lions
- Māori Wardens
- NZTA (electronic billboards)
- Te Mana Whenua/Iwi networks
- Rural Support Trust
- Transport operators networks
- CDEM volunteers/LSAR
- Surf lifesaving
- Coastguard
- Religious organisations
- Federated Farmers
- Volunteer Rural Fire Force

The Group should also coordinate engagement with the following large institutions with people in their care:

- Large tourism operators and collectives
- Business collectives
- Department of Conservation
- Schools
- Prisons

- Hospitals and rest home franchises
- Fonterra

The Group should develop and maintain a database structure (or at least facilitate consistency amongst TAs) that Local Authorities can use to store and access auto-dialler, phone tree and self-maintaining network contact lists and details. This may be as simple as a web hosted shared spreadsheet and simplicity should be a goal. The database could be capable of being queried by the Group Members to extract geographic distribution lists based on the nature and location of the emergency.

6.3 TA SPECIFIC OR LOCAL OPTIONS

A large number of groups and pockets with specific alerting needs have been identified in Appendix A1, and summarised in each TAs sub-section of the Results chapter. The large majority of these will be reached via the national mobile app option recommended under Section 6.1, and the additional regionally supported options listed in Section 6.2. Updating any contact database maintained by the Group (or separately by TAs) needs to be budgeted in terms of FTE within each TA as their own responsibility, along with FTE effort around implementing the mobile app.

Any remaining isolated pockets or groups will need to be identified as the above options are tested. Specifically the following options are likely to be of most effective and low-cost use:

- Telephone trees
- Local independent self-maintained networks (beyond those listed in 6.2 above)
- Institutions with many people in their care
- Mobile PA – but note that FTE effort is needed to maintain readiness here, and there is direct cost too. It is also limited by the on-demand availability of staff and vehicles
- Third party mobile PA – notes as per Mobile PA point above.
- SMS-PP may have some additional coverage beyond the mobile app to current non-smartphone users (such as of the elderly and farmers), but this is likely to rapidly drop off as smartphone uptake continues to rapidly rise.
- VHF or HF radio into pockets, probably to trigger a local response tree (to save on equipment costs) – but note there is a substantial hardware (EOC, repeaters and receivers), training, and upkeep cost to this, particularly if radio is not being used by the EOC.
- Route alert (door knocking) but note that FTE effort is needed to maintain readiness here. It is also severely time limited by the on-demand availability of staff.

These will all have FTE costs as well as direct costs that must be budgeted for.

6.4 POTENTIAL SUPPLIERS OF SYSTEMS

Key systems emerging from workshops were explored (Appendix A3) in terms of cost and further detail, for the following reasons:

- National mobile alerting will be available free of charge from one or more of the ERS, Red Cross and/or Google apps (Section 4.4). The Group and TAs should budget permanent FTE time to maintain the effective use of these systems, both in terms of entering alerts into the system, and promoting/assisting the public install and being able to use the app(s).

- Rural broadband suppliers can provide internet to smartphones (and thus app connectivity without mobile coverage). See Appendix A3.1.
- Radio networks – these were identified as public alerting options either already in use, or available for use, by many TAs.
- Voice Over IP (VOIP) auto-diallers – identified as a particularly cost-effective way of reaching both location ‘pockets’ and public ‘groups’ that may need further alerting via mobile phones and landlines. Two supplier costs are supplied to indicate both the low and high ends of the cost range (Appendix A3.3). The ideal supplier will depend on the volume of calls expected and the Group IT infrastructure.
- SMS-PP services – identified as a potentially cost-effective way of reaching both location ‘pockets’ and public ‘groups’ that may need alerting beyond the reach of national mobile alerting (could reach non-smartphone users such as some of the elderly and farmers). BULLETiN is well recommended by the Bay of Plenty CDEM Group already – it has a competitive cost basis.
- Mobile PA – identified as a potentially cost-effective way of reaching both location ‘pockets’ that may need specific alerting beyond the reach of national mobile alerting. The Taupo District cost basis is the most cost effective solution reviewed (note even cheaper suppliers are available, Appendix A3.5). Mobile PA is nominally costed at 0.05 FTE per 100,000 people reached based on the staff effort needed to maintain the system, it assumes no salary or wages need to be paid to drivers.
- VHF Radio – cost is roughly projected from the experience of Gisborne to reach groups of 200 people including the effort to coordinate response groups and exercise. The reality will vary depending on EOC and repeater costings depending on the scale and design of the network.
- Other districts may want to engage with Taupo to learn how they engage with neighbourhood support, Fleetlink (based on Trunked Mobile Radio technology that allows radios to talk to one another anywhere in the country where there is coverage) and NZTA for fixed digital billboards.
- Telephone trees are nominally costed as requiring four FTE per 100,000 people reached, assuming a high level of involvement from the TA in engaging with individuals on the tree, connecting them and maintaining and triggering the tree. The real cost will vary depending on any level of autonomy within the trees for their own development and upkeep.
- See also the key independent self-maintained networks and large institutions with people in their care recommended in Section 6.2. These are nominally costed at 0.2 FTE per 100,000 people to be reached, but this depends on the size of the networks and institutions.
- Specific targeted options should be explored further through existing relationships within the region:
 - GeoZone apps for domestic and foreign language tourists
 - School-links emergency alerts is well recommended by Waikato TAs already and has been shown to be cost-effective.

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APPENDICES

A1.0 DETAIL FROM TA WORKSHOPS

A1.1 HAMILTON CITY

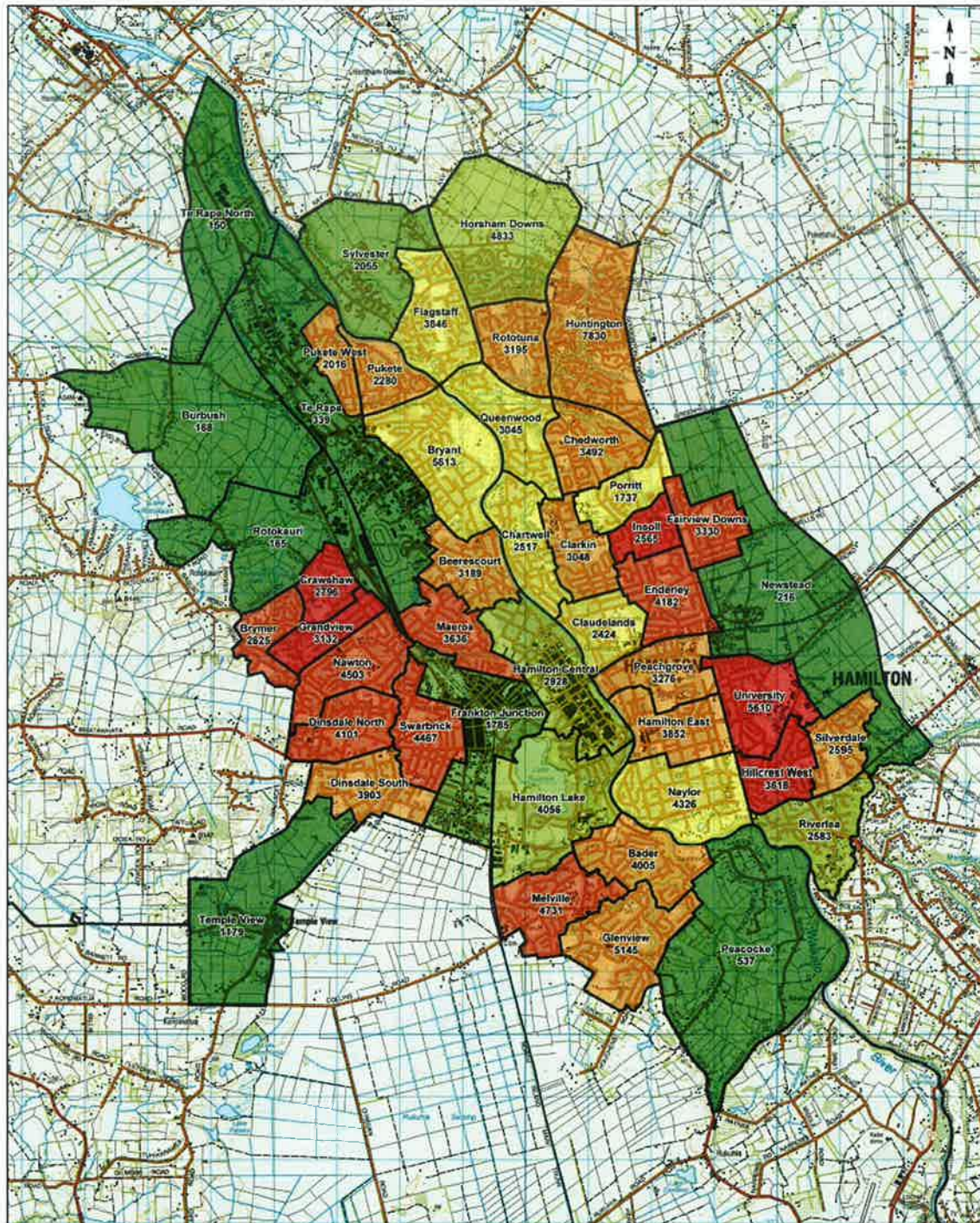


Figure A1.1 Hamilton City Area Units with 2013 usual resident population count and density shown (green = low density, red = high density).

Hazards

- Dam failure (20 minutes flow time down the Waikato River from Karapiro)
- Industrial hazchem (e.g., hazmat train under CBD) or rapid onset traffic incidents
- Chlorine gas from treatment plant in Te Rapa
- Heavy rainfall, tornados and hail (Frankton had a tornado with 7 fatalities in the 1940s)
- Pandemic or bio-emergency

Institutions with people in their care

- Transient populations are important, especially into large events in stadiums, into CBD and into the large shopping complex of “The Base” at Te Rapa (estimated thousands of visitors on weekends)
- Several aged care facilities
- Three tertiary education institutions
- Large employers – these workers are in the care of employers and may not have access to communications while at work e.g., Lifeline Utilities, Fonterra, Gallaghers, Primary Industry factories, Councils, Government Agencies, Hospitals/Medical Centres, Schools, Shopping Centres.

Pockets that may need specific alerting

- Te Rapa
 - High proportion of elderly residents (>25%)
 - Low number of usual residents but influx of thousands of transients (workers and shoppers) during the day and weekend
 - Usual residents have relatively lower access to telecommunications
 - Lots of workers (>1,000) under the care of large institutions
- CBD (Hamilton Central)
 - Large influx of transients (workers, shoppers and clubbers) during the day and weekend nights.
 - Lots of workers (>1,000) under the care of large institutions
 - Usual residents have relatively low access to telecommunications
 - Culturally diverse: > 50% of residents identify as being of non-European descent
- Insoll
 - Relatively low access to telecommunications
 - Culturally diverse: >50% of residents identify themselves as being of non-European descent
- Hamilton East
 - Lots of workers (>1,000) under the care of large institutions
 - Culturally diverse: >50% of residents identify themselves as being of non-European descent
- University
 - Lots of workers (>1,000) under the care of large institutions
 - Culturally diverse: >50% of residents identify themselves as being of non-European descent

- Other culturally diverse CAU/suburbs (>50% of residents identify themselves as being of non-European descent)
 - Clarkin
 - Swarbrick
 - Enderly
 - Grandview
 - Crawshaw
 - Bader
 - Fairview Downs
 - Poritt
 - Melville
- Other CAU/suburbs with lots of workers (>1,000) under the care of large institutions
 - Rotokauri
 - Frankton
 - Hamilton Lake
- Templeview/Latter Day Saints – Culturally diverse: >50% of residents identify as being of non-European descent – are they connected to mainstream news and communication channels?
- Claudelands event centre and Waikato Stadium – large events
- Hamilton Gardens – large numbers of transients all year round
- Newstead – new expanding suburb and employment area in the future
- Peacocke – High proportion of elderly residents (>25%)

Groups that may need specific alerting

- 160 languages spoken
- Māori are 20% of the population
- Transients (tourists and people on highways especially) – highways can be considered a ‘pocket’ to some degree.
- New residents – in 2006 35% of current (2013) usual residents lived in another NZ district and 8% lived overseas.

Telephone Access

Telephone household (usually occupied private dwellings) access statistics for Hamilton City from 2013 census:

- Percent of households with access to mobile phones: 85%
 - No significant coverage issues identified
- Percent of households with access to landline phones: 83%
- Percent of households with no access to telecommunications: 2%

A1.2 HAURAKI DC

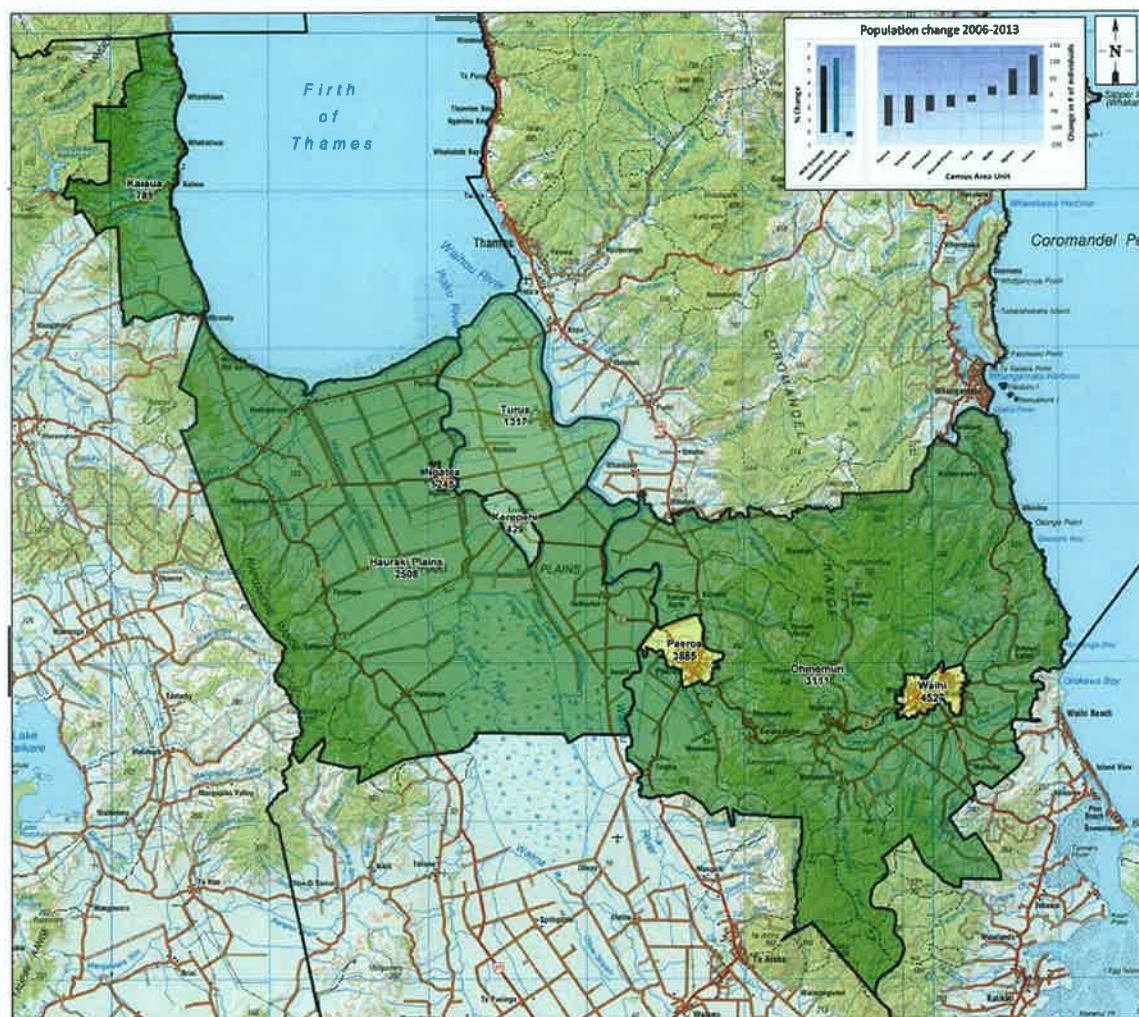


Figure A1.2 Hauraki District Area Units with 2013 usual resident population count and density shown (green = low density, red = high density).

Hazards

History of flooding with warnings that have been effective in the past. Considerable flood protection scheme in place so flood risk areas are generally well known and controlled. Failure of flood protection works could be catastrophic. Also:

- Coastal erosion.
- Tsunami threat.
- Ashfall (distal source)
- Lifelines – SH2. Hazardous substances.
- Earthquake (Kerepehi Fault)
- Animal epidemics
- Geothermal – Miranda

Institutions with people in their care

- Retirement villages – especially Ohinemuri House and Hetherington House
- Goldfields school – high dependency kids
- Waihi Academy of Studies (Taiwanese Language School)
- Schools
- Hauraki District Council
- Newmont Gold Mine
- Leaches Quarry
- Kerepehi Industrial Development Area – Chinese Ice Cream Factory
- Silver Fern Farms

Pockets that may need specific alerting

- Paeroa
 - Relatively low access to telecommunications (excl. mobile)
 - High proportion of elderly residents (>25%)
 - Large event (Battle of the Streets) attracts over 10,000 people
- Ohinemuri
 - Influx of thousands of transients (tourists, travellers, hikers, cyclists, workers) especially during the peak summer holiday season.
 - Whiritoa receives approximately 7,000 additional visitors in summer – peak holidays
 - Karangahake Gorge – Very popular with tourists and has SH2 running through it but poor mobile phone coverage
- Kaiaua
 - High proportion of elderly residents (>25%)
 - Popular coastal route with transients from Auckland – especially in summer
- Waihi
 - High proportion of elderly residents (>25%)
 - One major employer

- Ngatea
 - High proportion of elderly residents (>25%)
 - Seasonal fruit-pickers from overseas,
- Kerepehi
 - Relatively low access to telecommunications (excl. mobile)

Groups that may need specific alerting

- Transients (tourists and people on highways) on State Highways and Hauraki Rail Trail (cycleway – Karangahake Gorge to Kaiaua along the coast) – highways can be considered a ‘pocket’ to some degree.
- Freedom campers.

Telephone access

Telephone household (usually occupied private dwellings) access statistics for Hauraki District from 2013 census:

- Percent of households with access to mobile phones: 81%
 - Coverage issues mentioned in workshop:
 - Karangahake Gorge – Significant with tourists and travellers on SH2
 - Poor mobile coverage probably only affects 10% of population
- Percent of households with access to landline phones: 80%
- Percent of households with no access to telecommunications: 3%

A1.3 MATAMATA-PIAKO DISTRICT

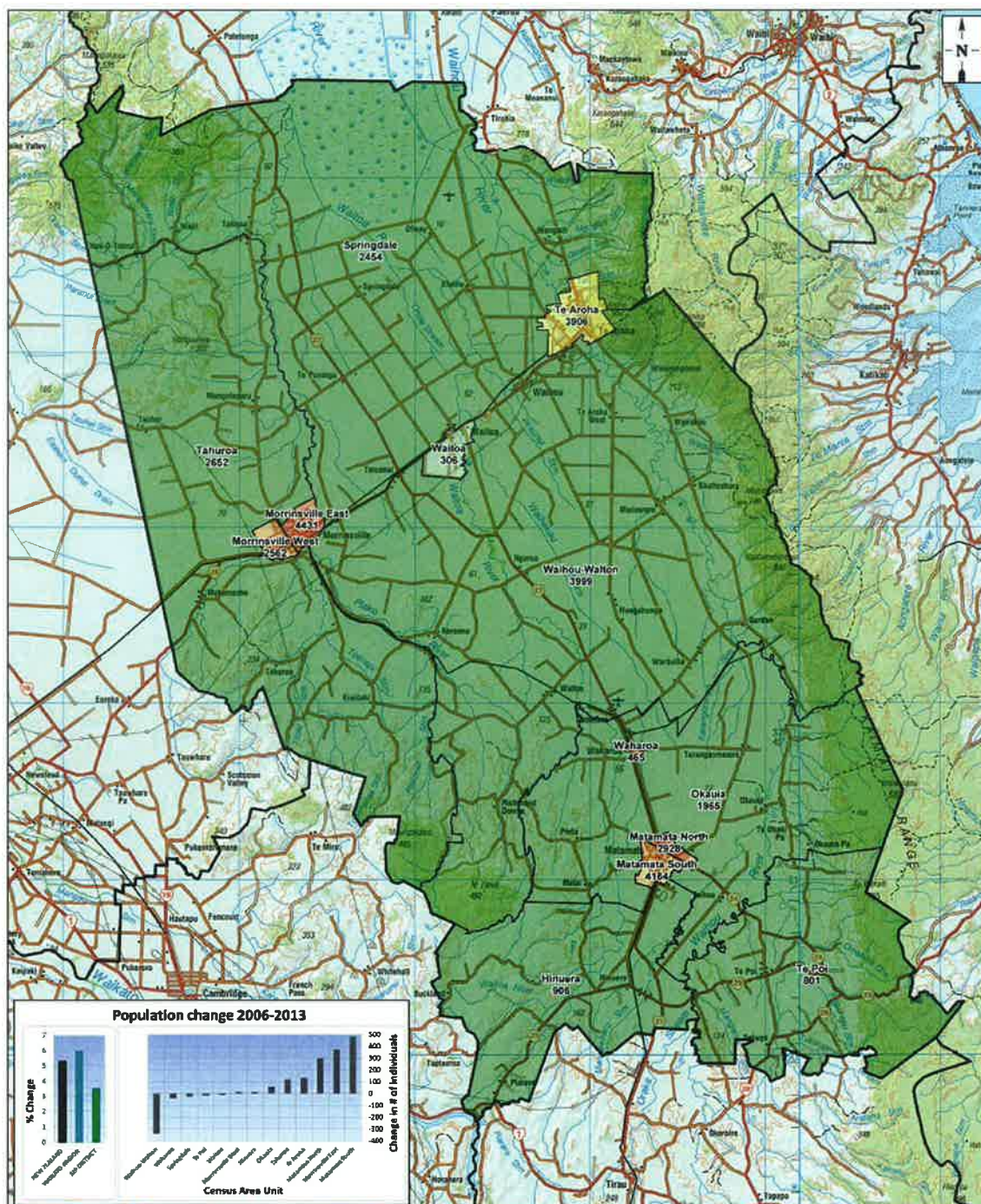


Figure A1.3 Matamata-Piako Area Units with 2013 usual resident population count and density shown (green = low density, red = high density)

Hazards

Mostly flooding and also many Hazchem sites including large employers with Hazchem materials on-site and in transit on road and rail corridors. Winds, in particular the “Kaimai Buster” in the lee of the Kaimai ranges during strong easterlies. Also:

- Animal epidemic
- Earthquakes (1972)
- Ashfall (distal source)
- Geothermal areas

Large institutions with people in their care

Many working in large facilities (including sites with hazchem):

- Silver Fern Farms
- Dairy Factories – Waihou, Tatua and Morrinsville
- Inghams poultry processing – two sites
- Pohlen Elderly Care Hospital – Te Aroha
- Schools
- Rest Homes and Residential Villages

Pockets that may need specific alerting

- Morrinsville
 - Lots of workers (>1,000) under the care of large institutions
 - Large events = Morrinsville Fireworks (~5,000 people), A&P Show and Summer Harness Raceday
- Matamata
 - High proportion of elderly residents (>25%)
 - Large events = Christmas Races and A&P Show
- Te Aroha
 - High proportion of elderly residents (>25%)
 - Large events = Aroha “Cruise in” Annual Motorcycle and Classic Car Poker Run (~3,000 people) and A&P Show
- Waharoa
 - Low access to telecommunications (excl. mobile)
 - Culturally diverse - high Māori population, lower socio-economic area
- Hinuera
 - Hobbiton – up to 4,500 tourists per day
 - Poor mobile phone coverage
- Other areas with lots of workers (>1,000) under the care of large institutions
 - Waitoa
 - Waihou-Walton
- Other areas with patchy, poor or no mobile phone coverage
 - Te Tapui/Maungakawa foothills
 - Lower slopes of Kaimai Range

Groups that may need specific alerting

- Tourists/cyclists on the Rail Trail – Te Aroha to Paeroa
- Transients (tourists and people on highways especially) – highways can be considered a ‘pocket’ to some degree.

Telephone Access

Telephone household (usually occupied private dwellings) access statistics for Matamata-Piako District from 2013 census:

- Percent of households with access to mobile phones: 84%
 - Coverage issues mentioned in workshop:
 - Not really a problem in most areas but patchy in some valleys – Spark generally has good coverage.
- Percent of households with access to landline phones: 84%
- Percent of households with no access to telecommunications: 2%

A1.4 OTOROHANGA DISTRICT

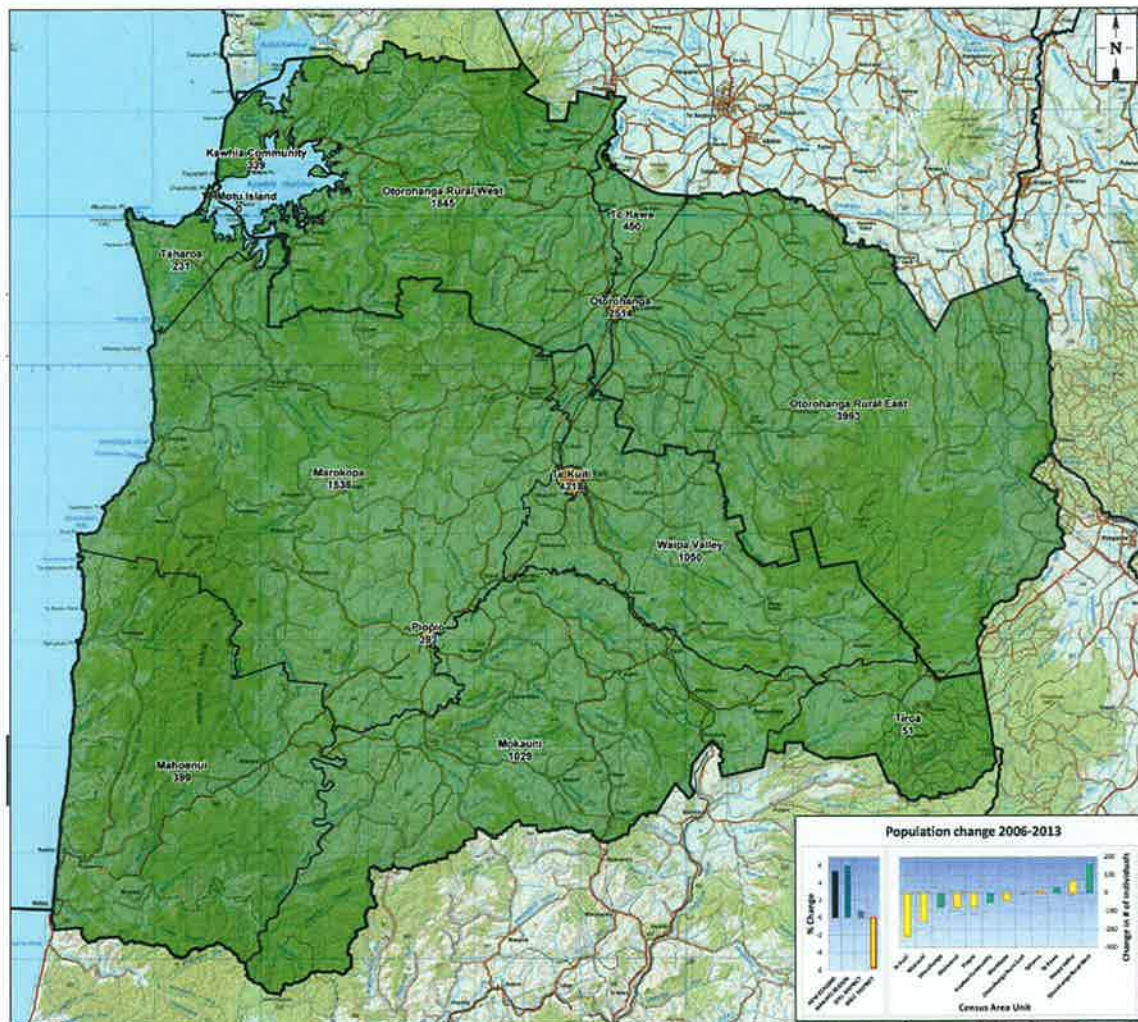


Figure A1.4 Otorohanga and Waitomo Districts Area Units with 2013 usual resident population count and density shown (green = low density, red = high density).

Hazards

- Flooding
- Coastal Erosion
- Landslides
- Coastal Inundation/Tsunami
- Ashfall (distal source)
- Lifelines failures/incidents (Highways, rail, power, water, gas)

Institutions with people in their care

- Waikeria prison is well connected with robust systems.
 - Has a direct link to CDEM – Martin Berryman – via phone
- Largest school is Otorohanga High School. There are a few rest homes.
- Large public events include the Kai festival in Kawhia with about 3000-4000 people attending in February.
- Waitomo caves – thousands of visitors per day travel through the district to get to the caves (just over the district boundary in Waitomo).

Pockets that may need specific alerting

- Kawhia/Aotea (not particularly vulnerable other than being isolated though.)
 - High proportion of elderly residents (>25%)
 - Large volumes of tourists in the summer holiday peak season (mostly domestic but some foreign)
 - Culturally diverse: >50% of residents identify themselves as being of non-European descent
 - Large events – Kai Festival
 - Patchy mobile phone coverage
- Other areas with poor mobile phone coverage
 - Hill country in between Otorohanga town and Kawhia (incl. SH31) – Otorohanga Rural West
 - To the east and south of the district (but is sparsely populated) – Otorohanga Rural East

Groups that may need specific alerting

- Transients on SH3 – travellers heading to and from Taranaki and Southern North Island and to Ski-fields on Ruapehu. Tourists travelling to Waitomo Caves.
- New residents – in 2006 37% of current (2013) usual residents lived in another NZ district and 3% lived overseas.
- High Māori population in western/coastal areas

Telephone access

Telephone household (usually occupied private dwellings) access statistics for Otorohanga from 2013 census:

- Percent of households with access to mobile phones: 82%
 - Coverage issues discussed in workshop
 - Younger populations have a higher uptake of smartphones than older populations, Telco companies are pushing smartphone uptake so there is an increase, but there would be fairly poor access in some areas
 - It is estimated Otorohanga District has better than 50% coverage as there aren't as many isolated populations. Noted that coverage is more important than access to a mobile phone here when considering census data as those with access to a mobile phone often only have coverage and use it when in town. Landline coverage is very good.
- Percent of households with access to landline phones: 81%
- Percent of households with no access to telecommunications: 2%

A1.5 SOUTH WAIKATO DISTRICT

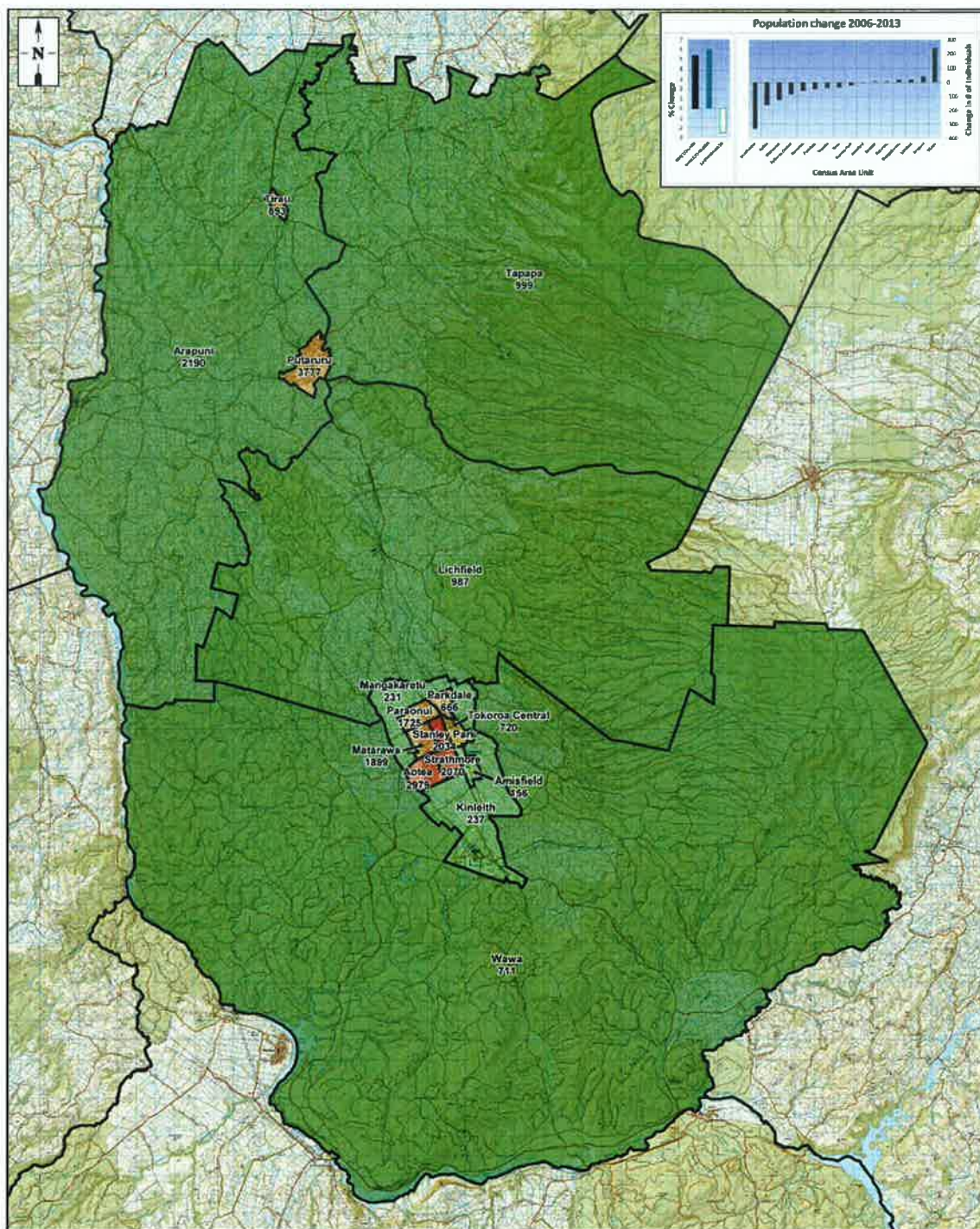


Figure A1.5 South Waikato District Area Units with 2013 usual resident population count and density shown (green = low density, red = high density).

Hazards

- Hazchem incidents from large industrial sites – e.g., Chlorine Leak at Kinleith Mill
- Rural Fire
- Biological/Animal epidemic
- Volcanic ashfall (distal source)
- Lifelines failures/incidents (Highways, rail, power, water)

Institutions with people in their care

- Lichfield Dairy Factory
- Kinleith Mill
- Forestry companies
- Schools and some camps along the Waikato River
- Waratah New Zealand

Pockets that may need specific alerting

- Tokoroa Central and Stanley Park
 - Relatively low access to telecoms (excl. mobile phones).
 - Culturally diverse: >50% of residents identify themselves as being of non-European descent (mostly Māori and Pacific Peoples)
- Area units with patchy, poor or no mobile phone coverage (mostly rural farmland, exotic forestry or conservation estate.)
 - Wawa
 - Lichfield
 - Tapapa
 - Arapuni
- Area units that are culturally diverse (>50% of residents identify themselves as being of non-European descent – mostly Māori and Pacific Peoples)
 - Strathmore
 - Aotea
 - Matarawa
 - Parkdale
- There are several retirement villages (Putaruru, Tokoroa). There is a residential village of intellectually disabled people in Tokoroa. These can be handled separately.

Groups that may need specific alerting

- Some recent changes in rural areas with forestry to dairy conversion – leads to population density increases
- Transients – Some community events and hard to reach people on river trails and riverside camping areas. A lot of travellers on SH1.

Telephone access

Telephone household (usually occupied private dwellings) access statistics for South Waikato District from 2013 census:

- Percent of households with access to mobile phones: 83%
 - Coverage issues discussed in workshop
 - No locations with poor access to mobile phones
 - Most residential areas and areas close to the main highways have reasonably good mobile phone coverage
 - Areas with patchy, poor or no coverage are mostly rural farmland, exotic forestry or conservation estate
- Percent of households with access to landline phones: 78%
 - Tokoroa Central 65%
 - Stanley Park 70%
- Percent of households with no access to telecommunications: 3%
 - Stanley Park 5.5%
 - Tokoroa Central 4.7%

A1.6 TAUPO DC

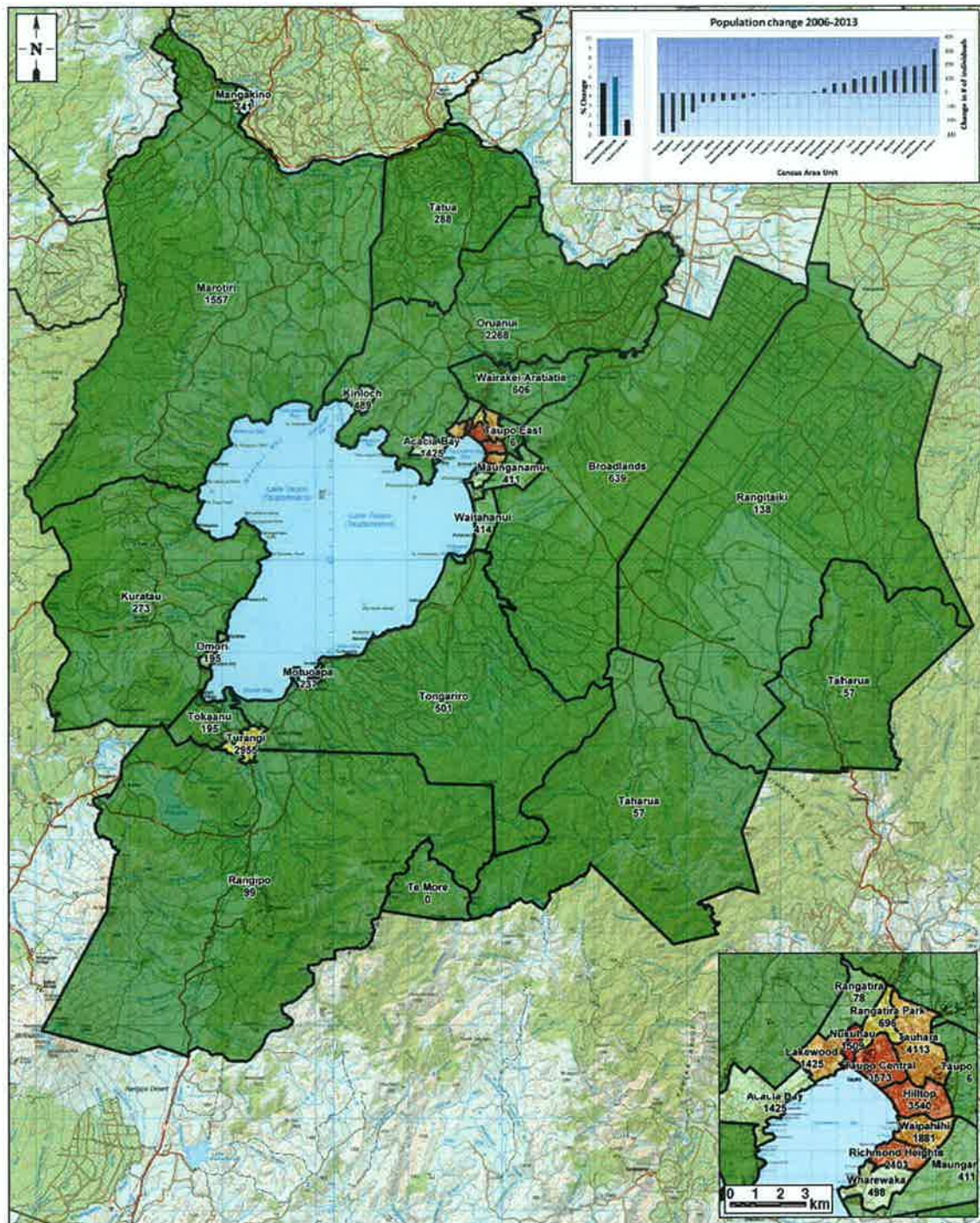


Figure A1.6 Taupo District Area Units with 2013 usual resident population count and density shown (green = low density, red = high density).

Hazards

- A range of hazards possible, especially:
 - volcanic
 - meteorological
 - flooding
 - geophysical (landslides)
 - geothermal
 - earthquakes

Existing Systems in Use

- Natural warnings – actively promoted
 - Waihi Village landslide scenario
 - Local geothermal eruption or subsidence
 - Eruption columns from volcanoes
- Websites (Taupo DC, Chamber of Commerce, Enterprise Great Lake Taupo)
- Email distribution lists
 - Waihi Village landslide scenario
 - All tourist accommodation providers – PIM uses
- Independent Self Maintained Networks
 - Neighbourhood Watch
 - Potential to fleetlink radio into all commercial trucks in district via truckstops
- Electronic Billboards
 - NZTA arrangement for fixed billboards
 - Mobile arrangement (through contractors?)
- Helicopter PA
- Mobile PAs
 - Rural Fire (8)
 - One on CDEM Ute
- Radio
 - MoU – within an hour to get messages out
 - All local radio stations
 - Includes 2 x Iwi radio stations
 - CDEM Sting sound
 - Media Releases (Radio, less likely TV)
- Taupo DC Facebook (1453 likes)
- Dedicated CDEM Facebook (682 likes)
- Dedicated CDEM Twitter (574 followers) – Used for alerts only
- Stakeholder text distribution lists
- Phone Trees
 - Volcano – Te Maari scenario (Bub Smith)
 - ESOL (English for Speakers of Other Languages) group contacts – Also radio broadcasts.
 - Schools

- Fax to schools
- Dedicated CDEM Siren (Waihi Village)
- Marine radio
Direct links to DIA Harbourmaster

Independent Self-maintained networks

- Neighbourhood watch
- Truckstops
- Neighbourly App
- Logging contractors
- Rangitaiki Pub
- Lions and Rotary Clubs
- Iwi
- Lochnivar Station
- Local CDEM links in Omori and Kinloch

Institutions with people in their care

- Two prisons
- Hospital
- Mill
- Geothermal power stations
- Four large rest-homes
- Camp grounds
- Conferences and sporting events very significant
 - CDEM has direct existing connections via events managers
- Tourist operators
- Forestry companies/Logging contractors
- Marae

Pockets that may need specific alerting

- Tokaanu
 - High proportion of elderly residents (>25%)
 - Patchy, poor or no mobile phone coverage
 - Popular with transients
 - Culturally diverse (>50% of residents identify themselves as being of non-European descent)
- Omori
 - High proportion of elderly residents (>25%)
 - Patchy, poor or no mobile phone coverage
 - Popular with transients

- Wairakei-Aratiatia and Taupo Central
 - Lots of workers (>1,000) under the care of large institutions
 - Popular with transients
 - Popular for hosting large events
- Taharua and Rangitaiki
 - Relatively low access to mobile phones
 - Patchy, poor or no mobile phone coverage
- Tongariro and Rangipo
 - Patchy, poor or no mobile phone coverage
 - Popular with transients
 - Culturally diverse (>50% of residents identify themselves as being of non-European descent)
- Kuratau
 - Patchy, poor or no mobile phone coverage
 - Popular with transients
- Turangi
 - Popular with transients
 - Culturally diverse (>50% of residents identify themselves as being of non-European descent)
- Tongariro National Park
 - Patchy, poor or no mobile phone coverage
 - Popular with transients
 - Popular for large events
- Lake Taupo and its shores
 - Popular with transients
 - Popular for large events
- Other area units with a high proportion of elderly residents (>25%)
 - Lakewood
 - Rangatira Park
 - Wharewaka
- Other area units with patchy, poor or no mobile phone coverage
 - Broadlands
 - Kuratau
 - Marotiri
 - Tatua
 - Oruanui
 - Places specifically mentioned at the workshop included:
 - Waihi Village and other holiday settlements along the western bays
 - Napier-Taupo Highway (SH5) black spot (both radio and mobile). HB have put a new repeater in.
 - Hatepe Hill Plateau
 - Poihipi Road

- Whangamata Road
- Western Bays Road (SH32)
- Hatepe Village (Dam above it) – Population swells into the hundreds during the summer holiday season.
- Other areas especially popular with transients (tourists/travellers/commuters)
 - Orakei Korako
 - Kinloch
 - Taupo Airport
 - Accacia Bay
 - Motuoapa
 - Local rivers and streams for fishing
 - State Highways (1, 5, 32, 47 and 46)
- Other Area units that are culturally diverse (>50% of residents identify themselves as being of non-European descent).
 - Waitahanui
 - Mangakino
- Other areas popular for large events
 - Taupo motorsport park and raceway
 - The roads around Lake Taupo

Groups that may need specific alerting

- Transients
 - December to mid-February population swells by thousands, mostly New Zealanders (estimated 90–100% increase in population)
 - Campgrounds are busier for longer than this, freedom campers are especially hard to reach
 - Overseas visitors usually are backpackers
 - People on remote mountain bike tracks. Uncertain how to reach them if in a mobile phone black spot.
 - An estimated 40% of houses in Taupo District are holiday homes
 - Large influxes of visitors for sports events and conferences
 - Many of these transients may be unfamiliar with local hazards and systems
- English as a Second Language
 - Some immigrant populations recently arrived to help in the dairy sector (low English levels)
- Council Iwi liaison officer works directly with local Iwi in events
- Remote forestry workers
- New residents – in 2006 32% of current (2013) usual residents lived in another NZ district and 6% lived overseas – significant for public education

Telephone Access

Telephone household (usually occupied private dwellings) access statistics for Taupo District from 2013 census:

- Percent of households with access to mobile phones: 85%
 - Taharua 37.5%
 - Rangitaiki 44.4%
 - Coverage issues discussed in workshop
 - Western Bays patchy coverage with high numbers of transients during summer
 - Rangitikei – no coverage
 - State H/Way 5 poor coverage
 - Mangakino poor coverage and fewer landlines
- Percent of households with access to landline phones: 81%
 - Rangipo 44.4%
 - Tokaanu 59.1%
 - Taharua 62.5%
 - Waitahanui 63.8%
 - Mangakino 66%
 - Wairakei-Aratatia 68.9%
 - Tatua 69%
- Percent of households with no access to telecommunications: 3%
 - Mangakino 7%
 - Waitahanui 6.4%
 - Turangi 4.3%

A1.7 THAMES COROMANDEL DC



Figure A1.7 Thames-Coromandel District Area Units with 2013 usual resident population count and density shown (green = low density, red = high density).

Hazards (and implications)

Most likely Faster Onset, localised and widespread hazards. Local or regional source Tsunami is the primary concern in terms of consequence. Whole district is prone to flash flooding and debris flow/landslides as there is a short distance between the hills and the sea. Slips causing road closure are very common. Also:

- Severe weather
- Storm surge/coastal erosion
- Earthquake
- Ashfall – distal source
- Hazardous sites
- Animal disease
- Cascading lifelines failure – power outages to isolated communities in storms

Large institutions with people in their care

- DOC
- Thames Hospital
- Thames Mill
- Schools
- Tourist operators
- Wintec
- Language School
- Toyota Thames
- Whitianga Fish Processing
- Forestry
- Retirement Villages and Rest Homes
- Prices Foundry
- Supermarkets and Warehouse

Pockets that may need specific alerting

- Moanataiari (Thames)
 - High proportion of elderly residents (>25%)
 - Lots of workers (>1,000) under the care of large institutions
 - Especially popular with transients/tourists
 - Hosts large events
- Whangamata
 - High proportion of elderly residents (>25%)
 - Especially popular with transients/tourists (especially in summer)
 - Hosts large events (“Beach Hop” in Mar/Apr >100,000 people)
- Whitianga and Coromandel Town
 - Especially popular with transients/tourists
 - Hosts large events

- Other area units with a high proportion of elderly residents (>25%)
 - Parawai
 - Te Puru-Thornton Bay
 - Tairua
 - Pauanui Beach
- Other areas with patchy, poor or no mobile phone coverage
 - Most rural and conservation areas including many places along SH25 and 25A.
 - Most lowly populated coastal areas including some places that are popular with transients such as Cathedral Cove.
- Other areas especially popular with transients/tourists
 - Most of peninsula but especially coastal settlements and beaches, hiking and mountain biking trails in the valleys and ranges, and state highways.
- Other areas hosting large events
 - Hikuai (Kauaeranga Valley)
 - Coastal roads and remote inland trails – Sports events (cycling, mountain biking, trail running)

Groups that may need specific alerting

- ESOL (English as a second language) tourists
- Freedom campers group all year round, actually within ESOL Tourists and NZ tourists. Remaining barrier is simply a remote camping pocket coverage issue – links to DoC rangers in remote areas will be valuable
- Large numbers of commuters between towns
- Elderly group in most coastal towns
- New residents – in 2006 31% of current (2013) usual residents lived in another NZ district and 5% lived overseas – significant for public education

Telephone Access

Telephone household (usually occupied private dwellings) access statistics for Thames-Coromandel District from 2013 census:

- Percent of households with access to mobile phones: 81%
 - Coverage issues discussed in workshop
 - Access is OK. Coverage is the problem.
 - Elderly and rural residents tending not to buy smartphones but almost everyone else is.
 - Power outages relatively common and there is a lack of backup at some mobile repeater sites
 - Coverage is poor in most rural and conservation areas including many places along SH25 and 25A and also in most lowly populated coastal areas including some places that are popular with transients such as Cathedral Cove.
- Percent of households with access to landline phones: 82%
- Percent of households with no access to telecommunications: 3%

Other information

Other detailed information is listed below as there was too much to put in section 5.8.

Independent Self-maintained networks

Alerting via self-maintained networks (e.g., rural fire, neighbourhood watch, religious groups), the following opportunities are highlighted:

- Surf Lifesaving
- Coastguard
- Rotary
- DOC
- Federated Farmers/Rural Support Trust
- Iwi phone trees
- Schools, text lists etc.
- Religious Groups
- Neighbourhood Watch in some areas
- VRF Force
- LSAR
- Emergency services HF coverage, including DOC, Police, SAR, Amateur Radio etc.
 - HF on way out, VHF replaces all of these?

Existing Alerting Systems and notes on each system

- Radio
 - Iwi, Gold and Coromandel FM. Locals don't tend to listen to Auckland or national radio stations.
 - Many people listen to radio over satellite TV, requires power
 - Mediaworks, Coromandel FM – more robust repeaters + generators – does go down in power outages
 - More repeaters are required
 - Gaps in radio coverage – geographic pockets
- Websites (TCDC, Thames Valley CD)
- Facebook (TCDC, 2167 likes)
- Twitter (TCDC, 692 followers; Thames Valley CD 318 followers)
- Email subscription service
- SMS-PP subscription “follow tc_dc” – generic TCDC topics published though
- Fixed tone only sirens (most owned by NZFS/VRFF, 27 of 30). Some not integrated into CDEM alerting system
 - Contrary to national standard meaning and tone – meaning for TCDC sirens is “evacuate” rather than “seek further information”, and there are multiple, non-compliant tones
 - Rely on power
 - Thames siren coverage patchy with wind. Not audible indoors unless close.
 - Whitianga siren coverage has patchy audibility
 - Double glazing bylaws reducing penetration

- Heads up only – slow response
- TCDC surveyed 2011 – comments from communities can't hear
- Annual siren testing once a year in Sep (fri before DST change). 6 monthly servicing.
- Resource consent limiting at Whangamata
- Models of Maintenance and ownership are not consistent (not all TCDC)
- Single tone on for minimum 10 minutes is just for Tsunami
- False alarms cause CDEM headaches
- Emergency services PA, only on rural fire trucks
- Regional flood warning system (SMS-PP and email)
- Route Alert (CDEM and council staff undertake limited area door-knocking)
 - Especially for flooding around the Thames Hospital Zones
- Natural warnings – public education materials (“Know the signs”)
 - Tsunami signs exist in ‘at-risk areas’ – Larger communities on east coast.
 - Problem is that the sign is similar to the Pacific Coast Highway sign
 - Some communities have maps indicating 20m contour. All education material is focussed around tsunami risk nature signs. Open days are used to get message out. Fridge magnets with warning signs and an attached notepad have been issued. All hazards brochures were delivered to camp grounds. All schools are required to have an all hazards plan – MinEdu. Noted that Shakeout isn't a good time for schools as they are right in the middle of exams. Day care facilities well set up for an incident but want a call from CDEM which is a bit difficult.
- Use VHF and UHF – links to DOC
- Mobile PAs
 - TCDC project
 - Compliance Officer 4WD Vehicles
 - Targeting remote areas
 - Triggering mechanism likely to be phone calls to staff. 24/7 response expectation?
 - MPI (Fisheries Officers) - 2+ vehicles with lights and loudspeakers
- Rural fire
 - Local brigades part of response plans
 - Note they rapidly have response, not alerting, commitments during a crisis

Other key points noted from the workshops

- Sirens in use (<30 operational) – see existing system notes
- Note mobile phones rely on Waiheke Island repeater?
- Huge transient numbers
 - 130k-150k people at summer peak, most from Auckland, Waikato and Tauranga (mostly English speaking New Zealanders)
 - A few thousand international tourists all year round –notably Germans and Chinese
 - Social risk – high if international visitors lost.

- Tsunami hazard sets the performance standard for CDEM but less effective for other TAs
- Roads can often be closed
- Absentee owners significant
 - Aucklanders will expect the Auckland CDEM app and know a siren as 'all clear' when in fact it means the opposite in the Coromandel.
 - Usually resident pop can be very disperse as a result of widespread holiday homes
- Schools and daycares required to evacuate
 - Many hope for a phone call instructing evacuation from CDEM

A1.8 WAIKATO DISTRICT

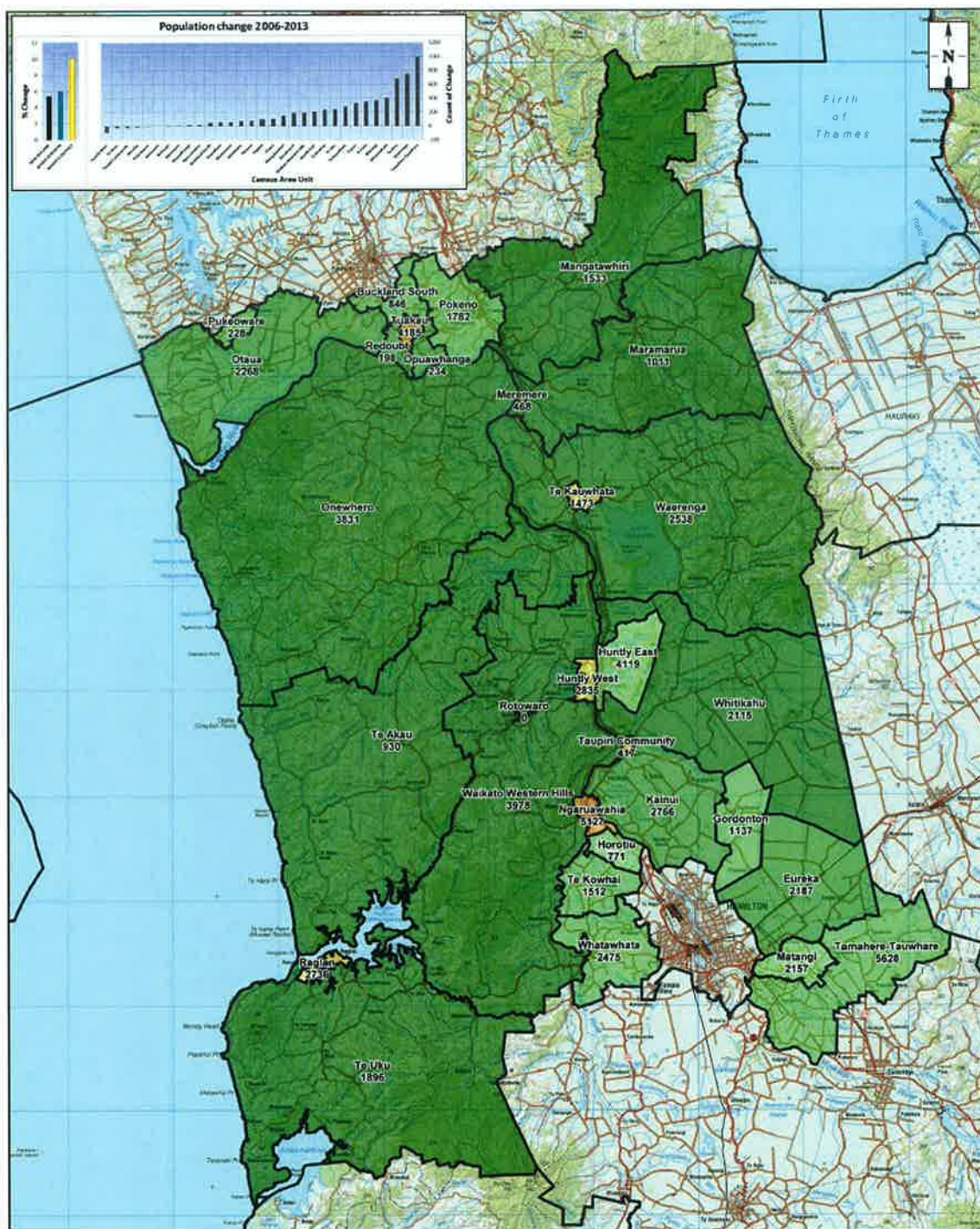


Figure A1.8 Waikato District Area Units with 2013 usual resident population count and density shown (green = low density, red = high density).

Hazards

- Dam failure (Karapiro 40 minutes away)
- Potential isolation at Port Waikato (one road in and out)
- Hamilton Airport – Flight path over Tamahere
- Recently identified Hamilton fault (extends to Gordonton)
- Infrastructure failure or sabotage
- Industrial incident, especially Huntly Power Station
- Rural fire including peat fires
- Highway 22 – Landslide and isolation risks
- Mine collapse or burning
- Tsunami (west coast)
- Ashfall – distal source
- Volcanic event in Auckland would cause major evacuation impact in Waikato
- Cyclone/Storms
- Flooding (last serious flooding was 1958)
- Animal disease
- Both short lead-in time and long lead in time events are important
- Both local and widespread events are important
- **Agreement multipliers for hazards not necessary**

Institutions with people in their care

- Port Waikato – School Camp
- Christian Youth Camps
 - Raglan – Karioi Camp Karakariki
 - Ngaruawahia Huntly Lake Pukemiro Camp
- Turangawaewae Marae – Koroneihana, Poukai events, Marae based events
 - 36 Marae within the Waikato district
- Large influx of population when events held at Turangawaewae Marae
- Major Regatta – March
- Hopuhopu – Tainui games, Māori Touch Nationals
- Springhill Prison
- Affco and other large industrial sites in Horotiu
- Huntly Genesis Energy Power Station
- Quarries and Mines
 - Huntly
 - Solid Energy
 - Stephenson's
 - Puke Coal
- Yashilli Dairy Factory
- Residential Rest Homes
 - Tamahere - Eventide Rest Home
 - Te Kowhai

- Aparangi, Te Kauwhata,
- Hospital – Raglan residential care
- Kimihia Home, Huntly
- Jellicoe Home – Tuakau
- Pensioner Flats
 - Tuakau
 - Huntly
- Hampton Downs – Raceway, public events
- Council camping areas
 - Ngaruawahia Domain
 - St. Stephen's car park, Tuakau
 - Lake Hakanoa Motor Caravan Park
- Raglan Kopua Holiday Park Bryant Home – Raglan Children Camp
- Hakarimata Tracks – estimated to be used by over 400 people per day during the peak season

Pockets that may need specific alerting

- Te Kauwhata
 - High proportion of elderly residents (>25%)
- Meremere and Huntly West
 - Relatively low access to telecommunications (excl. mobile phones)
 - Culturally diverse (>50% of residents identify themselves as being of non-European descent)
- Te Akau
 - Relatively low access to mobile phones
 - Patchy, poor or no mobile phone coverage
- Raglan
 - Especially popular with transients (tourists, travellers, commuters)
 - Hosts large events
- Ngaruawahia
 - Culturally diverse (>50% of residents identify themselves as being of non-European descent)
 - Hosts large events (Turangawaewae Marae)
- Waerenga
 - Patchy, poor or no mobile phone coverage in east
 - Host large events (Hampton Downs motorsport park and drag strip)
- Other area units with patchy, poor or no mobile phone coverage
 - Onewhero (incl. Port Waikato)
 - Waikato Western Hills
 - Te Uku
 - Mangatawhiri
 - Maramarua
 - Waerenga

- Eureka
 - Lots of workers (>1,000) under the care of large institutions
- Other areas especially popular with transients (tourists, travellers, commuters)
 - State highways (1, 2, 23, 39)
- Other area units that are culturally diverse (>50% of residents identify themselves of being of non-European descent)
 - Taupiri Community (Māori/Pacific Peoples)
- Other areas that host large events
 - Kainui (Hopuhopu events and regatta)
 - Several Christian youth camps (see institutions...)
- Other pockets noted at workshop
 - Department of Conservation Land – Pirongia/Whatawhata
 - Maramarua Village – Poor Mobile phone reception
 - Aotea Harbour – Sparse population and access can be difficult

Groups that may need specific alerting

- Large transient influxes in some locations e.g., Raglan (seven month summer season, population quadruples; and doubles seasonally)
 - Many campgrounds (including DOC) with basic facilities and no-one on site – most have poor mobile coverage across the district
- Some substantial elderly residential villages across the district
- Seasonal workers from overseas (Viet Nam, India etc) on rural properties around Gordonton (100s)
- Transients and cargo on highways 1,000's of vehicles per hour at peak times
- Growing faster than national average, especially in the north of the district
- Tamahere – major growth, more than another 1,000 people over 8 years
- Areas where English for Speakers of Other Languages may be an issue include Yashili Dairy Factory in Pokeno, workers to build the factory
- *New residents – in 2006 37% of current (2013) usual residents lived in another NZ district and 4% lived overseas – significant for public education*

Telephone Access

Telephone household (usually occupied private dwellings) access statistics for Waikato District from 2013 census:

- Percent of households with access to mobile phones: 84%
 - Te Akau 57%
 - Coverage issues discussed in workshop
 - Port Waikato – no mobile phone coverage, one road in, one road out, 350 population, not everyone has a landline, low socio-economic issues have an effect on communication availability/access.
 - Poor coverage: Miranda Glen Murray, Pukemiro, Waikaretu, Onewhero, Glen Afton, Whale Bay – Raglan, Mangatangi

- Percent of households with access to landline phones: 83%
 - Meremere 43%
 - Huntly West 55%
- Percent of households with no access to telecommunications: 2%
 - Meremere 9.5%
 - Huntly West 7%

A1.9 WAIPA DC

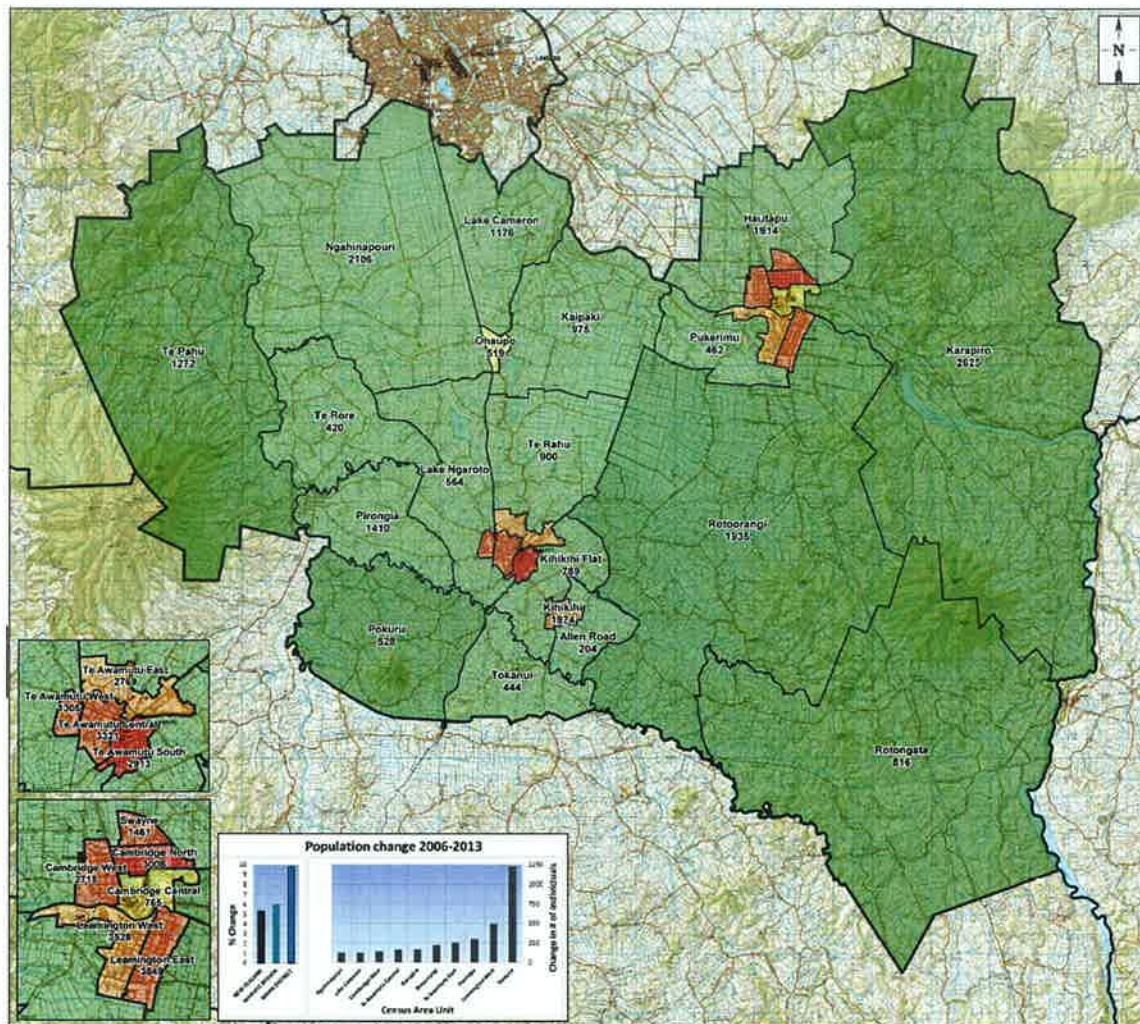


Figure A1.9 Waipa District Area Units with 2013 usual resident population count and density shown (green = low density, red = high density)

Hazards

- Severe weather (two recent tornado events near Cambridge)
- Flooding (especially near the Waipa River)
- Earthquakes
- Ashfall – distal sourced
- Animal disease
- Lifeline utility failures
- Fire (Maungakawa Hill)
- Dam Break (Karapiro)
- Hazchem incidents (State Highways and Main Trunk Rail Line)

Institutions with people in their care

- Mystery Creek Events Centre
- Velodrome – Cambridge
- Rowing – Lake Karapiro
- Harness Racing – Cambridge
- Equestrian – Kihikihi
- Three large high schools and many intermediate/primary schools

Pockets that may need specific alerting

- Cambridge
 - High proportion of elderly residents (>25%)
 - Especially popular with transients (tourists, travellers, commuters)
 - Hosts large events (Velodrome, water sports on Lake Karapiro nearby, Harness Racing, Fireworks)
- Te Awamutu
 - Lots of workers (>1,000) under the care of large institutions
 - Especially popular with transients (tourists, travellers, commuters)
- Ohaupo
 - High proportion of elderly residents (>25%)
 - Hosts large events (fireworks)
- Lake Karapiro, Mystery Creek Events Center, Pirongia
 - Especially popular with transients (tourists, travellers, commuters)
 - Hosts large events
- Area units with relatively low access to telecommunications (excl. mobile)
 - Tokanui
- Area units with patchy, poor or no mobile phone access (all in the hill country)
 - Te Pahu
 - Karapiro
 - Rotoorangi
 - Rotongata
- Other areas with lots of workers (>1,000) under the care of large institutions
 - Hautapu

- Other areas especially popular with transients (tourists, travellers, commuters)
 - Hamilton Airport
 - Maungatautari
 - Pirongia Forest Park
 - State Highways (1, 3, 39)
 - Arapuni Road
 - Owairaka Valley/Waipapa Road
- Other areas that host large events
 - Kihikihi - Equestrian

Groups that may need specific alerting

- Many transients unfamiliar with local hazards and systems, especially at events and travelling on the highways and local roads
- New residents – in 2006 32% of current (2013) usual residents lived in another NZ district and 5% lived overseas – significant for public education

Telephone Access

Telephone household (usually occupied private dwellings) access statistics for Waipa District from 2013 census:

- Percent of households with access to mobile phones: 85%
 - Coverage issues discussed in workshop
 - People might have smartphones but doesn't mean they use them in a smart way – may not have notifications, data or wifi turned on
 - Cambridge has patchy coverage for Vodafone
 - Owairaka valley area patchy coverage (farmers and climbers)
 - In rural areas sometimes there is coverage on the roads but not at the house
- Percent of households with access to landline phones: 87%
 - Tokanui 67%
- Percent of households with no access to telecommunications: 1%

A1.10 WAITOMO DC

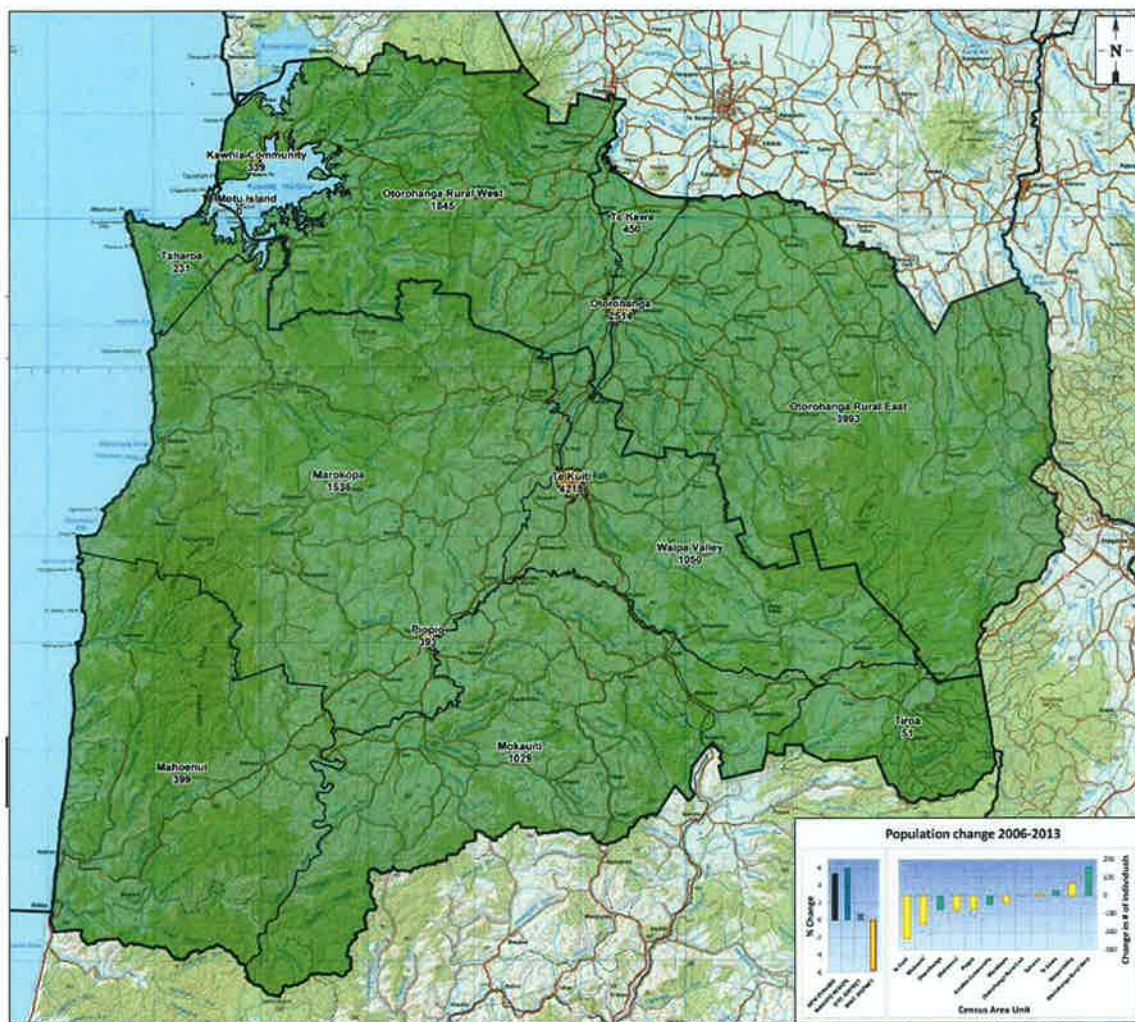


Figure A1.10 Waitomo and Otorohanga Districts Area Units with 2013 usual resident population count and density shown (green = low density, red = high density)

Hazards

- Flooding
- Coastal Erosion (Mokau/Awakino/Marokopa)
- Landslides
- Coastal Inundation/Tsunami
- Ashfall (distal source)
- Lifelines failures/incidents (Highways, rail, power, water, gas) – SH3 via the Awakino Gorge is a key transport link to New Plymouth with no alternative route from the north. It is often closed due to accidents and landslides.

Institutions with people in their care

- Largest school is Te Kuiti High. One hospital in the district – Te Kuiti hospital. A few rest homes.
- Waitomo caves – thousands of visitors (including large numbers of international tourists) per day.

Pockets that may need specific alerting

- Te Kuiti
 - 5% of households with no access to Telecoms
 - Large public events – sheep muster Te Kuiti – late march/early April 3,000–4,000 people.
- Waipa valley
 - Crusader Meats use islander workers.
 - Despite good household telecoms access only areas close to SH3 have mobile phone coverage.
- Mokauiti
 - 60% of households with no mobile access
 - 4% of households with no access to telecoms
 - Generally poor mobile phone coverage except near Piopio and SH3.
- Mahoenui
 - 47% of households with no mobile access
 - Generally poor mobile phone coverage except near some parts of SH3
- Marokopa
 - 31% of households with no mobile access
 - Poor mobile phone coverage except around Piopio, Waitomo Caves and SH3.
- Waitomo Caves – year round attraction with foreign and local tourists, also buses (30–40 per day) on highways to and from Waitomo Caves. Taharoa
 - 32% of households with no landline access
 - Poor mobile phone coverage but high household access to mobile phones indicates it may have a private system provided by NZ Steel – needs checking.
 - large isolated iron sand mining operation – a lot of people travelling in to work each day from other areas
 - Culturally diverse: >50% of residents identify themselves as being of non-European descent
- Tiroa
 - Poor household access to telecoms and mobile phone coverage
 - Small, remote population
 - Pureora mountain bike trail – popular all year round mostly with Aucklanders

Groups that may need specific alerting

- Some dairy farmers in south of district use Philippine labour which explains slightly lower English proficiency in that area.
- Coastal Marokopa and Mokau areas have summer peaks in tourists. Mostly domestic but some foreign tourists.
- Transients (tourists and people on highways especially) – highways can be considered a ‘pocket’ to some degree.

Telephone access

Telephone household (usually occupied private dwellings) access statistics for Waitomo District from 2013 census:

- Percent of households with access to mobile phones: 70% (This is well below the national and regional average).
 - Coverage/access issues mentioned in workshop:
 - Taharoa signal access may be private access provided by the mining company.
 - Younger populations have a higher uptake of smartphones than older populations, Telco companies pushing smartphone uptake so there is an increase in general, but there would be fairly poor access in many areas.
 - There are many areas of limited coverage and there are whole communities in no reception areas. Areas of patchy to no coverage include: Aria (there is VHF coverage there), Mokau, Awakino, Marokopa and Pureora.
 - Most of these areas are not particularly vulnerable to hazards other than being isolated. Farmers who lack coverage and are prone to being isolated are also fairly resilient.
 - For Waitomo District in general it is estimated that ~50% of the usual resident population (about 4,500 people)
 - For Waitomo District in general – 50% of the population (about 4,500 people) are out of coverage areas.
 - Noted that coverage is more important than access to a mobile phone when considering census data as those with access to a mobile phone often only have coverage and use it when in town.
- Percent of households with access to landline phones: 81%
- Percent of households with no access to telecommunications: 4%

A2.0 BASELINE DATA SOURCES

Information on priority hazards in each TA was sourced from the Waikato Regional Council, Waikato CDEM Group and TA reports and websites. Information on alerting systems currently in use in each TA was available from surveys undertaken by GNS Science during development of the updated decision support tool in 2014, and from Waikato CDEM Group from the process of developing the Waikato CDEM Group Warning Systems Strategy 2014–2020.

Where possible, GIS analysis of Census and other data was used to interpret and process the data. For example, population and spatial area data for each census area unit (CAU; generally equivalent to suburbs or localities) was analysed to determine high and low density populations for each CAU in each TA.

The percentage of residents that could speak English was directly available from NZ Census data. Some values for groups with impairments that could inhibit receipt or understanding of warnings were not available. Most likely proxies for these groups based on NZ Census data were identified and tabulated to use as a basis for discussion of such groups in the local workshops.

For sight, hearing and mobility impairment the closest match to this type of information available publicly was considered to be Census NZ data of age bands for each TA and CAU. The proportion of normally resident citizens over the age of 65 was used as a starting value for discussions in workshops.

Access to telecommunications was analysed from two main sources:

1. Coverage maps for mobile phone networks from the websites of the main providers (Spark, Vodafone and 2Degrees)
2. NZ 2013 Census data on household access to mobile and to landline telephones.
 - This was used as a proxy for the proportion of the population with access to telephones, mobiles and landlines at home and is reported for each TA in the results. Network operators' coverage maps have not been used because they are providers' estimation of coverage and there is no reason to expect these are a more accurate approximation of real coverage than the census access data.

A2.1 STATISTICS NEW ZEALAND 2013 CENSUS DATA DISCUSSED

- % of total households in occupied private dwellings with:
 - No access to telecommunications
 - Access to a Mobile Phone
 - Access to a landline telephone
 - Access to the internet
- usually resident population
- number of low density usual residents (<200 people per km²)
- number of high density usual residents (>200 people per km²)
- % population growth since 2006
- % of usual residents that lived in another New Zealand district or overseas in 2006

- % population aged 65 and over
- % population that can speak English
- ethnic diversity
- number of large institutions (over 100 employees)
- area units with over 1000 employees working in moderate-large institutions (50 or more employees per institution)

A2.2 OTHER INFORMATION SOUGHT BEFORE THE WORKSHOPS AND DISCUSSED

- Existing public alerting systems currently in use – case studies of recent use
- Hazard priorities – both natural and anthropogenic
- Spark, Vodafone and 2degrees mobile coverage (available from online maps)
- Number and source of transients during the peak holiday season
- Vulnerable lifeline networks

A2.3 OTHER INFORMATION SOUGHT FROM THE WORKSHOPS

- Budget, for set-up, maintenance and staff time applied to warning systems
- Other systems used not already identified
- Exercise/testing regime of existing systems
- Desired maximum reach of any one system
- Levels of public education/awareness about alerts
- Levels of natural warnings awareness
- Smartphone uptake – old style versus Smartphone
- Landline phone coverage
- Mobile coverage “black spots”
- Communities prone to being isolated due to lifelines outages
- Important lifelines corridors and facilities
- Areas where visitor and tourist numbers are especially significant
- Daily worker migration
- Significant worker commute corridors
- Significant large institutions where workers may be out of reach
- Significant large public events and venues
- Systems that are not likely to be used in the foreseeable future

A3.0 ALERT PROVIDERS

A3.1 NATIONAL MOBILE ALERTING

It is envisioned that at least one (and probably all) of these options will be available for the Waikato CDEM Group within the 2015/16 financial year. All four public app developers (i.e., other than GeoZone) are geo-targeted and are discussing the implementation of Common Alerting Protocol (CAP) as part of a standard New Zealand implementation for all apps, ideally with a single input platform for emergency managers to enter public alerts securely into, which will then go to all apps.

A3.1.1 Emergency Response System alerts

MBIE and Police are leading the emergency response system (ERS) application project – which includes both 111 calling and location-based alerting (service to be established by July 2016). This will provide geo-targeted alerts.

MCDEM is further exploring telecommunications based public alerting options (e.g., mobile device broadcasting). A business case has been provided to Government.

A3.1.2 Auckland CDEM app

CloudM and the Auckland CDEM Group has developed a native Apple iOS and Android app called Civil Defence New Zealand Application. It is available to other regions, currently on a cost-basis. This will provide geo-targeted alerts.

A3.1.3 Google Now

Google Public Alerts via the Google Now app. Google is working directly with GeoNet, MetService and MCDEM to develop alerting. This will provide geo-targeted alerts.

A3.1.4 Red Cross

Red Cross is piloting its Hazard app with Wellington Region Emergency Management Office. It will be available to other regions and will provide geo-targeted alerts.

A3.1.5 Apps by GeoZone (e.g., Campermate)

GeoZone apps are specifically developed to target the camping and international tourist market. They supply their apps when tourists hire vehicles through providers such as Britz, Jucy, Thrifty, Wicked and Maui. Products can deliver geo-targeted push notifications (max 225 characters) to phones with one of the apps installed. The apps are available as native Android and iOS. This is potentially a useful way to reach freedom campers and independent travellers in remote areas. Geo-targeted messages can be delivered 24/7 and translated into French, German or Chinese. GeoZone is also capable of monitoring locations and times of app use and thereby reporting on tourist movements.

A3.1.6 Rural broadband

Rural broadband suppliers can provide internet to smartphones (and thus app connectivity without mobile coverage). Some providers with pricing are listed here: <http://www.therural.co.nz/country-living/rural-broadband-options-in-new-zealand>. Lightwire (<https://www.lightwire.co.nz/rural>) in the Waikato area starts at \$65 per month.

A3.2 RADIO STATIONS

Note that Radio New Zealand National, and other radio stations within the Radio Broadcasters Association, are covered in terms of expectations for alerting by the MCDEM MoU found at:

<http://www.civildefence.govt.nz/assets/Uploads/publications/Radio-MoU-october-2013.pdf>

Further specific aspects of key radio stations mentioned in workshops or apparently available in the region are given here (where comment from those stations was given in response to the project team's enquiry).

A3.2.1 Switch FM

87.8	Switch FM Radio	Community Radio	2010	Frequency was changed to 87.8 in late 2010.
Transmits to: Cambridge – streams online worldwide FM Live DJs? Mon–Fri 8am–12 midday. Tues 5.30pm–7pm. Sunday 10–12 midday. Listenership 1. Target Audience – Cambridge residents plus 2. Listeners – targeting whole community with various shows 3. More people tune in – 8–12midday weekdays 4. Community notices? YES 5. Council, EM CD asked you to put out EM message or information? ??? 6. Could you do this? ??? 7. Preferred method to receive emergency messages. ???				

A3.2.2 Contact FM

88.1	Contact FM	Student Radio	2005
NOT OPERATING AT PRESENT			

A3.2.3 Free FM

89.0	Free FM	Access Radio – Local (Not for Profit)	2012	Free FM is previously known as Community Radio Hamilton and re-launched to 89fm - a full power FM frequency after 21 years of broadcasting on 1206AM and 106.7FM.
Transmits to: From Cambridge to entire Waikato CDEM Group. Bombay Hills – Paeroa – summit of Kaimais – Tirau – Rotorua – beyond Tokoroa – past Te Kuiti FM – Yes gaps where there are hills/ranges e.g., Arapuni Hills, Raglan, Bombay Hills. FM radio is a 'line of sight' broadcasting tool. Live DJs – Yes – only during Breakfast show. Staff are in the studio at all times but most shows are pre-recorded. Some other shows broadcast live – all shows are prepared by community groups e.g., Burmese, Chinese, Health and Disability etc. different languages too. Can break into programming to broadcast emergency messages. Can break remotely into programming to play pre-recorded emergency messages. After Chch they took the initiative and created a better version of the 'Language Line' messaging and sent it to radio stations in Chch as the original version created by Govt(?) was not of broadcasting quality. Listenership 1. Target audience – various niche sectors – don't aim at any particular group as they are 'not for profit' 2. Listeners – don't measure 3. Most people tune in? Breakfast, then evening shows 4. Community notices or messages – yes to various communities 5. Council, emergency services, civil defence etc. asked to put out an emergency message or information – NO 6. Could you do this if you were asked – YES 7. How would you prefer to receive requests and emergency messages phone/email etc. – Phone, followed by txt and/or email				

A3.2.4 Mediaworks stations

92.2	MediaWorks covers: More FM Waikato, LiveSport (AM), RadioSport (AM), The Edge, The Rock, The Breeze, RadioLive, MaiFM, George, The Sound, Hauraki, The Hits, The Coast	Adult Contemporary	1999	
Transmits to: Whole of Waikato. AM and FM – no coverage gaps Live DJs? Varies with each station. 5am–12 midnight, 24/7 music, can be broken into to go local Listenership 1. Target Audience – cover everyone with all stations above. Community based, female skewed. The Edge is most listened to – no live DJs. 2. Listeners – whole of Taranaki plus... 3. More people tune in – Breakfast show then afternoon Drive show. 4. Community notices? YES on radio and facebook and webpage 5. Council, EM CD asked you to put out EM message or information? YES, strong relationship with CDEM and councils. 6. Could you do this? YES 7. Preferred method to receive emergency messages. Mobile phone best then txt, email.				

A3.2.5 Nga Iwi FM

92.2	Nga Iwi FM	Hit Music/Urban/Iwi	1991
Transmits to: Coromandel, Kaiaua, Ngatea, Waiomu, Matarangi, Mangatangi, Tapu, Waitakaruru, Huntly Maramarua, Te Aroha, Waihi, Hauraki Plains, Miranda, Thames, Paeroa. FM – no coverage gaps Live – DJs 7am–6pm. 24/7 music Listenership 1. Target Audience – Hauraki people – South Auckland – Huntly. Teens to 60s 2. Listeners - ~5000 3. More people tune in from 1pm – 6pm 4. Community notices? YES 5. Council, EM CD asked you to put out EM message or information? YES 6. Could you do this? YES 7. Preferred method to receive emergency messages. Phone best then txt, email.			

A3.2.6 Tainui FM

95.4	Tainui FM	Urban/Iwi	1989	1989–1993 Te Reo Irirangi O Tainui 1993–2000 Tainui FM 2000–2011 Radio Tainui 2011 Tainui FM
Transmits to: Entire Waikato CDEM Group FM – 3 frequencies because of ranges/hills. Gap in South Auckland Live DJs – 7am–9pm. 9pm–7am automated but can be contacted to broadcast emer. messages Listenership 1. Target Audience – Waikato Tainui tribal members + anyone else 2. Listeners - ~ assume Tainui iwi but not sure of total number 3. More people tune in from – Breakfast 6–10am and Drive 2–6pm 4. Community notices? YES – local schools, marae, sporting groups 5. Council, EM CD asked you to put out EM message or information? YES – water use, water pipe damage 6. Could you do this? YES 7. Preferred method to receive emergency messages – txt then email to info@tainui.co.nz				

A3.2.7 Newstalk ZB

97.0	Newstalk ZB	Talk radio	1999	1992–1993 Easy Listening 97FM 1993–1999 Easy Listening i97FM
Transmits to: all of NZ AM/FM both – no gaps Live DJs – 24/7 Listenership 1. Target Audience – everyone 2. Listeners - ~ ??? all of NZ potentially 3. More people tune in from – Breakfast and Drive 4. Community notices? YES 5. Council, EM CD asked you to put out EM message or information? YES 6. Could you do this? YES 7. Preferred method to receive emergency messages – phone, txt, email				

A3.2.8 Raglan Community Radio

98.1	Raglan Community Radio	Community Radio	2006	from 1994 was on 96.6
Transmits to: Raglan FM – gaps around town because of topography Live DJs – 6 hours per day average – changeable Listenership 1. Target Audience – everyone in Raglan and some local rural listeners. 2. Listeners - ~ 3. More people tune in from – Breakfast 6–10am and Drive 4–7pm 4. Community notices? YES – local schools, marae, sporting groups 5. Council, EM CD asked you to put out EM message or information? Not to manager's knowledge. MOU with MCDEM for broadcasting emergency messages. Had information via a press release but not directly from CDEM. No agreement with local CDEM group. 6. Could you do this? YES 7. Preferred method to receive emergency messages – 1. Phone then confirmation email before message broadcast. It is essential to get hold of a real person – no messages.				

A3.2.9 Niu FM

103.4	Niu FM and Radio 531	Pacific Mix	2002
Transmits to: Nationally FM – Live DJs – 6 hours per day average – changeable – 6am–6pm NiuFM, 6pm–6am 531.P.I. Listenership 1. Target Audience – everyone in Raglan and some local rural listeners. 2. Listeners - ~ Pacific communities in NZ 3. More people tune in from – Breakfast 6–10am and Drive 4–7pm 4. Community notices? YES – local schools, marae, sporting groups 5. Council, EM CD asked you to put out EM message or information? Not to manager's knowledge. MOU with MCDEM for broadcasting emergency messages. Had information via a press release but not directly from CDEM. No agreement with local CDEM group. 6. Could you do this? YES 7. Preferred method to receive emergency messages – 1. Phone then confirmation email before message broadcast. It is essential to get hold of a real person – no messages. *Would like messages translated into at least the 5 main Pacific Island languages as the station is for all Pacific Islanders and each weekday evening show concentrates on an individual island.			

A3.2.10 The Yak FM

107.1	The Yak FM	Student Radio	2004	Formerly Max FM. Rebranded in 2011
Not transmitting at present				

A3.2.11 AM Christian Radio

AM Stations				
855	Radio Rhema, Life FM, Southern Star & AM network, The Word (about to shut down)	Christian Radio	1988	1985 and 1988 Ag Week Radio (temporary station used during Fieldays).
Transmits to: All of NZ AM and FM – no gaps Live DJs – Mon–Fri 24 hours. Ability to remotely voicebreak from anywhere in the world. Listenership 1. Target Audience – everyone in NZ. LifeFM – young adults – 30s, Southern Star 55+, Rheema 30-55 2. Listeners - ~ email coming with figures 3. More people tune in from – Breakfast 6–10am and Drive 4–7pm 4. Community notices? YES – local schools, marae, sporting groups 5. Council, EM CD asked you to put out EM message or information? Not to manager's knowledge. MOU with MCDEM for broadcasting emergency messages. Had information via a press release but not directly from CDEM. No agreement with local CDEM group. 6. Could you do this? YES 7. Preferred method to receive emergency messages – 1. Phone then confirmation email before message broadcast.				

A3.2.12 Bitter FM

87.6 FM	Bitter FM			
Transmits to: Taupo. FM Live DJs No – Music 24/7 no ads. Listenership 1. Target Audience – music lovers 2. Listeners – ????? 3. More people tune in – ????? 4. Community notices? ????? 5. Council, EM CD asked you to put out EM message or information? ????? 6. Could you do this? ????? 7. Preferred method to receive emergency messages. ?????				

A3.2.13 Tuwharetoa FM

97.6 FM	Tuwharetoa FM (Turangi)	Māori radio	
Transmits to: Reporoa, Mangino, Wairouru, Taihape, Turangi – right around the mountain FM – yes some gaps but gets to more places than other radio stations. Live DJs – Mon–Fri 7am–10am. 11am–7pm. Ability to voicebreak because staff live locally Listenership 1. Target Audience – Māori 5–90 years in am show. 30–55 years in pm show 2. Listeners - ~ 70,000 at last count in 2006 3. More people tune in from – different audiences at different times as above 4. Community notices? YES – local schools, marae, sporting groups, non-profit 5. Council, EM CD asked you to put out EM message or information - YES 6. Could you do this? YES 7. Preferred method to receive emergency messages – 1. Phone then 2. txt then confirmation email before message broadcast.			

A3.3 VOICE OVER IP (VOIP) PROVIDERS

A3.3.1 TNZ Limited

1. What communications methods does this product use to distribute messages
 - text message, phone calls to landlines, phone calls to mobile phones
2. Any start-up or registration cost?
 - No
3. Cost per call: set rate or cheaper if higher numbers (e.g., over 1000)
 - Yes cost per call. Mobile calls more expensive but txt and mobile phone call same cost.
 - Yes dependent on number of calls.
4. What is the capacity of the product in terms of number of messages per minute or hour? Any evidence to support this claim?
 - Txt = 1000/minute
 - Phone = 1000/minute
 - Evidence – used for non-emergency everyday service so they know its capabilities
5. Estimated time to call 1000 numbers? 10,000 numbers?
 - Txt – 2-3 minutes
 - Phone – 3-4 minutes
6. Is the provider (not the CDEM officers) able to provide a ballpark quote for 1000 calls? 10,000 calls?
 - Assume 1000 calls >1 minute = \$200
 - 10000 calls > 1 minute = \$2000
7. Who provides the telephone numbers?
 - Customer e.g., council
8. How is the database updated?
 - Customer supplies numbers and messages
9. What other requirements are needed for this product to operate? E.g., electricity mains, telephone lines, internet connection?
 - Electricity, telephone lines, internet connection. Mobile phones will work as long as the towers are operating
10. What is the activation time (from when the owner first wants to send a message to when the first person will receive a warning)
 - Txt 2-3 minutes
 - Phone – 3-4 minutes
11. Can it be pre-programmed e.g., recorded messages? Typed messages?
 - Yes
12. How is the service activated?
 - Email, phone, web based, txt by customer verified contact number and address only

13. How do you know messages have been received?
 - When txt is sent the system tells us when it is received
14. What happens if a message fails (e.g., number engaged, incorrect email address, no such phone number etc.)
 - If phone number is incorrect it will not be rung – the system will reject it

A3.3.2 GetsReady

1. What communications methods does this product use to distribute messages
 - Email, text
2. Any start-up or registration cost?
 - \$10,000 + \$180 per month
3. Cost per call: set rate or cheaper if higher numbers (e.g., over 1000)
 - No
4. What is the capacity of the product in terms of number of messages per minute or hour? Any evidence to support this claim?
 - ~5600 numbers on database at present – takes 10-15 mins to send messages
5. Estimated time to call 1000 numbers? 10,000 numbers?
 - 1000 – 5–10 minutes
 - 10000 – 15–20 minutes
6. Is the provider (not the CDEM officers) able to provide a ballpark quote for 1000 calls? 10,000 calls?
 - No cost per call
7. Who provides the telephone numbers?
 - Residents enter their own information
 - Those without internet can fill in a form and get local volunteers to enter info.
8. How is the database updated?
 - Residents and volunteers
9. What other requirements are needed for this product to operate? E.g., electricity mains, telephone lines, internet connection?
 - Mobile phone towers, internet connection, electricity
10. What is the activation time (from when the owner first wants to send a message to when the first person will receive a warning)
 -
11. Can it be pre-programmed e.g., recorded messages? Typed messages?
 - Yes template
12. How is the service activated?
 - By CDEM controllers
13. How do you know messages have been received?
 - CDEM controller includes self so knows when messages have been sent

14. What happens if a message fails (e.g., number engaged, incorrect email address, no such phone number etc.)
 - Will not know if incorrect number or if someone does not receive the message

**Are looking to expand their business with more alerting options in the future

A3.4 SMS TEXT MESSAGE

A3.4.1 LERT Info

1. What communications methods does this product use to distribute messages
 - Txt messages
 - Email messages
 - Up to 400 characters
2. Any start-up or registration cost?
 - \$19.95 per mobile phone signup – per phone
 - Email no cost
 - Smartphone can have specific ring tone
3. Cost per call: set rate or cheaper if higher numbers (e.g., over 1000)

Councils:

 - 1-5000 numbers \$0.12 per call
 - 5001-10000 \$0.11 per call
 - 10000-20000 \$0.10 per call and so on

Messages to individuals from LERT cost is included in the \$19.95 registration
4. What is the capacity of the product in terms of number of messages per minute or hour? Any evidence to support this claim?
 - 1000's per hour – no known limit – Aussie supplier
5. Estimated time to call 1000 numbers? 10,000 numbers? 5000 = 10 secs then next 5000
 - 3 secs average delivery time
6. Is the provider (not the CDEM officers) able to provide a ballpark quote for 1000 calls? 10,000 calls?
 - See Q4.
7. Who provides the telephone numbers?
 - Individuals
 - Councils
8. How is the database updated?
 - Users update themselves
9. What other requirements are needed for this product to operate? e.g., electricity mains, internet connection?
 - Smartphone allows for reply facility
10. What is the activation time (from when the owner first wants to send a message to when the first person will receive a warning)
 - 3-5 secs and an email if there is one

11. Can it be pre-programmed e.g., recorded messages? Typed messages?
 - Yes
12. How is the service activated?
 - By message generator facilitating this
 - Can have system open all the time so it works immediately
 - Can be devolved to several operators to send out messages
13. How do you know messages have been received?
 - Don't unless received on Smartphone
14. What happens if a message fails (e.g., number engaged, incorrect email address, no such phone number etc.)
 - Nothing – we would not know

Comment – only provider in NZ allowed to send emergency alerts – IP issues.

Can geo-locate txts

Can send message to just one suburb or two or five.

LERT or clients (councils) can send messages.

Can message travelling clients for hazards in the area they are travelling in.

Looking at phone messaging at present.

Ring Stuart for more info.

A3.4.2 BULLETIN

1. What communications methods does this product use to distribute messages
 - Txt messages only
2. Any start-up or registration cost?
 - \$199.00 messenger setup cost
 - Monthly hosting fee \$45.00
3. Cost per call: set rate or cheaper if higher numbers (e.g., over 1000)

Councils:

 - \$0.13 cents per call whether one or 10,000 calls
4. What is the capacity of the product in terms of number of messages per minute or hour? Any evidence to support this claim?
 - 2000-3000 per second
5. Estimated time to call 1000 numbers? 10,000 numbers? 5000 = 10 secs then next 5000
 - 2–3 secs average delivery time, 10,000 calls – 10–15 seconds
6. Is the provider (not the CDEM officers) able to provide a ballpark quote for 1000 calls? 10,000 calls?
 - See Q3.

7. Who provides the telephone numbers?
 - Councils must have their own database of phone numbers
8. How is the database updated?
 - Councils update themselves
9. What other requirements are needed for this product to operate? e.g., electricity mains, internet connection?
 - Electricity, internet connection, mobile phone towers
10. What is the activation time (from when the owner first wants to send a message to when the first person will receive a warning)
 - Council sends out the message so it depends on how they do it and on the ability of the transmitter e.g., Spark
11. Can it be pre-programmed e.g., recorded messages? Typed messages?
 - Yes can have pre-recorded templates
 - Yes can manually type messages
 - Messages can be scheduled for future events etc.
12. How is the service activated?
 - By Council activating the system and then Spark, Vodafone, or 2degrees transmitting the message
13. How do you know messages have been received?
 - System generates a report of numbers not connected with – can supply individual numbers
14. What happens if a message fails (e.g., number engaged, incorrect email address, no such phone number etc.)
 - Report generated back to Council immediately

A3.5 MOBILE PA

Taupo CDEM have successfully deployed mobile PA systems during emergency events. Their units are purpose-built, vehicle mounted systems at a cost of \$1000 per unit. Taupo DC has used a Wellington supplier to provide mobile PA units for all CDEM vehicles. They report that the units are imported from the US as second hand units and are reliable and reasonably priced. The units are voice capable and have three tones. Price per unit is approximately \$1000 NZ. The supplier, Emergency Lighting Services www.eve.co.nz is based in Wellington.

Taupo CDEM reports that cheaper suppliers of amps and speakers can be sourced. Depending on reported NZ user group reliability, warranties, parts, back up service etc and where the closest service agent is.

A3.6 VHF AND HF RADIO

Gisborne Unitary Authority used VHF radio to reach isolated communities when reviewed by Leonard et al. (2007). The cost is roughly projected from the experience of Gisborne to reach groups of 200 people including the effort to coordinate response groups and exercise. The reality will vary depending on the scale and system architecture chosen. The cost could be substantial depending on hardware (EOC, repeaters and receivers), training, and upkeep, particularly if radio is not being used by the EOC.



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Open Meeting

To	Strategy & Finance Committee
From	S Duignan General Manager Customer Support
Date	23 February 2016
Prepared By	K Newell
Chief Executive Approved	Y
DWS Document Set #	1148889
Report Title	West Coast Tsunami Study

1. Executive Summary

The West Coast Tsunami Study, jointly funded by Waikato District Council, Waikato Regional Council and WEL Energy, has now been completed by Jose Borrero of Raglan-based eCoast.

The study was completed as part of Civil Defence Emergency Management (CDEM) activities to improve understanding of the risk to the community and to apply this to emergency planning.

This report advises the key findings of the study and the potential impact of a tsunami on Port Waikato, Raglan Harbour and Aotea Harbour. The study focused primarily on very large earthquakes and the size of the resulting tsunami wave heights. The modelling has indicated that even with a very large earthquake, wave heights generated are expected to be relatively small; however the currents produced by the wave activity will be potentially dangerous and persisting for many hours after the earthquake.

This report describes the proposed communication plan to local communities.

2. Recommendation

THAT the report of the General Manager Customer Support – West Coast Tsunami Study - be received.

3. Overview

The study has focused primarily on ‘near source’ tsunami generated by very large (Magnitude 9) earthquakes on known fault systems in and around the Tasman Sea and South West Pacific. This included tsunami generated by earthquakes in the Solomon Islands, along the New Hebrides trench directly north of New Zealand, along the Tonga-Kermadec trench to the east of the North Island and along the Puysegur Trench south and west of the South Island.

The study has also considered ‘distant source’ tsunami generated along the west coast of South America, focusing on the largest known historical events of 1868 and 1960 – each with

earthquake magnitudes greater than 9 – in northern and southern Chile respectively.

The study was undertaken to identify the risk of tsunami affecting Port Waikato, Raglan Harbour and Aotea Harbour and has found wave heights will be relatively small, but inundation may affect low-lying areas. However, tsunami may still produce strong currents, particularly at the entrance to the harbours, making it dangerous to be on or in the water.

The tsunami study has found that for Waikato's west coast:

- tsunami wave heights from all sources modelled are relatively small
- inundation of low lying areas may occur if the tsunami occurs during a high tide
- tsunami arrival times for 'regional' sources are between 3 and 6 hours, but with the peak tsunami activity occurring several hours after the first arrival
- tsunami arrival times for 'distant' sources are between 15 and 17 hours.

Despite the relatively small tsunami heights, all of the scenarios produced potentially dangerous currents of around 2 knots, particularly at the entrance to each harbour. In each case, these dangerous currents persisted for many hours after the arrival of the largest waves.

4. Communication Plan

In developing a communications plan regarding the study findings, the likelihood and consequence of tsunami have been considered. Whilst the information is important, it is considered unnecessary to conduct full public meetings; however, this information will form an important part of our public education to communities regarding hazard risk.

The plan is to present the report findings to the Onewhero/Tuakau & Raglan Community Boards on 7 and 8 March respectively. Community Response Group members will be specifically invited to attend these meetings.

A media release has been jointly prepared by Waikato Regional Council and Waikato District Council to follow the board meetings.

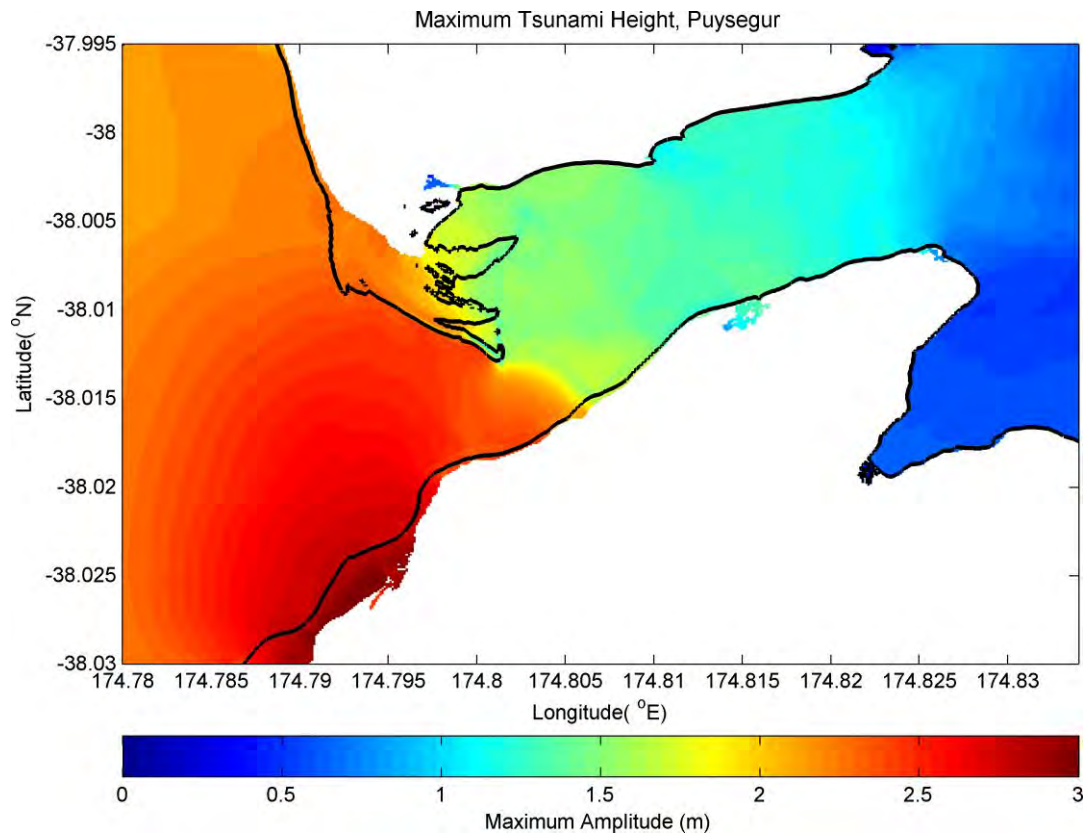
5. Conclusion

The results of the West Coast Tsunami study are important in understanding the risk to our communities and provide valuable information for CDEM planning and public education.

Attachments

Attachment(s) – *Numerical modelling of Tsunami Effects at Port Waikato, Raglan and Aotea Waikato West Coast, New Zealand by e-coast Marine Consulting and Research.*

Numerical modelling of Tsunami Effects at Port Waikato, Raglan and Aotea Waikato West Coast, New Zealand



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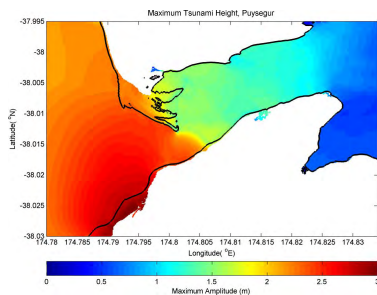
Numerical modelling of Tsunami Effects at Port Waikato, Raglan and Aotea Waikato West Coast, New Zealand

Report Status

Version	Date	Status	Approved By:
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V 2	3 February 2016	FINAL – R1	JCB

It is the responsibility of the reader to verify the currency of the version number of this report.

Jose C. Borrero Ph.D.
Sam O'Neill M.Sc.



Cover Picture: Maximum tsunami heights at the entrance to Aotea Harbour generated by an earthquake on the Puysegur Trench

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1 INTRODUCTION

This report describes the assessment of tsunami effects resulting from regional and distant tectonic (earthquake) sources at Port Waikato, Raglan (Whaingaroa) Harbour and Aotea Harbour located on the west coast of New Zealand's North Island (Figure 1.1). These effects include the quantification of maximum and minimum tsunami wave heights, the extents of tsunami inundation and tsunami induced current speeds. The results from this study are intended to guide emergency management and evacuation planning activities. As such, this study focuses primarily on extreme tsunami scenarios in an effort to define likely maximum credible events for the purposes of planning evacuation routes and increasing public awareness. This report extends tsunami inundation and hazard studies previously completed by Borrero (2013, 2014). This study also carries on from the works of Power *et al.* (2011) and Goff and Chagué-Goff (2015). The former analysed the tsunami hazards posed to New Zealand from the Tonga-Kermadec and Southern New Hebrides subduction margins, while the latter reviewed the history of tsunamis on the west coast of New Zealand over the past 700 years.

1.1 Definition of Tsunami Source Regions

Tsunami sources are generally grouped according to the tsunami wave travel time from the source region to the site of interest. For the New Zealand context, Power (2013) grouped sources according to the following definitions:

- Distant source – more than 3 hours travel time from New Zealand
- Regional source – 1–3 hours travel time from New Zealand
- Local source – 0–60 minutes travel time to the nearest New Zealand coast

This study focuses on tsunamis generated by sources located in the Solomon Islands and along the Southern New Hebrides, Tonga-Kermadec and Puysegur Trenches (see Figure 1.2). Strictly speaking, based on these definitions and the computed travel times (presented in Section 3) for the west coast of the Waikato, the Southern New Hebrides, Tonga-Kermadec and Puysegur trench sources would be considered 'regional' while the Solomon Island sources would be considered 'distant source'. However, considering the geography of the southwest Pacific and when comparing arrival times in New Zealand for tsunamis coming from South America (arrivals in 14–17 hours, see Section 4), it is advantageous to consider tsunamis emanating from the Solomon Islands sources as 'regional' and to cluster these events with the other source regions located in the southwest Pacific.

For the regional/distant source events located in the south western Pacific, we consider a large magnitude (M9.0) event located along each subduction zone plate boundary, constructed with uniform slip distribution. For the Solomon and Tonga-Kermadec Trenches, two separate cases are considered, accounting for portions with differing strike orientations along the former, and to observe the differing effects associated with shifting the source region along the latter (see Figure 2.1).

For the distant source events, we consider only South American tsunamis for two reasons; firstly, sensitivity studies for Pacific Rim tsunamis conducted by Borrero *et al.* (2014) suggest that for a given earthquake size, tsunamis originating from South America have a larger impact in New Zealand than do tsunamis originating from most

other parts of the Pacific Rim, and secondly, the South American Subduction Zone (SASZ) has a well-known history of producing very large earthquakes ($>M8.5$) and is likely to produce another such event in coming decades. While the sensitivity study of Borrero *et al.* (2014) show that tsunamis originating from Central America produce somewhat larger tsunami heights in New Zealand than a South American source of equivalent magnitude, the subduction zone offshore of Central America has never produced an earthquake with sufficient magnitude to generate a trans-pacific tsunami. For this reason, tsunamis from Central America are not considered here, nor are large magnitude events from other parts of the Pacific Rim. Given the historical record and the results from Borrero *et al.* (2014) we assume that the cases modelled here represent the maximum credible far-field events.

We use the current state-of-the art tsunami modelling tools (ComMIT: Titov *et al.* 2011) and the most recent scientific literature on the relevant tsunami source mechanisms. Model results are compared quantitatively and qualitatively to available historical information.

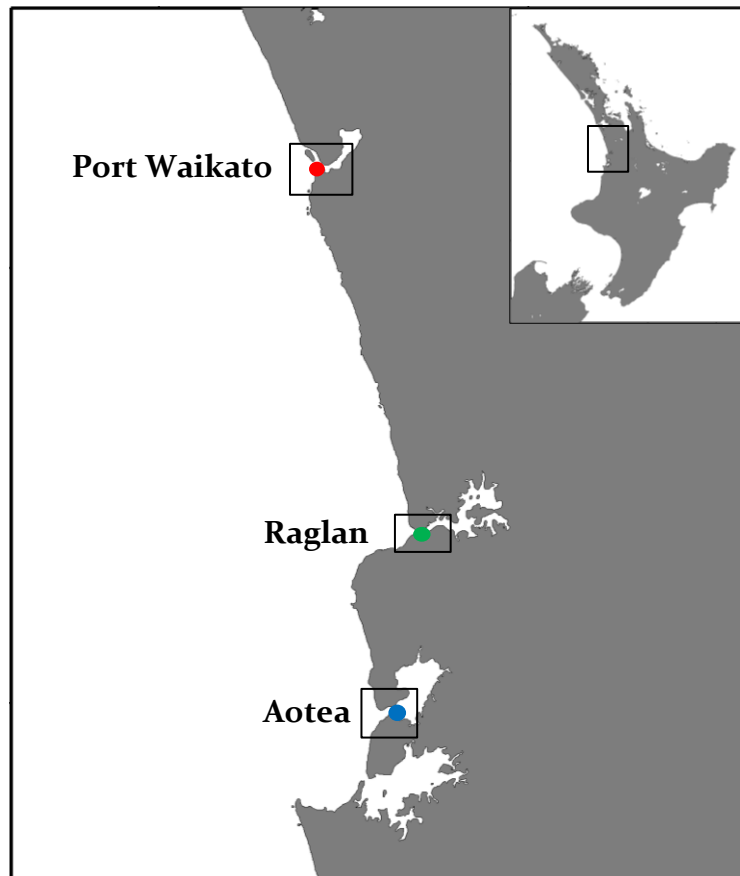


Figure 1.1 The location of Port Waikato (red dot), Raglan (green dot) and Aotea (blue dot) on the west coast of the Waikato Region, North Island, New Zealand. Boxes bounding the coloured dots indicate the extents of the three model C grids.

1.2 Review of Recent and Historic Literature

As noted above, this study extends the work of Power *et al.* (2011) and Goff and Chagué-Goff (2015) and provides tsunami wave height estimates for additional areas along the Waikato west coast for both regional and far-field sources.

Important results that came from the Power *et al.* (2011) study include:

- The Tonga-Kermadec Trench has produced two subduction thrust events of ~M8.0 in the last century and GPS data suggests that strong interseismic coupling to approximately 30 km depth may be indicative of the potential for larger (>M8.0) events to occur there.
- Based on thrust events on the Kermadec Arc between 1976 and 2009, the frequency of occurrence of earthquakes greater than or equal to M8.0 is about once per century on average.
- Numerical results for a M8.9 tsunami generated on the middle portion of the Kermadec subduction margin indicate that wave amplitudes of 3 – 5 m occur on the south-western coast of Northland. A result of the merging of separately

diffracted wave chains around the top of the North Island. In particular, fast-moving diffracted waves travelling through the South Norfolk and Reinga Basins catch up to the slow-moving diffracted waves travelling between Great Island (Three Kings Islands) and Cape Reinga.

- The Southern New Hebrides Trench produced a large ~M8.4 earthquake in 1901 and is shown to converge at a rate of 48 – 50 mm/year.
- Based on thrust events on the Southern New Hebrides Arc between 1976 and 2009, the frequency of occurrence of earthquakes greater than or equal to M8.0 is about once every 28 years on average.
- Numerical results for a M8.8 tsunami generated on the Southern New Hebrides subduction margin indicate that wave amplitudes of 3 – 5 m occur on the south-western coast of Northland. This effect is larger than that on Northlands east coast because of the wave-guiding effects of the Norfolk and Three Kings Ridges (see Figure 1.2).

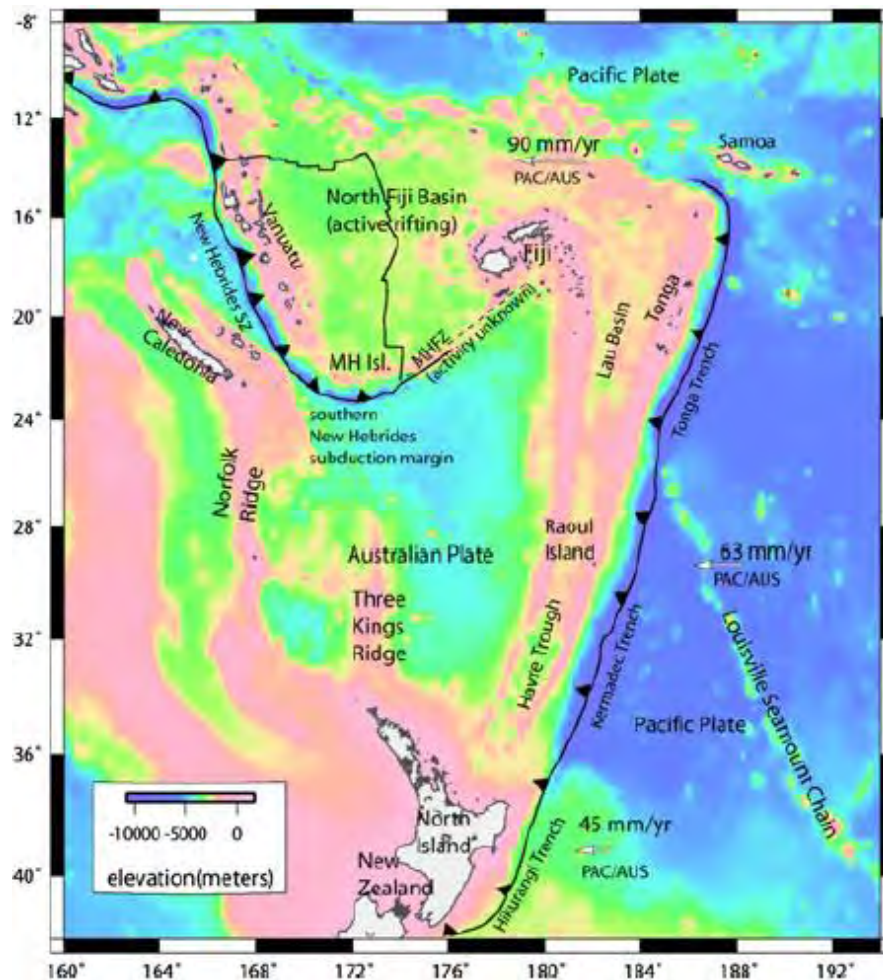


Figure 1.2 Tectonic setting of the Kermadec and New Hebrides plate margins. Black triangles signify the over-riding plate at the regions' subduction margins. White arrows show predicted motion of the Pacific Plate relative to the Australian Plate (taken from Power et al. (2011)).

Important results from the Goff and Chagué-Goff (2015) study include the identification of three (possibly 4) separate tsunami events along the west coast of New Zealand. These include an event in the modern era (August 1870) in Westport that was possibly misidentified and mis-associated with a tsunami that occurred in August 1868 and was caused by the great 1868 Arica Earthquake in Northern Chile and Southern Peru. A newspaper account of the event written in 1912 describes a significant series of waves starting as a ‘huge bank of water about 40 feet high’ that rushed up the river, retreating and returning two more times resulting in the destruction of several buildings and businesses as well as the flooding of the local cemetery resulting in the uncovering of and transport coffins. This event was believed to have occurred in 1868 as a result of the 1912 account stating that the year of the event’s occurrence was “*when the Dominion of New Zealand was only twenty-seven years old*”. As Goff and Chagué-Goff (2015) point out however, the ‘Dominion of New Zealand’ was only designated in 1907, however it became a separate British Crown colony in 1841, and this may be the reference year for the article thereby suggesting that the ‘tidal wave’ event occurred in 1868.

However, additional evidence presented by Goff and Chagué-Goff (2015) casts some doubt on the year in which this event occurred. This includes information from the register of New Zealand Historic Places Trust indicating that the building which housed the Bank of New South Wales in Westport was moved after it was “*inundated by a tidal wave in 1870*” before being relocated again in 1872 due to river flooding and ultimately destroyed a few years later by another river flood before being rebuilt in 1877 at a safer site. This evidence is important since it clearly differentiates between river flooding and the ‘tidal wave’ that first damaged the building. Also, it notes 1870 as the year for the ‘tidal wave event’ event, thus suggesting that the 1912 newspaper account was written by someone who confused the 1868 tsunami (which was well observed throughout New Zealand) with this unique one-off event in 1870. Interestingly, the Sydney tide gauge does show that a tsunami of negligible height and of unknown origin was recorded on August 12, 1870 (Goff and Chagué-Goff, 2014).

These details notwithstanding, based on our modern understanding of tsunami wave propagation and far field effect, it is highly unlikely that the 1868 Arica earthquake and tsunami was capable of producing ~12 m, highly destructive surges in Westport. On the other hand it does seem strange that such a destructive and unusual event (destruction of several buildings, businesses, wharves and the cemetery!) did not garner more accurate, descriptive or widespread contemporary accounts. There fore, the source mechanism for this event remains a mystery. Given the extreme, highly localised wave heights, the very small tsunami height recorded in Sydney and the fact that there were no earthquakes recorded nearby on that day, points to a submarine landslide as a possible mechanism. Goff and Chagué-Goff (2015) point to slope failures on the Gilbert Seamount or within the Cook Canyon as possible sources, however no detailed studies on these sources have been conducted.

The fact that a relatively large and destructive, yet highly localized tsunami occurred on the west coast of New Zealand is in itself troubling. However, Goff and Chagué-Goff (2015) go on to describe evidence for two (or possibly 3) other events. One (or two) of these may have occurred in the South Taranaki Bight and and/or the Westland Coast between 1470 and 1510 AD. The last event described by Goff and

Chagué-Goff (2015) and most relevant to this study is that which may have occurred on the west Waikato coast between 1320 and 1450 AD affecting approximately 150 km of coastline between Albatross Point and Waikawau. A marked central region exists around Marokopa where most estimated wave run-ups are ~30 m above sea level and decrease significantly over 30 – 50 km alongshore to the north and south. This event is troubling in that it corresponds to extreme tsunami runup heights (~60 m maximum at Ngararahae) and because identifying a likely source for the wave is very difficult.

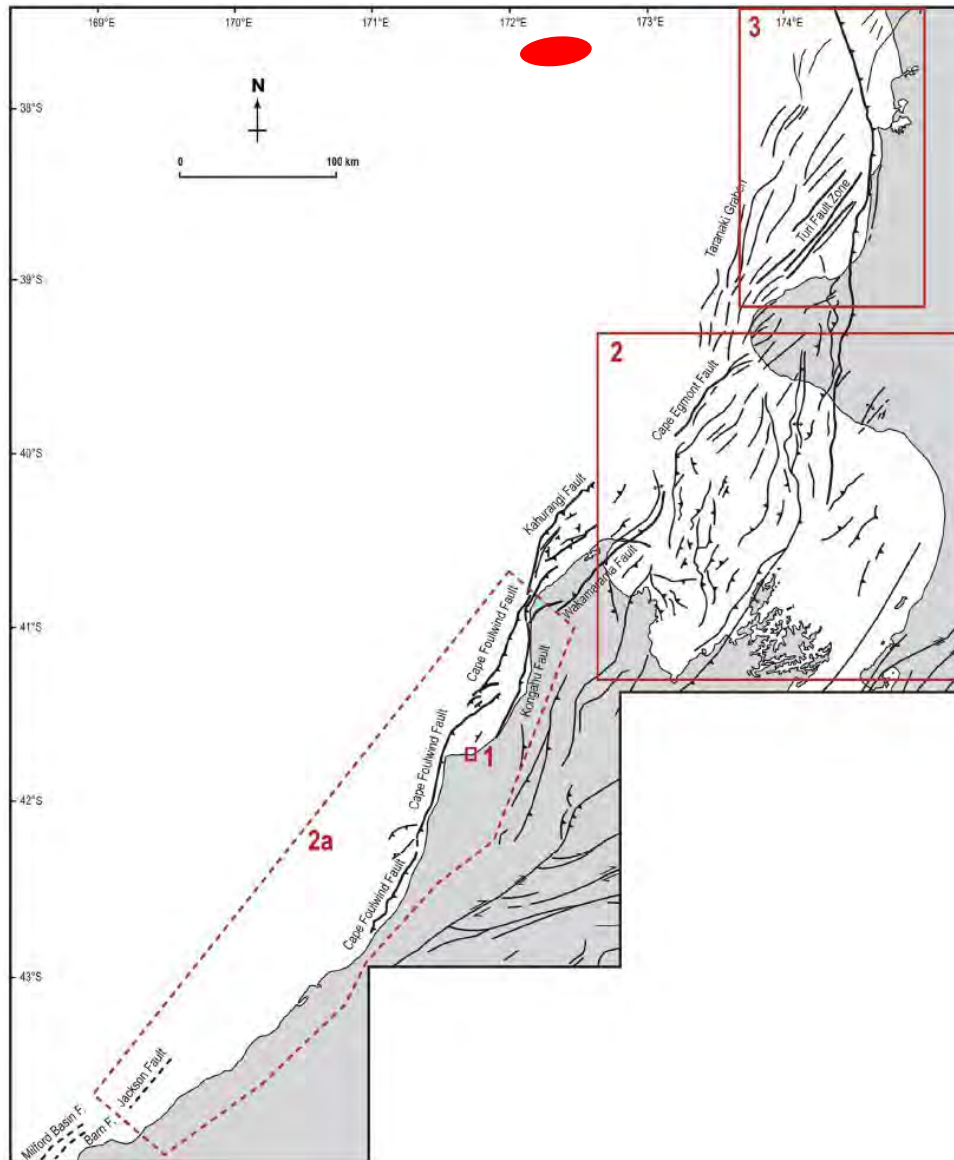


Figure 1.3 Main faults of the central west coast of New Zealand (taken from Goff and Chagué-Goff (2015)). The red ellipse indicates the approximate location of the Aotea seamount (37.6° S, 172° E)

While the distribution of the estimated runup heights corresponds to that created by a submarine slope failure, the local bathymetry does not contain significant slope failure source regions. Goff and Chagué-Goff (2015) point to the Aotea Seamount as a possible source, however they note that this feature rises approximately 1200 m from the surrounding seafloor reaching its peak in approximately 1000 m of water.

Given the scale of the Aotea Sea Mount and the depths in which it lies, it would require an extraordinarily large slope failure to generate an initial wave large enough to produce the 30 to 60 m on shore tsunami heights. We assess this with a numerical modelling study in Section 5 below.

As a final note, we point another tsunami event that may have occurred on the Waikato west coast and is described in de Lange and Healy (1986). They report that in June 1891: *“following an earthquake located offshore from the mouth of the Waikato River, the local Maori population reported that water within Aotea Harbour was greatly agitated and large waves were observed entering the harbour.”*

However, there were no reports from Raglan or Manukau Harbours and official reports from Manukau Harbour *“make no mention of unusual tides”*.

1.3 Modelling Approach

The numerical modelling presented in this study was carried out using the Community Model Interface for Tsunamis (ComMIT) numerical modelling tool. The ComMIT model interface was developed by the United States government National Oceanic and Atmospheric Administration's (NOAA) Centre for Tsunami Research (NCTR) following the December 26, 2004 Indian Ocean tsunami as a way to efficiently distribute assessment capabilities amongst tsunami prone countries.

The backbone of the ComMIT system is a database of pre-computed deep water propagation results for tsunamis generated by unit displacements on fault plane segments (100 x 50 km) positioned along the world's subduction zones. Currently, there are 1,691 pre-computed unit source propagation model runs covering the world's oceans included in the propagation database. Using linear superposition, the deep ocean tsunami propagation results from more complex faulting scenarios can be created by scaling and/or combining the pre-computed propagation results from a number of unit sources (Titov *et al.*, 2011). The resulting trans-oceanic tsunami propagation results are then used as boundary inputs for a series of nested near shore grids covering a coastline of interest. The nested model propagates the tsunami to shore computing wave height, velocity and overland inundation. The hydrodynamic calculations contained within ComMIT are based on the MOST (Method Of Splitting Tsunami) algorithm described in Titov and Synolakis (1995, 1997) and Titov and Gonzalez (1997). The ComMIT tool can also be used in conjunction with real time recordings of tsunami waveforms on one or more of the deep ocean tsunameter (DART) stations deployed throughout the oceans to fine tune details of an earthquake source mechanism in real time. An iterative algorithm that selects and scales the unit source segments is used until an acceptable fit to the observed DART data is met.

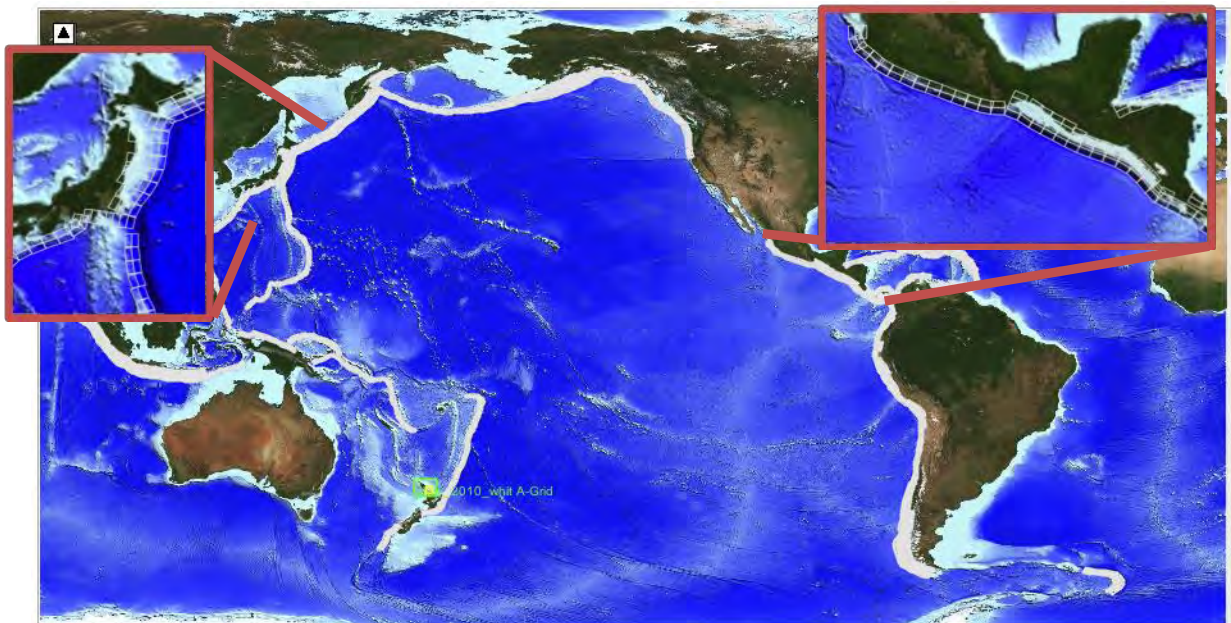


Figure 1.4 The ComMIT propagation model database for tsunamis in the world's oceans. Insets show the details of the source zone discretization in to rectangular sub-faults.

1.4 Numerical Modelling Grids

The Waikato Regional Council (WRC) provided raw bathymetry and LiDAR topography data for construction of the numerical modelling grids. The data were provided with a reference datum of MSL, a WGS84 projection and were combined with additional data sets covering the regional offshore bathymetry and on land topography. This included the Shuttle Radar Topography Mission (SRTM) 90 m resolution topography and nautical chart data from Land Information New Zealand (LINZ). An additional survey dataset of the Port Waikato central channel, also supplied by WRC, was used to complement the LiDAR there. The coverage areas of the various datasets are shown in Figure 1.5. The data were combined in to a master set of “x, y, z” triplets and then gridded in to different resolutions and coverage areas using a Kriging algorithm. The highest resolution C level model grids (10 m) are shown in Figure 1.6. Model grids were set up for both mean sea level (MSL) and mean high tide (HT).

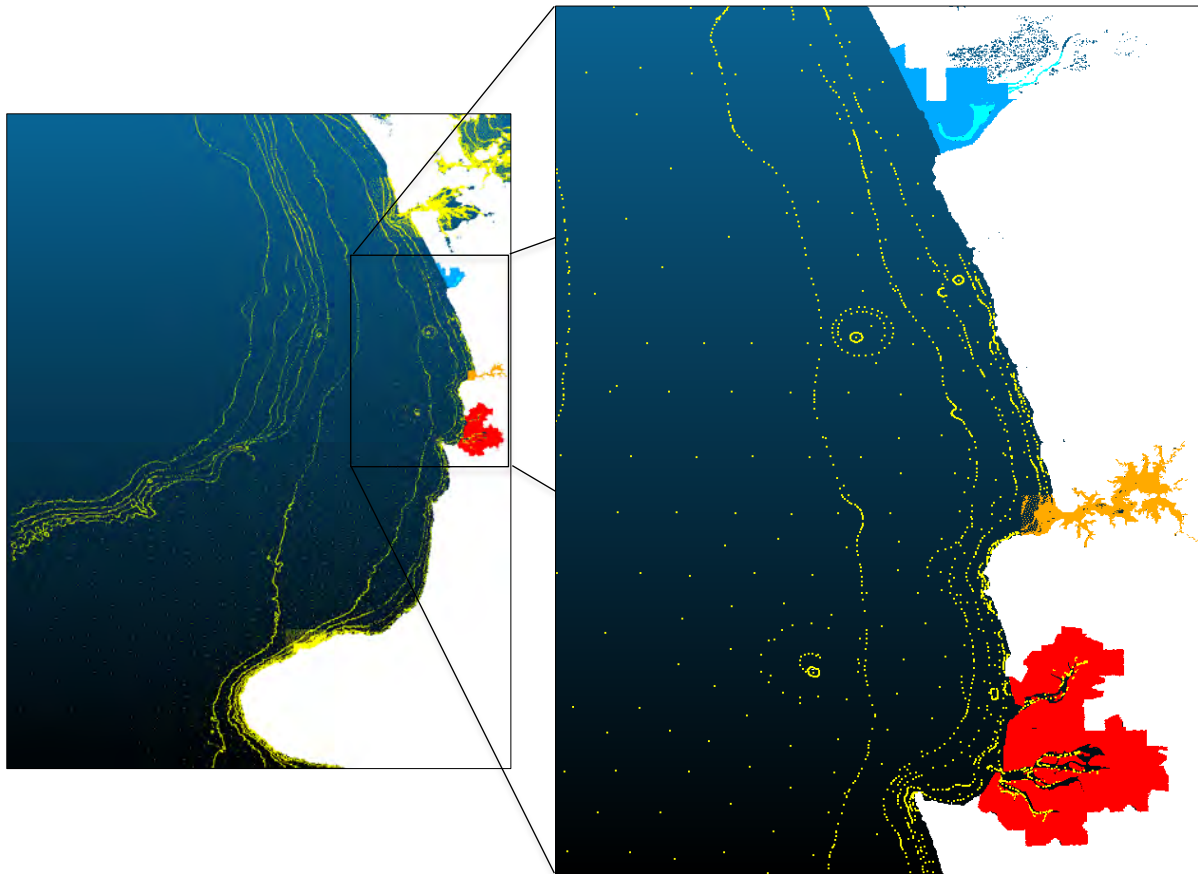


Figure 1.5 Coverage area of the different bathymetry data sets. White: SRTM topography, Yellow: LINZ digitised chart contours and sounding points, Red, Orange and Blue: LiDAR topography, Light Blue: WRC survey.

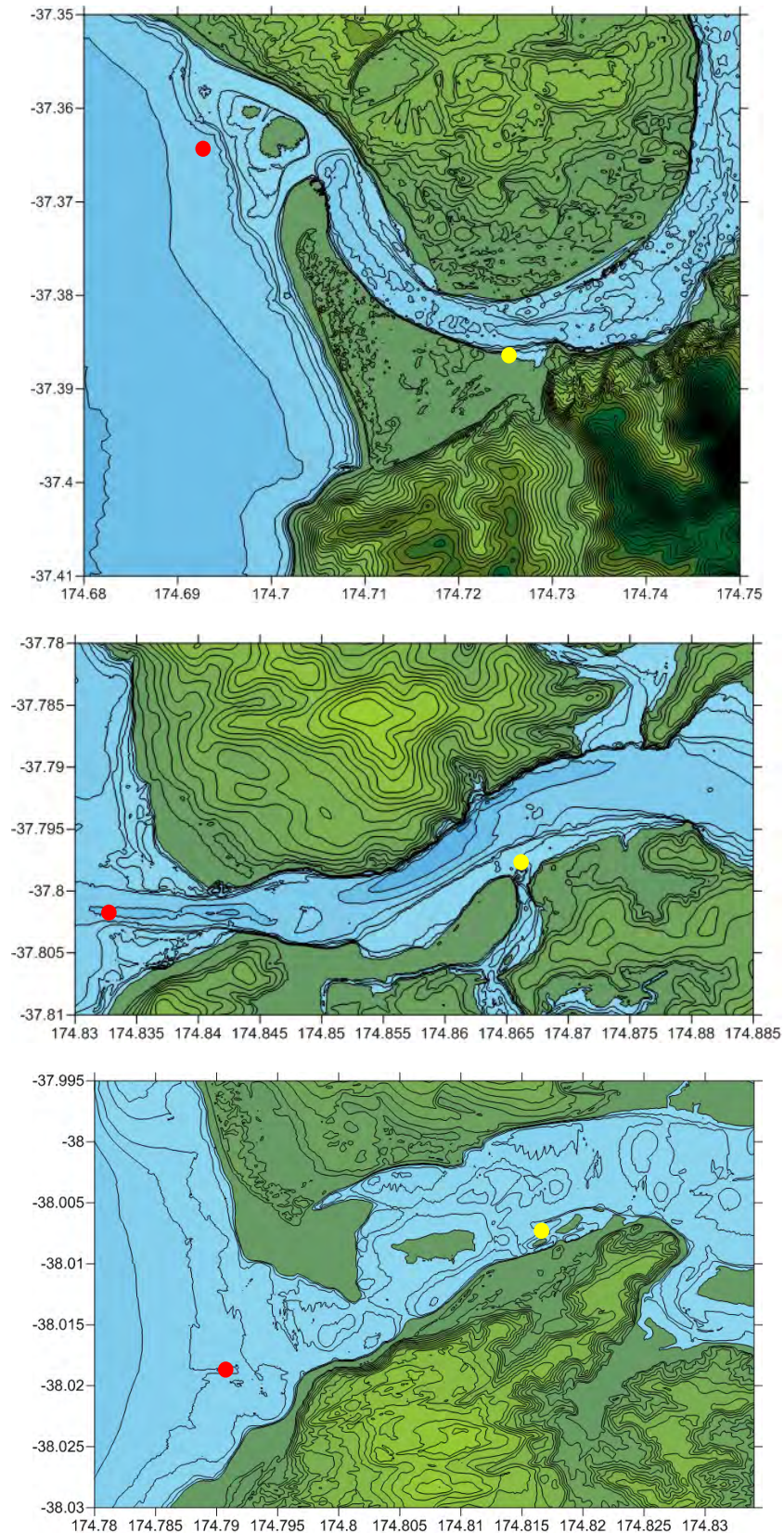


Figure 1.6 The final numerical modelling C grids (MSL) at 10 m resolution: Port Waikato (top), Raglan (middle) and Aotea (bottom). The red and yellow dots indicate the locations where water level time-series are extracted outside and inside each harbour respectively.

1.5 Aotea Harbour Bathymetry

It should be noted that the LiDAR data used to build the Aotea Harbour modelling grid was based on data collected in 2007-2008. As a result, the bathymetry does not reflect the current configuration of the northern spit at the entrance to Aotea Harbour. Changes in the morphology of the Aotea Harbour entrance are presented in Figure 1.7 and Figure 1.8. It is apparent that the data used here satisfactorily represents the shape of the northern spit in 2008, however significant changes are apparent over subsequent years. As of the most recent image (August 2015) the spit appears to be returning to the general shape seen in the 2008 imagery and data.

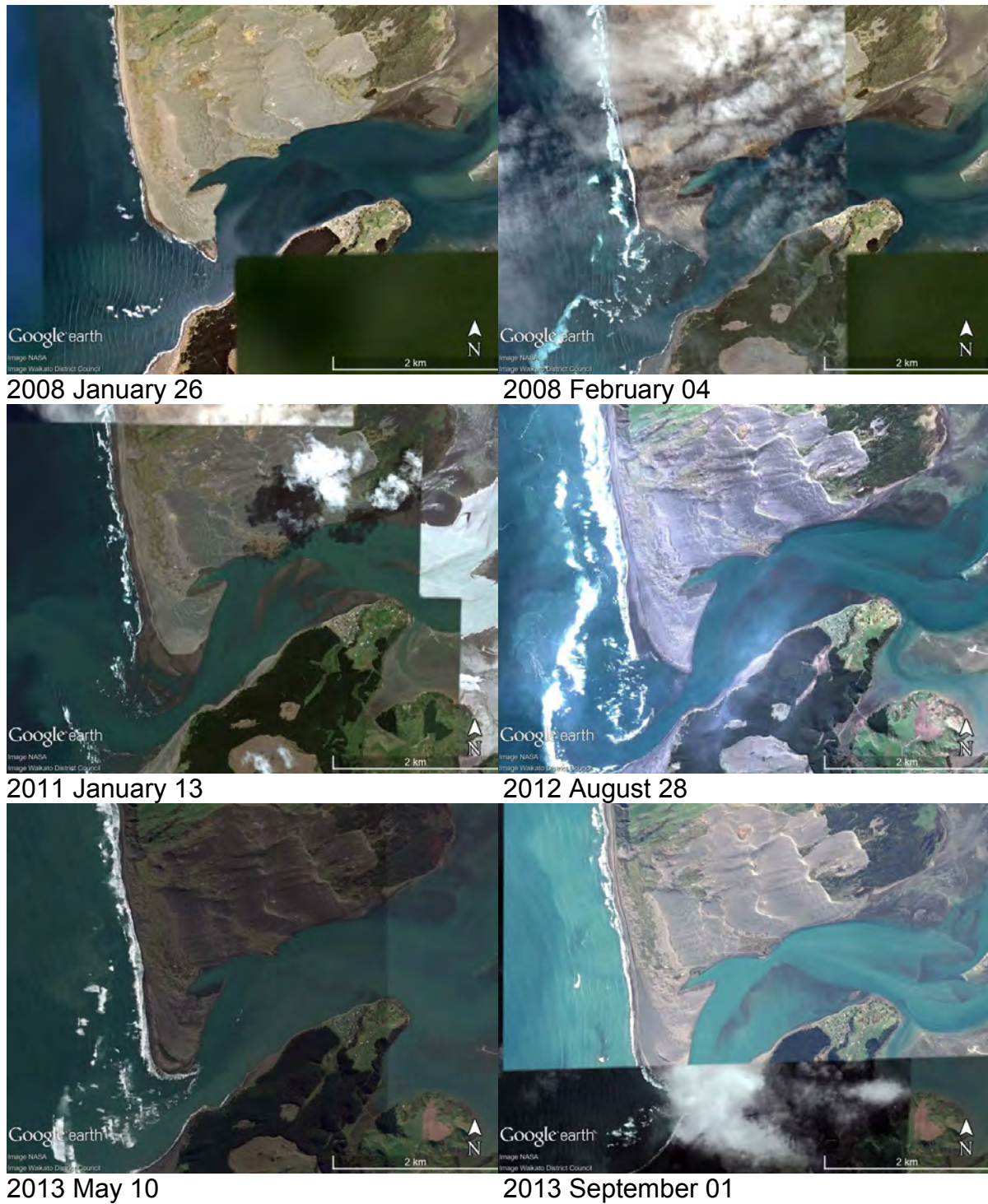


Figure 1.7 Changes in the morphology of the Aotea Harbour bar from 2008 - 2013

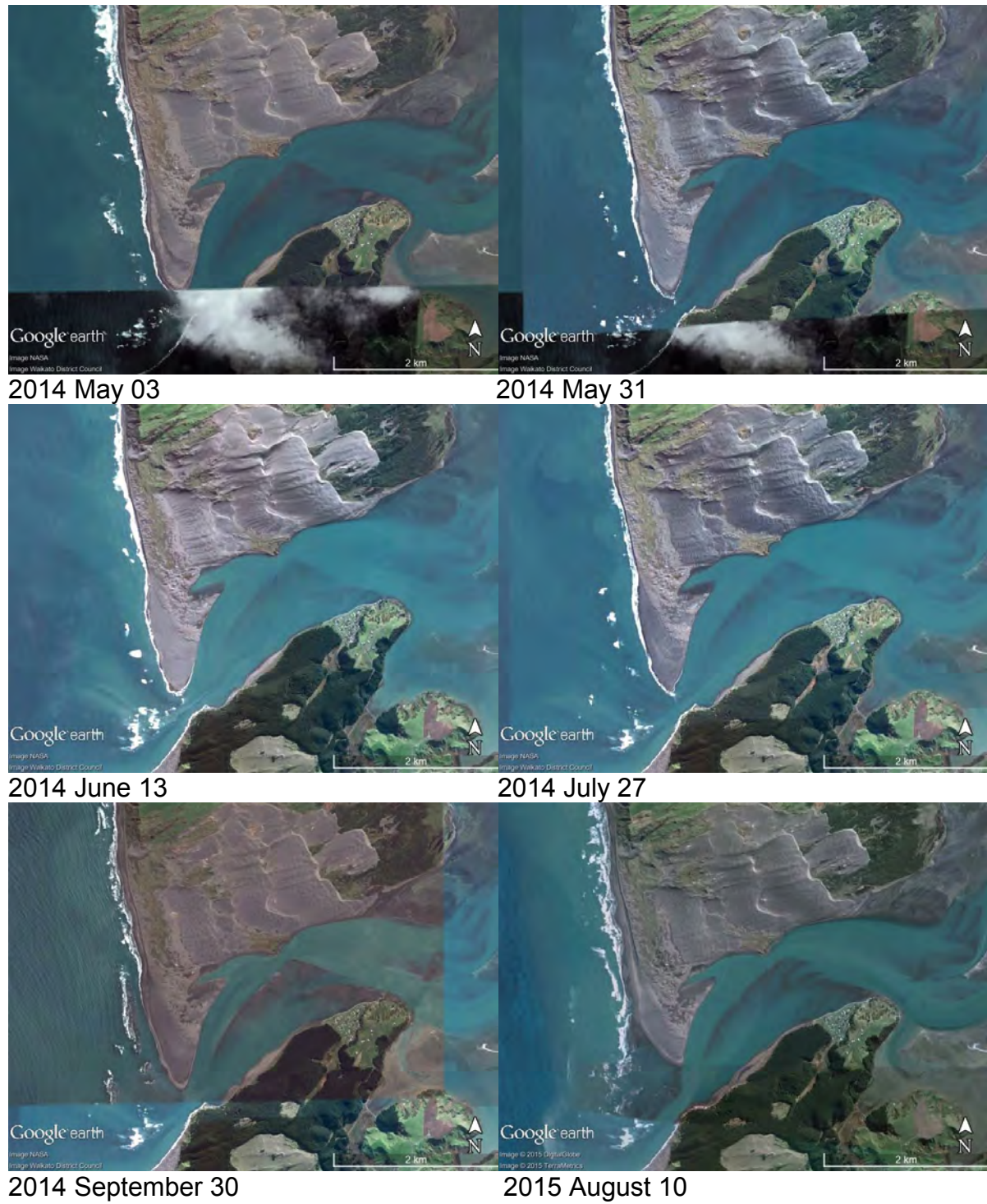


Figure 1.8 Changes in the morphology of the Aotea Harbour bar from 2013 - 2014

2 TSUNAMI SOURCE MODELS

For this study we focus on tsunamis generated by tectonic sources on both regional and far-field subduction zone plate margins. For the regional sources we use a suite of hypothetical earthquake scenarios of with magnitude M 9.0 positioned on the southern New Hebrides, Tonga-Kermadec and Puysegur Trenches, (Figure 2.1).

A similar approach is used for tsunami sources in the Solomon Islands, while these tsunamis strictly speaking are 'distant source' due to the >5 hr travel times to our study sites, for geographic consistency, we group them with the regional sources below.

We also explore the effects of distant sources tsunami including the 1960 Valdivia, Chile earthquake and the 1868 Arica Chile earthquake.

2.1 Regional/Distant Source Scenarios in the South-western Pacific

These tsunami sources are based on the assumption that any subduction zone on earth is capable of producing a very large (i.e. M_w 9.0) earthquake. Although the subduction zones investigated in this study have not produced such large events in historical times, the possibility of such an event occurring cannot be discounted. Indeed the recent very large earthquakes occurring on the Sumatra subduction zone in December 2004 and offshore of northern Japan in March 2011 were not considered as plausible events based on historical seismicity and our present seismological understanding of these source regions.

As noted above, Power et al. (2011) studied the tsunami hazard for New Zealand from the Tonga-Kermadec trench and the southern New Hebrides subduction zone. In their assessment they also used hypothetically large earthquakes as the tsunami source with a M 8.8 event on the southern New Hebrides Trench and up to a M 9.4 event on the Tonga-Kermadec Trench. Here we adopt a similar approach, however we use a suite of identical earthquake sources positioned along the different subduction zones as indicated in Figure 2.1. Each tsunami source is represented by an earthquake with a fault plane area of 400x100 km and 22 m of uniform slip, corresponding to an earthquake with magnitude of M9.

Table 2.1 Regional tsunami sources used for the study.

Case Number	Name	Code
1	Southern New Hebrides	HEB 1
2	Puysegur Trench	PUY 1
3	Tonga-Kermadec south	TK 1
4	Tonga-Kermadec north	TK 2
5	Solomon Islands East	SOL 1
6	Solomon Islands Central	SOL 2
7	Solomon Islands West	SOL 3

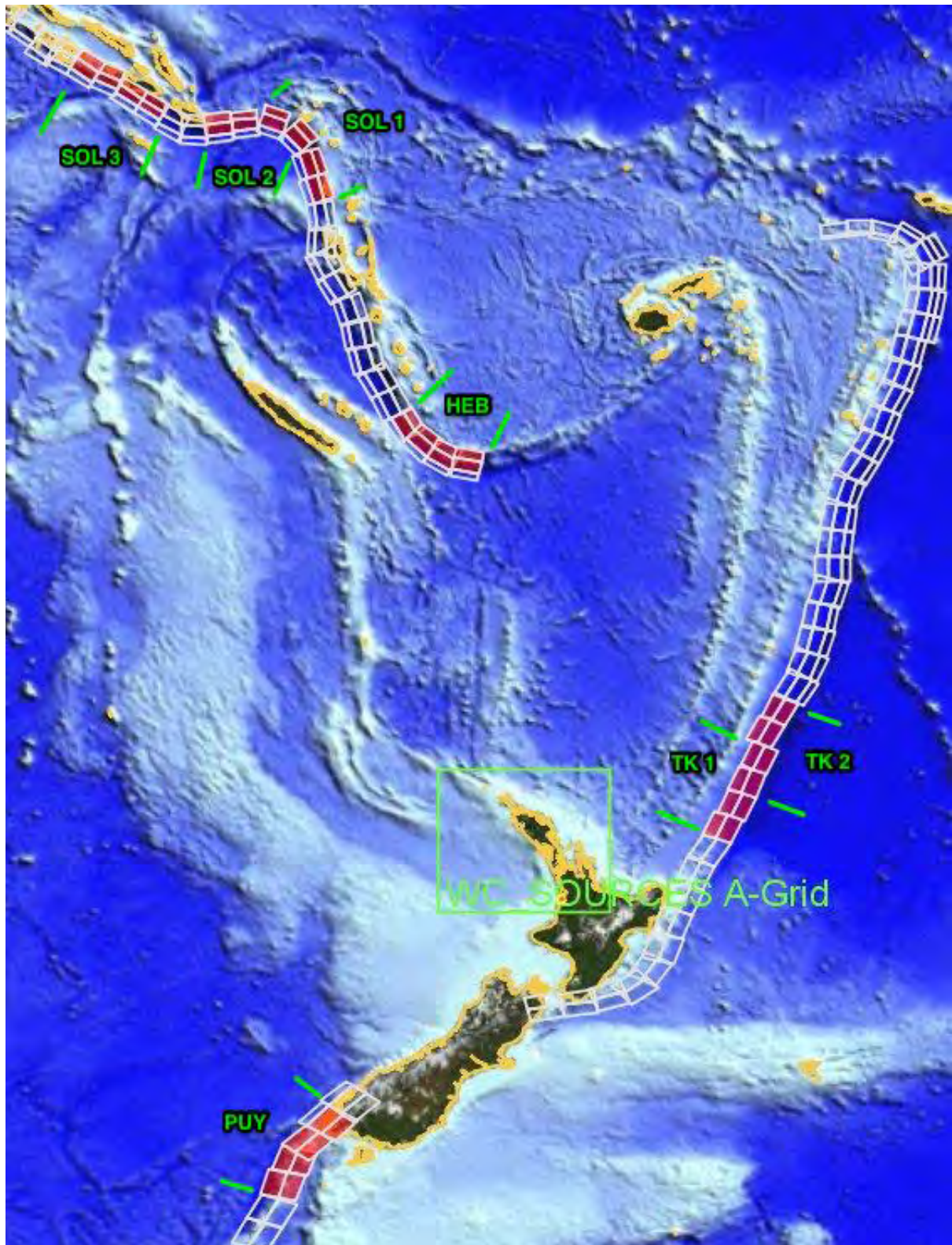


Figure 2.1 Regional tsunami source regions. *SOL* Solomon Trench, *HEB* New Hebrides Trench, *TK* Tonga-Kermadec Trench and *PUY* Puysegur Trench.

2.2 Distance Source Scenarios

In this report, two distant source tsunami scenarios are considered. These are based on the 1868 Arica and 1960 Valdivia historical Chilean events. The rationale for focussing on these two sources only is discussed in Section 4 below.

Borrero (2013) conducted a detailed analysis of the effects of the 1960 tsunami at Whitianga. In that study he compared the numerical model results from 6 different versions of the tsunami source for that event to eyewitness accounts and observations of inundation at Whitianga. The results of that study suggested that the earthquake slip distribution proposed by Fujii and Satake (2012) provided the best fit to the overall observed effects. However, it was necessary to increase the overall slip amounts by 20% to most accurately reproduce the observed inundation. The fault segments, initial seafloor deformation and slip amounts used for that source are shown in Figure 2.2 and Table 2.2.

For the 1868 Arica event, we used source segments corresponding to a rupture extending from Arica, Chile, 600 km northward into southern Peru. This source uses uniform slip of 39.6 m over the fault plane. This source mechanism produced the best fit to the available observations of the 1868 tsunami in Lyttelton Harbour as discussed in Borrero and Goring (2015).

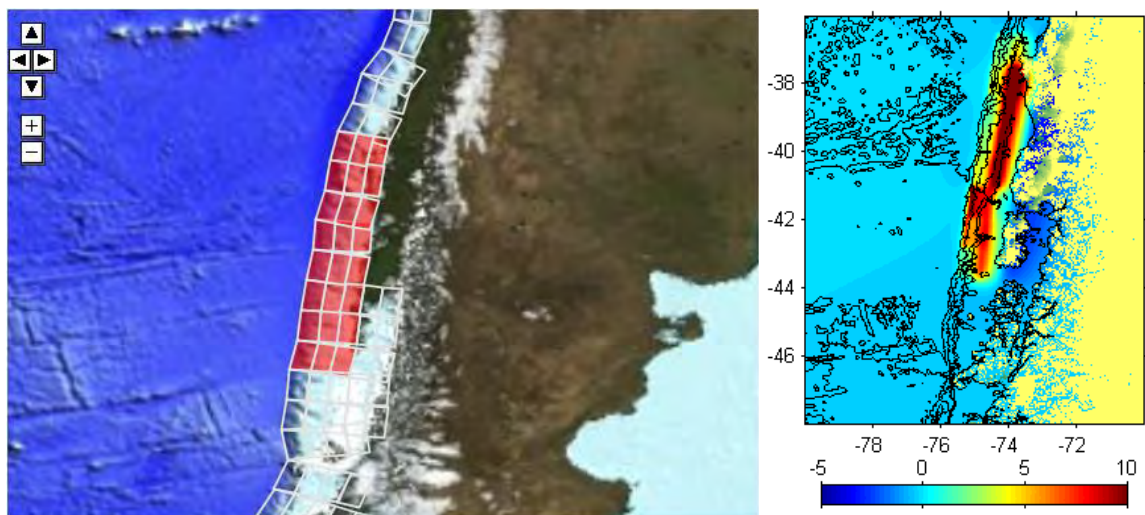


Figure 2.2 (left) Unit source segments used to define the 1960 Chilean Earthquake suite of events. (right) Initial sea floor deformation at the source region.

Table 2.2 Faults segment slip amounts for the 1960 Chilean tsunami.

Fault Segment Slip Amounts		
5.0	12.9	1.2
6.6	36.1	21.0
2.8	31.1	11.3
4.9	29.6	11.5
7.8	32.9	6.6
25.7	17.8	6.2
15.3	21.7	5.5
3.7	20.5	2.7

**Figure 2.3 Source segments used for the 1868 Arica tsunami.**

3 MODEL RESULTS: REGIONAL/DISTANT TSUNAMIS SOURCES IN THE SOUTHWESTERN PACIFIC

3.1 Propagation Models

Tsunami water levels and current speeds for the sources described above were modelled at Port Waikato, Raglan and Aotea. For each of the cases, we have plotted the modelled tsunami wave heights in the southwest Pacific (Figure 3.1 and Figure 3.2). The regional propagation plots show the strong influence bathymetric features have on guiding tsunami wave energy towards the west coast. This is particularly true for the three Solomon Islands cases with the Solomon 3 cases showing a strong focussing effect along the Lord Howe Rise (Figure 3.2). Also evident is how the west coast is largely shielded from the brunt of the wave energy produced by either of the two Tonga-Kermadec trench sources. From these plots we can also see that the Puysegur source transmits significant tsunami wave energy toward the west coast despite its southerly position and near parallel orientation relative to the west Waikato coastline.

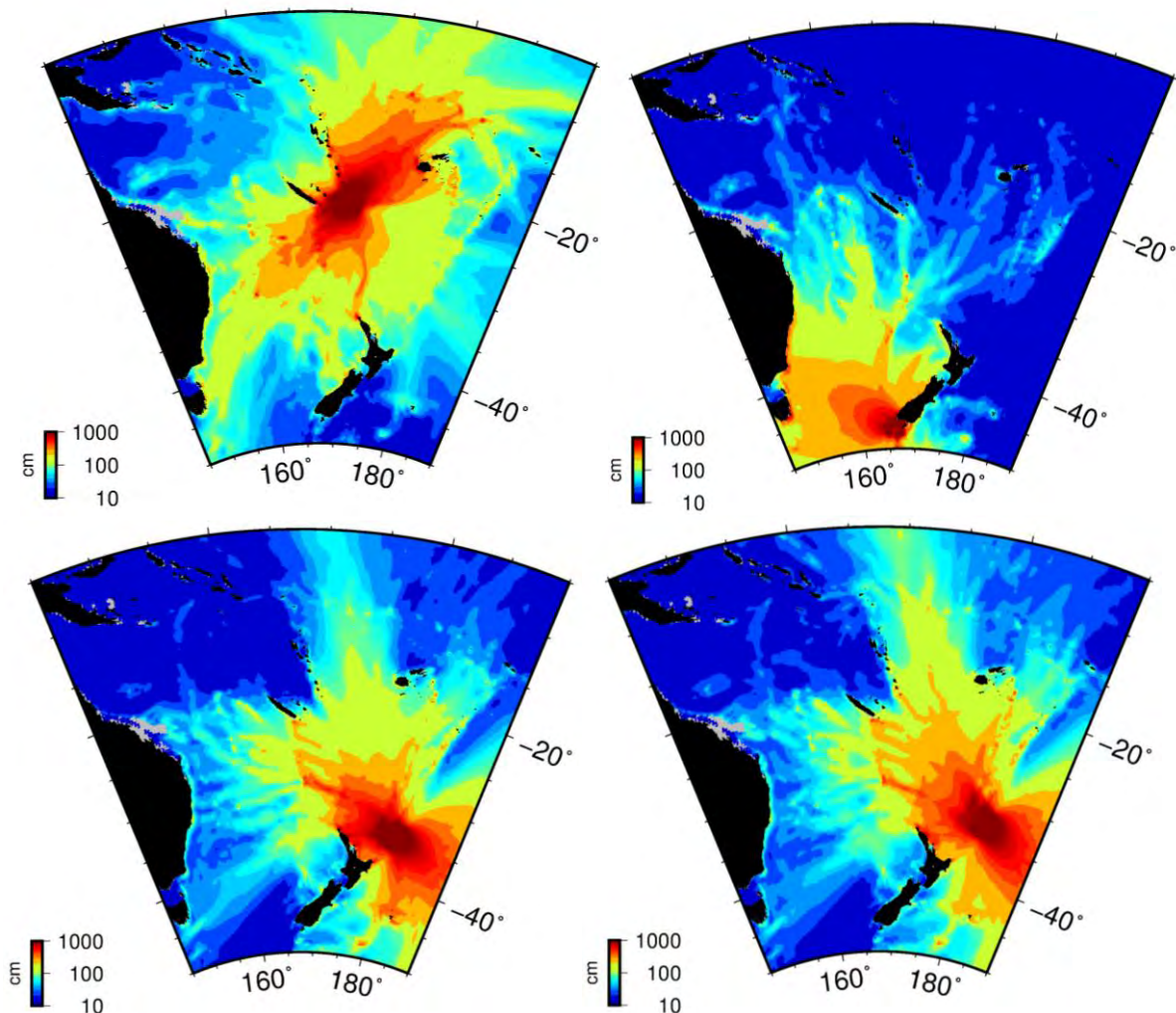


Figure 3.1 Maximum computed tsunami heights over the southwest Pacific region for the Southern New Hebrides (top left), Puysegur (top right), TK 1 (bot. left) and TK 2 (bot right) sources.

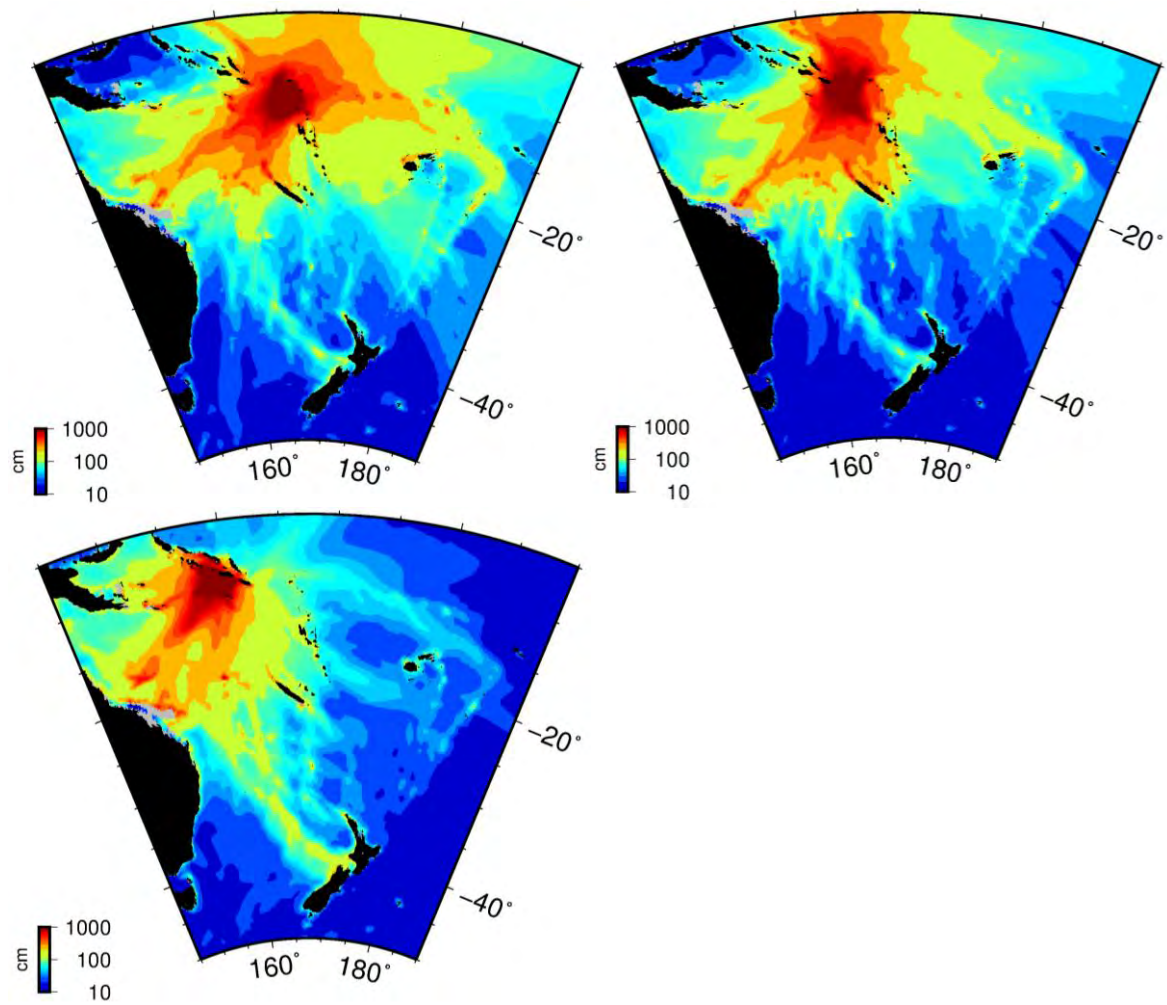


Figure 3.2 Maximum computed tsunami heights over the southwest Pacific region for the Solomon 1 (top left), Solomon 2 (top right) and Somolon 3 (bot. left) sources.

3.2 Tsunami Arrival Times and Heights

An important consideration for the regional tsunami hazard is a clear understanding of the tsunami arrival time. 'Tsunami arrival' however can be defined in a number of ways, whether it is the time of the first water level change (rise or drop) or the time of the maximum wave height.

As discussed above, tsunami sources are generally grouped according to the tsunami wave travel time from the source region to the site of interest. For the New Zealand context, Power (2013) grouped sources according to the following definitions:

- Distant source – more than 3 hours travel time from New Zealand
- Regional source – 1–3 hours travel time from New Zealand
- Local source – 0–60 minutes travel time to the nearest New Zealand coast

For the different tsunami sources, we depict the tsunami arrival times and time series of the water levels throughout the tsunami simulations in Figure 3.4 through Figure 3.7. In these plots we see that the first withdrawal of the water surface begins approximately 3 – 3.5 hours after the earthquake for the Southern New Hebrides, Puysegur and two Tonga-Kermadec sources, and around 5 – 5.5 hours after the earthquake for the two Solomon sources.

Strictly speaking and using the definitions above, all of these events could be classified as 'distant source' relative to the west coast of the Waikato (just marginally so for the Tonga-Kermadec, Puysegur and Southern New Hebrides sources). However, since tsunamis from these source regions would be affecting other parts of New Zealand in much less time (i.e. Northland for the Solomon Islands and Southern New Hebrides, the Coromandel Peninsula and Bay of Plenty for the Tonga-Kermadec and Southland for the Puysegur Trench), and for geographic regions, we consider this group of sources to be 'regional' here.

For the first Tonga-Kermadec case at all three harbours, the initial withdrawal is followed by the largest positive surge (equal largest at Port Waikato), a result that is in line with that presented by Power *et al.* (2011) for the west coast of Northland. In contrast however, all other cases show that significant surges continue for several hours after tsunami arrival. Notably, the Solomon 1 scenario shows a significant surge occurring 14-15 hours after the earthquake. That this surge is not evident in the Solomon 2 scenario results is indicative of the strong role wave focussing and de-focussing over large bathymetric features has on tsunami induced water levels.

The timing of the tsunami first arrival, peak tsunami activity and largest tsunami surge are summarised in Table 3.1.

Plots of the maximum computed tsunami heights are presented in Figure 3.9 for the Solomon 1 and Puysegur tsunami sources. The complete set of modelled maximum tsunami heights are presented in the various appendices. The highest modelled tsunami heights across the simulations occurs for the Puysegur scenario. This scenario produces tsunami heights of up to 3.1 m at the shoreline just south of the entrance to Aotea Harbour, 3.0 m just north of the river mouth at Port Waikato and 2.4 m to the north of Raglan Harbour.

This Puysegur scenario is the only one that produces any appreciable overland inundation and in Figure 3.10 we present flow depth plots showing the extent and depth of the inundation for the three sites for this case. In general the inundation is limited to the beach areas of the open coast and does not affect the populated areas inside the harbours or up the river. The exception being the Kopua Domain area inside of Raglan Harbour where the model results suggest that this area is susceptible to flooding for the Puysegur scenario.

Table 3.1 Summary of Tsunami arrival and timing of peak tsunami activity for regional sources. All times are approximate and determined through visual inspection of the time series plots.

	First Arrival (hrs)	Peak Activity (hrs)	Largest Surge (hrs)
Port Waikato			
HEB	3.5	3.5-4	9
PUY	3	3-9	4.8
TK 1	3	3-12	6.5
TK 2	3	3-16	6.5
SOL 3	6	6-16	14
SOL 2	6	6-16	11
SOL 3	6	6-18	13
Raglan			
HEB	4	4-11	10
PUY	3.5	3.5-9	5
TK 1	3	3-12	3.5
TK 2	3	3-12	3.5
SOL 3	6	6-20	9
SOL 2	6	6-20	11
SOL 3	6	6-20	19
Aotea			
HEB	4	4-13	6
PUY	3.5	3.5-11	7
TK 1	3	3-14	3.5
TK 2	3	3-14	6
SOL 3	6	6-20	10
SOL 2	6	6-18	10
SOL 3	6	6-20	10

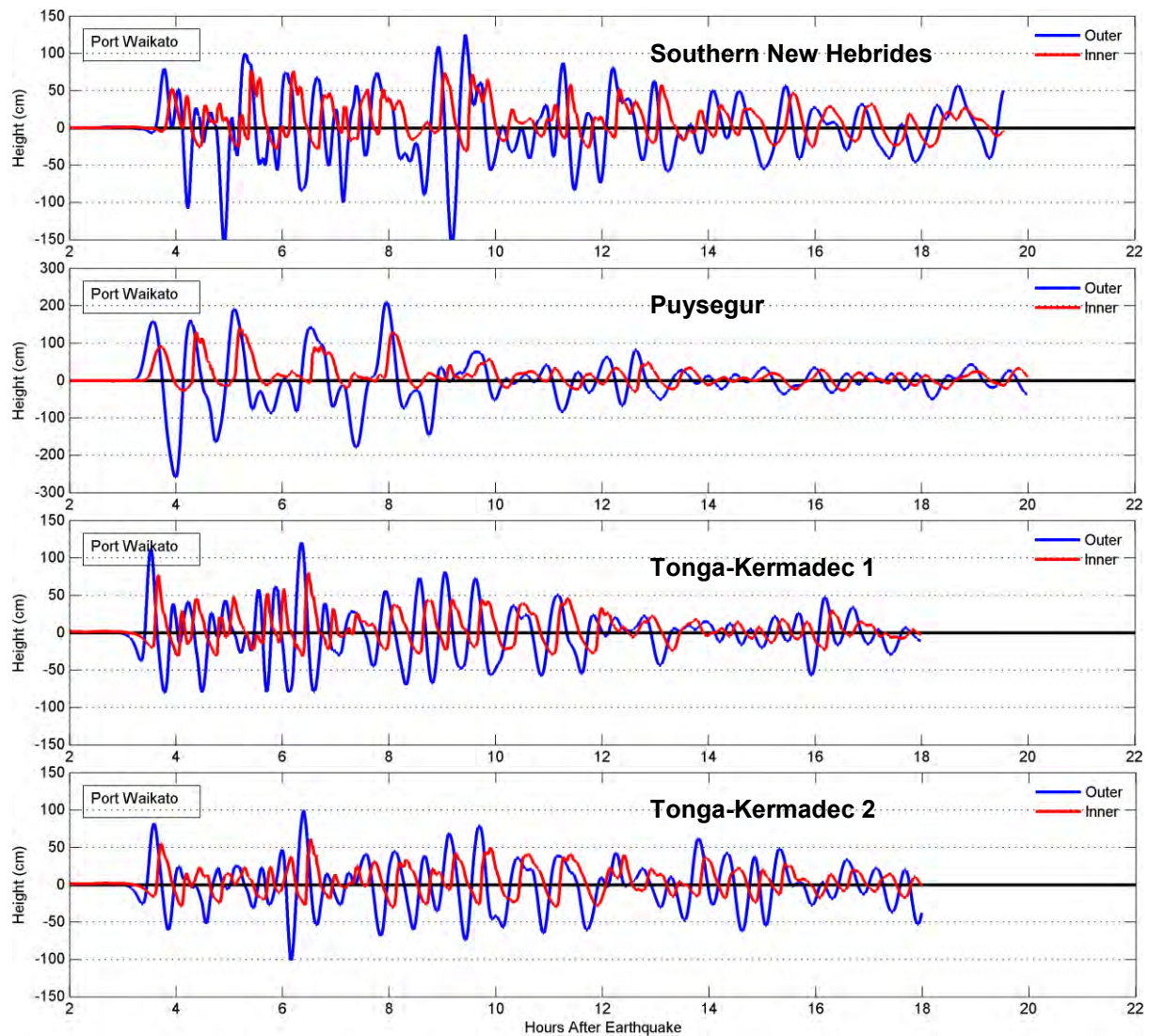


Figure 3.3 Water level time series plots for each regional source at Port Waikato. Top to bottom: New Hebrides, Puysegur, Tonga-Kermadec 1 and Tonga-Kermadec 2. Blue lines represent the outer harbour while red lines represent the inner harbour. Time series locations are indicated by the red and yellow dots in Figure 1.5. Note the different height axis for the Puysegur event.

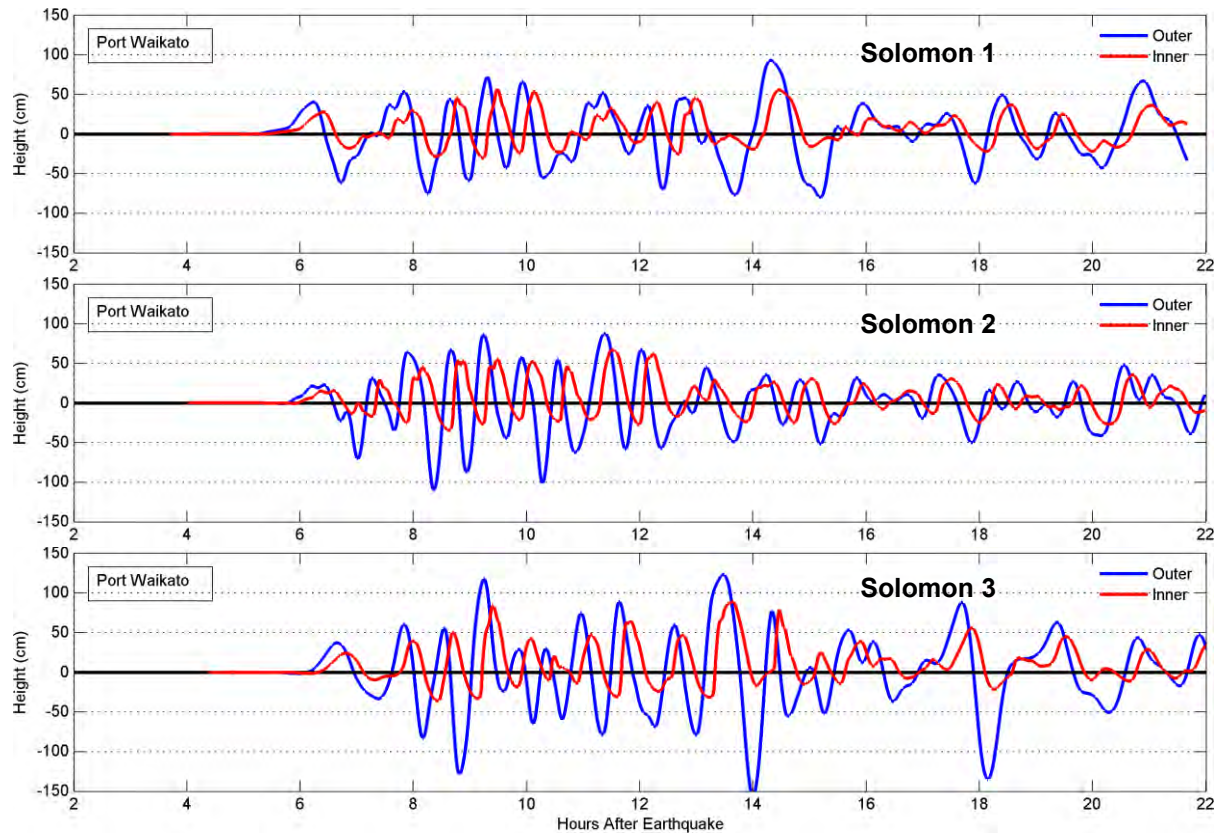


Figure 3.4 Water level time series plots for each regional source at Port Waikato. Top to bottom: Solomon 1, Solomon 2, Solomon 3. Blue lines represent the outer harbour while red lines represent the inner harbour. Time series locations are indicated by the red and yellow dots in Figure 1.5. Note the different height axis for the Puysegur event.

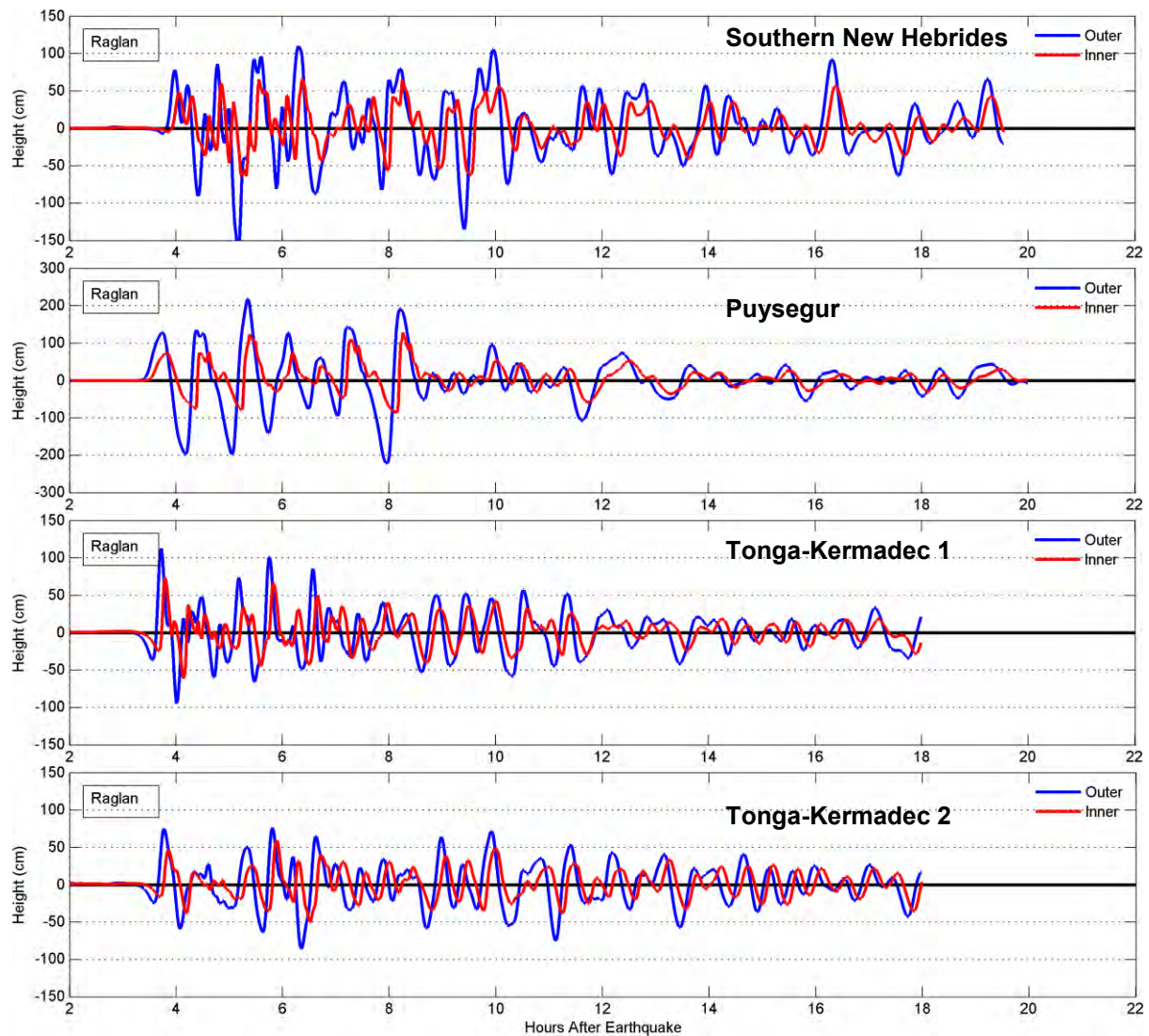


Figure 3.5 Water level time series plots for each regional source at Raglan Harbour. Top to bottom: New Hebrides, Puysegur, Tonga-Kermadec 1 and Tonga-Kermadec 2. Blue lines represent the outer harbour while red lines represent the inner harbour. Time series locations are indicated by the red and yellow dots in Figure 1.5. Note the different height axis for the Puysegur event

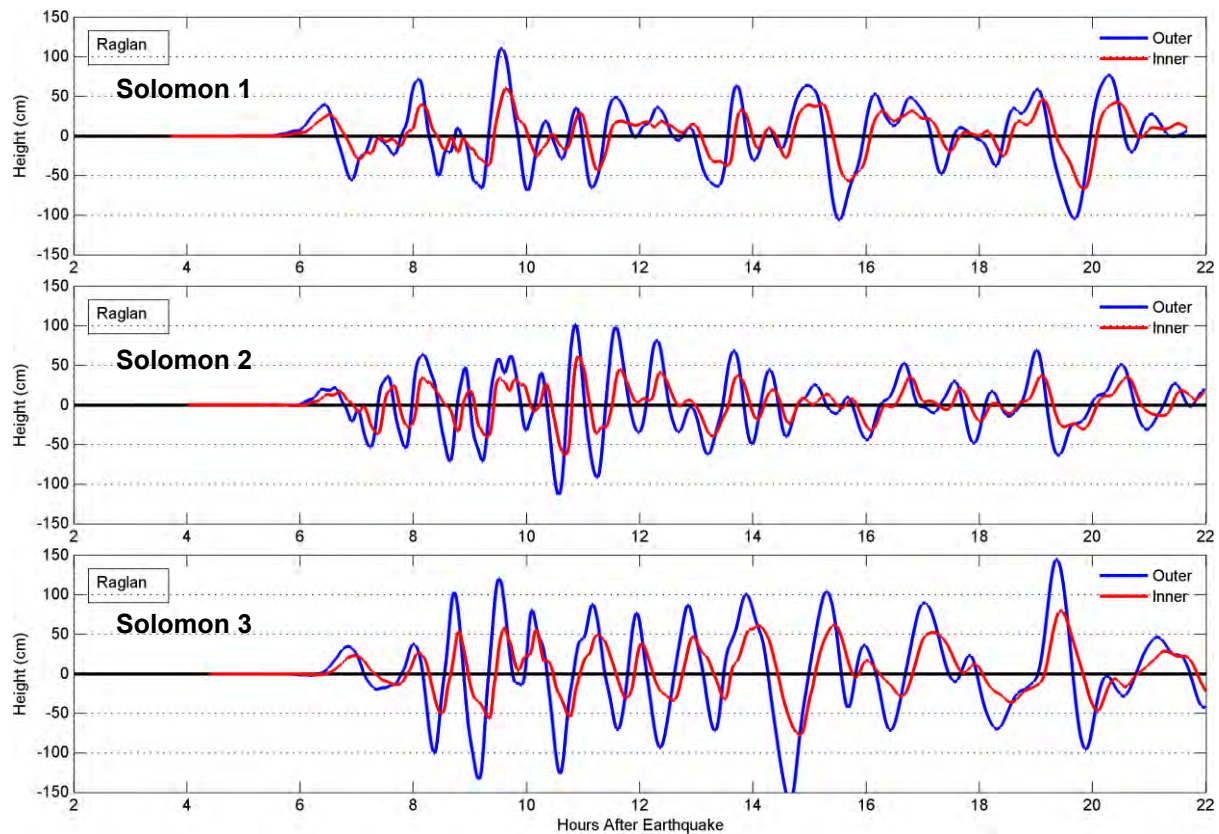


Figure 3.6 Water level time series plots for each regional source at Raglan Harbour. Top to bottom: Solomon 1, Solomon 2, Solomon 3. Blue lines represent the outer harbour while red lines represent the inner harbour. Time series locations are indicated by the red and yellow dots in Figure 1.5. Note the different height axis for the Puysegur event.

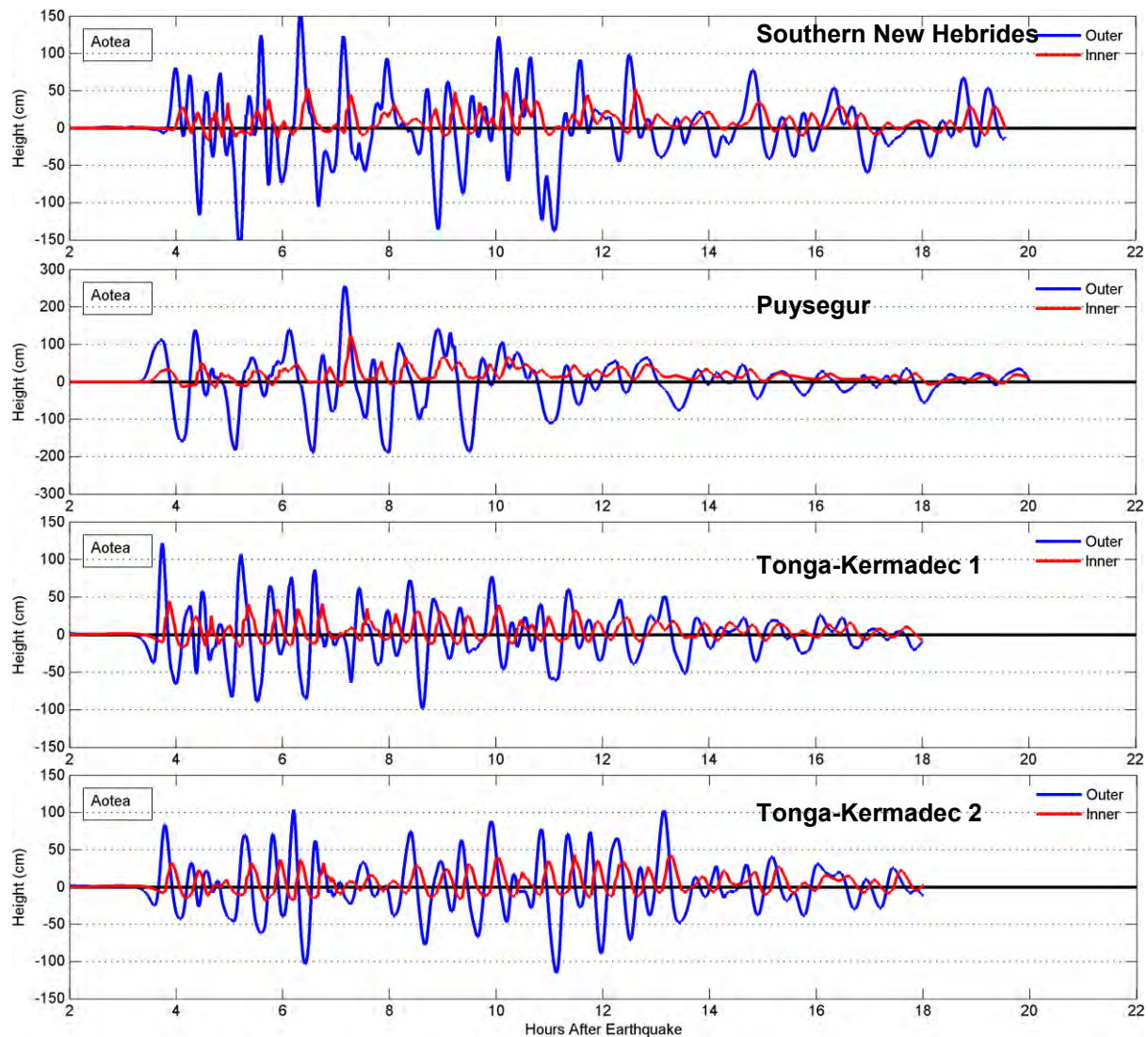


Figure 3.7 Water level time series plots for each regional source at Aotea Harbour. Top to bottom: New Hebrides, Puysegur, Tonga-Kermadec 1 and Tonga-Kermadec 2. Blue lines represent the outer harbour while red lines represent the inner harbour. Time series locations are indicated by the red and yellow dots in Figure 1.5. Note the different height axis for the Puysegur event

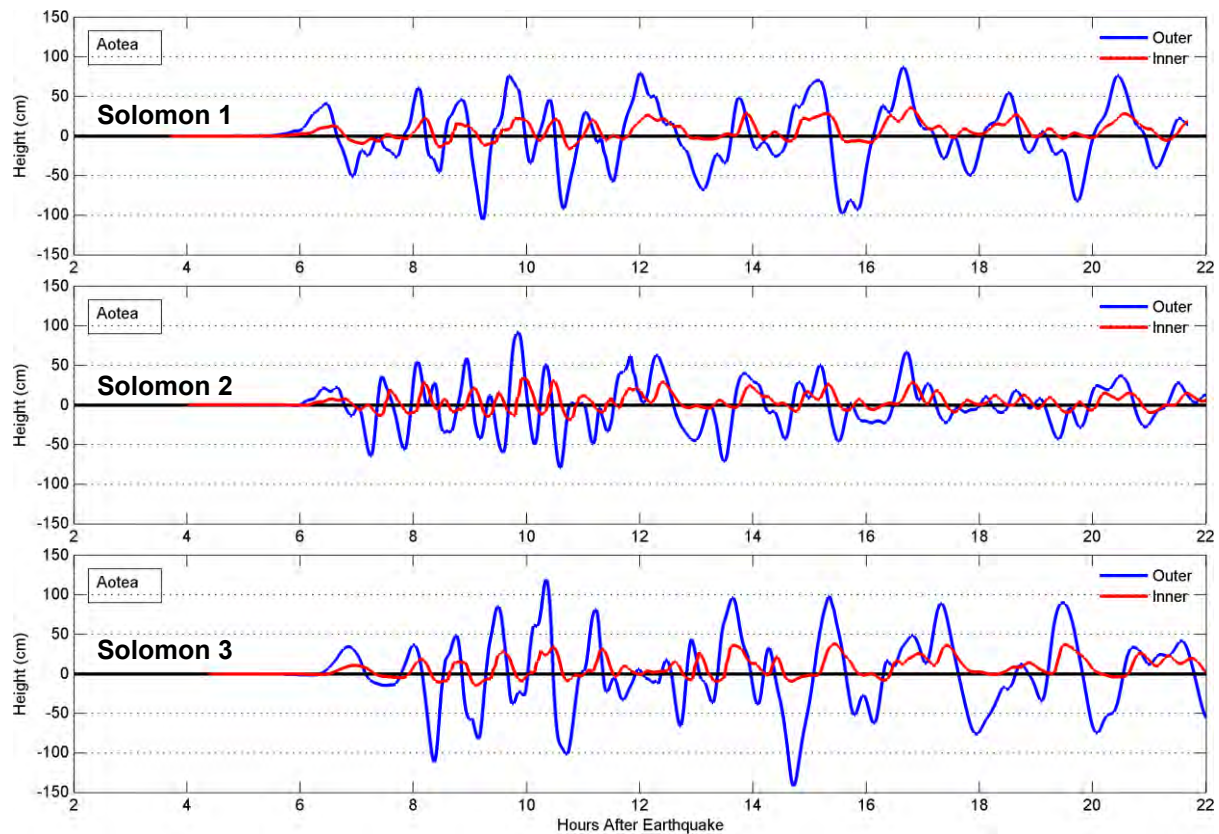


Figure 3.8 Water level time series plots for each regional source at Aotea Harbour. Top to bottom: Solomon 1, Solomon 2, Solomon 3. Blue lines represent the outer harbour while red lines represent the inner harbour. Time series locations are indicated by the red and yellow dots in Figure 1.5. Note the different height axis for the Puysegur event.

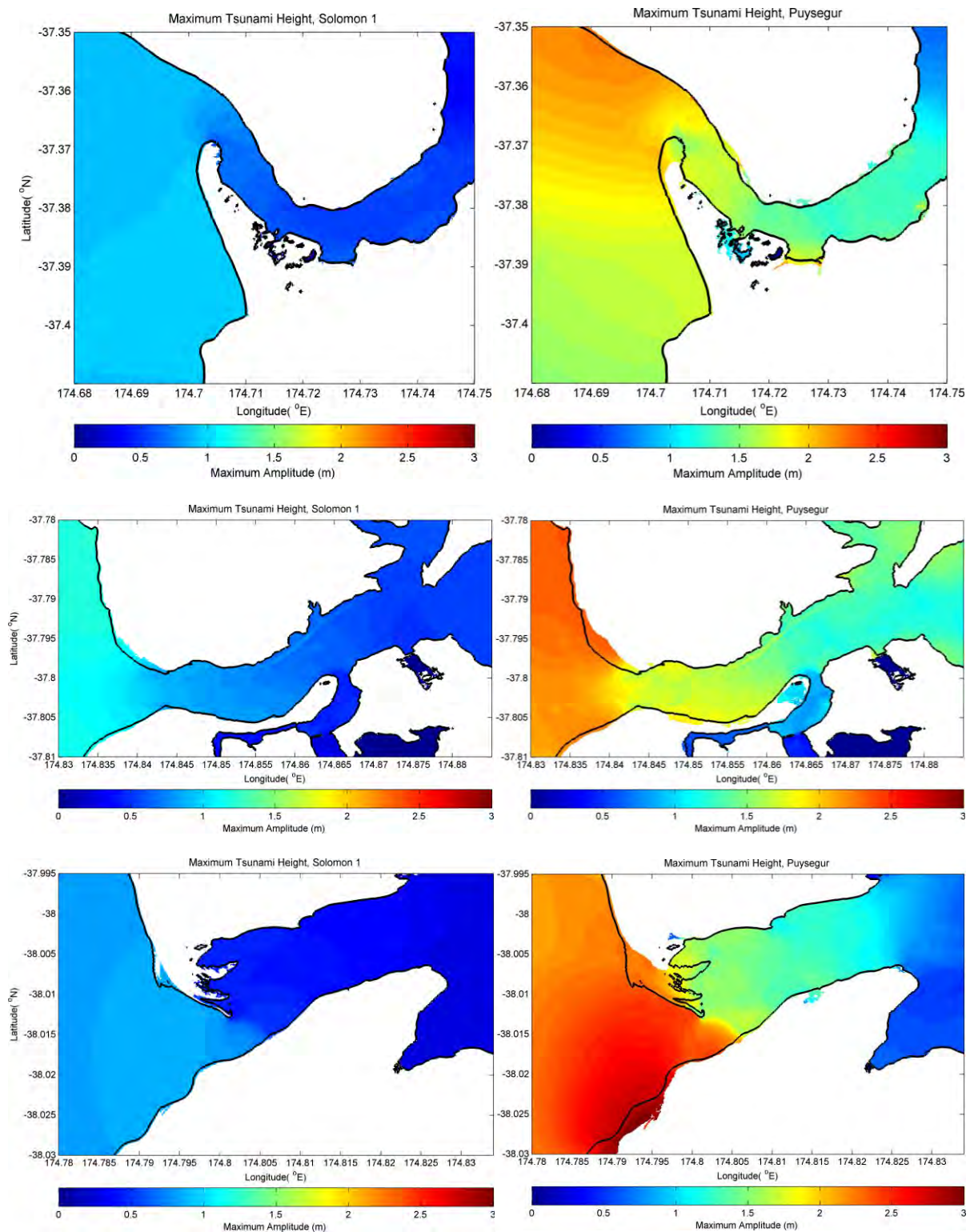
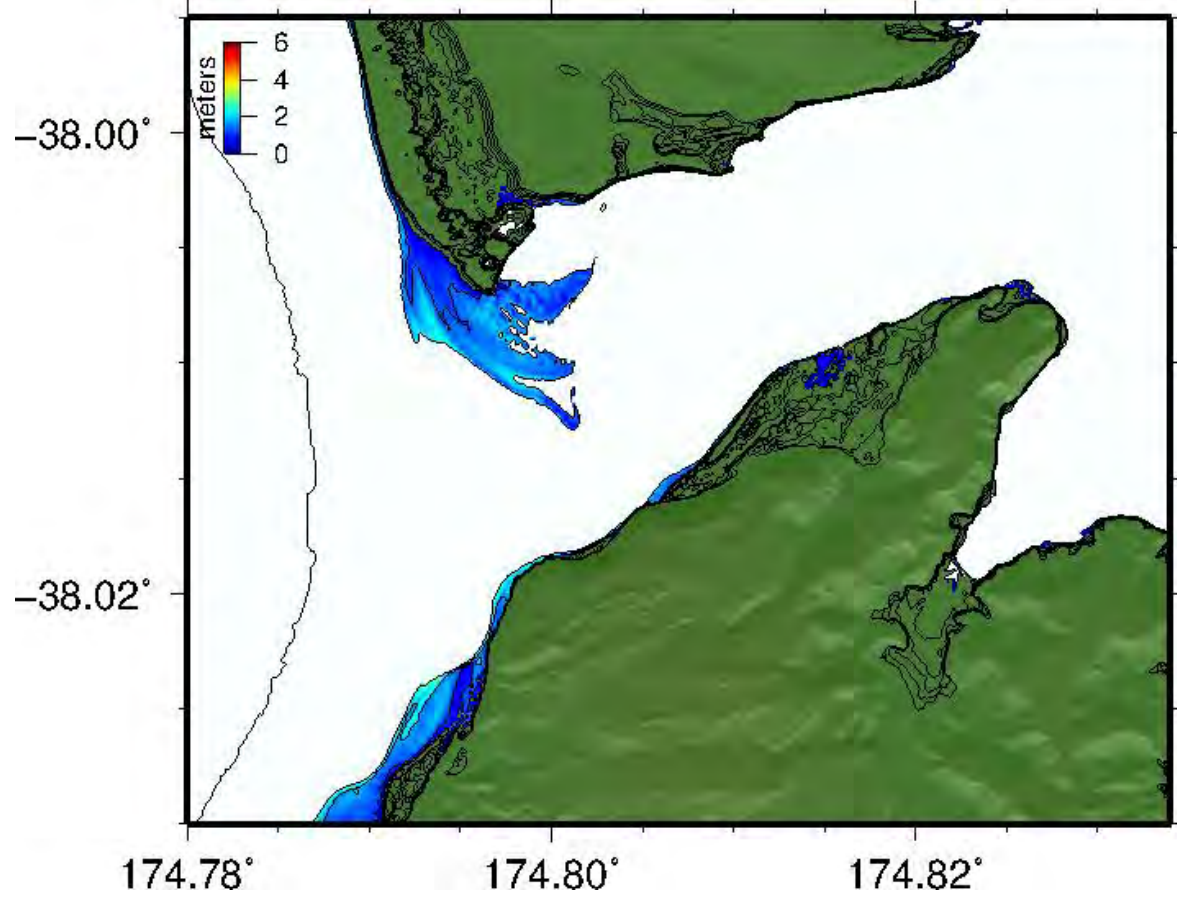
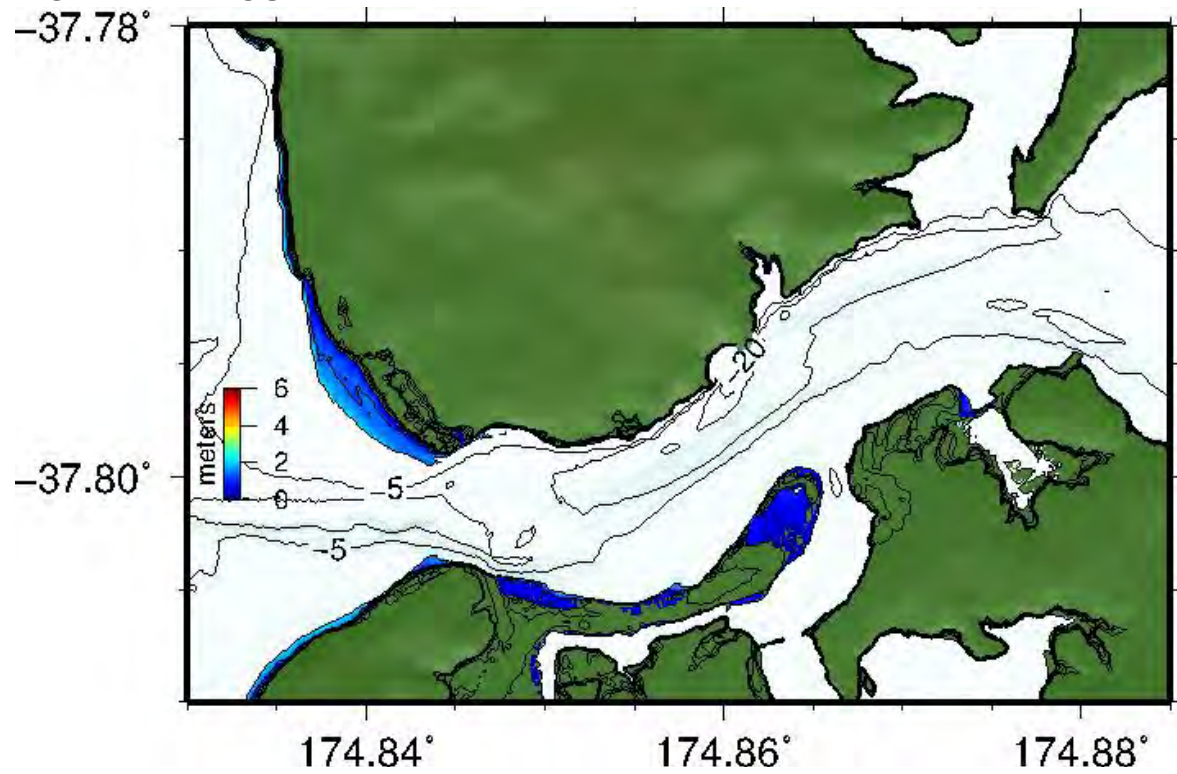


Figure 3.9 Maximum computed water levels for scenarios Solomon 1 (left) and Puysegur (right) at Aotea, Port Waikato and Raglan (top to bottom respectively); each case run at high tide.

AOTEA HARBOUR**RAGLAN HARBOUR**

PORT WAIKATO

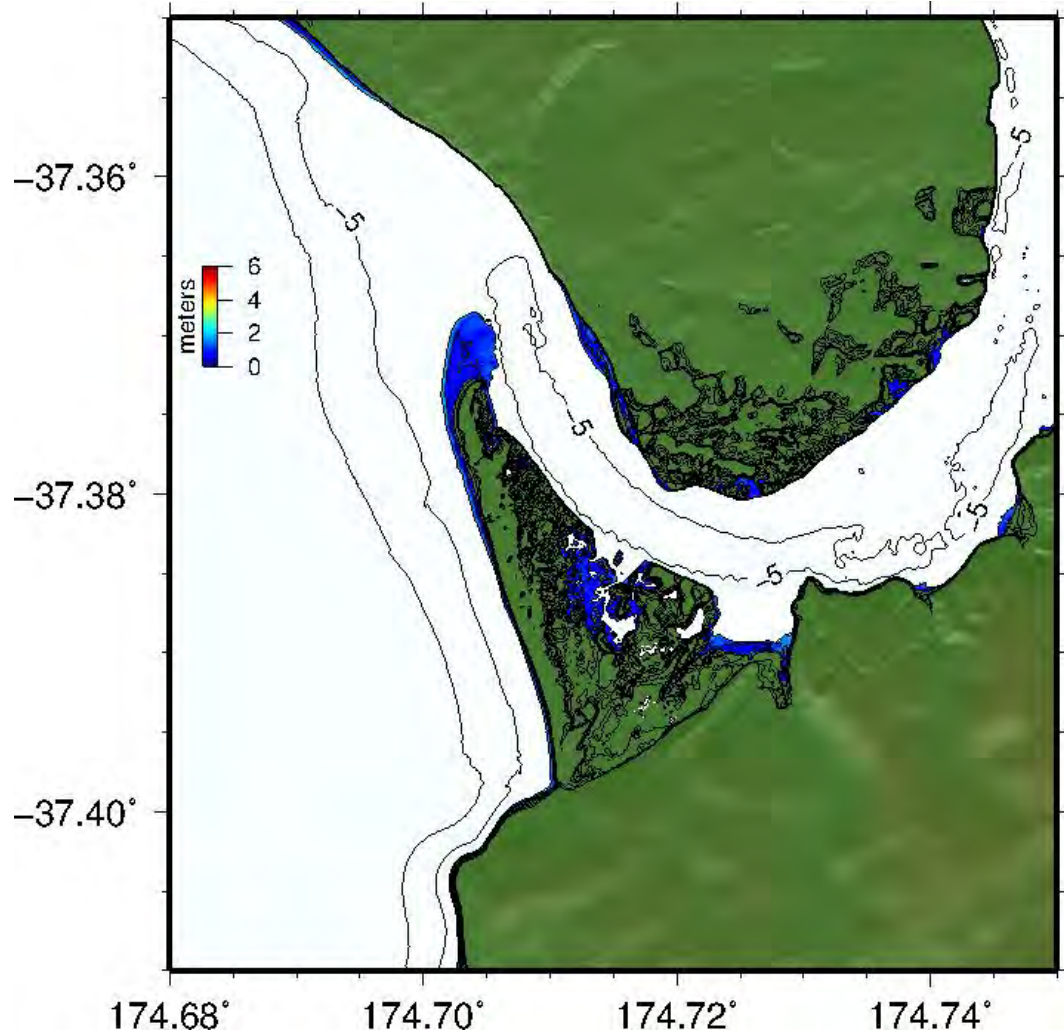


Figure 3.10 Flow depth plots for areas inundated by the Puysegur scenario at high tide at Aotea and Raglan Harbours (previous page) and Port Waikato (above).

3.3 *Tsunami Current Speeds*

Given the narrow entrances to Port Waikato, Raglan and Aotea Harbours, large current speeds are to be expected for some of the modelled tsunami scenarios. The variations in current speeds at these locations between the least and most severe scenarios (Solomon 1 and Puysegur respectively) are shown in Figure 3.11.

Perhaps more important than simply knowing the maximum current speeds, is also knowing the potential duration of strong currents. This concept is illustrated in the time-current-threshold maps shown in Figure 3.12. In this figure, we choose a particular current speed threshold and plot, as a colour, the time (in hours) over which that threshold is exceeded.

We emphasize here that this does not mean currents of this threshold are exceeded continuously over the time span indicated, but rather that the particular current speed threshold is exceeded at least once in that time period. In Figure 3.12 we compare the time-current threshold results between the Solomon 1 and Puysegur cases. The plots suggest that the Solomon 1 source has the potential to produce strong currents for up to 16 hours after tsunami arrival, however, this occurs only over relatively small areas in the Aotea and Port Waikato runs with a somewhat larger area affected in the Raglan case. In the Puysegur results however, we see that while the 3 knot threshold is exceeded over a larger portion of the harbour entrances, the duration generally lasts less than 12 hours. In the case of the Solomon 1 scenario, inspection of the water level time series plots above show a late arriving large surge that is likely the cause of the strong current late in the time series. Looking at the water level time series for the Puysegur case we see that the strongest tsunami effects occur between 3 and 9 hours after the earthquake. The full set of time-current-threshold maps is contained in the various appendices..

Current hazard plots are presented in Figure 3.13 through Figure 3.15. In these figures we plot the maximum computed current speeds for each source scenario using a banded colour palette. Presented this way, we can see which regions of the model domain are susceptible to what level of currents. The complete set of current hazard zone plots are presented for the three sites in the appendices.

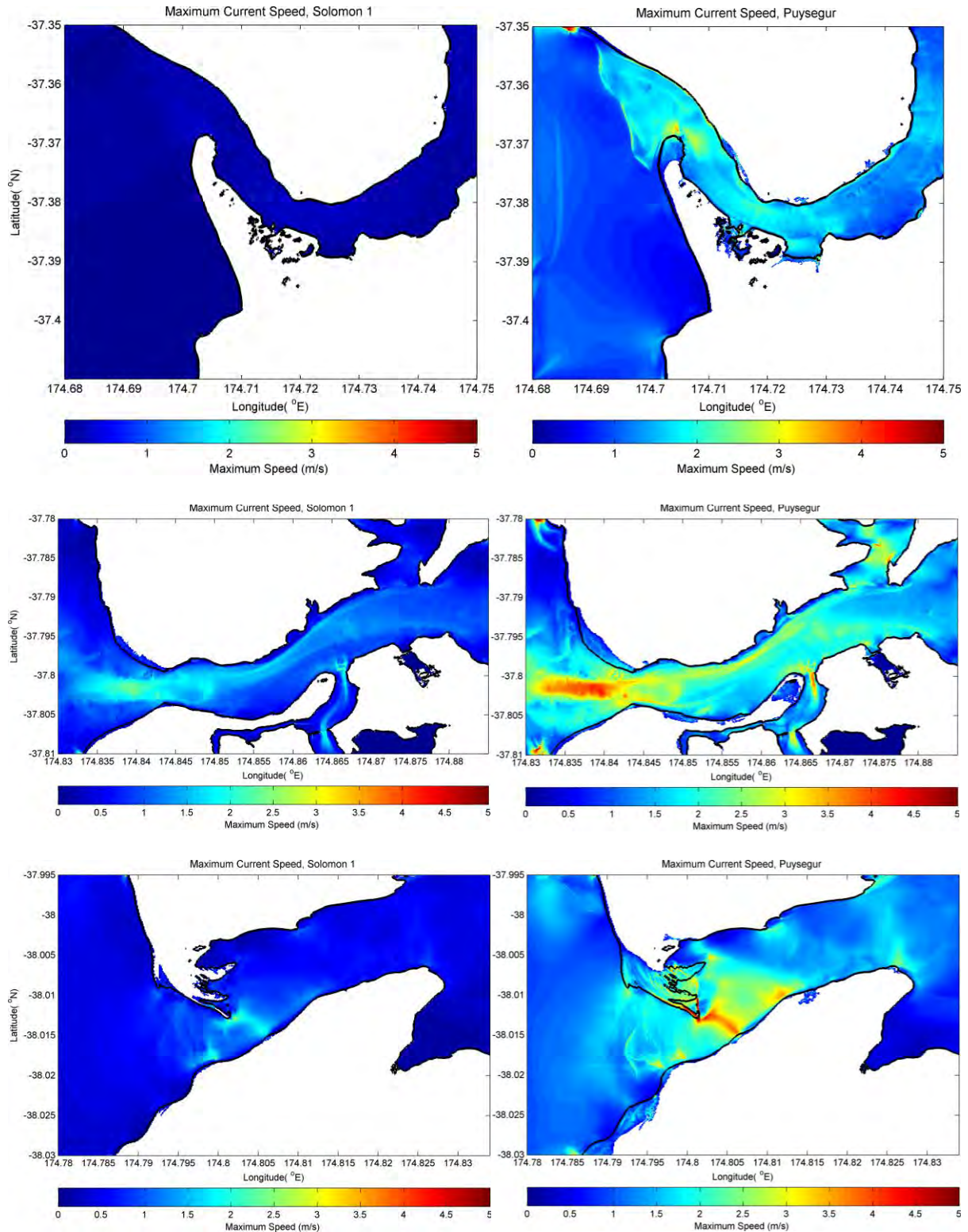


Figure 3.11 Computed maximum current speeds for scenarios Solomon 1 (left) and Puysegur (right) at Aotea, Port Waikato and Raglan (top to bottom respectively); each case run at high tide.

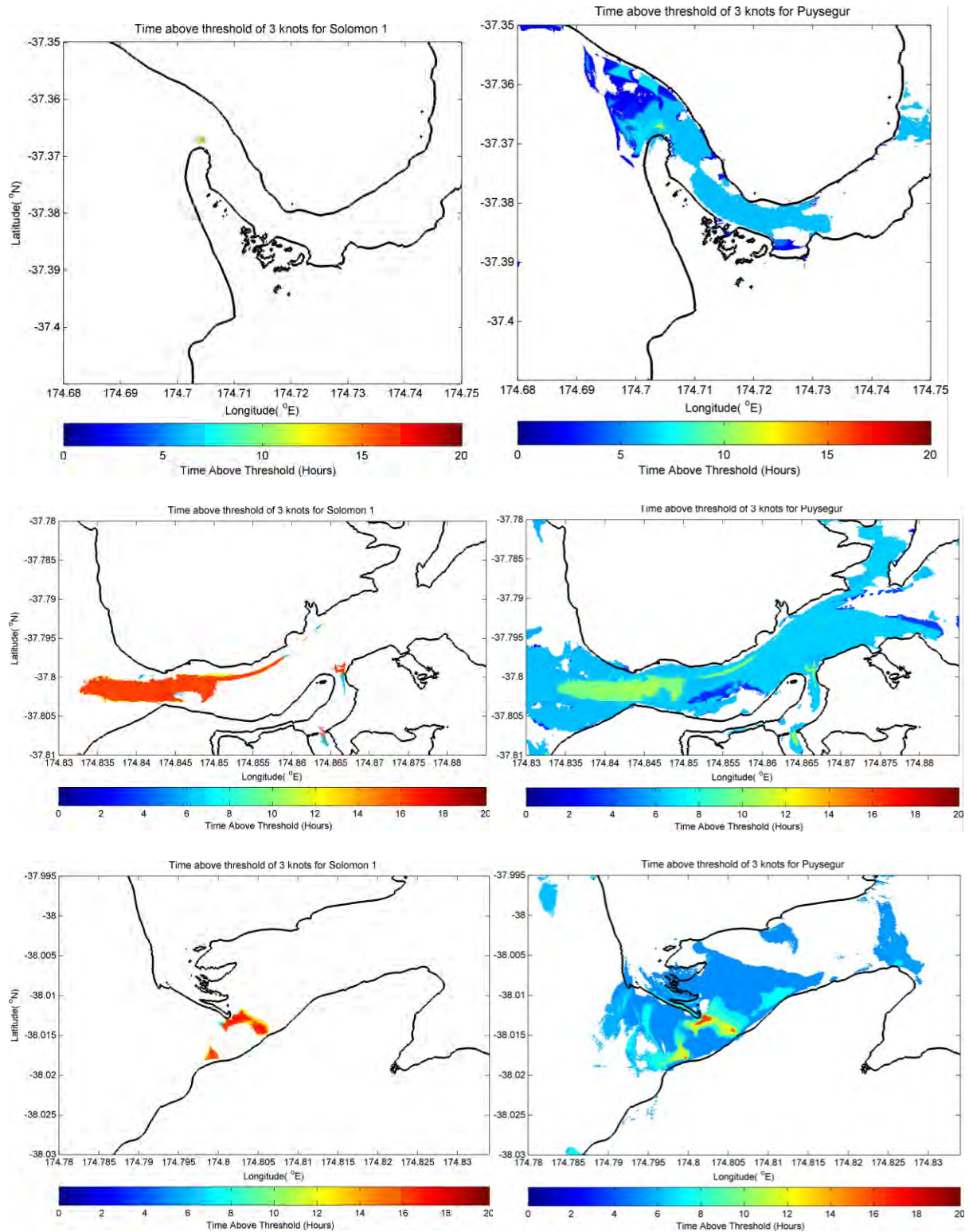


Figure 3.12 Time-current-threshold maps for scenarios Solomon 1 (left) and Puysegur (right) at high tide.

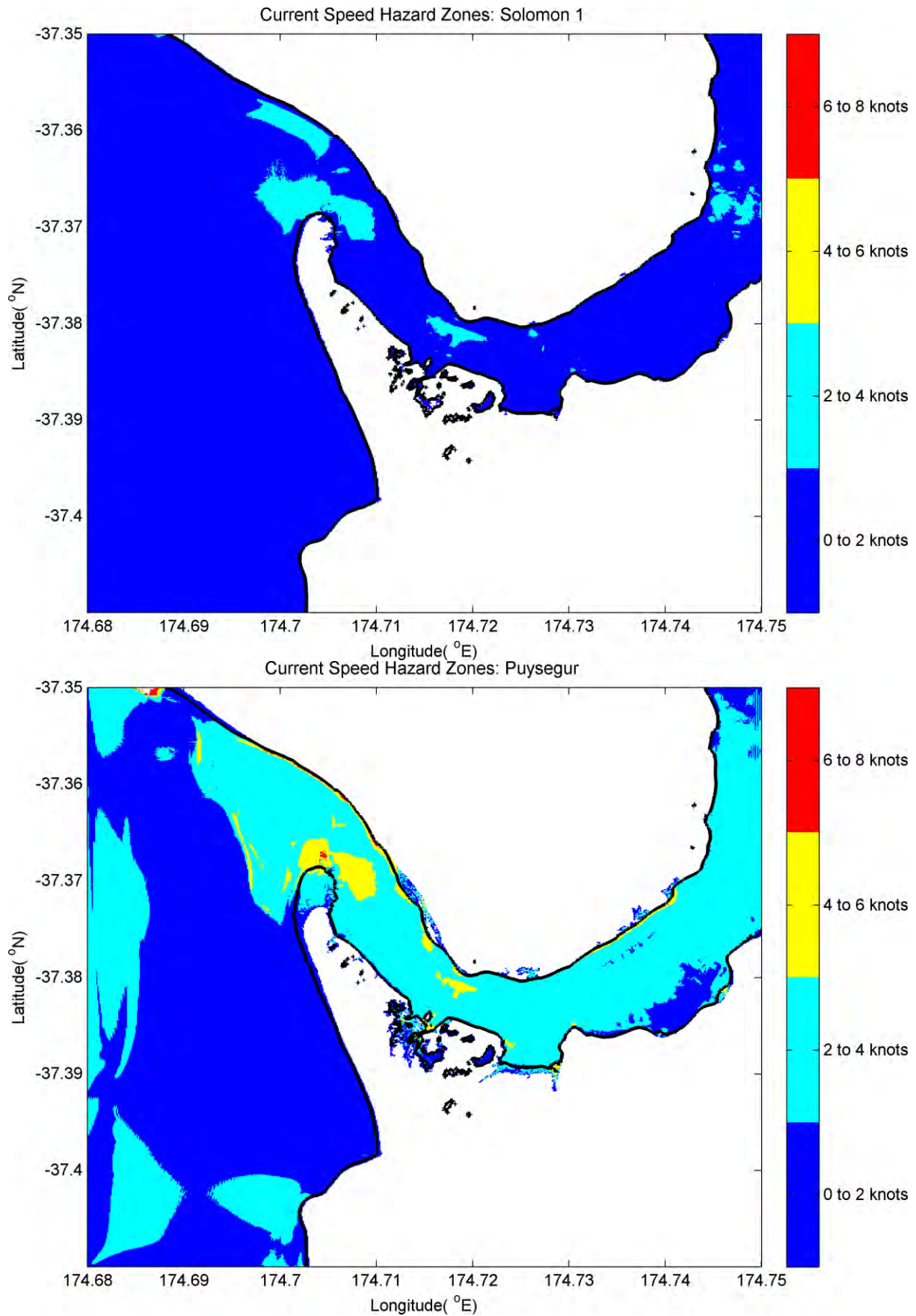


Figure 3.13 Tsunami induced current speed hazard areas at Port Waikato for the Solomon 1 (top) and Puysegur (bottom) tsunami sources.

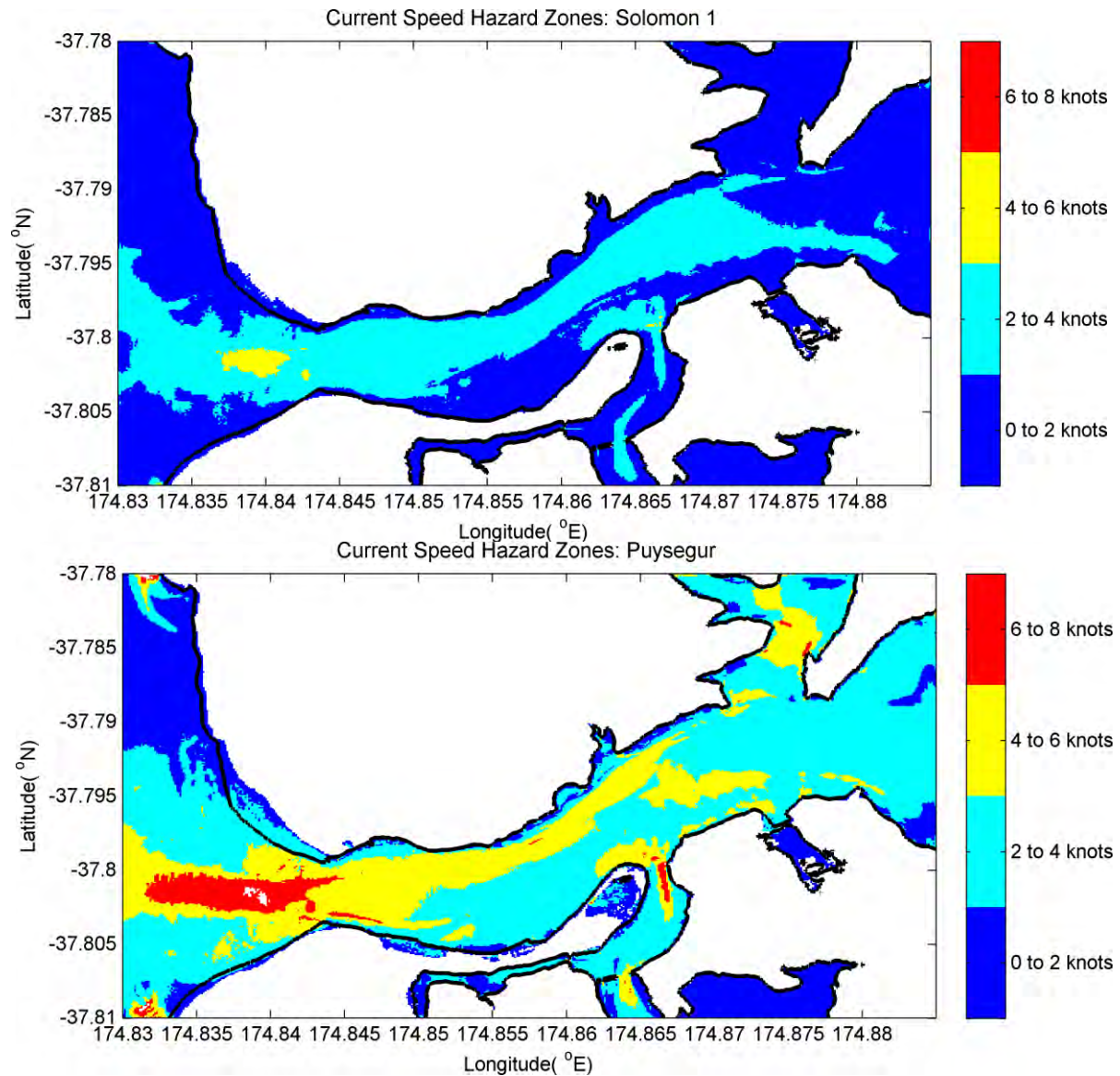


Figure 3.14 Tsunami induced current speed hazard areas at Raglan Harbour for the Solomon 1 (top) and Puysegur (bottom) tsunami sources.

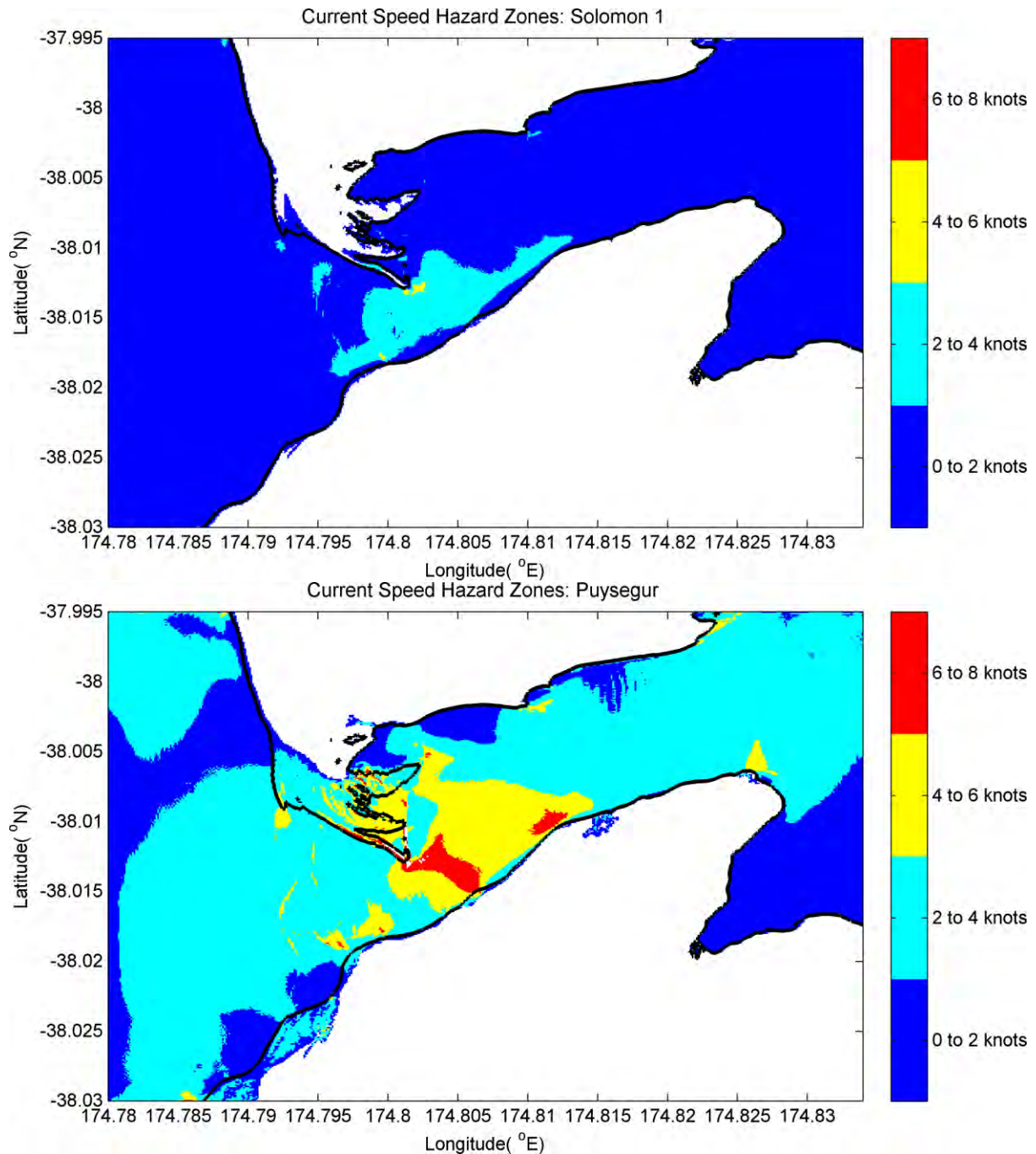


Figure 3.15 Tsunami induced current speed hazard areas at Aotea Harbour for the Solomon 1 (top) and Puysegur (bottom) tsunami sources.

4 MODEL RESULTS: DISTANT SOURCE TSUNAMIS

It is generally accepted that tsunamis generated along the Pacific rim would cause the strongest effects in New Zealand along the east and north facing coasts. The west coast of New Zealand is somewhat protected from north Pacific tsunamis by the shallow island chain ridges running from the Solomon Islands to Fiji. These shallow areas and complex bathymetric features act to reduce and scatter the incident tsunami wave trains. This effect is shown in Figure 4.1 for four large tsunamis (M9 earthquake source) emanating from the north Pacific region. However, the wave guide effect of the Lord Howe Rise and the Norfolk and Three Kings Ridges (see Figure 1.2) will still cause tsunami wave focussing and can lead to locally higher wave heights in some areas, yet we see in Figure 4.2 for the north Pacific case, the offshore tsunami heights are generally less than 1 m along the west coast of the North Island. For this reason, we focus our attention on tsunamis generated along the west coast of South America.

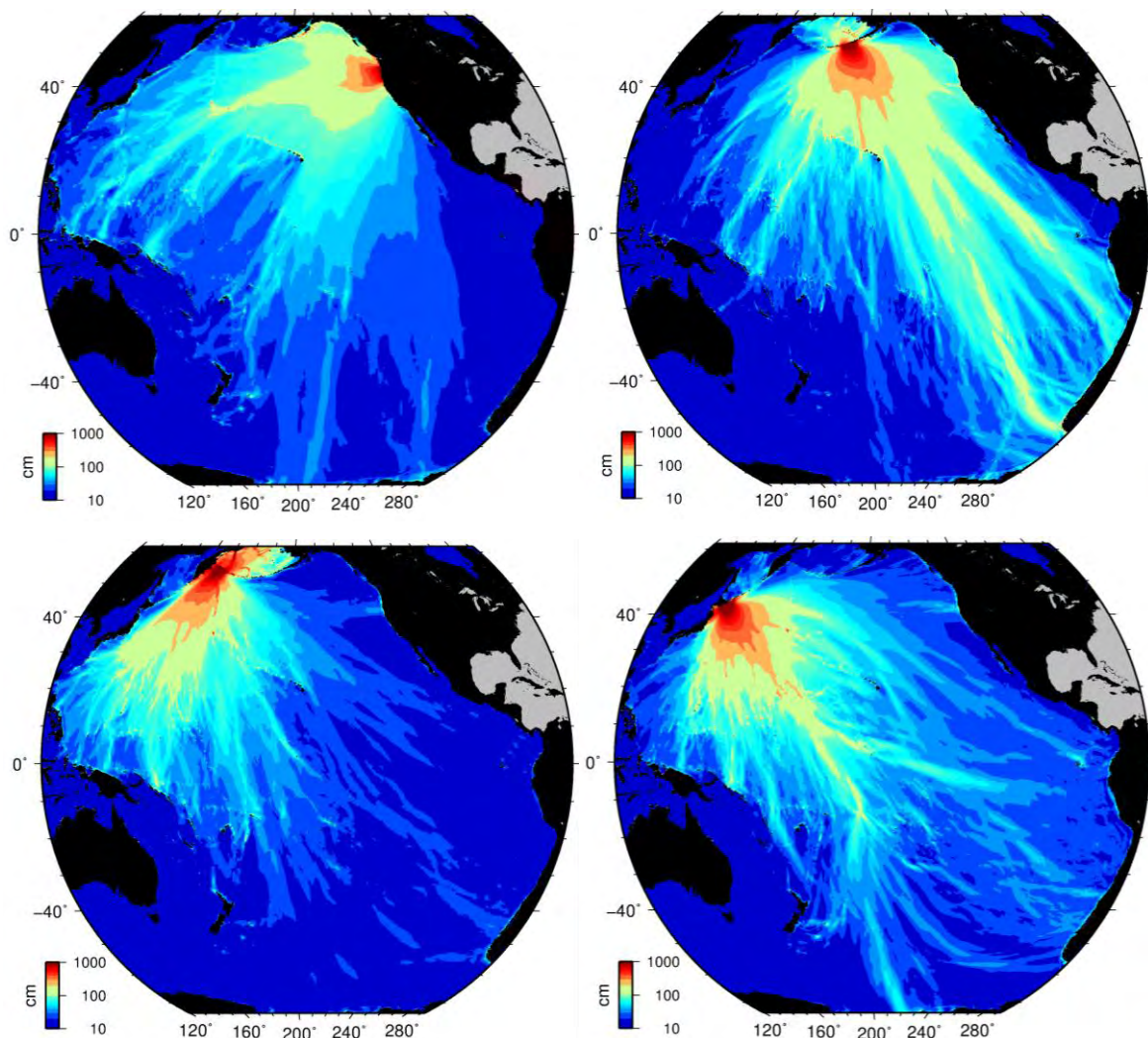


Figure 4.1 Modelled trans-Pacific tsunami wave heights for tsunami emanating from the north Pacific.

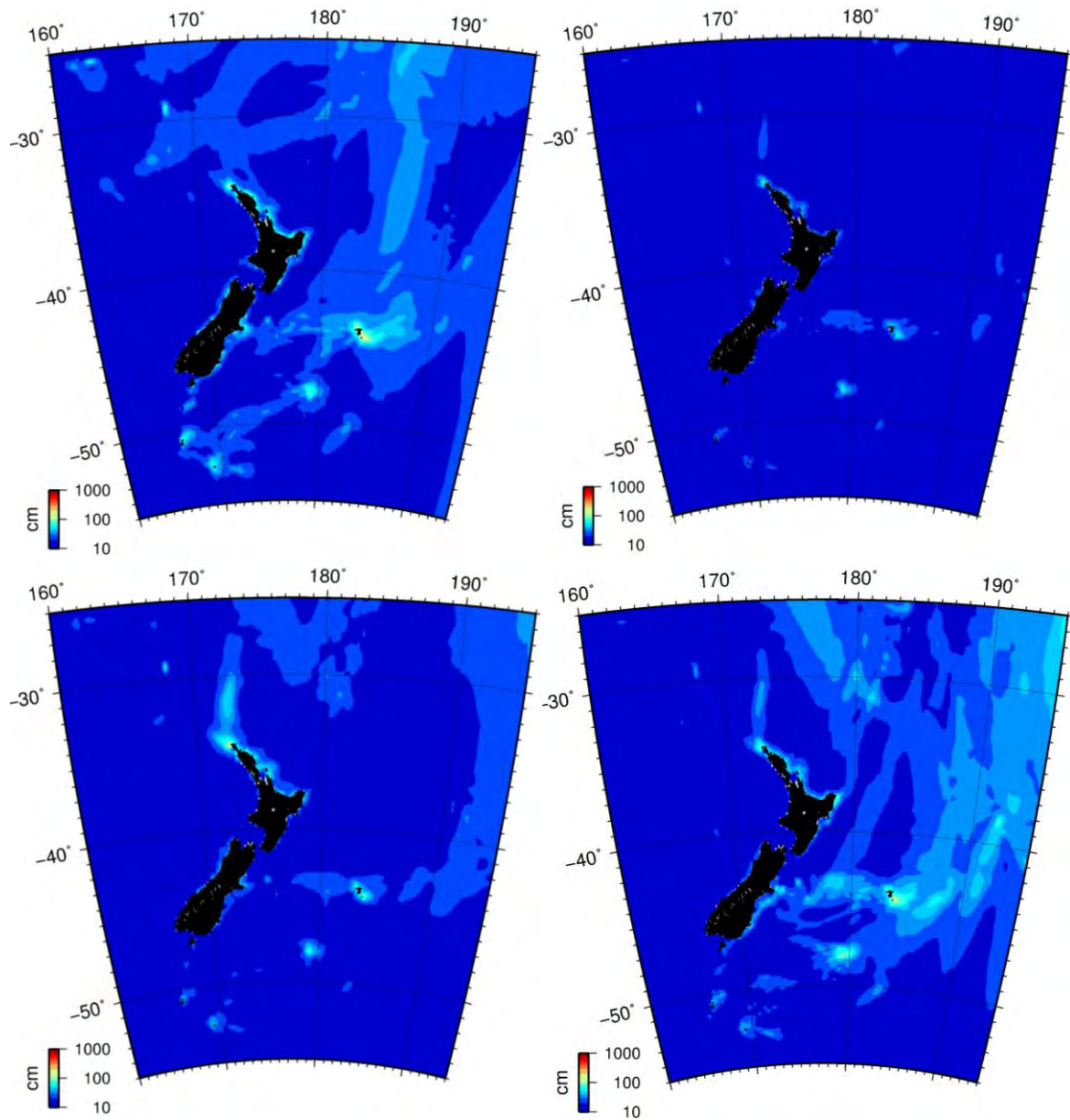


Figure 4.2 New Zealand regional tsunami wave heights from the four north pacific tsunami scenarios depicted in Figure 4.1.

4.1 Propagation Models

For tsunami sources along the west coast of South America, the strongest impact in New Zealand are again along the east coast of the North and South Islands. However, as seen in Figure 4.3, the west coasts are significantly sheltered from the tsunami waves. Thus, for this assessment, we conducted detailed modelling for the two largest tsunami sources available in the historic record, namely the 1960 Valdivia earthquake in southern Chile and the 1868 Arica earthquake that occurred in southern Peru and Northern Chile.

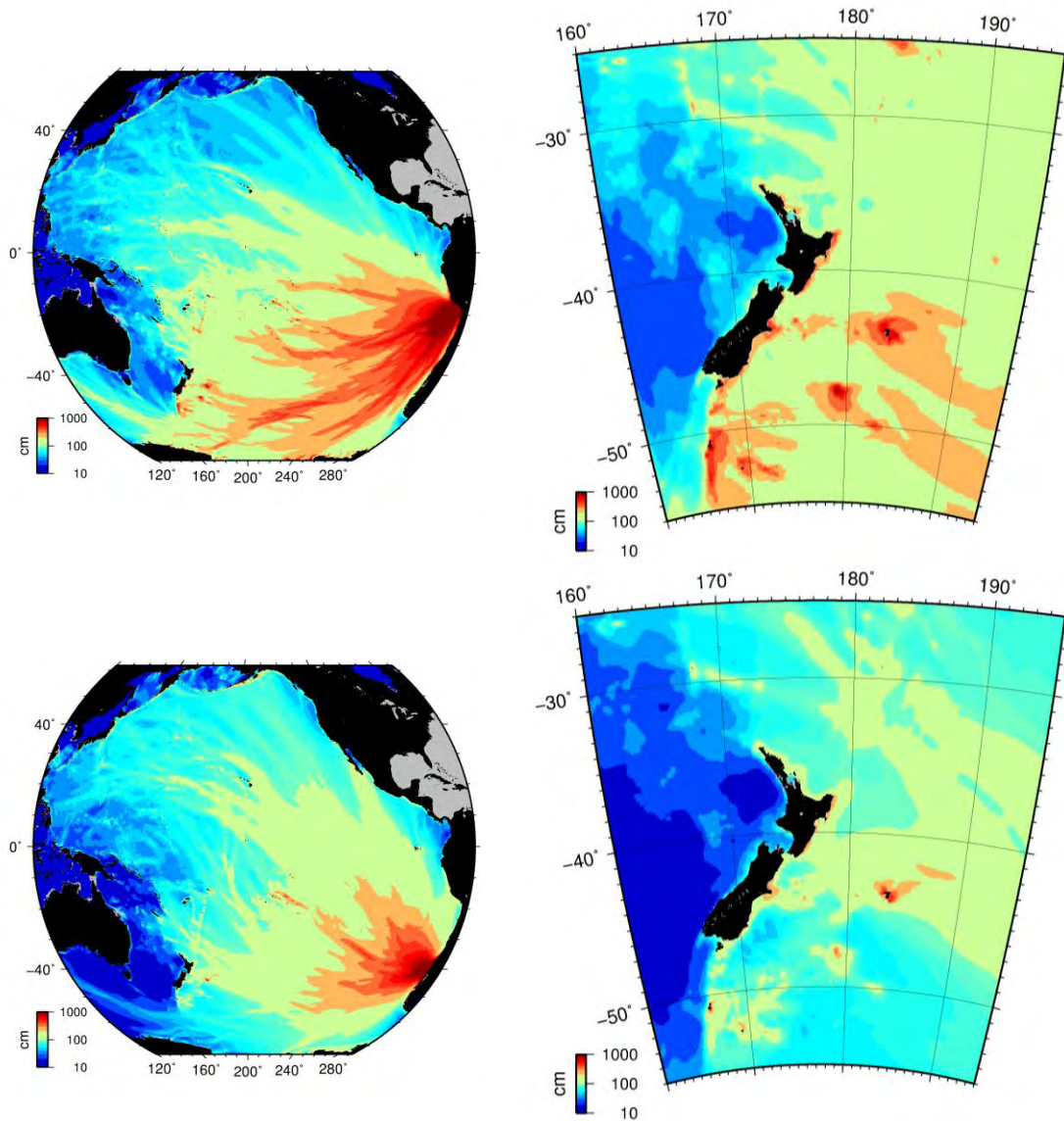


Figure 4.3 Trans-Pacific and regional propagation plots for the 1868 Arica (top) and 1960 Valdivia tsunamis from Chile.

4.2 Arrival Times and Tsunami Heights

Modelled time series of water level at the entrance to and inside of Port Waikato, Raglan and Aotea Harbours for each of the far-field cases are presented in Figure 4.6 through Figure 4.6. We note that the 1960 southern Chile event arrives somewhat earlier than the 1868 Arica event, however it is also important to note that at each location, the largest surge occurs between many hours after tsunami arrival.

Tsunami heights are generally less than 50 cm and do not cause any substantial inundation. This is consistent with the historical record which does not report any significant tsunami effects along the New Zealand west coast for far-field Pacific basin tsunamis.

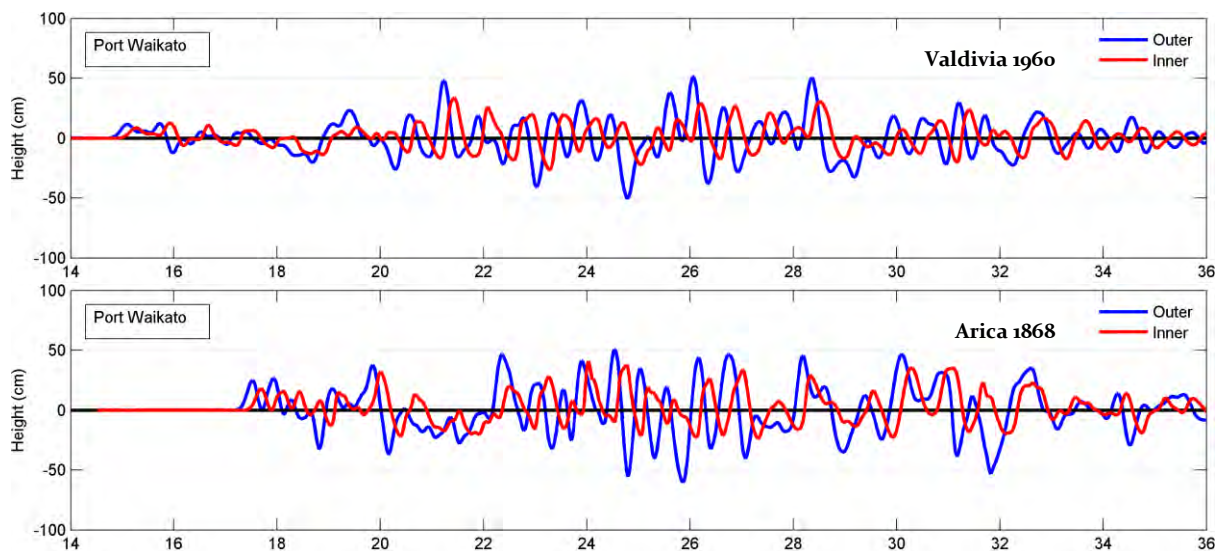


Figure 4.4 Water level time series for the 1960 (top) and 1868 (bottom) tsunamis at Port Waikato.

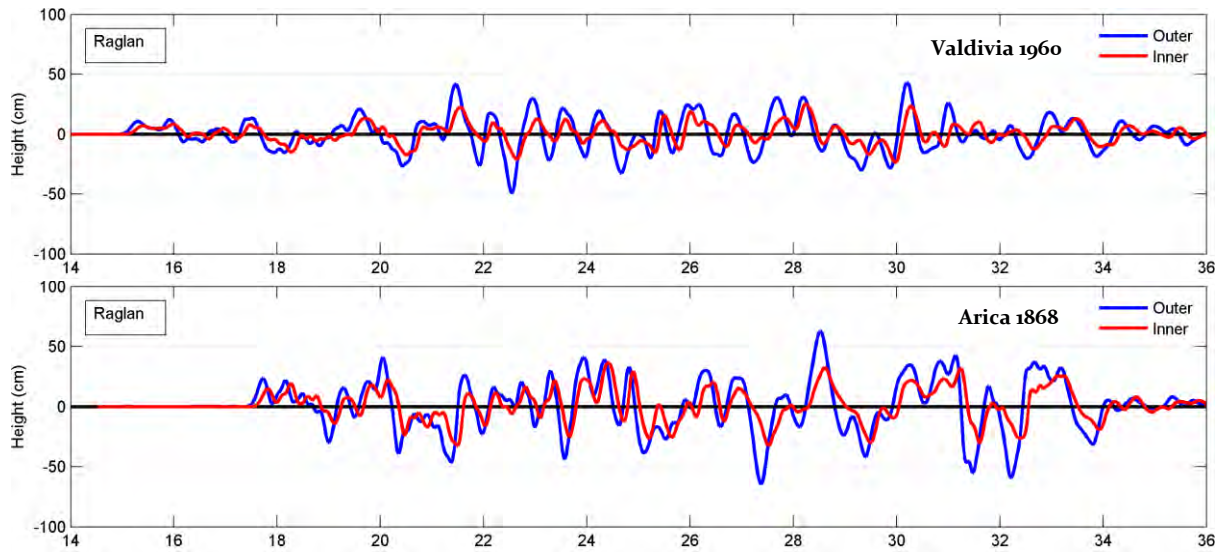


Figure 4.5 Water level time series for the 1960 (top) and 1868 (bottom) tsunamis at Raglan Harbour.

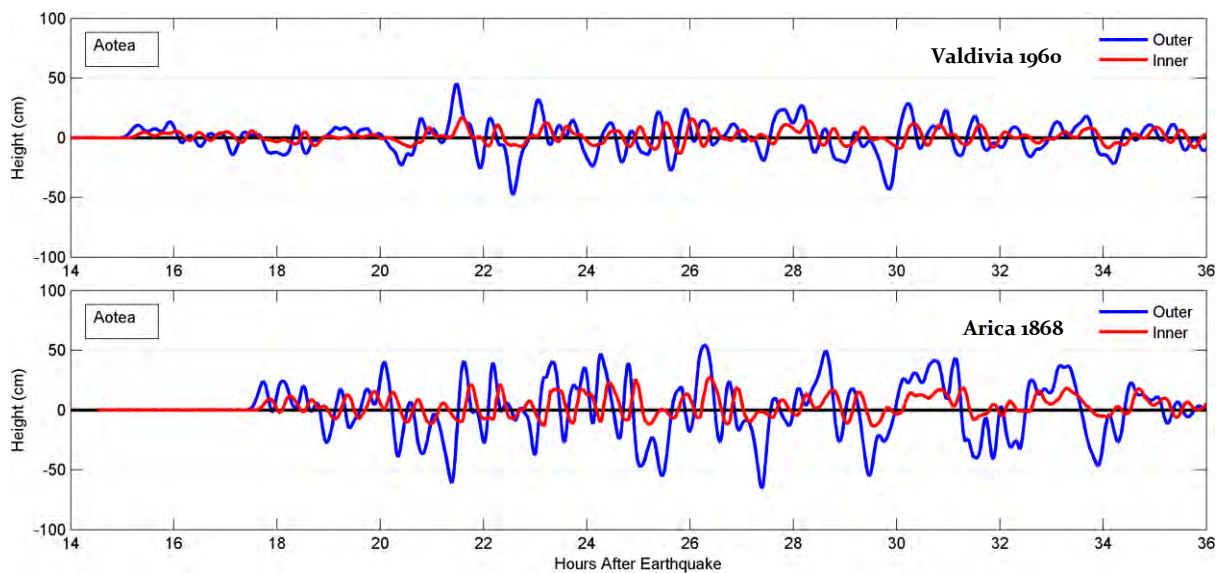


Figure 4.6 Water level time series for the 1960 (top) and 1868 (bottom) tsunamis at Aotea.

4.3 Tsunami Current Speeds

Consistent with the relatively small wave heights, the far field sources also produce overall low current speeds. Modelled maximum current speeds are generally less than 1.5 m/s (3 knots). Time-speed threshold plots show however that these currents speeds can persist for up to 20 hours after tsunami arrival (Figure 4.7).

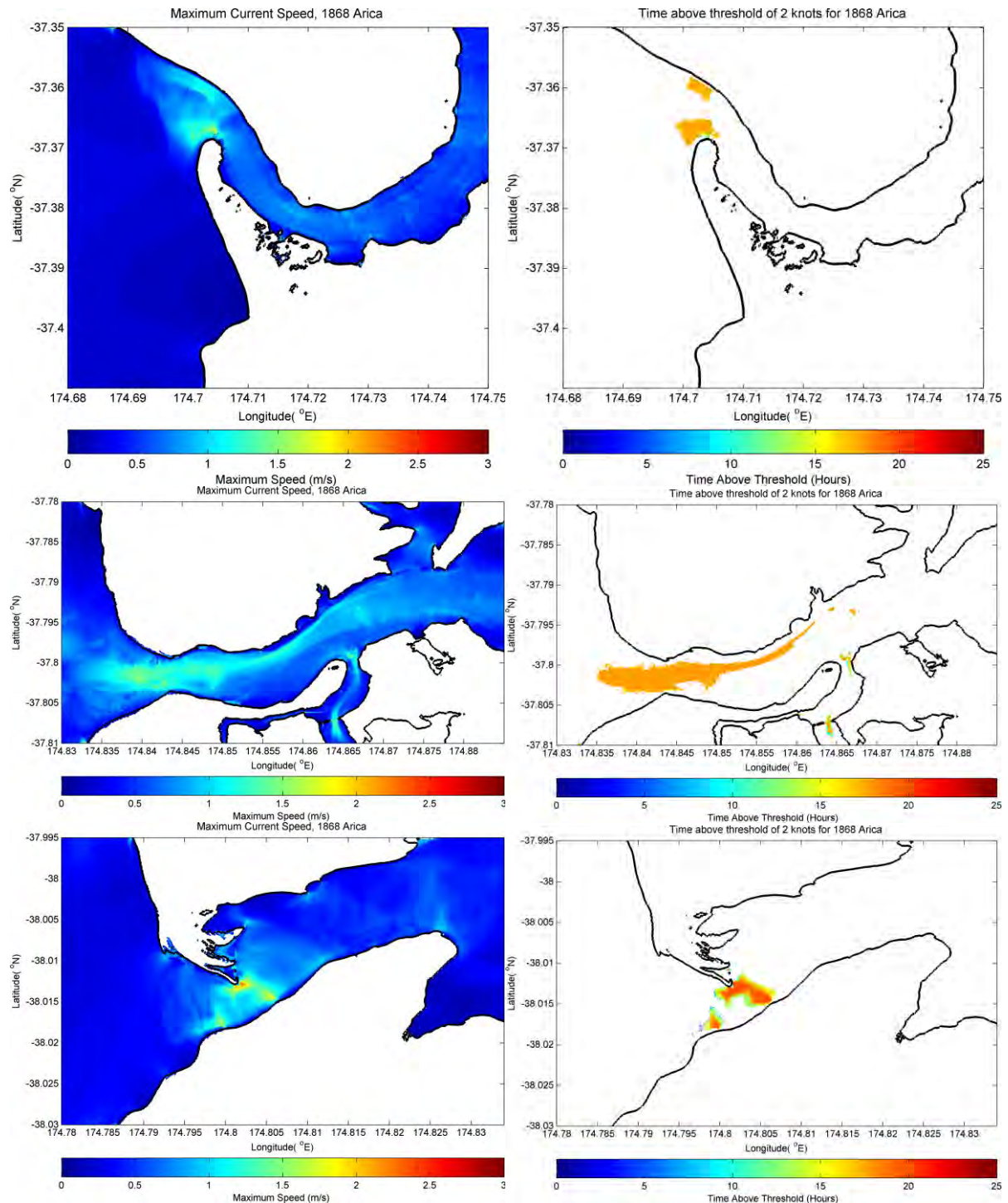


Figure 4.7 Maximum modelled current speeds and time-speed threshold plots for the 1868 Arica tsunami at the three study locations.

5 MODELLEING PREHISTORIC WEST COAST TSUNAMIS

Focussing on the enigmatic west coast tsunami of 1320-1450 AD hypothesized by Goff and Chagué-Goff (2015), we use a numerical modelling approach to investigate the tsunami propagation patterns of a landslide-type source occurring on or around the location of the Aotea Seamount. Although we do not rigorously simulate the dynamic formation of a landslide induced wave, we do model an initial condition that is reminiscent of a large landslide generated wave in terms of scale, i.e. 10's km rather than the 100's of km typical of a tectonic tsunami source. Furthermore, our tsunami source is of a dipole shape characteristic of landslide induced water waves.

For the modelling presented here we produced a static displacement of the water surface with an initial positive displacement of ~7 m and a negative displacement of ~4 m. The initial wave shape is positioned proximal to the Aotea seamount with the positive water surface deformation positioned towards shore representative of a translational slide or rotational slump moving down slope. We trialled three different slide orientations (striking 105°, 120° and 135° along the long axis) to assess the sensitivity of the model results and determine areas of possible coastal focussing and defocussing of wave heights.

The results presents in Figure 5.1 show that for a given initial wave height of the scale of the Aotea Seamount, the initial wave heights are significantly reduced between the source and the coastline. For initial wave heights of ~11 m (+7 and -4), the wave heights at the coast are generally less than 1 m in height. This is likely the result of the relatively shallow bathymetry and the highly dispersive nature of the short, steep initial wave condition. There is some evidence of wave focussing producing larger wave heights in the southern corner of the Taranaki Bight, but there is no evidence of the extreme wave focussing needed to produce the 60 m runup heights at Ngararahae as hypothesized by Goff and Chagué-Goff (2015). In Figure 5.2 we show the effect of doubling the height of the dipole initial condition (~22 m height range, +14 m to -8 m). While this produces noticeably larger wave heights at the coast, it is still insufficient to produce the 30 to 60 m heights discussed by Goff and Chagué-Goff (2015).

For illustrative purposes, in Figure 5.2 we also show the effect of a longer, wider source model, representative of an earthquake-type dislocation centred on the Aotea Seamount. It is apparent that the longer source produces more concentrated and larger wave heights along the shoreline. However, this type of earthquake source does not exist in the Tasman Sea.

Ultimately, it is very difficult to reconcile the geologic evidence presented by Goff and Chagué-Goff (2015) suggestive of 30 to 60 m tsunami runup heights along the coast of south west Waikato with numerical modelling of potential tsunami source whether they be regional or near field.

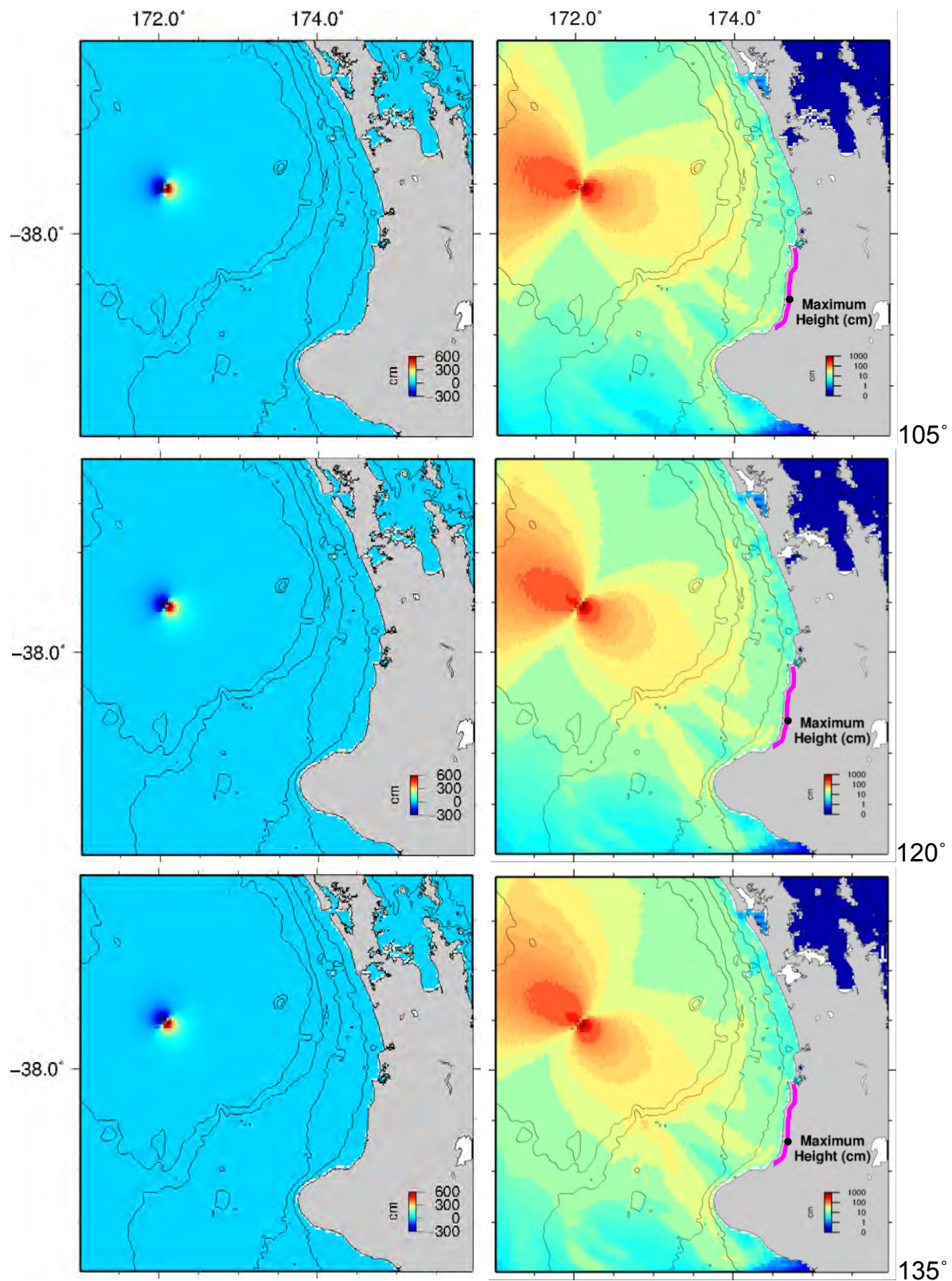


Figure 5.1 Initial surface displacements and maximum modelled wave heights (log scale) for hypothetical tsunami sources on the Aotea Sea Mount for three different source orientations. The section of coast highlighted in magenta is the region where Goff and Chagué-Goff (2015) have estimated runup heights of 30 m or greater. The Black dot is Ngarahae, location of 60 m estimated runup heights.

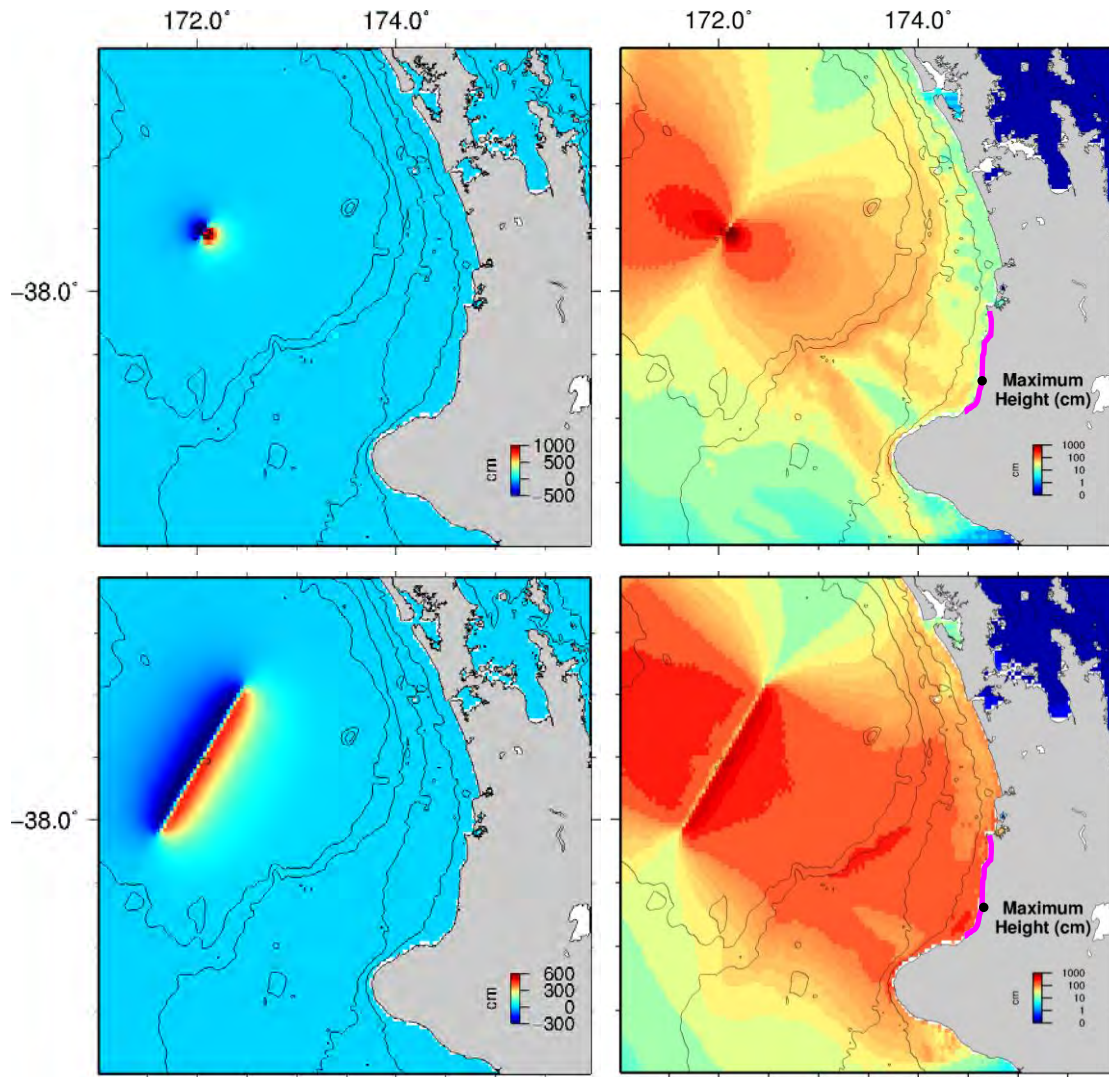


Figure 5.2 Comparing results for a dipole source with twice the initial wave height (top) and a long source (representative of an earthquake rupture).

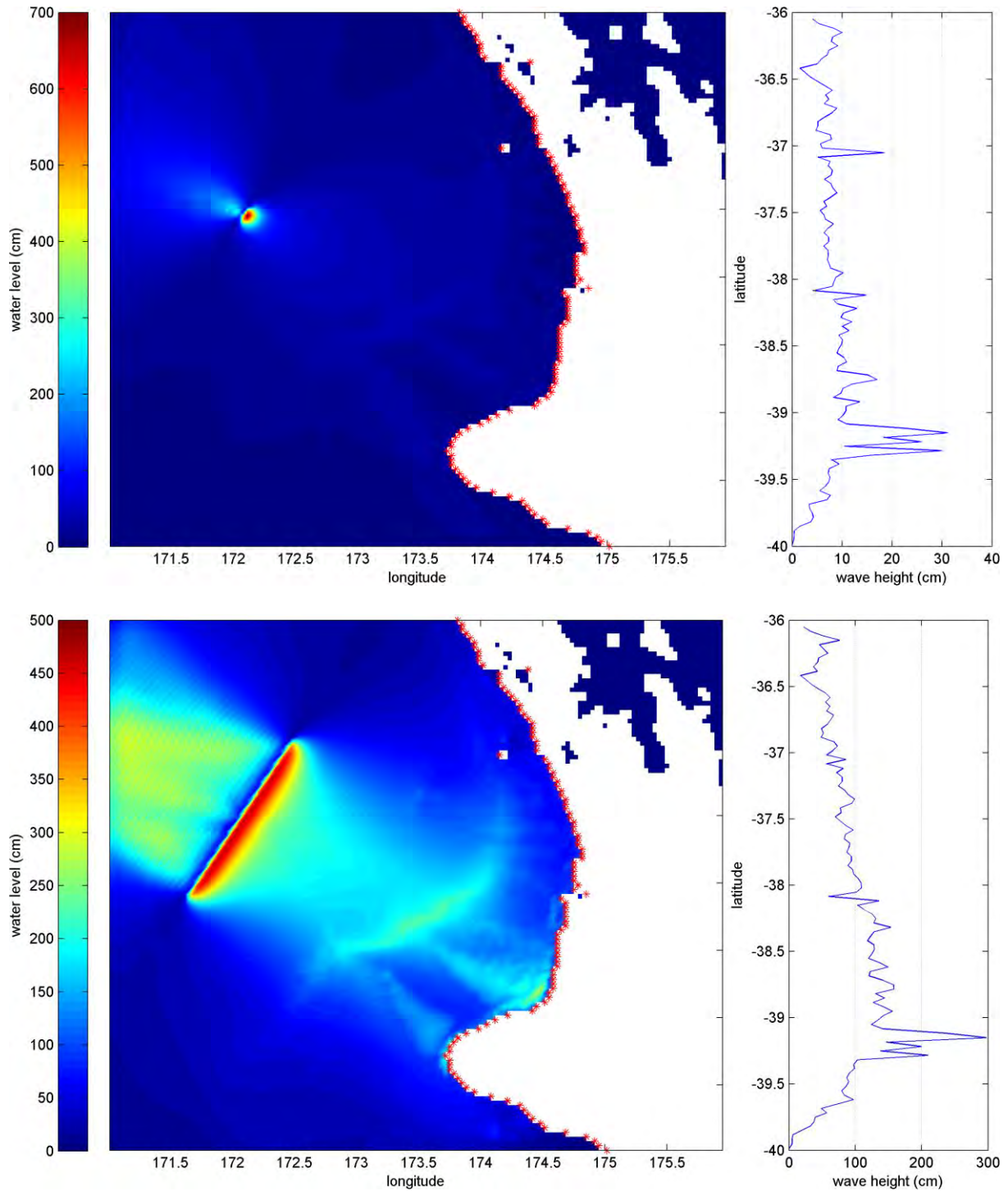


Figure 5.3 Comparison of along shore unup heights from a dipole source (top) and a longer, wider source (bottom). Note the different scales on the runup plots to the right.

6 SUMMARY AND CONCLUSIONS

We have evaluated the tsunami hazards at three locations on the west coast of North Island New Zealand; Port Waikato, Raglan Harbour and Aotea Harbour for several regional and far-field tsunami sources. The assessment includes maximum tsunami wave heights, tsunami inundation and tsunami induced current speeds. We also assessed nearshore tsunami heights along the west coast as a result of possible near field landslide or slump sources. These model results will be used by the Waikato Regional Council and the Waikato District Council as part of evacuation planning and emergency management activities as well as for education and outreach activities amongst the potentially affected populations.

For the regional sources we focus on the Southern New Hebrides, Solomon, Puysegur and Tonga-Kermadec Trenches, and consider a large magnitude (M9.0) events located along each subduction zone plate boundary. Source models were based on interpolate subduction earthquakes with a fault plane of 400 km x 100 km and uniformly distributed slip of 22 m. Of the cases modelled, only the Puysegur event produces significant wave heights at the study sites and are seen to be in the order of 2 to 2.5 m. All scenarios however produce potentially dangerous tsunami currents, particularly at the entrance to each harbour, and persist for many hours after the arrival of the largest wave. The arrival times from these regional sources is relatively short, approximately 3 – 5.5 hours for the initial withdrawal of the water surface with the first tsunami peak arriving some 15 to 30 minutes afterwards. In most cases at all three harbours, the first wave was not the largest of the tsunami wave train. The exception was this was for the TK 1 scenario which produced the first arriving wave as the largest. Furthermore, for these sites, the overall characteristics of the tsunami wave train were much more varied and complex with surges of significant height persisting for many hours after tsunami arrival.

For the far-field sources, we consider two large magnitude earthquake sources along the South American subduction zone representing the 1868 Arica and 1960 Valdivia, historical Chilean events. Neither of these scenarios produce significant tsunami wave heights at Port Waikato, Raglan or Aotea. For both of these modelled cases, the peak tsunami wave height occurred more than 6.5 and as much as 11 hours after tsunami arrival. This is an important consideration for tsunami warnings for large, far-field events. In terms of tsunami induced current speeds, the far-field sources produce lower peak current speeds than the regional sources, however, the duration of the currents is much longer, with current speeds of more than 2 knots persisting for up to 16 hours after tsunami arrival.

Finally, we conducted a preliminary numerical modelling investigation in to the source of the very large (30 – 60 m) tsunami runup heights along the western Waikato coast as hypothesized by Goff and Chagué-Goff (2015). The results suggest that if the causative mechanism were a slump on the Aotea Seamount, initial water surface displacements would need to be of the order of 100 m to produce runup heights anywhere near the 30 m (let alone 60 m!) heights required. However, sources with larger dimensions (i.e. longer and wider) produce proportionally larger nearshore tsunami heights as compared to the short, steep wave heights produced from submarine slumps or landslides. If the findings of Goff and Chagué-Goff (2105) are to be believed, then the possible source for such a wave remains a mystery.

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Open Meeting

To	Strategy & Finance Committee
From	TG Whittaker General Manager Strategy & Support
Date	12 February 2016
Prepared By	DM Lee Executive Assistant
Chief Executive Approved	Y
DWS Document Set #	1148566
Report Title	Summary of Movements in Discretionary Funds to 10 February 2016

1. Executive Summary

To provide the Committee with a summarised report giving balances of all the discretionary funds including commitments as at 10 February 2016.

2. Recommendation

THAT the report of the General Manager Strategy & Support – *Summary of Movements in Discretionary Funds to 10 February 2016* – dated 12 February 2016 be received.

Attachment – Summary of Movements in Discretionary Funds to 10 February 2016

Summary of Movements in Discretionary Funds
As of 10 February 2016

	Carry Forward 2014/15	Annual Plan Budget 2015/16	Plus Income 2015/16	Less Expenditure 2015/16	Net Funding Remaining 2015/16	Less Commitments 2015/16	Funding Remaining after Commitments
Rural Ward	43,105.00	30,963.00	-	34,763.39	39,304.61	5,000.00	34,304.61
Huntly	24,494.00	24,026.00	-	14,762.74	33,757.26	8,279.14	25,478.12
1 Meremere	18,290.00	6,325.00	533.64	12,306.60	12,842.04	1,373.50	11,468.54
Ngaruawahia	31,885.00	20,999.00	-	80.00	52,804.00	40,500.00	12,304.00
Onewhero Tuakau	30,257.00	28,878.00	-	12,522.53	46,612.47	31,274.00	15,338.47
Raglan	11,730.00	14,271.00	-	5,861.96	20,139.04	3,000.00	17,139.04
Taupiri	6,076.00	1,624.00	386.55	500.00	7,586.55	300.00	7,286.55
2 Te Kauwhata	64,986.00	11,139.00	-	2,400.00	73,725.00	69,778.70	3,946.30
Mayoral	3,271.00	8,000.00	-	3,319.12	7,951.88	-	7,951.88

1 Meremere budget inclusive of budget for salaries of \$4,775

2 Te Kauwhata budget inclusive of budget for salaries of \$6,941

Open Meeting

To	Strategy & Finance Committee
From	T G Whittaker General Manager Strategy & Support
Date	23 December 2015
Prepared By	S Thompson Finance Operations Team Leader
Chief Executive Approved	Y
DWS Document Set #	1118801
Report Title	Funding for Kariaotahi Hall

1. Executive Summary

The Kariaotahi Hall lost significant funding when Auckland Council discontinued charging residents for cross boundary hall rates in 2012. Council funded the shortfall for the 2012/13 and 2013/14 rating years. The Hall Committee has requested that the funding continue as they are struggling to operate with the funding they do receive from Council. This is because the majority of the users of the hall are situated within the Auckland boundary and cannot be charged. The alternative would be to increase the targeted rate to the remaining ratepayers, which would require a threefold increase, which is not considered equitable. Instead, it is recommended that Council fund an amount equivalent to the income previously received from the LTCCP Contribution Reserve (the reserve established as part of the Franklin integration with Waikato District Council) until a permanent alternative is identified.

2. Recommendation

THAT the report of the **General Manager (Strategy and Support) – Funding for Kariaotahi Hall** - be received;

AND THAT the shortfall in funding of \$2,906 per annum be funded from the **LTCCP Contribution Reserve** until this issue can be reconsidered through the next rating review.

3. Background

The Kariaotahi hall was inherited by Council as part of the Franklin transition in 2010. The catchment area for the hall targeted rate spanned both the Waikato and Auckland boundaries. For the first few years, Auckland Council rated residents living within their jurisdiction and transferred those funds to Council. In 2012, Auckland Council ceased this practice in recognition of the fact that Council was also benefiting from its ratepayers not funding halls administered and funded by Auckland Council. This essentially means that Council ratepayers enjoy the benefit of Auckland funded halls and Auckland residents enjoy the benefits of Council funded halls. Ceasing the transfer of funds was part of a quid pro quo arrangement.

Council passed a resolution to fund the shortfall of \$2,906 in 2012/13 and 2013/14 for the Kariaotahi hall.

There is an opportunity through the next rating review to reconsider the way in which halls are funded.

The Hall Committee are seeking permanent funding of the \$2,906 per annum to compensate for the fact that Auckland Council are no longer contributing to the cost of operating the hall.

4. Discussion and Analysis of Options

4.1 Discussion

The Kariaotahi Hall has been significantly impacted by the decision made by Auckland Council to no longer contribute to their hall. This was part of a quid pro quo arrangement, whereby Council ratepayers enjoy the use of halls in Auckland Council jurisdiction for no charge and vice versa. This is a difficult issue that was created as a result of the Franklin District Council integration with both Auckland Council and Waikato District Council. This issue can be considered as part of the next rating review undertaken by Council.

4.2 Options

Council can decide to do the following;

- Do nothing – the hall will need to operate on \$600 a year which is insufficient to maintain and insure the building. This is likely to result in a deterioration in the hall over time.
- Agree to fund the shortfall from an alternative source. It is suggested that the LTCCP Contribution Reserve be used for this purpose and that consideration be given to funding halls in the next rating review. An alternative could be to make a grant distribution from the Rural Ward Discretionary Fund.
- Consider extending the boundary – a review has been done and it is unlikely that additional users who use the hall can be identified within the Waikato District Council area.

5 Considerations

5.1 Financial

At \$600 a year, the maintenance of the hall and its surrounds will be minimal. With minimal maintenance, the building is likely to deteriorate at a more rapid rate than expected.

5.2 Legal

N/A

5.3 Strategy, Plans, Policy & Partnership Alignment

N/A

5.4 Assessment of Significance & Engagement

N/A

6. Consultation

The following stakeholders have been/or will be consulted:

Planned	In Progress	Complete	
		Done	Internal
		N/A	Community boards/Community committees
		N/A	Waikato-Tainui/Local iwi
		N/A	Households
		N/A	Business
		N/A	Other Please Specify

Depending on the option council takes, further consultation may be necessary.

7. Conclusion

The Kariaotahi Hall Committee have requested Council consider providing additional funding support in lieu of income lost from the Franklin District Council integration into Auckland and Waikato Councils. It is proposed to fund the shortfall of \$2,906 via the LTCCP Contribution Reserve until such time as this issue can be reconsidered through the rating review.

8. Attachments

Letter of Support – Kariaotahi Hall Committee



RECEIVED

21 DEC 2015

To: Stephen Thompson
Waikato District Council

From: Kariaotahi Hall Committee

Waikato District Council

Subject: Funding for Kariaotahi Hall

Background:

Kariaotahi School was built in 1931 as a replacement for a previous school. It was also used as a community facility for social events within the district. The school closed in 1968 and the buildings and grounds have since been used as a community centre.

Current situation:

Prior to the boundary change, under the Franklin District Council, the hall levies from targeted rates were approximately \$3,500 per annum. We expected to be in no worse situation under Waikato District Council.

Since the boundary change, our remittances from targeted rates have been approximately \$600 per annum, and this has affected the sustainability of our facility and its accessibility to the community.

The majority of the community that supports this hall are now within Auckland boundaries, therefore their rates fund facilities outside their historic community. While the hall is now physically and politically within the Waikato boundary, the targeted rated area now provides only approximately one sixth of the previous income from rates.

The committee has sought advice and assistance from WDC to find a solution to this ongoing issue. The committee is also instigating its own fundraising initiatives - to involve and maintain the historic community's sense of belonging as well as to fund the upkeep of the facility to keep it a desirable and accessible venue for their use.

We have been advised that we cannot easily - if at all - extend our boundaries into the Whiri Whiri area for targeted rates, and although it was suggested that we could increase our targeted levy, it is inequitable and discriminatory to expect one sixth of the community to provide the total amount for the facility that others use also.

We acknowledge that when the Kariaotahi Hall committee asked for financial assistance from Waikato District Council in 2013 we received some support, and we appreciate the recent emergency replacement of our damaged toilet.

We have a motivated and pro-active new hall committee who are committed to maintaining this community taonga which has a unique and historic significance of value beyond the immediate community.

Signed:

Phil Agnew
Chairman
Kariaotahi Hall Committee

17.12.15

Open Meeting

To	Strategy & Finance Committee
From	TG Whittaker General Manager Strategy & Support
Date	12 January 2016
Prepared By	A Diaz Finance Manager
Chief Executive Approved	Y
DWS Document Set #	1122800
Report Title	Riskpool Annual Report 2015

1. Executive Summary

The Trust funds are in a deficit position of \$2.3 million with outstanding claims liabilities of \$29.82 million at the end of June 2015 (an increase of \$13.33 million or an 81% increase on June 2014 figures).

The most significant claim relates to the collapse of the Southland Stadium in 2010. Invercargill City Council was found to be negligent in their issue of the Code of Compliance Certificate for remedial works which the High Court found to be instrumental in the plaintiff's loss. Approximately \$17 million was awarded to the plaintiff. This claim is fully reinsured but may impact future reinsurance costs.

Claim numbers have continued to decrease and there are now 236 open claims, of which only 28 relate to leaky home matters. Council has opted out of Riskpool for the last two funding years, however in the event that claim provisions for prior financial years are insufficient there is a risk that Council would have to contribute additional funds.

2. Recommendation

THAT the report of the General Manager Strategy & Support – Riskpool Annual Report 2015 – be received.



ANNUAL REPORT

2015



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RISKPOOL | MISSION STATEMENT

- ◡ Assisting and encouraging Local Government to take greater collective responsibility for managing liability risks.
- ◡ Facilitating group support and the dissemination of collective knowledge, expertise and experience.
- ◡ Proactively identifying, analysing and responding to emerging liability issues with practical and meaningful risk management advice and assistance.
- ◡ Providing a complete and balanced service to all Members, incorporating scheme administration, risk management, loss control advice, and claims management services.
- ◡ Providing a meaningful and practical risk management and loss control service which is effective, accountable and designed to meet the needs of Local Government.
- ◡ Providing a claims management service which is equitable and achieves financial efficiency whilst promoting better public relations between local authorities and their communities.



CHAIRMAN'S REPORT

It has been another busy year at Riskpool due in part to the ever changing face of liability and the general ebb and flow of the insurance market. Increased competition from providers has presented us with the opportunity for self-assessment and to ensure that we really are getting the best value for our members. We aim to provide the highest standards in public liability and professional indemnity cover. Owned by local government, we are structured to enable local authorities to self insure public liability and professional indemnity risk at low cost. We ensure sustainability by directly accessing international reinsurance markets on behalf of pool members. The interests of our members are our sole focus.

Faced with increased competition in the approach to renewal we have worked hard with reinsurers to ensure a reduction in contribution for all councils for the coming fund year. This coupled with our life-time-cost approach to claims handling ensures that we have remained the preferred provider for the majority of New Zealand's councils.

In April I was elected Chairman of the Riskpool Board taking over from Jim Palmer who has been Chair for the past two years. On behalf of the Board and staff I would like to thank Jim for all the work he has done and the time he has dedicated to Riskpool. Given his knowledge of the issues surrounding local government and his ongoing involvement in the sector we are very pleased that he is able to remain on the Board as a Director.

Claims numbers have continued in a general downward trend with there now only being 236 open claims. This is in stark comparison to the 951 claims notified in one year at the height of the leaky buildings period during the early

2000s. Of those 236 claims, only 28 are for leaky buildings which gives us confidence that the leaky building saga may be approaching its conclusion. Despite the release of the judgment in *Osborne v Auckland Council* in June 2014 and the subsequent concern that this would cause an influx of newly eligible leaky claims, we have not seen an increase in notifications. Members are to be congratulated on their improved risk management, which not only feeds through into reduced contribution levels, but also means that their ratepayers are enjoying better service.

One of Riskpool's most significant current claims is Southland Stadium, a professional indemnity claim which arose from the collapse of the Stadium following a heavy snowstorm in 2010. This claim was heard in the Christchurch High Court and a judgment was received in August. The Court found that Invercargill City Council had been negligent in their issue of the Code Compliance Certificate for remedial work carried out on the Stadium and that this had been causative of the loss to the plaintiff. Judgment of nearly \$17 million was awarded to the plaintiff and while the

Council was successful in a cross-claim against the second defendant, receiving a 90 per cent indemnity, due to the pecuniary position of this defendant Council has been left "last man standing". While this claim is fully reinsured and will not have direct repercussions for local authorities, given the quantum involved it may have implications on future reinsurance costs.

The current accounts for Fund Years 1-18 show a deficit of \$2.3 million. This has arisen as a result of an increase in claims reserves. Outstanding claims liabilities show estimates increasing from \$16.49 million at 30 June 2014 to \$29.82 million at 30 June 2015. The majority of the increase is due to the decision in the Southland Stadium claim, which is fully reinsured.

In the past year there has been a real focus on strengthening the relationship between Riskpool's staff and councils throughout the country. The reason to do this is to enable us to better understand and meet your needs as Riskpool members and to encourage feedback on how we might

better our products and services. We strongly encourage councils to approach us directly at any stage if there are queries regarding cover or matters with which we might be able to provide assistance. We pride ourselves on our approachability and the distance we go in assisting members with ad hoc advice.

In April in conjunction with LAPP we were pleased to host the first Riskpool Forum to be held at The Museum of New Zealand Te Papa Tongarewa. The Forum was attended by around sixty representatives from councils across the country. Presentations were given by a variety of speakers and the feedback was unanimous that attendees found the day well worth the trip to Wellington. It is our intention to make this Forum an annual event in order to update both members and non-members on developments at Riskpool, as well as providing a platform for updates from relevant professionals from within the sector.

Riskpool prides itself on the work it does on behalf of local government in setting good legal precedent. Over the year

we have seen the release of a number of judgments that have clarified existing law to the benefit of councils. One of the most notable being the decision in *Henry and Ors v Auckland Council*. This case surrounded the negligent issue of a Land Information Memorandum by the Council. In finding in the Council's favour the High Court passed judgment on a number of points which will serve to simplify the LIM process for councils in future.

The proceedings by Wellington City Council against the Fund which were served in 2014 are ongoing. The Board continues to decline the matter based on Queen's Counsel advice.

We would like to acknowledge the Fund and Scheme Manager, the Claims Manager and the Scheme Solicitor for all their work over the past year which has ensured the smooth running of the Fund. Particular thanks go to Riskpool's General Manager Juliet Martin who stepped down from her position in July after an extended illness. We wish Juliet all the best for her future endeavours.

To all the members of Fund Year 19 we would like to thank you for your ongoing support of the Fund. We remain committed to offering the highest standards in public liability and professional indemnity cover for the local government sector and look forward to being of service to you this year.



Andrew Aitken
Chairman



INDEPENDENT AUDITOR'S REPORT

To the readers of New Zealand Mutual Liability Riskpool's Financial Statements for the year ended 30 June 2015

The Auditor-General is the auditor of New Zealand Mutual Liability Riskpool (the 'Scheme') comprising Fund No.1 to Fund No. 18. The Auditor-General has appointed me, Dave Shadwell, using the staff and resources of Deloitte, to carry out the audit of the financial statements of the Scheme on her behalf.

OPINION

We have audited the financial statements of the Scheme on pages 8 to 26, that comprise the statement of financial position as at 30 June 2015, the statement of financial performance, statement of movement in trust funds and statement of cash flows for the year ended on that date and the notes to the financial statements that include accounting policies and other explanatory information.

In our opinion, the financial statements of the Scheme:

- present fairly, in all material respects:
 - its financial position as at 30 June 2015; and
 - its financial performance and cash flows for the year then ended; and
- comply with generally accepted accounting practice in New Zealand and have been prepared in accordance with Public Benefit Entity Standards with disclosure concessions.

Our audit was completed on 12 November 2015. This is the date at which our opinion is expressed.

The basis of our opinion is explained below. In addition, we outline the responsibilities of the Trustee and our responsibilities, and explain our independence.

EMPHASIS OF MATTERS - UNCERTAINTIES ASSOCIATED WITH THE OUTSTANDING CLAIMS PROVISION AND REINSURANCE RECEIVABLES

Without modifying our opinion, we draw your attention to Note 7 to the financial statements. The note describes the variables that may affect the outstanding claims provision and related reinsurance receivables. The note also describes the inherent uncertainties involved in estimating those amounts using actuarial assumptions, including in relation to leaky building claims which are subject to a high degree of uncertainty. The valuation of the reinsurance receivables is subject to similar uncertainties as the valuation of the outstanding claims liability.

We consider the disclosures about the above matters to be adequate.

BASIS OF OPINION

We carried out our audit in accordance with the Auditor-General's Auditing Standards, which incorporate the International Standards on Auditing (New Zealand). Those standards require that we comply with ethical requirements and plan and carry out our audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

Material misstatements are differences or omissions of amounts and disclosures that, in our judgement, are likely to influence readers' overall understanding of the financial statements. If we had found material misstatements that were not corrected, we would have referred to them in our opinion.

An audit involves carrying out procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgement, including our assessment of risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the preparation of the Scheme's financial statements in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the Scheme's internal control.

An audit also involves evaluating:

- the appropriateness of accounting policies used and whether they have been consistently applied;
- the reasonableness of the significant accounting estimates and judgements made by the Trustee;
- the adequacy of the disclosures in the financial statements; and
- the overall presentation of the financial statements.

We did not examine every transaction, nor do we guarantee complete accuracy of the financial statements.

We believe we have obtained sufficient and appropriate audit evidence to provide a basis for our audit opinion.

RESPONSIBILITIES OF THE TRUSTEE

The Trustee is responsible for the preparation and fair presentation of financial statements for the Scheme that comply with generally accepted accounting practice in New Zealand.

The Trustee's responsibilities arise from clause 6.6.1 of the Trust Deed of the Scheme.

The Trustee is responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The Trustee is also responsible for the publication of the financial statements, whether in printed or electronic form.

RESPONSIBILITIES OF THE AUDITOR

We are responsible for expressing an independent opinion on the financial statements and reporting that opinion to you based on our audit. Our responsibility arises from section 15 of the Public Audit Act 2001.

INDEPENDENCE

When carrying out the audit, we followed the independence requirements of the Auditor-General, which incorporate the independence requirements of the External Reporting Board.

In addition to the audit we have carried out assignments in the areas of taxation compliance services, which are compatible with those independence requirements. Other than the audit and these assignments, we have no relationship with or interests in the Scheme.



Dave Shadwell

DELOITTE

On behalf of the Auditor-General
Wellington, New Zealand



NEW ZEALAND MUTUAL LIABILITY RISKPOOL

Summary Statement of Financial Performance
for the year ended 30 June 2015

	Note	2015 \$000	2014 \$000
Revenue			
Members' Contributions		4,363	4,424
Contribution to expenses from prior fund years		796	790
Reinsurance Recoveries	8	16,987	2,536
Direct Claims Expense	7	(20,404)	(3,023)
Claims Administration Expense		(796)	(789)
Reinsurance Expense		(2,376)	(1,957)
Net Result for the Period		(1,430)	1,981
Investment Revenue		187	287
Total Revenue		(1,243)	2,268
Expenditure			
Claims Manager's Fee		921	906
Fund & Scheme Manager's Fee	4	907	856
Audit Fees		23	28
Tax Compliance Services		7	14
Consultancy		109	140
Directors' Fees		49	63
Meeting/Travel Expenses		22	18
Marketing		2	-
Directors & Officers Liability Insurance		75	57
Legal Fees		139	91
Printing and Stationery		13	11
Sundry Expenses		2	1
Total Expenditure		2,269	2,185
Net Surplus/(Deficit) before Tax		(3,512)	83
Tax Expense			
Net Surplus/(Deficit) after Tax		(3,512)	83

This statement is to be read in conjunction with the Statement of Accounting Policies and Notes to the Financial Statements.

Summary Statement of Movements in Trust Funds
for the year ended 30 June 2015

	Note	2015 \$000	2014 \$000
Total Trust Funds at 1 July		1,238	1,155
Net Surplus/(Deficit)		(3,512)	83
Total Trust Funds at 30 June		(2,274)	1,238

This statement is to be read in conjunction with the Statement of Accounting Policies and Notes to the Financial Statements.

Summary Statement of Financial Position
as at 30 June 2015

	Note	2015 \$000	2014 \$000
Trust Funds			
Trust Accounts		(2,927)	585
Trust Capital Account		653	653
Total		(2,274)	1,238
Represented by:			
Assets			
Cash	9	2,324	2,030
Short Term Bank Deposits		1,500	5,200
Accrued Interest		3	12
Accounts Receivable		78	216
Prepayments		18	18
Reinsurance Receivable	8	24,054	10,733
Total Assets		27,977	18,209
Current Liabilities			
Accounts Payable		174	413
Taxation Receivable/(Payable)		2	1
GST Receivable/(Payable)		259	65
Total Current Liabilities		435	478
Claims Provision	7	29,816	16,493
Total Liabilities		30,251	16,971
EXCESS/(DEFICIT) ASSETS OVER LIABILITIES		(2,274)	1,238

This statement is to be read in conjunction with the Statement of Accounting Policies and Notes to the Financial Statements.

Summary Statement of Cash Flows
for the year ended 30 June 2015

	Note	2015 \$000	2014 \$000
Cash flows from operating activities			
Cash was provided from:			
Members' Contributions		4,427	3,707
Interest Received – Bank		189	274
Reinsurance recoveries received		3,705	2,175
		8,321	6,156
Cash was applied to:			
Reinsurance		(2,394)	(2,425)
Claims Manager's Fee		(921)	(906)
Fund & Scheme Manager's Fee		(918)	(904)
Contribution to expenses from prior fund years		796	790
Legal Fees		(158)	(75)
Claims		(7,957)	(7,991)
Consultants		(120)	(118)
Audit Fees		(36)	(41)
Other Expenses		(201)	(139)
Taxation Refunded / (Paid)		(2)	112
GST Refunded / (Paid)		184	322
		(11,727)	(11,375)
Net Cash inflow/(outflow) from operating activities	6	(3,406)	(5,219)
Net increase/(decrease) in cash held		(3,406)	(5,219)
Opening cash at 1 July		7,230	12,449
Closing cash at 30 June		3,824	7,230
Comprising of:			
Cash		2,324	2,030
Short Term Bank Deposits		1,500	5,200
Total		3,824	7,230

This statement is to be read in conjunction with the Statement of Accounting Policies and Notes to the Financial Statements.



NEW ZEALAND MUTUAL LIABILITY RISKPOOL

Statement of Financial Performance for the year ended 30 June 2015

	Note	Fund No. 18 (14–15)		Fund No. 17 (13–14)		Fund No. 16 (12–13)		Fund No. 15 (11–12)		Fund No. 14 (10–11)		Fund No. 13 (09–10)	
		2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
		\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Revenue													
Members' Contributions		4,363	-	-	4,424	-	-	-	-	-	-	-	-
Contribution to expenses from prior fund years		796	-	-	790	-	-	-	-	-	-	-	-
Reinsurance Recoveries	8	2,339	-	518	1,144	(154)	171	3	401	16,169	(79)	(13)	690
Direct Claims Expense	7	(3,173)	-	(134)	(1,811)	374	158	510	(814)	(16,251)	59	(10)	(708)
Claims Administration Expense		-	-	(499)	-	(197)	(487)	(31)	(162)	(9)	(58)	(16)	(7)
Reinsurance Expense		(2,376)	-	-	(1,892)	-	-	-	-	-	-	-	-
Net Result for the Period		1,949	-	(115)	2,655	23	(158)	482	(575)	(91)	(78)	(39)	(25)
Investment Revenue		14	-	9	8	3	20	-	12	2	-	(2)	(5)
Total Revenue		1,963	-	(106)	2,663	26	(138)	482	(563)	(89)	(78)	(41)	(30)
Expenditure													
Claims Manager's Fee	4	921	-	-	906	-	-	-	-	-	-	-	-
Fund & Scheme Manager's Fee		907	-	-	856	-	-	-	-	-	-	-	-
Audit Fees		10	-	1	11	1	(4)	1	1	1	1	1	1
Tax Compliance Services		6	-	1	5	-	(2)	-	1	-	1	-	1
Consultancy		121	-	(12)	157	-	(17)	-	-	-	-	-	-
Directors' Fees		51	-	(2)	63	-	-	-	-	-	-	-	-
Meeting/Travel Expenses		22	-	-	15	-	3	-	-	-	-	-	-
Marketing		2	-	-	-	-	-	-	-	-	-	-	-
Directors & Officers Liability Insurance		75	-	-	57	-	-	-	-	-	-	-	-
Legal Fees		19	-	10	44	-	(60)	-	35	-	25	-	-
Printing and Stationery		10	-	3	6	-	5	-	-	-	-	-	-
Sundry Expenses		2	-	-	1	-	-	-	-	-	-	-	-
Total Expenditure		2,146	-	1	2,121	1	(75)	1	37	1	27	1	2
Net Surplus/(Deficit) before Tax		(183)	-	(107)	542	25	(63)	481	(600)	(90)	(105)	(42)	(32)
Tax Expense		-	-	-	-	-	-	-	-	-	-	-	-
Net Surplus/(Deficit) after Tax		(183)	-	(107)	542	25	(63)	481	(600)	(90)	(105)	(42)	(32)

This statement is to be read in conjunction with the Statement of Accounting Policies and Notes to the Financial Statements.

Fund No. 12 (08–09)		Fund No. 11 (07–08)		Fund No. 10 (06–07)		Fund No. 9 (05–06)		Fund No. 8 (04–05)		Fund No. 7 (03–04)		Fund No. 6 (02–03)		Fund No. 1–5 (97–02)		TOTAL	
2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,363	4,424
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	796	790
619	74	(89)	49	(29)	28	(1,182)	99	(501)	(455)	9	(166)	(699)	507	(3)	73	16,987	2,536
(753)	(655)	453	(297)	327	821	(1,348)	(1,194)	(400)	770	(200)	643	127	29	74	(24)	(20,404)	(3,023)
-	(25)	(9)	-	(14)	(6)	(3)	(15)	-	(24)	(12)	-	(6)	-	-	(5)	(796)	(789)
-	-	-	-	-	-	-	(5)	-	(16)	-	(9)	-	(9)	-	(26)	(2,376)	(1,957)
(134)	(606)	355	(248)	284	843	(2,533)	(1,115)	(901)	275	(203)	468	(578)	527	71	18	(1,430)	1,981
-	5	(12)	(12)	(25)	(25)	110	148	11	19	(22)	(8)	86	107	13	18	187	287
(134)	(601)	343	(260)	259	818	(2,423)	(967)	(890)	294	(225)	460	(492)	634	84	36	(1,243)	2,268
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	921	906
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	907	856
1	1	1	1	1	1	1	5	1	1	1	1	1	7	1	1	23	28
-	1	-	1	-	1	-	1	-	1	-	1	-	1	-	1	7	14
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	109	140
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	49	63
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22	18
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75	57
-	-	-	-	-	-	-	-	-	-	110	47	-	-	-	-	139	91
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	11
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1
1	2	1	2	1	2	1	6	1	2	111	49	1	8	1	2	2,269	2,185
(135)	(603)	342	(262)	258	816	(2,424)	(973)	(891)	292	(336)	411	(493)	626	83	34	(3,512)	83
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(135)	(603)	342	(262)	258	816	(2,424)	(973)	(891)	292	(336)	411	(493)	626	83	34	(3,512)	83



NEW ZEALAND MUTUAL LIABILITY RISKPOOL

Statement of Movements in Trust Funds for the year ended 30 June 2015

	Note	Fund No. 18 (14–15)		Fund No. 17 (13–14)		Fund No. 16 (12–13)		Fund No. 15 (11–12)		Fund No. 14 (10–11)		Fund No. 13 (09–10)	
		2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
		\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Total Trust Funds at 1 July		-	-	542	-	691	754	(867)	(267)	(78)	27	(754)	(722)
Net Surplus/(Deficit)		(183)	-	(107)	542	25	(63)	481	(600)	(90)	(105)	(42)	(32)
Capital Contribution		-	-	-	-	-	-	-	-	-	-	-	-
Total Trust Funds at 30 June		(183)	-	435	542	716	691	(386)	(867)	(168)	(78)	(796)	(754)

This statement is to be read in conjunction with the Statement of Accounting Policies and Notes to the Financial Statements.

Fund No. 12 (08-09)		Fund No. 11 (07-08)		Fund No. 10 (06-07)		Fund No. 9 (05-06)		Fund No. 8 (04-05)		Fund No. 7 (03-04)		Fund No. 6 (02-03)		Fund No. 1-5 (97-02)		TOTAL	
2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
(2,226)	(1,623)	(1,419)	(1,157)	(5,718)	(6,534)	1,806	2,779	2,668	2,376	(2,133)	(2,544)	3,610	2,984	5,116	5,082	1,238	1,155
(135)	(603)	342	(262)	258	816	(2,424)	(973)	(891)	292	(336)	411	(493)	626	83	34	(3,512)	83
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(2,361)	(2,226)	(1,077)	(1,419)	(5,460)	(5,718)	(618)	1,806	1,777	2,668	(2,469)	(2,133)	3,117	3,610	5,199	5,116	(2,274)	1,238



NEW ZEALAND MUTUAL LIABILITY RISKPOOL

Statement of Financial Position as at 30 June 2015

	Note	Fund No. 18 (14–15)		Fund No. 17 (13–14)		Fund No. 16 (12–13)		Fund No. 15 (11–12)		Fund No. 14 (10–11)		Fund No. 13 (09–10)	
		2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
		\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Trust Funds													
Trust Accounts		(183)	-	435	542	716	691	(386)	(867)	(168)	(78)	(796)	(754)
Trust Capital Account		-	-	-	-	-	-	-	-	-	-	-	-
Total		(183)	-	435	542	716	691	(386)	(867)	(168)	(78)	(796)	(754)
Represented by:													
Assets													
Cash	9	652	-	268	1,232	93	541	(856)	(809)	130	(97)	(1,378)	(790)
Short Term Bank Deposits		-	-	-	-	-	-	-	-	-	-	-	-
Accrued Interest		-	-	-	-	-	-	-	-	-	-	-	-
Accounts Receivable		48	-	-	12	27	-	3	10	-	48	-	(22)
Prepayments		-	-	-	-	18	18	-	-	-	-	-	-
Reinsurance Receivable	8	2,339	-	1,661	1,144	1,318	1,572	619	902	16,392	496	1,095	1,108
Total Assets		3,039	-	1,929	2,388	1,456	2,131	(234)	103	16,522	447	(283)	296
Current Liabilities													
Accounts Payable		143	-	4	128	4	13	2	3	3	3	2	221
Taxation Receivable/(Payable)		2	-	-	1	-	-	-	-	-	-	-	-
GST Receivable/(Payable)		(15)	-	(13)	(21)	(93)	(75)	75	56	3	35	(26)	(52)
Total Current Liabilities		130	-	(9)	108	(89)	(62)	77	59	6	38	(24)	169
Claims Provision	7	3,092	-	1,503	1,738	829	1,502	75	911	16,684	487	537	881
Total Liabilities		3,222	-	1,494	1,846	740	1,440	152	970	16,690	525	513	1,050
EXCESS/(DEFICIT) ASSETS OVER LIABILITIES		(183)	-	435	542	716	691	(386)	(867)	(168)	(78)	(796)	(754)

Signed on behalf of the Trustee, Local Government Mutual Funds Trustee Limited on 12 November 2015

Andrew Aitken
CHAIRMAN

Jim Palmer
DIRECTOR

This statement is to be read in conjunction with the Statement of Accounting Policies and Notes to the Financial Statements.

Fund No. 12 (08-09)		Fund No. 11 (07-08)		Fund No. 10 (06-07)		Fund No. 9 (05-06)		Fund No. 8 (04-05)		Fund No. 7 (03-04)		Fund No. 6 (02-03)		Fund No. 1-5 (97-02)		TOTAL	
2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
(2,361)	(2,226)	(1,077)	(1,419)	(5,460)	(5,718)	(618)	1,806	1,777	2,668	(2,615)	(2,279)	2,986	3,479	4,823	4,740	(2,927)	585
-	-	-	-	-	-	-	-	-	-	146	146	131	131	376	376	653	653
(2,361)	(2,226)	(1,077)	(1,419)	(5,460)	(5,718)	(618)	1,806	1,777	2,668	(2,469)	(2,133)	3,117	3,610	5,199	5,116	(2,274)	1,238
(1,970)	(1,746)	(1,078)	(745)	(4,923)	(4,845)	2,354	2,074	1,099	1,371	(3,644)	(3,088)	5,873	3,187	5,704	5,745	2,324	2,030
-	-	-	-	-	-	1,500	2,600	-	-	-	-	-	2,600	-	-	1,500	5,200
-	-	-	-	-	-	3	4	-	-	-	-	-	8	-	-	3	12
-	24	-	58	-	-	-	58	-	28	-	-	-	-	-	-	78	216
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18	18
1,080	964	285	374	-	29	(2,147)	1,556	1,037	1,538	2,362	2,353	(2,209)	(1,528)	222	225	24,054	10,733
(890)	(758)	(793)	(313)	(4,923)	(4,816)	1,710	6,292	2,136	2,937	(1,282)	(735)	3,664	4,267	5,926	5,970	27,977	18,209
2	22	2	5	2	3	2	3	2	3	2	3	2	3	2	3	174	413
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1
120	137	22	13	89	89	(199)	(391)	(336)	(336)	357	343	201	192	74	74	259	65
122	159	24	18	91	92	(197)	(388)	(334)	(333)	359	346	203	195	76	77	435	478
1,349	1,309	260	1,088	446	810	2,525	4,874	693	602	828	1,052	344	462	651	777	29,816	16,493
1,471	1,468	284	1,106	537	902	2,328	4,486	359	269	1,187	1,398	547	657	727	854	30,251	16,971
(2,361)	(2,226)	(1,077)	(1,419)	(5,460)	(5,718)	(618)	1,806	1,777	2,668	(2,469)	(2,133)	3,117	3,610	5,199	5,116	(2,274)	1,238



NEW ZEALAND MUTUAL LIABILITY RISKPOOL

Statement of Cash Flows for the year ended 30 June 2015

	Note	Fund No. 18 (14–15)		Fund No. 17 (13–14)		Fund No. 16 (12–13)		Fund No. 15 (11–12)		Fund No. 14 (10–11)		Fund No. 13 (09–10)	
		2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
		\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Cash flows from operating activities													
Cash was provided from:													
Members' Contributions		4,418	-	9	3,707	-	-	-	-	-	-	-	-
Interest Received – Bank		14	-	-	8	3	20	-	12	2	-	(2)	(5)
Reinsurance recoveries received		-	-	-	-	100	145	286	-	315	305	-	555
		4,432	-	9	3,715	103	165	286	12	317	305	(2)	550
Cash was applied to:													
Reinsurance		(2,375)	-	-	(1,892)	-	(487)	-	-	-	-	(19)	19
Claims Manager's Fee		(921)	-	-	(906)	-	-	-	-	-	-	-	-
Fund & Scheme Manager's Fee		(907)	-	(11)	(845)	-	(59)	-	-	-	-	-	-
Contribution to expenses from prior fund years		796	-	-	790	-	-	-	-	-	-	-	-
Legal Fees		(19)	-	(29)	(27)	-	60	-	(37)	-	(25)	-	-
Claims		(88)	-	(854)	(83)	(527)	(507)	(350)	(1,625)	(62)	(398)	(560)	(601)
Consultants		(77)	-	(43)	(80)	-	(38)	-	-	-	-	-	-
Audit Fees		(1)	-	(11)	-	(2)	(9)	(2)	(2)	(2)	(2)	(2)	(2)
Other Expenses		(184)	-	(17)	(130)	-	(9)	-	-	-	-	-	-
Taxation Refunded / (Paid)		(1)	-	(1)	-	-	2	-	10	-	1	-	(1)
GST Refunded / (Paid)		(3)	-	(7)	550	(22)	(7)	19	(9)	(26)	(83)	(5)	(37)
		(3,780)	-	(973)	(2,623)	(551)	(1,054)	(333)	(1,663)	(90)	(507)	(586)	(622)
Net Cash inflow/(outflow) from operating activities	6	652	-	(964)	1,092	(448)	(889)	(47)	(1,651)	227	(202)	(588)	(72)
Net increase/(decrease) in cash held		652	-	(964)	1,092	(448)	(889)	(47)	(1,651)	227	(202)	(588)	(72)
Opening cash at 1 July		-	-	1,232	140	541	1,430	(809)	842	(97)	105	(790)	(718)
Closing cash at 30 June		652	-	268	1,232	93	541	(856)	(809)	130	(97)	(1,378)	(790)
Comprising of:													
Cash		652	-	268	1,232	93	541	(856)	(809)	130	(97)	(1,378)	(790)
Short Term Bank Deposits		-	-	-	-	-	-	-	-	-	-	-	-
Total		652	-	268	1,232	93	541	(856)	(809)	130	(97)	(1,378)	(790)

This statement is to be read in conjunction with the Statement of Accounting Policies and Notes to the Financial Statements.

Fund No. 12 (08-09)		Fund No. 11 (07-08)		Fund No. 10 (06-07)		Fund No. 9 (05-06)		Fund No. 8 (04-05)		Fund No. 7 (03-04)		Fund No. 6 (02-03)		Fund No. 1-5 (97-02)		TOTAL	
2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,427	3,707
-	5	(12)	(12)	(25)	(25)	112	144	11	18	(22)	(8)	95	99	13	18	189	274
503	411	-	-	-	-	2,520	(152)	-	-	-	-	(19)	911	-	-	3,705	2,175
503	416	(12)	(12)	(25)	(25)	2,632	(8)	11	18	(22)	(8)	76	1,010	13	18	8,321	6,156
-	-	-	-	-	-	-	(5)	-	(16)	-	(9)	-	(9)	-	(26)	(2,394)	(2,425)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(921)	(906)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(918)	(904)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	796	790
-	-	-	-	-	-	-	-	-	-	(110)	(47)	-	-	-	-	(158)	(75)
(710)	(1,200)	(335)	(239)	(52)	75	(3,650)	(2,387)	(284)	(89)	(436)	115	3	(1,047)	(52)	(5)	(7,957)	(7,991)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(120)	(118)
(2)	(2)	(2)	(2)	(2)	(2)	(2)	(6)	(2)	(2)	(2)	(2)	(2)	(8)	(2)	(2)	(36)	(41)
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(201)	(139)
-	-	-	(1)	-	(3)	-	38	-	9	-	1	-	26	-	30	(2)	112
(15)	148	16	(15)	1	1	200	(200)	3	2	14	(20)	9	(7)	-	-	184	322
(727)	(1,054)	(321)	(257)	(53)	71	(3,452)	(2,560)	(283)	(96)	(534)	38	10	(1,045)	(54)	(3)	(11,727)	(11,375)
(224)	(638)	(333)	(269)	(78)	46	(820)	(2,568)	(272)	(78)	(556)	30	86	(35)	(41)	15	(3,406)	(5,219)
(224)	(638)	(333)	(269)	(78)	46	(820)	(2,568)	(272)	(78)	(556)	30	86	(35)	(41)	15	(3,406)	(5,219)
(1,746)	(1,108)	(745)	(476)	(4,845)	(4,891)	4,674	7,242	1,371	1,449	(3,088)	(3,118)	5,787	5,822	5,745	5,730	7,230	12,449
(1,970)	(1,746)	(1,078)	(745)	(4,923)	(4,845)	3,854	4,674	1,099	1,371	(3,644)	(3,088)	5,873	5,787	5,704	5,745	3,824	7,230
(1,970)	(1,746)	(1,078)	(745)	(4,923)	(4,845)	2,354	2,074	1,099	1,371	(3,644)	(3,088)	5,873	3,187	5,704	5,745	2,324	2,030
-	-	-	-	-	-	1,500	2,600	-	-	-	-	-	2,600	-	-	1,500	5,200
(1,970)	(1,746)	(1,078)	(745)	(4,923)	(4,845)	3,854	4,674	1,099	1,371	(3,644)	(3,088)	5,873	5,787	5,704	5,745	3,824	7,230



NEW ZEALAND MUTUAL LIABILITY RISKPOOL

Notes to the Financial Statements for the year ended 30 June 2015

Note 1. Statement of Accounting Policies

REPORTING ENTITY

The New Zealand Mutual Liability Riskpool (the "Scheme") is governed by a Deed of Trust dated 1 July 1997 and the provision of the Deed of Variation of Deed of Trust dated 22 June 2007.

The purpose of the Scheme is to provide professional indemnity and public liability cover to Member local governments and to manage all claims for civil liabilities made against Members. A separate Fund is established for each year providing cover for the period from 4pm 30 June to the following 4pm 30 June.

The Scheme is not an insurer under the Insurance (Prudential Supervision) Act 2010 and is not required to have a credit rating.

Local Government Mutual Funds Trustee Limited (LGMFTL) has been appointed to act as the Trustee for the Scheme.

New Zealand Local Government Insurance Corporation Limited trading as Civic Assurance (Civic) is the Fund Manager for the Scheme and holds all the shares in LGMFTL in trust for the Members of the Scheme.

STATEMENT OF COMPLIANCE

The financial statements for each fund year have been prepared in accordance with Tier 2 Public Sector Public Benefit Entity (PBE) Standards and disclosure concessions have been applied. The criteria under which the Trust is eligible to report in accordance with Tier 2 PBE Standards are that it is not publicly accountable and is not large.

This is the first set of financial statements presented in accordance with the PBE Standards. There were no financial adjustments required to the comparatives for the period ended 30 June 2014.

GENERAL ACCOUNTING POLICIES

The reporting currency is New Zealand dollars. Income and expenses are accounted for on an accruals basis. The measurement base adopted is that of historical cost except for specific policies as described below.

PARTICULAR ACCOUNTING POLICIES

The following are particular accounting policies which materially affect the measurement of financial performance and financial position. Further particular accounting policies are contained in the relevant notes to the financial statements.

Goods and Services Tax

The financial statements are prepared on a GST exclusive basis except for receivables and payables which are stated inclusive of GST.

Revenue

Members' contributions are recognised in the relevant fund in the year for which they are invoiced.

Financial Instruments

i) **Non-derivative financial instruments**

A financial instrument is recognised if the Fund becomes a party to the contractual provisions of the instrument. Financial assets are derecognised if the Fund's contractual rights to the cash flows from the financial assets expire or if the Fund transfers the financial asset to another party without retaining control or substantially all risks and rewards of the asset.

Bank and Cash Equivalents

Bank and cash equivalents are measured at amortised cost using the effective interest rate and any accrued interest is recorded separately in the Statement of Financial Position.

Receivables

Trade and other receivables are measured at initial recognition at fair value, and are subsequently measured at amortised cost using the effective interest rate.

Financial Liabilities

Financial liabilities include Sundry Creditors and Outstanding Claims. Financial liabilities are recorded initially at fair value, net of transaction costs. Subsequent to initial recognition, liabilities are measured at amortised cost.

ii) Offsetting Financial Instruments

Financial assets and liabilities are not offset as there is no legally enforceable right to set-off.

iii) Asset Quality***Impairment of Financial Assets***

Financial assets measured at amortised cost are reviewed at each balance date to determine whether there is any objective evidence of impairment. If any such condition exists, the asset's recoverable amount is estimated and provision is made for the difference between the carrying amount and the recoverable amount.

As at the date of these Financial Statements, no such evidence of impairment exists.

iv) Fair Value and Carrying Amount of Financial Instruments

The carrying amounts of all financial assets and liabilities are considered to be equivalent to their market value, which for these assets and liabilities is also considered to be fair value.

CHANGES IN ACCOUNTING POLICIES

There have been no changes in accounting policies during the year.

Note 2. Taxation

The income tax expense charged against the surplus for the year is the estimated liability in respect of that surplus and is calculated after an allowance for permanent differences. The liability method of accounting for deferred taxation is applied on a comprehensive basis. Future tax benefits attributable to tax losses or temporary timing differences are only recognised to the extent that it is probable that future taxable profit will be available against which the unrecognised temporary difference or unused tax losses can be utilised.

The Scheme has not recognised a deferred tax asset in respect of tax losses of \$5.6M (2014: \$2.9M) as at 30 June 2015. There is no unrecognised deferred tax asset in respect of timing differences at 30 June 2015 (2014: nil).

Note 3. Merger of funds

Prior to 30 June 2009 the Board decided that as all Fund 1 claims had been settled resulting in a small surplus and that Funds 2 – 4 had excess assets over liabilities and it was extremely unlikely to have claims settlements which would result in those excesses turning into deficits, it was appropriate that in exchange for the surplus within each of Funds 1 to 4, that Fund 5 (2001-02) accept any losses not recoverable by reinsurance on the operations of Funds 1 to 4 and that the surplus remaining in Funds 1 to 4 be applied by way of transfer to Fund 5 on or before 30 June 2009.

Note 4. Related parties

During the reporting period the Scheme had related party transactions with Civic who is the Fund and Scheme Manager and a Reinsurer for the Scheme and holds all the shares in LGMFTL in trust for the Members of the Scheme.

In addition the Board of Directors of the Trustee consists of a number of Chief Executive Officers of Member local governments who transact with the Scheme.

During the year the Scheme paid administration fees to Civic of \$0.907M (2014: \$0.845M). The balance outstanding at balance date for Civic was nil (2014: \$0.011M). The Scheme received reinsurance receipts of \$0.798M (2014: \$1.045M). Reinsurance receivable from Civic at balance date is \$nil (2014: \$0.23M). There are no guarantees or other commitments with Civic.

Note 5. Contingent liabilities and commitments

Other than possible future liabilities in respect of claims which have not yet been notified, the Scheme had no contingent liabilities at 30 June 2015 (2014: Nil).

The Scheme had no capital or operating lease commitments at 30 June 2015 (2014: Nil).



NEW ZEALAND MUTUAL LIABILITY RISKPOOL

Notes to the Financial Statements for the year ended 30 June 2015 *(continued)*

Note 6. Reconciliation of Net Surplus/(Deficit) to Net Cash Flows from Operating Activities

Statement of Cashflows Accounting Policy:
The Statement of cash flows is prepared on a GST exclusive basis which is consistent with the Statement of Financial Performance.

a) Cash is considered to be cash on hand and current accounts in banks, net of overdrafts, and short term bank deposits.

b) Investing activities are those relating to the acquisition, holding and disposal of investments.

c) Financing activities are those activities which result in changes in the size and composition of the capital structure of the Scheme.

d) Operating activities include all transactions and other events that are not investing or financing activities.

	Fund No. 18 (14–15)		Fund No. 17 (13–14)		Fund No. 16 (12–13)		Fund No. 15 (11–12)		Fund No. 14 (10–11)		Fund No. 13 (09–10)	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Net Surplus/(Deficit)	(183)	-	(108)	542	25	(63)	481	(600)	(90)	(105)	(42)	(32)
Add/(less) non cash items												
Claims Provision	753	-	(752)	594	(419)	(696)	(553)	(1,042)	302	24	(332)	(221)
	753	-	(752)	594	(419)	(696)	(553)	(1,042)	302	24	(332)	(221)
Add/(less) movements in other working capital items												
Accrued Interest	-	-	-	-	-	-	-	-	-	-	-	-
GST Receivable	(15)	-	7	(21)	(18)	2	18	(9)	(32)	(76)	27	(68)
Taxation Receivable	2	-	-	1	-	2	-	10	-	-	-	(1)
Interfund Payable/Receivable	-	-	-	-	-	-	-	-	-	-	-	-
Trust Income Distribution	-	-	-	22	-	-	-	-	-	-	-	-
Prepayments	-	-	-	-	-	-	-	-	-	-	-	-
Deferred Tax	-	-	-	-	-	-	-	-	-	-	-	-
Contribution received in advance	-	-	-	(4,424)	-	-	-	-	-	-	-	-
Accounts Receivable	(48)	-	12	4,251	(29)	35	8	(10)	47	(45)	(21)	32
Accounts Payable	143	-	(123)	127	(7)	(169)	(1)	-	-	-	(219)	218
	82	-	(104)	(44)	(54)	(130)	25	(9)	15	(121)	(213)	181
Net Cash inflow/(outflow) from operating activities	652	-	(964)	1,092	(448)	(889)	(47)	(1,651)	227	(202)	(587)	(72)

Fund No. 12 (08-09)		Fund No. 11 (07-08)		Fund No. 10 (06-07)		Fund No. 9 (05-06)		Fund No. 8 (04-05)		Fund No. 7 (03-04)		Fund No. 6 (02-03)		Fund No. 1-5 (97-02)		TOTAL	
2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
(136)	(603)	341	(262)	258	816	(2,424)	(973)	(891)	292	(335)	411	(493)	626	82	34	(3,515)	83
(76)	(185)	(738)	59	(336)	(768)	1,356	(1,428)	592	(398)	(233)	(361)	564	(720)	(122)	(49)	6	(5,191)
(76)	(185)	(738)	59	(336)	(768)	1,356	(1,428)	592	(398)	(233)	(361)	564	(720)	(122)	(49)	6	(5,191)
-	-	-	-	-	-	1	(4)	-	-	-	-	8	(8)	-	-	9	(12)
(16)	150	8	(8)	2	1	191	(193)	-	5	14	(21)	9	(8)	-	-	195	(246)
-	-	-	-	-	(3)	-	38	-	9	-	1	-	26	-	30	2	113
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(4,424)
24	(14)	58	(57)	(1)	-	57	(8)	28	14	(1)	-	(1)	50	-	-	133	4,248
(20)	14	(2)	(1)	(1)	-	(1)	-	(1)	-	(1)	-	(1)	(1)	(1)	-	(235)	188
(12)	150	64	(66)	-	(2)	248	(167)	27	28	12	(20)	15	59	(1)	30	104	(111)
(224)	(638)	(333)	(269)	(78)	46	(820)	(2,568)	(272)	(78)	(556)	30	86	(35)	(41)	15	(3,405)	(5,219)



NEW ZEALAND MUTUAL LIABILITY RISKPOOL

Notes to the Financial Statements for the year ended 30 June 2015 (continued)

Note 7. Claims

	Fund No. 18 (14–15)		Fund No. 17 (13–14)		Fund No. 16 (12–13)		Fund No. 15 (11–12)		Fund No. 14 (10–11)		Fund No. 13 (09–10)	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Cumulative Claims Experience												
Claims paid – Prior year(s)	-	-	83	-	563	53	1,918	463	1,174	831	2,124	1,330
Claims paid – Current year	81	-	368	83	299	511	325	1,455	53	343	355	794
Claims Provision – Undiscounted	3,201	-	1,545	1,955	858	1,665	79	1,045	17,695	547	567	989
Risk Margin – 75% PoA	-	-	-	-	-	-	-	-	-	-	-	-
Discounting	(109)	-	(42)	(217)	(29)	(163)	(4)	(134)	(1,011)	(60)	(30)	(108)
Gross claims incurred (Paid and estimated)	3,173	-	1,954	1,821	1,691	2,066	2,318	2,829	17,911	1,661	3,016	3,005
Less reinsurance received	-	-	-	-	(245)	(145)	(286)	-	(1,335)	(1,061)	(800)	(800)
Less reinsurance recoverable	(2,339)	-	(1,661)	(1,144)	(1,318)	(1,572)	(619)	(902)	(16,392)	(496)	(1,095)	(1,108)
Total Net Claims	834	-	293	677	128	349	1,413	1,927	184	104	1,121	1,097
Claims Reconciliation												
Claims Provision 1 July	-	-	1,738	-	1,502	2,170	911	1,552	487	889	881	968
Claims paid – Current year	(81)	-	(368)	(83)	(299)	(511)	(325)	(1,455)	(53)	(343)	(355)	(794)
Reinsurance recoveries received	-	-	-	-	100	145	286	-	273	347	-	555
Current year's claims received	3,173	-	-	1,821	-	-	-	-	-	-	-	-
Current year's reinsurance recoverable	(2,339)	-	-	(1,144)	-	-	-	-	-	-	-	-
Reassessment of prior years claims	-	-	(385)	-	(220)	(329)	(514)	413	82	19	24	19
Movement in reinsurance recoveries	2,339	-	518	1,144	(254)	27	(283)	401	15,895	(425)	(13)	133
Claims Provision at 30 June	3,092	-	1,503	1,738	829	1,502	75	911	16,684	487	537	881

The Future Claims Administration Expense reflects the level of claims being handled. The table below shows the respective reserves for future claims administration expenses included in the claims provision.

Future Claims Administration Reserve	726	-	182	681	35	232	10	41	20	29	25	41

Fund No. 12 (08–09)		Fund No. 11 (07–08)		Fund No. 10 (06–07)		Fund No. 9 (05–06)		Fund No. 8 (04–05)		Fund No. 7 (03–04)		Fund No. 6 (02–03)		Fund No. 1–5 (97–02)		TOTAL	
2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
7,218	6,041	5,541	5,353	12,840	12,921	30,567	28,195	21,261	21,179	16,604	16,720	23,159	22,063	15,144	15,144	138,196	130,293
712	1,177	375	188	37	(81)	3,696	2,373	309	82	421	(116)	(9)	1,095	51	-	7,073	7,904
1,336	1,303	226	1,099	353	783	2,512	5,468	638	645	750	1,010	317	476	566	631	30,643	17,616
84	145	45	141	111	128	145	110	87	30	114	144	40	24	100	188	727	911
(71)	(139)	(11)	(152)	(17)	(101)	(131)	(704)	(31)	(73)	(36)	(102)	(13)	(38)	(15)	(43)	(1,550)	(2,034)
9,279	8,527	6,176	6,629	13,324	13,650	36,789	35,442	22,264	21,863	17,853	17,656	23,494	23,620	15,846	15,920	175,089	154,690
(1,000)	(498)	-	-	(260)	(260)	(21,354)	(18,834)	(7,128)	(7,128)	(1,749)	(1,749)	(24,663)	(24,682)	(4,867)	(4,867)	(63,687)	(60,024)
(1,080)	(964)	(285)	(374)	-	(29)	2,147	(1,556)	(1,037)	(1,538)	(2,362)	(2,353)	2,209	1,528	(222)	(225)	(24,054)	(10,733)
7,199	7,065	5,891	6,255	13,064	13,361	17,582	15,052	14,099	13,197	13,742	13,554	1,040	466	10,757	10,828	87,348	83,933
1,309	1,831	1,088	979	810	1,550	4,874	6,052	602	1,454	1,052	1,579	462	1,586	777	753	16,493	21,363
(712)	(1,177)	(375)	(188)	(37)	81	(3,696)	(2,373)	(309)	(82)	(421)	116	9	(1,095)	(51)	-	(7,073)	(7,904)
502	412	-	-	-	-	2,520	(152)	-	-	-	-	(19)	911	-	-	3,662	2,218
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,173	1,821
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(2,339)	(1,144)
133	580	(364)	247	(298)	(850)	2,530	1,096	901	(316)	188	(477)	573	(536)	(72)	(49)	2,578	(183)
117	(337)	(89)	50	(29)	29	(3,703)	251	(501)	(454)	9	(166)	(681)	(404)	(3)	73	13,322	322
1,349	1,309	260	1,088	446	810	2,525	4,874	693	602	828	1,052	344	462	651	777	29,816	16,493

55	46	20	29	15	29	30	33	15	8	25	37	15	21	15	12	1,188	1,239



NEW ZEALAND MUTUAL LIABILITY RISKPOOL

Notes to the Financial Statements for the year ended 30 June 2015 *(continued)*

Note 7. Claims *(continued)*

Claims

Accounting Policy: All claims are provided for when notified and claims provisions are recognised at management's best estimate of future expected claims costs. The claims provision includes provision for future expected claims settlement, incurred but not reported claims, and incurred but not enough reported. It also includes expected future claims handling costs.

The claims provision is measured as the central estimate of expected future payments relating to claims incurred at the reporting date. The expected future payments include those in relation to claims incurred but not enough reported ("IBNER"). These claims are discounted in the financial statements at the average expected term to settlement.

Claims expense represents claim payments adjusted for movement in the claims provision. The estimation of the claims provision involves a number of key assumptions and is the most critical accounting estimate. Risk margins are held to allow for uncertainty surrounding the outstanding claims liability estimation process. Potential uncertainties include those relating to the actuarial models and assumptions, the quality of the underlying data used in the models, general statistical uncertainty and the general environment.

The risk margin is applied to the net central estimates in order to arrive at an overall net provision that is intended to provide a probability of sufficiency of 75%.

The Directors take all reasonable steps to ensure that they have appropriate information regarding claims exposures. External actuarial advice is sought and the use of other experts is used to assess open claims. However, given the uncertainty in establishing the liability, it is likely that the final outcome will be different from the original liability established. Changes in claims estimates impact profit and loss in the year in which the estimates are changed.

Central Estimate of Claims Provision

As at 30 June 2015 the central estimate of the claims provision was evaluated by Jeremy Holmes (Fellow of the NZ Society of Actuaries) of Melville Jessup Weaver in accordance with the requirements of NZ Society of Actuaries: *Professional Standards No. 4 General Insurance Business*. The actuaries are satisfied as to the nature, sufficiency and accuracy of data used in the calculation of the outstanding claims liability.

The estimation of the claims provision is based on a claim by claim stochastic methodology adjusted for the impact of individual claim excess, excess of loss reinsurance, stoploss reinsurance and member's aggregate claim limits. Key assumptions used are inflation and discount rates, finalisation pattern, zero/non-zero claim probabilities and claim severity.

The interest rates used for discounting were gross yields to redemption of NZ government debt of appropriate duration taken from the NZ Debt Management office website. The rates range from 3.14% to 4.16% with duration to payment of 0.25 to 19.75 years. The mean interest rate is 2.96% with a mean duration to payment of 1.65 years.

The estimation of the claims provision is subject to a level of uncertainty. For 'leaky building' claims, the estimation is subject to a greater degree of uncertainty due to the nature of the claims, which are variable in size and settle over a longer term. The claims provision is considered the Fund Manager's best estimate as at the date of the signed accounts, but should be viewed in respect of the uncertainties.

Areas of estimation uncertainties

Many assumptions were made in arriving at the estimated figure of the claims provision and related reinsurance receivables. The final outcome will depend on many variables including the percentage of WHRS (Weathertightness Home Resolution Service) registrations that will not proceed, the percentage that will involve private certifiers and will have no impact on Riskpool and the contribution applied to other parties. The estimate takes into account all known relevant factors and draws on Riskpool's historical experience of these types of claims and external actuarial advice. The figure invariably will be subject to upwards or downwards adjustments in the future as claims are resolved.

Additional sources of uncertainty relating to leaky buildings include unpredictable court outcomes and political interventions. A trend towards a reduced number of defendants to leaky claims is leaving councils under joint and several liability and are therefore liable for higher costs. Claims are now highly dependent on a relatively small number of large claims and defendants often choosing to keep information confidential for as long as possible. Some potential claims may not yet be recognised and multi-unit claims are not separately identified.

On 11 October 2012 the Supreme Court gave a decision in the Spencer on Byron case which affirmed that a council owes the same duty of care for building inspections to non-residential property owners as it does to residential owners. Since then there has been one notification made to Riskpool which was of nominal cost. The full future effect of this decision has not been, and cannot be, determined.

Review of Assumptions

The normal review of assumptions in the year to 30 June 2015 includes interest discounting, finalisation patterns, zero/non-zero claim probabilities and case estimate credibility assumptions.

The most sensitive assumption is the case estimate credibility. If each of the case estimate credibility factors were decreased by 10% the baseline discounted 75% PoA outstanding claims net of reinsurance would increase by \$0.725M. Similarly a 10% increase would result in a \$0.722M decrease.



NEW ZEALAND MUTUAL LIABILITY RISKPOOL

Notes to the Financial Statements for the year ended 30 June 2015 *(continued)*

Note 8. Reinsurance

Reinsurance Recoveries Accounting Policy:

Reinsurance recoveries are provided for when the claims incurred exceed the reinsurance excess level. These debtors are stated at estimated realisable value.

Reinsurance Receivable Reconciliation

	Fund No. 18 (14–15)		Fund No. 17 (13–14)		Fund No. 16 (12–13)		Fund No. 15 (11–12)		Fund No. 14 (10–11)		Fund No. 13 (09–10)	
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
Reinsurance Receivable 1 July	-	-	1,144	-	1,572	1,544	902	502	496	922	1,108	974
Reinsurance recoveries received	-	-	-	-	(100)	(145)	(286)	-	(273)	(347)	-	(555)
Current year's reinsurance recoverable	2,556	-	672	1,287	(32)	368	60	513	16,196	(17)	89	827
Reinsurance Receivable - Undiscounted at 30 June	2,556	-	1,816	1,287	1,440	1,767	676	1,015	16,419	558	1,197	1,246
Discounting	(217)	-	(155)	(143)	(122)	(195)	(57)	(113)	(27)	(62)	(102)	(138)
Reinsurance Receivable - Discounted at 30 June	2,339	-	1,661	1,144	1,318	1,572	619	902	16,392	496	1,095	1,108

Individual excess of loss and stoploss reinsurance is organised on a Fund Year basis.

Included in the reinsurance recoveries is an amount following a commutation with Swiss Re of the first layer of reinsurance and a portion of the upper layers for fund years 3 to 10. There is reinsurance for the remainder of the higher layers. Each Fund entered into a reinsurance contract with the effect that the Funds had maximum claims paying exposure of: Fund 1 \$2M, Fund 2 \$2.5M, Funds 3, 4 & 5 \$3M, Fund 6 \$3.25M, Fund 7 \$3.5M, Funds 8 & 9 \$4M, Fund 10 \$6M, Fund 11 \$1.5M, Fund 12 \$1.625M, Fund 13 \$1M, Fund 14 \$0, Fund 15 \$1.35M and Funds 16 to 18 \$0. Refer to the commutation comment above. However Funds 7 to 9 do not have reinsurance cover for WHRS "leaky homes" claims and Funds 10 and thereafter do not have reinsurance cover for any "leaky homes" claims. All claims for Funds 14 and 16 to 18 are covered by reinsurance. There are 22 low risk members that were covered for WHRS and Non-WHRS claims for fund years 13 to 18, these risks being fully reinsured.

Fund No. 12 (08–09)		Fund No. 11 (07–08)		Fund No. 10 (06–07)		Fund No. 9 (05–06)		Fund No. 8 (04–05)		Fund No. 7 (03–04)		Fund No. 6 (02–03)		Fund No. 1–5 (97–02)		TOTAL	
2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000	\$000
964	1,301	374	325	29	-	1,556	1,306	1,538	1,992	2,353	2,519	(1,528)	(1,125)	225	152	10,732	10,412
(502)	(412)	-	-	-	-	(2,520)	152	-	-	-	-	19	(911)	-	-	(3,663)	(2,218)
718	195	(63)	96	(29)	-	(1,382)	292	(405)	(262)	228	128	(905)	29	18	101	17,721	3,557
1,180	1,084	311	421	-	-	(2,346)	1,750	1,133	1,730	2,581	2,647	(2,414)	(2,007)	243	253	24,792	11,751
(100)	(120)	(26)	(47)	-	29	199	(194)	(96)	(192)	(219)	(294)	205	479	(21)	(28)	(738)	(1,018)
1,080	964	285	374	-	29	(2,147)	1,556	1,037	1,538	2,362	2,353	(2,209)	(1,528)	222	225	24,054	10,733



NEW ZEALAND MUTUAL LIABILITY RISKPOOL

Notes to the Financial Statements for the year ended 30 June 2015 *(continued)*

Note 9. Financial Instruments

Financial Assets and Liabilities

The carrying amounts of all financial assets and liabilities are considered to be equivalent to their market value, which for these assets and liabilities is also considered to be fair value. All fixed interest investments were managed around a 90 day duration and carry a minimum Standard and Poor's credit rating of "A1" or equivalent.

Carrying value of Financial Assets and Financial Liabilities

	2015	2014
	\$000	\$000
Financial Asset: Loans and Receivables		
Bank & Cash Equivalents	3,824	7,230
Sundry Debtors	99	246
Reinsurance Receivable	24,054	10,733
Total Loans and Receivables	27,977	10,979
Financial Liability: Amortised Cost		
Accounts Payable	176	414
Total Amortised Cost	176	414

Note 10. Subsequent Events

In August 2015 a judgment was reached in the claim relating to Southland Stadium (Fund Year 14). Invercargill City Council was found liable for 10% of the judgment sum of \$17M however it is unlikely that the other party will be able to fund any material component of the remaining 90% leaving Invercargill City to fund the entire \$17M. Due to the timing of the judgment any further action is yet to be determined. Fund Year 14 is fully reinsured therefore any liability falls to Riskpool's offshore reinsurers.

In September 2015 a judgment was reached resulting in an adverse development on a previously settled un-reinsured WHRS claim. These financial accounts have been adjusted accordingly for both events.

In 2014 proceedings were served against the Scheme by Wellington City Council with regard to a claim where cover was declined on legal advice. At this stage the outcome of the dispute cannot be determined consequently no provision has been made in the financial accounts.

There have been no other material events after 30 June 2015 that requires adjustment to or disclosure in the financial statements.

Note 11. Going Concern

These financial statements have been prepared on a going concern basis.

For Funds 7, 10 to 15 and 18, while the total liabilities exceed total assets indicating a shortfall in equity, a going concern basis is appropriate because the Trustee is able to levy the members of the Funds to cover any shortfall in equity in any Fund under the terms of the Deed of Trust. In addition, the Scheme provides mutual protection from risk on a discretionary basis, insofar as the Trustee has the ability to not pay a claim if the individual Funds of the Scheme are not in a position to do so. The Trustee also has the ability, under certain circumstances, to merge several of the Funds thus reducing or eliminating any deficit.

The ongoing viability of the Scheme is dependent on member support and on continuing to obtain cost effective reinsurance for those members. Although there has been a drop in membership over the last two years, this will be offset by a decrease in the cost of reinsurance and managers' fees. There are a small number of open leaky claims (the number of open claims continues to trend downwards with only 28 leaky claims open).



SCHEME RULES

1. DEFINITIONS

In these Rules:

'Board' means the Board of Directors formed pursuant to clause 5 of the Deed of Trust;

'Coverage' is defined in Rule 8;

'Claim' means any claim made under the Protection Wording;

'Deed of Trust' means the deed dated the 1st day of July 1997 establishing the Scheme (as amended from time to time);

'Fund' means each separate annual fund established pursuant to clause 4 of the Deed of Trust; **'Fund Year'** has a corresponding meaning; the first Fund Year is from 4.00 pm on 30 June 1997 to 4.00 pm on 30 June 1998; subsequent Fund Years are from 4.00 pm on 30 June in a calendar year to 4.00 pm on 30 June in the next calendar year, unless otherwise determined by the Board;

'Fund Manager' means the Fund Manager appointed pursuant to clause 10 of the Deed of Trust;

'Member' means any person or body (whether incorporated or not) admitted as a member of the Scheme pursuant to clause 11.1 of the Deed of Trust and these Rules;

'Membership' has a corresponding meaning;

'Protection Wording' means, in relation to any particular Member and Fund Year, the combined liability protection wording issued to that Member by the Scheme setting out the risks covered by the Scheme and the terms, conditions

and limits in respect of those risks: this term equates to the term *'Guidelines'* in clause 8.1 of the Deed of Trust;

'Scheme' means the scheme more formally known as the New Zealand Mutual Liability Riskpool;

'Scheme Manager' means the Scheme Manager appointed pursuant to clause 9 of the Deed of Trust.

2. PURPOSE AND STATUS OF RULES

2.1 The purpose of these Rules is to set out the administrative mechanisms by which the Scheme is administered so as to put the purpose and intent of the Deed of Trust into effect.

2.2 In the case of conflict between the provisions of the three principal constituent documents of the Scheme, which are the Deed of Trust, these Rules and the Protection Wording, the Deed of Trust shall prevail over the Scheme's Rules which shall prevail over the Protection Wording.

3. OFFER OF MEMBERSHIP AND NOTICES

3.1 An offer of Membership may be made to any organisation or person approved for admission by the Board.

3.2 Membership of the Scheme is by Fund, so one Member may hold one or more Memberships.

3.3 Not later than 50 days prior to the end of a Fund Year, the Board shall provide written notice to each Member of that Fund advising whether that Member will be offered Membership for the next Fund Year and if so,

an indication of the initial contribution payable by that Member in respect of that Fund Year.

3.4 An offer to become a Member of a Fund must include:

- a) A copy of the Protection Wording unless this has already been provided;
- b) A copy of the Deed of Trust unless this has already been provided;
- c) An up-to-date copy of these Rules unless this has already been provided; and
- d) An indication of the initial contribution payable for the new Fund Year as determined by the Board.

3.5 Members offered Membership in the notice referred to in Rule 3.3 who do not accept that Membership shall give the Scheme Manager written notice of this decision prior to the later of:

- a) 20 days after receiving the notice; and
- b) 30 days prior to the start of the new Fund Year.

3.6 If a Member fails to give the notice described in Rule 3.5 within the required time frame, then the Member must reimburse the Scheme within 20 days for its share of reinsurance and other expenses that have or will be incurred by the Scheme because of the Scheme's expectation of that Member's participation. The amount to be reimbursed will be 25% of the initial contribution that the Member would have paid for Membership of the next Fund Year, being a reasonable pre-estimate of the reimbursement required.

4. ACCEPTANCE OF MEMBERSHIP OFFER

A body becomes a Member of a Fund by:

- a) Notifying the Scheme Manager in writing that it has accepted the offer of Membership; and
- b) Paying the initial contribution for that Fund Year as determined by the Board within 20 days of the start of the Fund Year (or for such longer period as determined by the Board) failing which, unless otherwise determined by the Board, the offer of Membership lapses.

5. MEMBERSHIP OBLIGATIONS

5.1 By its acceptance of an offer of Membership a Member agrees that:

- a) The Deed of Trust and these Rules as amended from time to time constitute a contract between the Scheme and the Member subject to Rule 5.3;
- b) The Member will be bound by the Deed of Trust and these Rules as amended from time to time and perform the obligations of a Member under the same accordingly;
- c) The Member will make available to the Scheme Manager or Fund Manager all information and data which the Scheme Manager or Fund Manager reasonably requires in order to determine the claims and risk management experience of the Member for the purpose of assessing contributions;
- d) The Scheme Manager shall be permitted (but not obligated) to carry out a risk management

audit or otherwise inspect the Member's property and operations at any time; and

- e) The Scheme Manager may examine and audit the Member's books and records at any time (but only so far as they relate to the Membership of the Scheme or risks covered by the Scheme).

5.2 For the avoidance of doubt, the contract the subject of Rule 5.1 (a) is a contract between a Member and the Scheme only and the contract does not create, as between a Member and any other Member or Members, any joint rights or obligations or any mutual rights or obligations.

5.3 To the extent, if any, to which a provision of these Rules or the Deed of Trust provides or implies:

- a) Anything in any way contrary to Rule 5.2; or
 - b) That the Scheme is constituted a joint or mutual agent for its Members or any of them –
- that provision is, to that extent, inoperative and does not form part of the legal relationship between a Member and the Scheme.

6. END OF MEMBERSHIP

6.1 Membership ends when and only when the Fund is closed.

6.2 The Board shall determine when a Fund and its accounts will be closed and final results for the Fund determined and declared.

6.3 Except in the event of the Scheme being wound up, no Member has any entitlement to be paid any amount on account of surplus for a Fund unless:

- a) The accounts for the Fund have been closed and final results determined and declared; and
- b) The Board has determined that a distribution or return should be paid to Members in respect of that Fund.

6.4 In the event that a Member is entitled to a distribution of a Fund's surplus, any amount due will be set-off against:

- a) Any contribution or other monies due but unpaid by the Member to the Scheme; and
- b) Any unrecovered loss or expense incurred by the Scheme by, through or in connection with the Member.

7. MEMBERS' CONTRIBUTIONS

7.1 Members' contributions are determined by the Board.

7.2 In the event that a Member fails to comply with the Deed of Trust, these Rules or a direction from the Board and in so doing, in the opinion of the Board, exposes the Scheme to an increased, additional or readily avoidable risk or financial loss (including loss of interest) or additional expense the Board may:

- a) Require the Member to top up its initial contribution to the relevant Fund to cover that increased, additional or readily avoidable risk; or
- b) Require the Member to pay an additional contribution for the relevant Fund to cover that loss or expense; or
- c) Exclude or limit that increased, additional or readily avoidable risk from the Member's Coverage.

8. COVERAGE (PAYMENT OF CLAIMS)

Subject always to the Deed of Trust and these Rules, the Scheme will indemnify each Member for damages or compensation in accordance with the Protection Wording. This is the definition of 'Coverage'. Coverage is only available once any other insurance has been fully utilised.

9. RECOURSE TO SCHEME ASSETS ONLY

For the payment of any Claim or the performance of any obligation of the Scheme, recourse may be had solely to the relevant Fund and no claim may be made or endorsed by a Member against:

- a) Any Trustee of the Scheme;
- b) Except in the case of negligence or other breach of duty, any employee or agent of the Scheme;
- c) Any other Fund; or
- d) Any person described in clauses 13.1.1 to 13.1.4 of the Deed of Trust.

10. REIMBURSABLE DEDUCTIBLE OR EXCESS

If the Scheme pays a deductible or excess amount referred to in a Protection Wording the Member shall reimburse the Scheme within 14 days of written notice from the Scheme.

11. NOTICE OF CLAIMS

Notice in writing must be given as soon as possible to the Scheme Manager by the Member:

- a) Of any occurrence, circumstance, claim, statement of claim, summons or proceedings

or of any impending prosecution, inquest or inquiry, or knowledge of any occurrence or circumstances which may subsequently give rise to a Claim, irrespective of its quantum; and

- b) Of any change materially affecting or varying any of the facts or circumstances existing at the commencement of Membership that shall come to the knowledge of the Member. A Member's knowledge shall be deemed to include the knowledge of any person whose knowledge would at law be that of the Member.

12. ADMISSIONS NOT TO BE MADE

The Member shall not make any admission, offer, promise or give any indemnity in respect of a Claim or potential Claim or Claim circumstance or potential Claim circumstance without the written consent of the Board.

13. INFORMATION TO BE PROVIDED

The Member must provide to the Scheme Manager and any loss adjuster, solicitor or other agent appointed by the Scheme Manager with respect to a Claim or potential Claim all information requested by such party in the manner and format requested.

14. GRANT OR REFUSAL OF INDEMNITY

14.1 Subject to clause 8.2 of the Deed of Trust, the Board shall advise the Member as soon as practicable after receipt of a Claim as to whether the Scheme grants or refuses indemnity.

14.2 Without limiting the discretions of the Board under the Deed of Trust, the Scheme may choose not to

indemnify the Member against any Claim or Claim circumstance and may withdraw any indemnity previously granted where the Member has:

- a) Breached or failed to comply with a condition or obligation in the Protection Wording or under the Deed of Trust or these Rules or committed any other act or made any other omission which entitles the Board to reduce or cancel a Member's Coverage under Rule 21; and
- b) The Scheme is prejudiced by that breach, failure, act or omission.

15. SUBROGATION

The Member agrees that in the event of payment of any Claim by the Scheme, the Scheme will be subrogated to all the rights of the Member against any person or other legal entity deemed responsible for the Claim, and in such event, the Member shall render to the Scheme Manager, loss adjuster, solicitor or other agent appointed by the Scheme Manager all assistance other than pecuniary, as is reasonably necessary to effect recovery.

16. SETTLEMENT OF CLAIMS

16.1 If the Scheme Manager so desires, it may take over the conduct in the name of the Member the defence or settlement of any claim against the Member.

16.2 On notifying a Claim or Claim circumstance, the Member shall promptly take at its own expense all reasonable steps to prevent other loss, personal injury or property damage arising out of the same or similar conditions, but such expense shall not be recoverable from the Scheme.

16.3 The Member shall use its best endeavours to preserve any damaged or defective property which might prove necessary or useful by way of evidence in connection with any Claim and except where some other course is required by Rule 16.2, but only so far as may reasonably be practical, the Member must not make any alteration or repair to any premises, machinery, fittings, appliances or plant without the consent of the Scheme until the Scheme has had an opportunity of inspection.

16.4 The Scheme has full discretion to conduct any proceedings in connection with any Claim.

16.5 The Scheme is entitled to prosecute in the name of the Member, at its own expense and for its own benefit, any claim for indemnity or damages or otherwise.

16.6 Notwithstanding Rules 16.1, 16.4 and 16.5, a Member shall not be required to contest any legal proceedings unless a solicitor (to be mutually agreed upon by the Member and the Scheme) advises that such proceeding should be contested, with the reasonable probability of success or partial success.

17. MEMBERS' LITIGATION RESPONSIBILITIES

In connection with any litigation or claim settlement negotiations conducted by the Scheme in the name of a Member, or any action taken by the Scheme in exercise of its rights of subrogation:

- a) if a personal appearance by an elected member, officer or agent of the Member is necessary at any conference, in any Court or elsewhere, the

expense of such an appearance shall be borne or paid by the Member;

- b) The Member shall fully co-operate by supplying any information and assistance requested by the Scheme Manager and any loss adjuster, solicitor or other agent appointed by the Scheme Manager or the Scheme with respect to the litigation claim;
- c) The Member may, upon notice in writing, prevent a settlement proposed by the Scheme of litigation or a claim brought or made against the Member, but if it does so and the claim is ultimately settled (or judgement is ultimately given) for a higher amount, then notwithstanding Rule 8, the Member must pay as estimated by the Board all amounts (including interest and legal costs) which exceed the amounts that the Scheme would have had to pay if the claim had been settled as proposed by the Scheme.

18. AUTOMATIC REINSTATEMENT

Upon notification to the Scheme of a Claim, cover under the Protection Wording shall be reinstated for such amount as may be ultimately paid by the Scheme in respect of such Claim up to the limit, if any, imposed by the Protection Wording.

19. CONTRIBUTION FROM OTHER INSURERS

When a loss paid is recoverable under an insurance policy, then the Scheme reserves its rights to seek full recovery from the insurer.

20. NOTICE TO SHOW CAUSE WHY ALL OR SOME COVERAGE SHOULD NOT BE CANCELLED

In the event that a Member (in this Rule referred to as the 'Defaulting Member'):

- a) Fails to comply with the reasonable directions of the Scheme as to the conduct of its operations so as to minimise risks;
- b) Fails to make available to the Scheme Manager or Fund Manager all information and data which either of them reasonably require in order to determine the claim and risk management experience of the Member for the purpose of assessing contributions;
- c) Fails to permit the Scheme Manager to carry out a risk management audit or otherwise inspect the Member's property and operations;
- d) Fails to permit the Scheme Manager to examine and audit the Member's books and records (but only so far as they relate to its Membership(s) of the Scheme or risks covered by the Scheme);
- e) Fails to pay contributions due to the Scheme within the time prescribed by these Rules or by the Board;
- f) Commits any other breach of these Rules which is not remedied within the time specified in a notice to the Defaulting Member - then in that regard the Board may by notice in writing to the Defaulting Member require that it show to the Scheme good cause within 14 days why all or some of its Coverage should not be cancelled.

21. REDUCTION OR CANCELLATION OF COVERAGE

21.1 The Board may, by special resolution, cancel or reduce Coverage for a Member by giving that Member notice in writing to that effect where the Member:

- a) Fails to comply with the duty of utmost good faith;
- b) Fails to comply with the duty of disclosure;
- c) Has made any fraudulent claim to the Scheme or under any contract of insurance; or
- d) Fails to show sufficient cause to the contrary in response to a notice issued pursuant to Rule 20.

21.2 A notice of reduction or cancellation of Coverage takes effect at whichever occurs first between

- a) The time when a policy of insurance between the Member and an insurer, being a policy of insurance that is intended by the Member to replace all or a good proportion of the cancelled Coverage is entered into; and
- b) At 4.00 pm on the 30th day after the day on which notice was given to the Member (or such later time as specified in the notice).

21.3 Cancellation or reduction of Coverage does not vary or waive the obligations of a Member to comply with the Deed of Trust and the provisions of these Rules.

22. REASONABLE CARE BY MEMBERS

Members shall:

- a) Exercise reasonable care that only competent employees are employed;
- b) Take reasonable measures to maintain all premises, fittings and plant in a safe and sound condition;
- c) Take all reasonable precautions to prevent loss or damage to property and personal injury;
- d) Take all reasonable precautions to prevent the manufacture, sale or supply of defective products;
- e) Take all reasonable precautions to prevent the release, issue, tender or supply of defective or erroneous advice or information;
- f) Comply and ensure that its employees, servants and agents comply with all statutory obligations, by-laws or regulations imposed on or by any local authority and
- g) At their own expense take all reasonable action to trace, recall or modify any item, document, information, advice or product manufactured, constructed, erected, installed, altered, repaired, serviced, treated, sold, supplied, distributed, prepared, provided, issued or tendered by the Member (including any container thereof other than a vehicle) containing any defect, error or deficiency of which the Member has knowledge or has reason to suspect.

23. SCHEME DOES NOT WARRANT RISK LEVELS

Each Member acknowledges that neither the Scheme's rights to make inspections nor the making thereof nor any report thereon constitutes an agreement or the assumption of an obligation, on behalf of or for the benefit of the Member or others, to determine or warrant that such property or operations are safe or represent any particular level of risk to liability.



2014–15 FUND YEAR MEMBERSHIP

Ashburton District Council
 Auckland Council
 Carterton District Council
 Central Hawke's Bay District Council
 Central Otago District Council
 Chatham Islands Council
 Christchurch City Council
 Clutha District Council
 Environment Canterbury
 Environment Southland
 Far North District Council
 Gore District Council
 Hastings District Council
 Hauraki District Council
 Hawke's Bay Regional Council
 Hurunui District Council
 Hutt City Council
 Invercargill City Council
 Kaikoura District Council
 Kaipara District Council
 Kapiti Coast District Council
 Mackenzie District Council

Marlborough District Council
 Masterton District Council
 Matamata-Piako District Council
 Napier City Council
 New Plymouth District Council
 Northland Regional Council
 Opotiki District Council
 Otago Regional Council
 Otorohanga District Council
 Palmerston North City Council
 Porirua City Council
 Queenstown Lakes District Council
 Ruapehu District Council
 Selwyn District Council
 Southland District Council
 South Taranaki District Council
 South Wairarapa District Council
 Stratford District Council
 Taranaki Regional Council
 Tasman District Council
 Taupo District Council
 Timaru District Council

Waikato Regional Council
 Waimakariri District Council
 Waimate District Council
 Waipa District Council
 Wairoa District Council
 Waitaki District Council
 Waitomo District Council
 West Coast Regional Council
 Whakatane District Council
 Whangarei District Council

Membership enquiries are welcome and should be referred to:

Legal Officer
 New Zealand Mutual Liability Riskpool
 P O Box 5521, Wellington 6145
 Attention: Jane Brown
 Telephone: 04 978 1268
 Facsimile: 04 978 1260
 E-mail: jane.brown@riskpool.org.nz



LOCAL GOVERNMENT MUTUAL FUNDS TRUSTEE LIMITED

DIRECTORY

Registered Office	9th Floor Civic Assurance House 116 Lambton Quay PO Box 5521 Wellington 6145	
Directors	Andrew Aitken (Chairman) Michael Hannan Tony Marryatt Jim Palmer Bryan Taylor (Advisory Director)	Auckland Auckland Hamilton Christchurch Auckland
Scheme & Fund Manager	Civic Assurance	
Claims Manager	Jardine Lloyd Thompson Limited	
Scheme Solicitors	Heaney & Partners	
Scheme Auditors	Dave Shadwell, Deloitte On behalf of the Auditor-General	

NEW ZEALAND LOCAL GOVERNMENT INSURANCE CORPORATION LIMITED

("LGIC")

AND

LOCAL GOVERNMENT MUTUAL FUNDS TRUSTEE COMPANY LIMITED

("Trustee Company")

This document is an amalgamation of the DEED OF TRUST dated 1 July 1997 and the provisions of
the DEED OF VARIATION OF DEED OF TRUST dated 22 June 2007

THIS DEED OF TRUST made the 1st day of July 1997

PARTIES

NEW ZEALAND LOCAL GOVERNMENT INSURANCE CORPORATION LIMITED at Wellington ("LGIC")

LOCAL GOVERNMENT MUTUAL FUNDS TRUSTEE LIMITED ("Trustee Company")

BACKGROUND

- A. LGIC is a Local Authority Trading Enterprise as that term is defined in the Local Government Act 1974.
- B. Trustee Company is a company incorporated under the Companies Act 1993 and is a wholly owned subsidiary of LGIC.
- C. LGIC, in consultation with Jardine, has agreed to establish a Trust pursuant to this deed to provide the Fund and the Scheme (to be known as the New Zealand Mutual Liability Riskpool) for the benefit of the Members of the Scheme and to manage all Claims for Civil Liabilities against the Members of the Scheme which may arise in connection with the exercise by the Members of any of their powers, duties or functions.
- D. The purpose for establishing this Trust in consultation with Members is to benefit residents and ratepayers of New Zealand and in particular that purpose is to be achieved by enabling Members to be recompensed from the Fund in respect of liabilities thus reducing the need for insurance cover and reducing Members' annual expenses. In addition the Scheme Manager will work with Members to ensure that proper systems are developed to promote the efficient and safe fulfilment of each Member's functions thus providing a benefit to the community as a whole.
- E. LGIC has agreed to hold all the shares in Trustee Company on trust for the Members of the Scheme pursuant to this deed.
- F. Trustee Company has agreed to act as Trustee of the Scheme and to hold and apply the Fund in accordance with this deed and the other Scheme Documents so as to provide the benefits intended to be obtained by Members of the Scheme as envisaged by this deed and the other Scheme Documents.

This is an amalgamation of the Deed of Trust dated 1 July 1997 and the Deed of Variation of Deed of Trust dated 22 June 2007. If necessary reference should be made to the provisions of the original documents which take precedence.

THIS DEED WITNESSES:

1. INTERPRETATION:

1.1 In this deed unless the context clearly requires otherwise:

“Act” means the Companies Act 1993.

“Additional Contribution” means any additional or further contribution to an Annual Fund by a Member, after the initial Contribution to that Annual Fund, called for or demanded by the Board pursuant to this deed and the Scheme Rules.

“Annual Fund” means the separate fund established, pursuant to the Scheme Documents, for each Fund Year of the Scheme.

“Board” means the directors of Trustee Company who number not less than the quorum required pursuant to the Constitution acting together as a board of directors.

“Call” means each call or demand for an Additional Contribution.

“Civil Liability” means any civil liability resulting from an obligation, function, power or duty of a Member arising under law and includes any public liability and any liability for negligence of the Member.

“Claim” means any claim by a Member in respect of that Member’s Civil Liability during the term of the Scheme in respect of the Risks.

“Constitution” means the constitution of Trustee Company as may be varied, or substituted from time to time.

“Contribution” includes each Member’s initial contribution to each Annual Fund as determined by the Board, pursuant to clause 11 and each Additional Contribution.

“Deed of Participation” means the deed of participation required to be entered into by each Member pursuant to clause 16.

“Fund” means all assets and property of the Scheme and includes each separate Annual Fund.

“Fund Manager” means the manager of the Fund pursuant to clause 10.

“Fund Year” means the year commencing 4.00pm on 30th June in each year and terminating 4.00pm on 30th June in the next following year, or as otherwise determined by the Board.

“Guidelines for Exercise of Discretion” or **“Guidelines”** means the guidelines from time to time set out by the Board as detailed in clause 8.1.

“Indemnity Cover” means insurance cover purchased by the Board on behalf of Members to meet the Claims of the Members in the amount and in respect of the Risks determined from time to time by the Board being amounts payable in excess of the pooled cover.

“Jardine” means Jardine Risk Consultants Limited.

“Local Authority” means a local authority pursuant to the Local Government Act 1974.

“Member” means any person or body (whether incorporated or not) admitted as a Member to the Scheme pursuant to the Scheme Documents.

“Pooled Cover” means cover provided from the Fund to manage and, if the Claims are accepted by the Board, settle or pay the Claims against the Members in respect of the Risks.

“Risks” means those risks of Civil Liability of each Member and which fall within the Guidelines for Exercise of Discretion for the relevant Fund Year.

“Scheme” means the scheme, to be known as the New Zealand Mutual Liability Riskpool, constituted by this deed and the other Scheme Documents.

“Scheme Documents” means this deed, the Scheme Rules, and the Constitution of Trustee Company and for each Member, its Deed of Participation and the Guidelines.

“Scheme Manager” means the manager of the Scheme appointed from time to time pursuant to clause 9.

“Scheme Manager’s Quantum” shall mean \$30,000 inclusive of self retained limit or such other amount as shall from time to time be fixed by the Board.

“Scheme Rules” means the rules of the Scheme as promulgated by the Board from time to time.

“Scheme Solicitor” means the solicitor appointed from time to time by the Board.

“Self Retained Limit” means the deductible or excess to be borne by each Member in respect of its Risks and Claims against it as provided in the Guidelines.

“Shares” means the shares in Trustee Company.

“Underlying Claim” means any claim for civil liability (covered for the time being under the Guidelines) made against a Member which may give rise to a Liability; but also includes a claim which may give rise to a Liability to a Member under any other category of risk to that Member which the Guidelines of the Scheme may properly have been extended to cover pursuant to the terms of this deed.

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- 1.2 In this deed, unless the context clearly otherwise requires:
- 1.2.1 Words importing the singular shall include the plural and vice versa;
- 1.2.2 References to any legislation shall include references to all amendments to that legislation and to any legislation passed in substitution for it (in whole or in part);
- 1.2.3 References to “director” or “directors” shall be to a director, or directors, of Trustee Company, acting in their capacity as such; and;
- 1.2.4 References to persons shall be deemed to include references to individuals, companies, corporations, firms, partnerships, joint ventures, associations, organisations, trusts, states or agencies of state, government departments and local and municipal authorities in each case whether or not having separate legal personality.

2. CONSTITUTION OF THE SCHEME

- 2.1 A scheme is hereby established by LGIC and Jardines for the benefit of Members of the Scheme with the objects set out in clause 3. The name of the Scheme shall be the New Zealand Mutual Liability Riskpool.
- 2.2 The parties agree that Trustee Company shall act as the Trustee of the Scheme established under this deed and shall be responsible to ensure that the purposes of the Scheme as provided by this deed and the other Scheme Documents are carried into effect.

- 2.3 The Fund of the Scheme shall include all assets and property for the time being held by or on behalf of Trustee Company, derived from:
- 2.3.1 Contributions;
- 2.3.2 Additional Contributions;
- 2.3.3 Any gifts, donations or grants
- 2.3.4 Revenue from investments;
- 2.3.5 Proceeds of realisation of investments;
- 2.3.6 Any policies or contracts of re-insurance or indemnity;
- 2.3.7 Any recoveries;
- 2.3.8 Any other source.
- 2.4 The Fund shall be held in trust for the benefit of the Members of the Scheme by Trustee Company upon the trusts and for the objects contained in this deed and shall be managed, administered and applied by Trustee Company in accordance with the powers contained in this deed, in order to attain those objects.
- 2.5 LGIC hereby declares that it holds the Shares on trust for the benefit of the Members in accordance with the terms of this deed and the other Scheme Documents for the objects and purposes of the Scheme.
- 2.6 Trustee Company is and shall remain responsible for the safe custody of all money, policies, certificates and other documents of title and value in connection with the Fund and for the safe custody, realisation and distribution of all assets and property from the Fund, from time to time vested in Trustee Company.

3. PURPOSES AND OBJECTS

- 3.1 LGIC and Trustee Company declare that their purposes in entering into this deed and the objects of the Scheme are:
- 3.1.1 To establish and maintain an Annual Fund for each Fund Year during the term of the Scheme for the benefit of the Members to meet the costs of establishing and running the Scheme and, subject to the terms of this deed and the other Scheme Documents and the Guidelines, to pay the Civil Liabilities of the Members arising from the Risks covered by the Scheme and specified in the Scheme Documents with the intention that Members’ needs for insurance cover and insurance expenses are reduced for the benefit of residents and ratepayers;
- 3.1.2 To provide Pooled Cover in respect of Risks as may be determined from time to time by the Board;
- 3.1.3 To manage and settle or pay Claims made against Members;
- 3.1.4 To develop programmes for the management of the risk of loss arising out of Civil Liability of the Members;
- 3.1.5 To reduce the amount and frequency of losses to the Members arising out of Civil Liability;
- 3.1.6 To purchase such Indemnity Cover or re-insurance in respect of such Risks as may be determined from time to time by the Board;

3.1.7	To undertake such other functions in relation to the management of Civil Liability as the Board may from time to time require having regard to the interests of the Members, including making grants from the Fund to a Member or any other person or body approved by the Board;	4.	THE FUND	4.2.2	to the extent that the Underlying Claim exceeds the amount of the Pooled Cover but does not exceed the amount of the Indemnity Cover for that Fund Year;
3.1.8	To investigate and if deemed appropriate by the Board, establish other Funds to cater for the insurance needs of Local Authorities and other local government organisations;	4.1	Trustee Company shall establish and maintain a Fund in the amount recommended by the Board and shall at the commencement of each Fund Year during the term of the Scheme on the advice of the Board invite the Members of the Scheme to contribute to the Fund at such levels as are determined pursuant to clause 6.6 to meet:		(i) to the amount of the Pooled Cover, from the relevant Annual Fund for that Fund Year;
3.1.9	To work with Members to ensure that proper systems are developed to promote the efficient and safe fulfilment of each Member's functions to provide to the Community as a whole;	4.1.1	such Underlying Claims as may be made against any one or more of the Members during that Fund Year in respect of Risks to the extent of the Pooled Cover.	4.2.3	To the extent that the Underlying Claim exceeds the amount of the Pooled Cover and the Indemnity Cover for that Fund Year;
3.1.10	To do all other things as may be necessary or desirable to further the above objects in the interests of the Members of the Scheme.	4.1.2	the premium payable to an appropriate indemnity insurer or insurers to provide Indemnity Cover for the Members during that Fund Year.		(i) to the amount of the Pooled Cover, from the relevant Annual Fund for that Fund Year;
3.2	The parties agree that they will co-operate to the fullest extent with each other in the implementation of the purposes stated in clause 3.1 and act in accordance with the provisions and spirit and intent of this deed.	4.1.3	the operating expenses of the Scheme for that year.		(ii) to the amount of the Indemnity Cover for that Fund Year, to the extent of that cover;
		4.1.4	the grants or allocations to be made pursuant to clauses 3.1.7 or 3.1.8 (if any).		(iii) the balance by the Fund from surpluses from previous Fund Years and from Additional Contributions from Members;
		4.1.5	any other amount determined by the Board to be required for the continuation of the Scheme.		(iv) to the limit of any guarantee provided by LGIC, by LGIC.
3.3	LGIC shall be entitled to be paid an administration fee to be determined from time to time by the Board for the performance of its functions and duties under this deed as Fund Manager and for the provision of any other services to Trustee Company.	4.2	Each Underlying Claim made upon any of the Members during a Fund Year in respect of Risks may at the discretion of the Board be met:	4.3	The Members shall be invited to Contribute to the Fund in the proportions to be determined annually by the Board. The Contributions by Members for each Fund Year shall be held and accounted for as a separate Annual Fund for that Fund Year.
		4.2.1	to the extent that the Underlying Claim does not exceed the amount of the Pooled Cover of the Annual Fund for that Fund Year from that Annual Fund;		

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- 4.4 Trustee Company shall administer the Fund with the intent that upon the settlement of all Claims made in respect of occurrences or events arising during the relevant Fund Year;
- 4.4.1 any surplus or anticipated surplus remaining in the Fund attributable to that Fund Year shall be allocated at the absolute direction of the Board towards liabilities of the Fund for any later Fund Year; and
- 4.4.2 any deficiency in the Fund shall be met by Additional Contributions by each Member in the proportion in which Contributions were made to the Annual Fund for that Fund Year.
5. **BOARD OF TRUSTEE COMPANY**
- 5.1 LGIC shall, following consultation with the Board, appoint persons (not exceeding a maximum of six at any one time) as directors for a term not exceeding three years and one month, and may following consultation with the Board at any time remove, with or without a replacement, any director.
- 5.2 Unless otherwise expressly provided in this deed or the Constitution, questions arising at any meeting of the Board shall be decided by a simple majority of the votes of those directors present and voting.
- 5.3 The quorum necessary for the transaction of business at meetings of the Board shall be the majority of the Directors. A director is to be counted for quorum purposes whether entitled to vote or not.
- 5.4 Subject to the provisions of this deed and any applicable law, LGIC shall determine, from time to time, what (if any) directors fees, other valuable consideration or other benefit shall be paid or given by Trustee Company out of the Fund to any director in respect of that person's performance of duties as a member of the Board.
- 5.5 No director may hold office for more than twelve years, whether continuously or in aggregate over several periods.
6. **DUTIES OF THE BOARD**
- 6.1 The Board shall be responsible to LGIC as shareholder (as trustee for the Members). Notwithstanding anything to the contrary in the Constitution, the duties of the Board shall include:
- 6.1.1 Implementing and achieving the purposes and objects of the Scheme;
- 6.1.2 Considering all Claims made against the Fund and determining whether or not the Board's discretion should be exercised to meet the Claim for the Member from the Pooled Cover;
- 6.1.3 Ensuring the Scheme is and remains financially viable and solvent within the "solvency tests" laid down by the Act and generally at law;
- 6.1.4 Conduct its business in accordance with this deed and other Scheme Documents, and otherwise in such manner as is resolved by the Board from time to time;
- 6.1.5 Promulgating and amending the Scheme Rules and the Guidelines from time to time.
- 6.2 The Board shall regard the purposes and objects of this deed and the Scheme as being of paramount importance in decisions made and policies adopted by it in relation to the Scheme and shall adopt and use such management and other techniques as will ensure that those main objectives are achieved.
- 6.3 The Trustee Company being a wholly-owned subsidiary of LGIC (as trustee for the Members), any director may act in a manner which he or she believes is in the best interests of LGIC (as trustee for the Members) and the Members, notwithstanding that it may not be in the best interests of the Trustee Company.
- 6.4 A director who is an officer, employee, nominee or representative of a Member shall only be disqualified from voting on any matter that affects that Member if it affects the Member directly and in a materially different way from which it affects other Members or there are personal reasons why that director has a conflict of interest.
- 6.5 The Board shall from time to time appoint the Scheme Solicitor for such tenure and upon such terms as it shall in its sole discretion decide, but such appointment shall be formally reviewed by the Board at least every three years.
- 6.6 The Board shall be responsible for the financial management of the Scheme to the extent that it shall:
- 6.6.1 annually prepare the financial statements and, where considered necessary, report to the Members on any items arising from those statements;

- 6.6.2 annually determine the Guidelines for the Risks to be provided for from the Fund for any Fund Year;
- 6.6.3 annually determine the amount of Pooled Cover to be provided for the Members from the Fund for any Fund Year;
- 6.6.4 annually determine the amount and nature of Indemnity Cover to be purchased for the Members from the Fund for any Fund Year and to determine the indemnity insurer or insurers for this purpose;
- 6.6.5 be responsible for the assessment of the Members to determine the proportion in which they are to contribute to the Fund in each year. Each Member shall be required to and shall provide to the Board and to the Scheme Manager such information as the Board or the Scheme Manager may require in relation to the history of Civil Liability Claims made against the Member, the Member's operating procedures or such other matters as may be directed in order to permit the Board to carry out its obligations under this clause.
- 6.7 The Board may from time to time establish, or disestablish, a Claims Committee. Any such Claims Committee shall have such membership, duties, functions and powers, and be subject to such procedures, as the Board may from time to time stipulate. Where a Claims Committee is disestablished, its duties, functions and powers shall revert to the Board (but without prejudice to the validity or effectiveness of any act or omission of the Claims Committee prior to its disestablishment), and any reference in this deed to the Claims Committee shall be read accordingly.
- 6.8 The Board at its discretion may establish such other committees, to be constituted by such persons, as the Board may determine. The Board may delegate such of its powers, duties and functions as it may determine to any committee or person.
- 6.9 The Board at all times remains responsible for powers and duties delegated to any committee or person and must monitor, by means of reasonable methods properly used, the exercise of those powers and duties by the delegate.
- 6.10 The Board shall consider regularly the reports of the Scheme Manager and the Claims Committee in relation to Claims and:
- 6.10.1 shall, on the recommendation of the Claims Committee and Scheme Manager, determine whether to accept or reject any Claim;
- 6.10.2 from time to time shall issue instructions to the Claims Committee and Scheme Manager regarding the processing of Claims; and
- 6.10.3 shall, on written request from a Member, reconsider any Claim that has been rejected.
- 6.11 [Intentionally Omitted]
- 6.12 Where it becomes apparent to the Board that the Annual Fund for any Fund Year will be insufficient to meet Claims payable from that Annual Fund, the Board may at any time require the payment by the Members of an Additional Contribution in the same proportions as the Contributions paid by each of the Members to that Annual Fund in order to ensure that all Claims upon that Annual Fund are able to be met.
- 6.13 In addition to the provisions of this clause the Board may at any time resolve to apply by way of transfer or loan any actual or anticipated surplus then remaining in any Annual Fund to any later Annual Fund or to such purposes as may be considered appropriate having regard to the purposes of the Scheme and this deed.
- 6.14 The Board, in accordance with the provisions of this deed, may make payments and grants from the Fund for the benefit of the Members and to further the objectives of the Scheme as the Board deems fit.
- 6.15 The Board shall within 12 months from the commencement of the Scheme hold an annual meeting of Members to be convened no earlier than 30 days after the mailing to Members of notice of such meeting. In each subsequent year in which the Scheme continues the Board shall in the same manner hold an annual meeting.
- 6.16 Any meeting of the Members shall be called and conducted as closely as is practicable in accordance with the Constitution and the Act as if it were a meeting of the shareholders of Trustee Company and as if the Members were shareholders of Trustee Company, and each meeting shall otherwise regulate its own proceedings, however at any such meeting:
- 6.16.1 a Member shall have one vote;
- 6.16.2 a Member may vote only in respect of matters arising in, from or relating to a Fund Year during which the Member was or is a Member of the Scheme; and
- 6.16.3 matters arising in, from or relating to different Fund Years shall be considered and voted on separately.

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7. [INTENTIONALLY OMITTED]

8. GUIDELINES AND CLAIMS

- 8.1 The Board upon the recommendation of the Scheme Manager shall set at the commencement of each Fund Year Guidelines for the exercise of its discretion as to whether or not Claims by Members should be met out of the Pooled Cover.
- 8.2 The Board shall have absolute and unfettered discretion as to whether or not any Claim should be met out of the Pooled Cover and shall be influenced by but not bound by the Guidelines.
- 8.3 The Claims Committee may authorise the Scheme Manager to meet Claims out of the Pooled Cover where:
- 8.3.1 Those Claims do not exceed the Scheme Manager's Quantum and;
 - 8.3.2 The Claim falls within the Guidelines and;
 - 8.3.3 The Underlying Claim against the Member is one for which the Member is reasonably liable and would in all probability be held liable at law for the amount of the Claim.
- 8.4 Where the quantum of any Underlying Claim exceeds the Scheme Manager's Quantum the Claims Committee shall authorise the Scheme Manager in conjunction with the Scheme Solicitor to administer and deal with that Underlying Claim but any settlement of a claim shall be authorised by the Claims Committee.

9. ENGAGEMENT OF SCHEME MANAGER

- 9.1 The Board shall appoint a person to be the Scheme Manager upon such conditions as to tenure and remuneration or otherwise as shall be determined by the Board in its sole discretion and agreed upon by the Scheme Manager and the first Scheme Manager shall be Jardine for a period of 5 years from commencement of the Scheme.
- 9.2 The Scheme Manager's duties shall be determined by the Board from time to time and may include:
- 9.2.1 from time to time undertake an assessment of the Members or any of them and their activities to assist the Fund Manager in the determination of the proportion in which the Members are to contribute to the Fund in any year and upon the conclusion of any such investigation direct the Members or any of them as to the procedures to be adopted by them to prevent losses or to minimise Civil Liability.
 - 9.2.2 under the supervision and direction of the Claims Committee and the Board the management of Claims made against each Member including:
 - (a) the investigation and assessment of those Claims;
 - (b) the preparation of regular reports to the Board on the progress of Claims and the preparation of recommendations as to the acceptance, rejection, settlement, litigation or other handling of the Claims;

- (c) the issue of instructions to the Scheme Solicitor for advice in respect of Claims and for assistance in the defence of Claims.

- 9.2.3 the provision of loss prevention and risk minimisation guidelines to members.

- 9.3 The Scheme Manager shall be available at all times to any member of the Board or any member of the Claim Committee or any other committee of the Board or any of the Members of the Scheme to answer any questions on the conduct of the Scheme's activities.

10. FUND MANAGER

- 10.1 LGIC shall be the Fund Manager upon such conditions as to remuneration or otherwise as shall be agreed by the Board and LGIC. In the event that LGIC becomes insolvent or ceases to trade then the Board shall appoint a new Fund Manager.
- 10.2 The Fund Manager's duties shall be determined by the Board from time to time and shall include:
- 10.2.1 the keeping of the accounts of the Annual Fund for each Fund Year;
 - 10.2.2 the provision of administrative and secretarial services to Trustee Company and the Board including setting agendas and submitting reports;
 - 10.2.3 the preparation of advice and recommendations on the investment of any moneys of the Fund not immediately required and implementation of decisions of the Board;

10.2.4	the preparation of regular reports to the Board in such form as the Board shall from time to time direct in respect of each Annual Fund as to:	10.4	The Fund Manager shall negotiate Indemnity Cover as requested by the Board and satisfying any specific requirements of LGIC while LGIC's Deed of Guarantee is operative or while there are outstanding amounts due to LGIC under any Deed of Guarantee.	11.2.7	any other matters the Board considers relevant, having regard to the purposes and objects of the Scheme.
	(i) Claims outstanding;			11.3	If during a Fund Year it becomes apparent to the Board that as a result of unexpected or exceptional circumstances the Fund for that Fund Year will be insufficient to meet Claims payable from the Fund, the Board may determine an Additional Contribution payable by each Member for the Fund Year (which will be in the same proportion to the Additional Contributions of all other Members as the initial Contribution paid by the Member for that Fund Year bears to the initial Contributions of all Members for that Fund Year).
	(ii) The Scheme Manager's assessment of liability in respect of each outstanding Claim;	11.	CONTRIBUTIONS TO SCHEME		
	(iii) The ability of the Fund to meet the assessment of liability;	11.1	Each Member, as a condition of membership of the Scheme for that Fund Year, shall pay the initial Contribution determined by the Board for that Member for that Fund Year.		
	(iv) The assessment of further Additional Contributions required, if any;			11.4	All Contributions (including any Additional Contribution under sub-clause 11.3) must be paid within twenty days of the date of the contribution notice given to the Member by the Board, the Scheme Manager or the Fund Manager (or such longer period as stated in the notice or determined by the Board).
	(v) The investment of the moneys of the Fund not immediately required;	11.2	The Contributions determined for any Member in respect of any Fund Year, shall be determined having regard to the advice from the Claims Committee, the Fund Manager and the Scheme Manager and such matters as the Board considers relevant to the Scheme Member's level of risk and may include, without limitation:		
	(vi) The allocation of surplus moneys in the Fund, if any;			11.5	Without affecting any other Rule, if the amount of any Contribution (including any Additional Contribution under sub-clause 11.3) is not paid by the due date:
10.2.5	the preparation of the annual operating budget;	11.2.1	the Member's revenue base;	11.5.1	interest may, if the Board so determines, accrue calculated daily, on daily balances (and compounding semi-annually) at the Bank of New Zealand Indicator Rate from the due date to the date of actual payment;
10.2.6	the calculation of Contributions in conjunction with actuarial advice and advice from the Scheme Manager;	11.2.2	the geographical location of the Member's territory;	11.5.2	an unpaid Contribution (and interest) constitutes a debt payable by the relevant Member to the Scheme and Trustee Company may bring proceedings for the recovery of that debt in its name on behalf of the Scheme.
10.2.7	the recommendation of the level of Pooled Cover to be provided in any Fund Year;	11.2.3	the population of the Member's territory;		
10.2.8	the recommendation of the level of Indemnity Cover to be provided in any Fund Year.	11.2.4	the Member's Civil Liability claims history (both during and prior to its membership of the Scheme);		
		11.2.5	any matter relating to the nature of the Member's territory or its operations which create increased or reduced risks of Civil Liability;		
10.3	The Fund Manager shall be available at all times to any member of the Board or any member of the Claims Committee or any other committee of the Board or any Member of the Scheme to answer questions on the management of the Fund.	11.2.6	any matters relevant to the Scheme Member's risk management practices that are known to the Board;		

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12. BANK ACCOUNT, INVESTMENT AND BORROWING POWERS

- 12.1 Trustee Company shall open a bank account for the Fund with a registered Bank determined by the Board.
- 12.2 The name of the bank account and the persons authorised as signatories to operate the bank account shall be determined by the Board.
- 12.3 The parties agree that the Trustee Company may invest moneys received in respect of the Fund and not immediately required to meet the liabilities of the Fund;
- 12.3.1 with any registered Bank;
- 12.3.2 in any security or investment authorised by the Trustee Act; or
- 12.3.3 in any security or investment authorised by the Local Government Act 1974 or prescribed pursuant to and for the purposes of that Act; or
- 12.3.4 with the Trustee of any other Trust Fund established for the benefit of Local Authorities or other local government organisations.
- 12.5 The parties agree that for any of the purposes of this deed Trustee Company may borrow moneys and for that purpose secure the repayment of its borrowings by granting security over the assets of the Scheme and the Fund.
- 12.6 All Contributions and other moneys received by Trustee Company shall be deposited to the credit of the Fund and shall be applied at its discretion as follows:
- 12.6.1 in payment of any establishment costs for the Scheme;

- 12.6.2 in payment of all administrative and operating costs associated with the Scheme;
- 12.6.3 in payment of fees due to the Scheme Manager and the Fund Manager;
- 12.6.4 in payment of all Claims accepted by the Board;
- 12.6.5 by way of any grant or allocation approved under this deed; and
- 12.6.6 generally in furtherance of the Scheme's objectives including a transfer, payment or loan in accordance with the Scheme Documents.

- 12.7 The parties agree that Trustee Company and the Board shall keep or cause to be kept all such accounting records for the Scheme and the Fund as fully and correctly explain the transactions and financial position of the Scheme and the Fund.

13. RECOURSE TO SCHEME ASSETS ONLY

- 13.1 For the payment of any Claim against the Scheme or the performance of any obligation of the Scheme under this deed, resort may be had solely to the Fund and other assets and property of the Scheme and no claim may be made or endorsed by a Member against:
- 13.1.1 any Member of the Board;
- 13.1.2 the Scheme Manager or the Fund Manager in any capacity other than as Scheme Manager or Fund Manager of the Scheme;
- 13.1.3 except to the extent of LGIC's indemnity to Trustee Company, LGIC; or
- 13.1.4 any other Member.

14. ORDER OF PRIORITY OF SCHEME DOCUMENTS

- 14.1 The Scheme Documents shall be construed in the following order of priority:
- 14.1.1 this deed, which shall be paramount; then
- 14.1.2 the Scheme Rules; then
- 14.1.3 the Constitution; and then
- 14.1.4 the Deed of Participation and the Guidelines for each Member.

15. SURPLUS ON LIQUIDATION OF SCHEME

- 15.1 Upon the winding up of the Scheme (including the liquidation of Trustee Company) the assets, if any, remaining after payment of the debts and liabilities of the Scheme and the costs of winding up ("the surplus assets") shall be distributed among the then Members of the Scheme in proportion to their Contributions to the Scheme over the Fund Year in which the winding up commenced and the previous four Fund Years, provided however that Members whose Contributions are not fully paid up at the commencement of the winding up shall receive only a proportionate share of their entitlement being the amount which is in proportion to the amount of their Contributions paid up. In calculating a Member's Contributions for the purposes of this clause the amount of the Contribution shall be reduced by the amount of any Claim or Claims paid or payable pursuant to the Scheme.

16. DEED OF PARTICIPATION

EXECUTED AS A DEED

16.1 Each Member, as a condition of membership of the Scheme, shall be required to execute under seal and deliver to Trustee Company a Deed of Participation in the form annexed as Schedule 1, as may be varied or substituted by the Board from time to time, whereby the Member covenants and agrees, for the benefit of Trustee Company and LGIC, to be bound and to observe and perform all the terms of this deed and the other Scheme Documents as if the Member was a party to this Deed and the other Scheme Documents.

EXECUTED by **NEW ZEALAND**)
LOCAL GOVERNMENT)
INSURANCE CORPORATION)
LIMITED by two of its directors:)

16.2 Members shall provide the Scheme Manager with all information as is necessary to give effect to the Scheme and in particular will:

 Director (Signature)

 Director (Signature)

16.2.1 Disclose all material facts to the Scheme Manager as if the Member was an insured and the Scheme Manager was an agent for an insurer and;

 Name (Please Print)

 Name (Please Print)

16.2.2 Conduct itself in its dealings with the Scheme in the same manner as if it was an insured under a policy of insurance with the Scheme and in particular act in good faith towards the Scheme.

EXECUTED by **LOCAL**)
GOVERNMENT MUTUAL)
FUNDS TRUSTEE COMPANY)
LIMITED by two of its directors:)

16.2.3 Immediately advise the Scheme Manager of any Underlying Claim and co-operate with the Scheme Manager and Scheme Solicitor in dealing with Underlying Claims.

 Director (Signature)

 Director (Signature)

17. VARIATIONS

17.1 LGIC and Trustee Company may make any variation or addition to this deed if it is consented to in writing by not less than 90% in number of Members, and any such variation or addition shall be binding on all Members.

 Name (Please Print)

 Name (Please Print)

This is an amalgamation of the Deed of Trust dated 1 July 1997 and the Deed of Variation of Deed of Trust dated 22 June 2007. If necessary reference should be made to the provisions of the original documents which take precedence.

SCHEDULE 1

DEED OF PARTICIPATION

(Name of Member)

HEREBY DECLARES covenants and agrees for the benefit of Local Government Mutual Funds Trustee Company Limited and New Zealand Local Government Insurance Corporation Limited to be bound by and observe and perform all of the terms of the Deed of Trust establishing the New Zealand Mutual Liability Riskpool and the Scheme Documents referred to in that Deed of Trust as if it was a party to those documents (as amended from time to time).

SIGNED BY _____)

_____)

as the duly authorised agent of _____)
the Member in the presence of: _____)

(Signature of duly authorised Agent)

(Signature of Witness)

(Name of Witness)

(Address of Witness)

(Date)

This is an amalgamation of the Deed of Trust dated 1 July 1997 and the Deed of Variation of Deed of Trust dated 22 June 2007. If necessary reference should be made to the provisions of the original documents which take precedence.



Open Meeting

To	Strategy & Finance Committee
From	TG Whittaker General Manager Strategy & Support
Date	11 February 2016
Prepared By	J Calambuhay Management Accountant
Chief Executive Approved	Y
DWS Document Set #	1148486
Report Title	Structure Plan Financial Report

1. Executive Summary

To update the Committee on expenditure on the Tuakau and Ngaruawahia structure plans to date. The financial summary is provided in the attachment to this report.

2. Recommendation

THAT the report of the General Manager Strategy & Support – Structure Plan Financial Report - be received.

3. Attachment

Structure Plan Financial Report

SUMMARY OF STRUCTURE PLANS

As of 11 February 2016

TUAKAU STRUCTURE PLAN	2012-2013	2013-2014	2014-2015	2015-2016
Annual Plan Budget	87,500	87,500	87,500	87,500
Carry Forward Budget		87,334	38,645	28,072
Total Budget	<u>87,500</u>	<u>174,834</u>	<u>126,145</u>	<u>115,572</u>
Less: Actual costs	<u>167</u>	<u>136,189</u>	<u>98,073</u>	<u>36,212</u>
Remaining Budget	<u>87,334</u>	<u>38,645</u>	<u>28,072</u>	<u>79,360</u>

NGARUAWAHIA STRUCTURE PLAN	2012-2013	2013-2014	2014-2015	2015-2016
Annual Plan Budget	na	87,500	87,500	87,500
Carry Forward Budget				
Total Budget		<u>87,500</u>	<u>87,500</u>	<u>87,500</u>
Less: Actual costs		<u>91,389</u>	<u>66,278</u>	
Remaining Budget		<u>(3,889)</u>	<u>21,222</u>	<u>87,500</u>

Open Meeting

To	Strategy & Finance Committee
From	TG Whittaker General Manager Strategy & Support
Date	10 February 2016
Prepared By	DM Lee Executive Assistant
Chief Executive Approved	Y
DWS Document Set #	1148572
Report Title	Waikato District Council Community Wellbeing Trust – Six Monthly Accounts to 31 December 2015

1. Executive Summary

To provide the Committee with the Community Wellbeing Trust six month accounts to 31 December 2015.

The Trust delivered a deficit of \$38,809 for the six months ended 31 December 2015, compared to a full year budget of \$141,524 as approved in the statement of intent. This is an unfavourable result relative to budget given the performance of financial markets during this time. This is the first time since inception that the Trust has endured performance adverse to budget. Trustees have discussed on a number of occasions the fact that there could be years where performance is lower than budget and vice versa. This is the nature of having a long term investment strategy. Once reserves are built up by distributing only 50% of the earnings after an inflation adjustment, there will be opportunities for the Trustees to make distributions without using the fund's capital.

2. Recommendation

THAT the report of the General Manager Strategy & Support – Waikato District Council Community Wellbeing Trust – Six Monthly Accounts to 31 December 2015 - be received.

Attachment(s) – *Waikato District Council Community Wellbeing Trust – Six Monthly Accounts to 31 December 2015*

Waikato District Community Wellbeing Trust
Performance Report
For the six months ended 31 December 2015

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Waikato District Community Wellbeing Trust
Performance report
For the six months ended 31 December 2015

Entity information

Legal name

Waikato District Community Wellbeing Trust (the Trust).

Type of entity and legal basis

The Trust was incorporated on 1 November 2010 under the Charitable Trust Act 1957 and is domiciled in New Zealand. On the same date the Trust was registered in accordance with the Charities Act 2005 to give it charitable status.

The Trust is controlled by Waikato District Council (WDC) and is a council-controlled organisation as defined under section 6 of the Local Government Act 2002, by virtue of WDC's right to appoint the Trustees.

Objectives of the Trust

1. To comply with the terms of the Trust Deed and in particular with the duties of the Trust as set out in clause 11 of the Deed *;
2. To develop an investment mandate seeking for the portfolio both income and growth from suitably diversified investments having a moderate investment risk.

* Clause 11 of the Deed lists the Trust's objectives as:

- a) To consider and approve projects submitted by Waikato District Council (Council);
- b) To publicise the projects and activities of the Trust;
- c) To actively promote the work of the Trust with a view to ensuring the long term operations of the Trust;
- d) To ensure information about the Trust's activities and objectives is available to people within the area and fosters a sense of community achievement and betterment;
- e) To develop appropriate funding allocation mechanisms; and,
- f) To be guided by a clearly defined set of principles.

The principal activities of the Trust are undertaken to:

- Promote the social, environmental and cultural wellbeing of the Waikato district and its communities;
- Deliver on the aspirations and community outcomes of the Waikato district as identified and promoted by the community; and,
- Fund projects identified by Council's planning documents.

Waikato District Community Wellbeing Trust
Performance report
For the six months ended 31 December 2015

Structure of the Trust's operations, including governance arrangements

The Trust comprises a Board of five Trustees who oversee the governance of the Trust.

The operation and administration of the Trust are undertaken by staff of WDC. Those staff are: General Manager–Strategy & Support, PA to the General Manager-Strategy & Support, Community Development Coordinator and Financial Accountant.

The Trustees are:

Mayor	Allan Sanson
Deputy Mayor	Dynes Fulton (Chairperson)
Councillor	Shelley Lynch
WDC appointee	Eileen Bateup
WDC appointee	Judi Muru

Main sources of the Trust's cash and resources

The Trust's introductory fund was provided by distribution of the capital fund of the Waikato Foundation Trust.

The proceeds of that distribution are invested in a portfolio of financial assets managed by Gareth Morgan Investments. The returns from the portfolio are the Trust's source of continuing revenue.

Waikato District Community Wellbeing Trust
Performance report
For the six months ended 31 December 2015

Statement of financial performance

2014/15 FY Actual			2015/16 FY Budget	2015/16 6 mths Actual
\$		Note	\$	\$
Revenue				
81,757	Finance income	1	51,626	31,861
30,944	Dividend income from portfolio of investments managed by Gareth Morgan Investments (GMI)		24,583	23,013
484,799	Gains and losses	2	169,626	(81,475)
597,500	Total revenue		245,835	(26,601)
Expenses				
6,291	Audit fees		7,200	944
22,446	Other expenditure	3	22,190	11,264
140,000	Grants	4	74,921	-
168,737	Total expenses		104,311	12,208
428,763	Surplus (deficit) for the year		141,524	(38,809)

Statement of financial position

2014/15 FY Actual		Note	2015/16 FY Budget	2015/16 6 mths Actual
\$			\$	\$
Assets				
Current assets				
296,968	Bank accounts and cash	5	342,773	319,028
3,477,916	Investments	6	3,456,447	3,255,632
I	Accrued interest		-	-
3,774,885	Total current assets		3,799,220	3,574,660
3,774,885	Total assets		3,799,220	3,574,660
Liabilities				
Current liabilities				
164,010	Creditors and accrued expenses	7	325,729	9,045
6,451	Accrued expenses	8	1,796	-
170,461	Total current liabilities		327,525	9,045
170,461	Total liabilities		327,525	9,045
3,604,424	Total assets less total liabilities (net assets)		3,471,695	3,565,615
Trust equity				
2,579,899	Introductory fund		2,579,899	2,579,899
193,643	Capital maintenance fund		260,246	229,687
830,882	Accumulated funds		631,550	756,029
3,604,424	Total Trust equity	9	3,471,695	3,565,615

Waikato District Community Wellbeing Trust
Performance report
For the six months ended 31 December 2015

Statement of cash flows

2014/15			2015/16	2015/16
FY Actual		Note	FY Budget	6 mths Actual
\$			\$	\$
Cash flows from operating activities				
Cash was received from:				
77,028	Interest receipts		51,626	50,245
30,943	Dividends received		24,583	23,013
Cash was applied to:				
(22,203)	Payment to suppliers		(20,756)	(11,441)
85,768	Net cash flows from operating activities		55,453	61,817
Cash flows from investing and financing activities				
Cash was received from:				
4,289,060	Sale of investments		-	3,300,196
Cash was applied to:				
(4,306,375)	Acquisition of investments		(35,232)	(3,178,926)
-	Repayment of debt		-	(160,730)
(17,315)	Net cash flows from investing and financing activities		(35,232)	(39,460)
170	Foreign exchange translation differences		-	(297)
68,623	Net increase (decrease) in cash for the year		20,221	22,060
228,345	Add opening bank accounts and cash	5	322,552	296,968
296,968	Closing bank accounts and cash	5	342,773	319,028

Waikato District Community Wellbeing Trust
Performance report
For the six months ended 31 December 2015

Statement of accounting policies

Basis of preparation

The Board of Trustees has elected to apply PBE SFR-A (PS) *Public Benefit Entity Simple Format Reporting – Accrual (Public Sector)* for Tier 3 entities on the basis that the Trust does not have public accountability (as defined) and has total annual expenses of less than \$2million.

All transactions in the financial statements are reported using the accrual basis of accounting.

The financial statements are prepared on the assumption that the Trust will continue to operate in the foreseeable future.

Goods and services tax

The Trust is not registered for GST. All amounts in the performance report are inclusive of GST.

Significant accounting policies

Interest and dividend revenue

Interest revenue is recognised as it is earned.

Dividend revenue is recognised when the dividend is declared.

Foreign currency transactions

Foreign currency transactions are translated into New Zealand Dollars using the exchange rate prevailing at the dates of the transactions. Foreign exchange gains and losses, resulting from the settlement of such transactions and from the translation at the end of the period exchange rates of monetary assets and liabilities denominated in foreign currencies, are recognised in surplus (deficit).

Grant expenditure

All grants made by the Trust are classified as discretionary.

Discretionary grants are those grants where the Trust has no obligation to award on receipt of the grant application. Such grants are recognised as expenditure when approved without condition by the Board and the approval has been communicated to the applicant. Discretionary grants made subject to conditions are recognised as expenditure when all conditions have been met.

Income tax

The Trust has charitable status and is exempt from income tax.

Bank accounts and cash

Bank accounts and cash includes cash on hand, deposits held at call with financial institutions.

Investment portfolio

Components of the investment portfolio are classified as financial assets at fair value through surplus or deficit. The reason for this classification is that the portfolio is comprised of identified financial instruments that are managed together and for which there is evidence of short-term profit-taking.

All financial assets in the portfolio are classified as a current asset.

After initial recognition, financial assets in this category are measured at their fair values with gains or losses on re-measurement recognised in the surplus or deficit.

Creditors and accrued expenses

Creditors and accrued expenses are measured at the amount owed.

Budget figures

The budget figures are derived from the statement of intent approved by the board at the beginning of the financial year. The budget figures have been prepared in accordance with Tier 3 standards (with the exceptions noted below), using accounting policies that are consistent with those adopted by the Trustees in preparing these financial statements.

Tier 2 PBE accounting standards applied

The Trustees have elected to apply the following Tier 2 PBE accounting standards:
PBE IPSAS 4 The effects of changes in foreign exchange rates; and,
PBE IPSAS 29 Financial instruments: recognition and measurement.

Waikato District Community Wellbeing Trust
Performance report
For the six months ended 31 December 2015

Notes to the performance report

1. Finance income

2014/15 FY Actual		2015/16 6 mths Actual
\$		\$
81,754	Interest income from portfolio of investments managed by GMI	31,827
3	Interest income from BNZ	34
81,757	Total finance income	31,861

Finance income is the only revenue received by the Trust and is all generated by exchange transactions.

2. Gains and losses from managed portfolio

2014/15 FY Actual		2015/16 6 mths Actual
\$		\$
249,200	Realised gains (losses) on investments	185,155
235,599	Unrealised gains (losses) on investments	(266,630)
484,799	Total realised and unrealised gains (losses)	(81,475)

3. Other expenditure

2014/15 FY Actual		2015/16 6 mths Actual
\$		\$
21,618	Management fees	11,025
828	Other expenses	239
22,446	Total other expenditure	11,264

Waikato District Community Wellbeing Trust
Performance report
For the six months ended 31 December 2015

4. Grants

2014/15 FY Actual			2015/16 6 mths Actual
\$		Grant	
40,000	Huntly Lions' Club – Ralph Mine Memorial	Construction of memorial poppet head	-
40,000	Allan Turner Memorial Walkway	Matangi-Tamahere bridge connection	-
20,000	Taupiri Rugby Football Club	Construction of a carpark	-
40,000	Te Awa River Ride Charitable Trust	Contribution towards cost of developing the cycleway	-
140,000	Total grants paid		-

5. Bank accounts and cash

2014/15 Actual			2015/16 Actual
\$			\$
1,006	Cash at bank		996
295,962	Cash investments managed by GMI	Note 14	318,032
296,968	Total bank accounts and cash		319,028

The carrying value of cash at bank approximates its fair value.

6. Investments

2014/15 Actual		2015/16 Actual
\$		\$
1,656,401	Fixed interest instruments managed by GMI	1,567,252
1,821,515	Equity instruments managed by GMI	1,688,380
3,477,916	Total investments	3,255,632

The Trust has a portfolio of investments which is managed by GMI. The portfolio investments are detailed in note 14.

Accrued interest of \$1,939 (June 2015: \$20,320) is included in the portfolio.

Waikato District Community Wellbeing Trust
Performance report
For the six months ended 31 December 2015

7. Creditors and accrued expenses

2014/15		2015/16
Actual		Actual
\$		\$
1,892	Management fee	1,823
162,118	WDC Payable:	7,222
7,118	- Audit fee 2012 (inc disbursements)	-
6,998	- Audit fee 2013	-
7,161	- Audit fee 2014	-
-	- Audit fee 2015	7,235
27	- Audit disbursements	-
103	- Annual return fees	51
711	- Advertising	-
140,000	- Grants	-
-	- Credit for overpayment	(64)
164,010	Total creditors and accrued expenses	9,045

Creditors and other payables are non-interest bearing and are normally settled within 30 days, therefore the carrying value of trade and other payables approximates their fair value.

All payables have arisen from exchange transactions.

8. Accrued expenses

2014/15		2015/16
Actual		Actual
\$		\$
6,291	Audit fee – current year	-
120	Audit disbursements - current year	-
40	Bank audit confirmation fee	-
6,451	Total accrued expenses	-

Waikato District Community Wellbeing Trust
Performance report
For the six months ended 31 December 2015

9. Equity

	Introductory fund	Capital maintenance fund	Accumulated funds	Total equity
Balance at 1 July 2014	2,579,899	130,130	465,632	3,175,661
Surplus (deficit)			428,763	428,763
Transfer from accumulated funds		63,513	(63,513)	-
Balance at 30 June 2015	2,579,899	193,643	830,882	3,604,424
Surplus (deficit)			(38,809)	(38,809)
Capital maintenance charge		36,044	(36,044)	-
Balance at 31 December 2015	2,579,899	229,687	756,029	3,565,615

Introductory and capital maintenance funds

The Trust was established with an initial contribution resulting from the transfer of 35% of funds previously held by the Waikato Foundation Trust as at 31 January 2012. This was recognised as revenue in that year and transferred to the introductory fund.

The Trust's performance objectives, as listed in the Statement of intent for the year to 30 June 2016, includes a requirement to protect the real (inflation adjusted) value of the fund. An adjustment of 2% is added to the Capital maintenance fund annually in order to achieve this objective.

10. Commitments

Capital commitments

There are no capital commitments as at 31 December 2015 (June 2014: Nil).

Operational commitments

As at 31 December 2015 the Trust had the following grant commitments:

Donee	Purpose of grant	Amount
Waikato Crime Prevention Trust	Installation of security cameras in North Waikato townships	20,000
Raglan Mountain Bike Club	Contribution towards development of a mountain bike track	20,000
Glen Afton Pukemiro Society Incorporated	Construction of a mining memorial in Glen Afton	20,000
Onewhero Old School Building Group	To resite the original Old School Building off Council land back to the Onewhero Area School grounds site.	35,000
Bush Tramway Club, Glen Afton	To complete stage 3 of historic railway track leasing to Glen Afton Village	31,096
Ngaruawahia United Football Club Inc	To upgrade the kitchen area at the Ngaruawahia United Football Club facility located at Centennial Park in Ngaruawahia.	30,500
Te Kauwhata Committee Inc	To commence stage one of the Walkway project that runs alongside the Whangamarino Wetland Te Kauwhata.	40,000
Total outstanding grants		\$196,596

11. Contingent liabilities

There are no contingent liabilities as at 31 December 2015 (June 2015: Nil).

12. Events after balance date

There are no significant events after the balance date.

13. Related party transactions

The Trust is controlled by Waikato District Council and is a member of the Waikato District Council Group along with Council and Strada Corporation Limited. All transactions with related parties were conducted at arms-length.

During the year Council has paid some expenses on behalf of the Trust and there is an amount payable to Council at balance date. Those transactions are listed in note 7 and the balance outstanding at 31 December 2015 is \$7,222 (June 2015: \$162,118).

The Allan Turner Walkway project, to which the Trust made a grant (see note 4), is a project of Waikato District Council.

14. Managed portfolio

The portfolio of the Trust's investments is managed by Gareth Morgan Investments Limited. The portfolio composition is:

2014/15		2015/16
\$		\$
295,962	Cash investments	318,032
1,656,401	Fixed interest	1,567,252
1,821,515	Equity investments	1,688,380
3,773,878	Total managed portfolio	3,573,664

Open Meeting

To	Strategy & Finance Committee
From	TG Whittaker General Manager Strategy & Support
Date	11 February 2016
Prepared By	DM Lee Executive Assistant
Chief Executive Approved	Y
DWS Document Set #	1148460
Report Title	Waikato District Community Wellbeing Trust – Draft Statement of Intent for year ended 30 June 2017

1. Executive Summary

To present to the Strategy & Finance Committee the Waikato District Community Wellbeing Trust draft Statement of Intent for year ended 30 June 2017.

2. Recommendation

THAT the report of the General Manager Strategy & Support – *Waikato District Community Wellbeing Trust – Draft Statement of Intent for year ended 30 June 2017* – be received;

AND THAT the Strategy & Finance Committee provides support or suggested changes to the trustees.

3. Background

Pursuant to section 64 of the Local Government Act 2002, a Council Controlled Organisation is required to provide a draft Statement of Intent to its shareholder (Council) by 1 March each year. Council then has the opportunity to provide feedback on the draft within two months of 1 March, after which time the Council Controlled Organisation must provide a completed Statement of Intent to the shareholder by 30 June.

4. Issues

The Trustees of the Wellbeing Trust have provided a draft Statement of Intent for the year ended 30 June 2017. The draft Statement of Intent retains the principles developed in the inaugural Statement of Intent, which are:

- Ensure the real (inflation adjusted) value of the fund is protected;
- Ensure the total grants distributed do not exceed 50% of the accumulated retained net income after allowing for the CPI movement and expenses;
- Ensure no more than 10% of the capital is distributed in any one year;
- Identify opportunities to grow the fund;
- Have a process for promoting the fund availability and allocating the fund;
- Monitor performance of investments by receiving and considering financial information.

The draft Statement of Intent has been prepared based on a long term return on investment of 6.88 per cent as per previous years. The grant distributions are based on the formula above, which reflects the discussions between trustees and Gareth Morgan Investments, whereby in future distributions will be based on the understood long term sustainable return (6.88 per cent). Hence, distributions will not increase in years where the return is higher than 6.88 per cent, which will also support distributions in years where returns are lower than 6.88 per cent or even negative. This is a change in practice.

5. Options considered

Council has the ability to approve or decline the Statement of Intent. Either of these options also provides the opportunity for feedback or changes.

The Trustees have the governance responsibility for the Wellbeing Trust. Council is receiving this report for approval of the Statement of Intent, as required under the Local Government Act.

6. Conclusion

The Committee is being asked to consider approving the draft Statement of Intent for the Waikato District Community Wellbeing Trust and whether any changes are sought.

Attachment(s) – Waikato District Community Wellbeing Trust – draft Statement of Intent for year ended 30 June 2017

Waikato District Community Wellbeing Trust

Statement of intent

For the year ending 30 June 2017

Waikato District Community Wellbeing Trust
Statement of intent
For the year ending 30 June 2017

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Waikato District Community Wellbeing Trust**Statement of intent****For the year ending 30 June 2017****Introduction**

This Statement of Intent (SOI) is presented by the Waikato District Community Wellbeing Trust (the Trust) as required by Section 64(1) of the Local Government Act 2002.

The SOI forms the basis for the accountability of the Trustees of the Trust to Waikato District Council, and sets out the objectives, scope of activities undertaken, and performance targets by which the Trust will be measured.

The purpose of this statement of intent is to:

- State publicly the activities and intentions of this council controlled organisation for the year and the objectives to which those activities will contribute;
- Provide a basis for accountability and transparency.

This Statement of intent covers the year to 30 June 2017 and also includes prospective financial information for the following two financial years.

Dynes Fulton (Chair)

Entity information**Legal name**

Waikato District Community Wellbeing Trust.

Type of entity and legal basis

The Trust was incorporated on 1 November 2010 under the Charitable Trust Act 1957 and is domiciled in New Zealand. On the same date the Trust was registered in accordance with the Charities Act 2005 to give it charitable status.

The Trust was established by Waikato District Council (WDC) and is a council-controlled organisation as defined under section 6 of the Local Government Act 2002, by virtue of WDC's right to appoint the Trustees.

Objectives of the Trust**Governance**

The Trust will be governed in accordance with the terms of the Trust Deed.

Clause 11 of the Deed lists the Trust's objectives as:

- a) To consider and approve projects submitted by Waikato District Council (Council);
- b) To publicise the projects and activities of the Trust;

Waikato District Community Wellbeing Trust**Statement of intent****For the year ending 30 June 2017**

- c) To actively promote the work of the Trust with a view to ensuring the long term operations of the Trust;
- d) To ensure information about the Trust's activities and objectives is available to people within the area and fosters a sense of community achievement and betterment;
- e) To develop appropriate funding allocation mechanisms; and,
- f) To be guided by a clearly defined set of principles.

Objective

- 1 To comply with the terms of the Trust Deed and in particular with the duties of the Trust as set out in clause 11 of the Deed.

Performance measures

- 1 Undertake an annual legal review of compliance with the Trust Deed no later than two months after the end of each financial year.

Investment

The Trust will, in accordance with the Trust Deed, invest or reinvest part or parts of the Trust Fund not immediately required for the purposes of the Trust (whether income or capital) in investments or securities, as the Trust Board considers beneficial to the Trust Fund. The Trust will also seek other opportunities and avenues for growing the Trust Fund. The intention of the Trustees is that the real value of the Trust Fund is preserved.

Objectives

- 1 To adhere to the Trust's *Management of Investment Portfolio and Distribution Policy*.
- 2 To review, on an annual basis, the investment mandate and the performance of the portfolio manager.

Performance Measures

- 1 At each quarterly meeting review compliance with the Trust's *Management of Investment Portfolio and Distribution Policy* during that quarter.

Fund disbursement

The Trust will, as appropriate, disburse funds towards projects that meet the Trust's criteria and that meet the objectives of the Trust Deed.

Objective

- 1 As per the *Management of Investment Portfolio and Distribution Policy*, to distribute total grants that do not exceed 50% of the accumulated retained net income after allowing for accumulated expenses, inflation movements and prior year distributions.

Performance Measures

- 1 The distribution process is undertaken that distributes the annual fund to eligible recipients in accordance with funding targets set up by the Trustees in accordance with the *Management of Investment Portfolio and Distribution Policy* for the 2015-16 year.
- 2 Six monthly reports are received from all successful applicants within the required time frames.

Waikato District Community Wellbeing Trust**Statement of intent****For the year ending 30 June 2017****Review of statement of intent**

The Trustees must consider and approve the Statement of Intent by 30 June each year.

Structure of the Trust's operations, including governance arrangements

The Trust comprises a Board of five Trustees who oversee the governance of the Trust.

The operation and administration of the Trust are undertaken by staff of WDC. Those staff are: General Manager–Strategy & Support, PA to the General Manager-Strategy & Support, Community Development Coordinator and Financial Accountant.

The Trustees are:

Mayor	Allan Sanson
Deputy Mayor	Dynes Fulton (Chair)
Councillor	Shelley Lynch
WDC appointee	Eileen Bateup
WDC appointee	Judi Muru

Main sources of the Trust's cash and resources

The Trust's introductory fund was provided by distribution of the capital fund of the Waikato Foundation Trust.

The proceeds of that distribution are invested in a portfolio of financial assets managed by Gareth Morgan Investments. The returns from the portfolio are the Trust's source of continuing revenue.

Waikato District Community Wellbeing Trust
Statement of intent
For the year ending 30 June 2017

Prospective statement of financial performance

		2015/16 Budget	2015/16	2016/17 Forecasts	2017/18 Forecasts	2018/19 Forecasts
	Note	\$	\$	\$	\$	\$
Revenue						
Finance income	1,2	51,626	57,674	53,105	53,460	55,577
Dividend income from portfolio of investments managed by Gareth Morgan Investments (GMI)	2	24,583	35,305	25,288	25,457	26,465
Gains and losses	2	169,626	(3,338)	174,483	175,652	182,606
Total revenue		245,835	89,641	252,876	254,569	264,648
Expenses						
Audit fees		7,200	8,024	7,200	7,200	7,200
Portfolio management fees	3	20,939	24,530	23,891	24,051	25,003
Other expenditure	4	1,251	1,211	1,252	1,251	1,251
Grants	5	74,921	196,596	75,630	74,948	78,040
Total expenses		104,311	230,361	107,973	107,450	111,494
Surplus (deficit) for the year		141,524	(140,720)	144,903	147,119	153,154

Prospective statement of financial position

		2015/16 Budget	2015/16	2016/17 Forecasts	2017/18 Forecasts	2018/19 Forecasts
	Note	\$	\$	\$	\$	\$
Assets						
Current assets						
Bank accounts and cash	6	342,773	331,791	333,968	347,113	361,147
Other financial assets	7	3,456,447	3,344,711	3,367,112	3,500,417	3,642,709
Total current assets		3,799,220	3,676,502	3,701,080	3,847,530	4,003,856
Total assets		3,799,220	3,676,502	3,701,080	3,847,530	4,003,856
Liabilities						
Current liabilities						
Creditors and other payables	9	325,729	205,559	85,232	84,563	87,735
Accrued expenses	10	1,796	7,239	7,240	7,240	7,240
Total current liabilities		327,525	212,798	92,472	91,803	94,975
Total liabilities		327,525	212,798	92,472	91,803	94,975
Net assets		3,471,695	3,463,704	3,608,608	3,755,727	3,908,881
Equity						
Introductory fund	12	2,579,899	2,579,899	2,579,899	2,579,899	2,579,899
Capital maintenance fund	11	260,246	265,731	335,006	407,178	482,292
Accumulated funds		631,550	618,074	693,703	768,650	846,689
Total net assets / equity		3,471,695	3,463,704	3,608,608	3,755,727	3,908,881

Waikato District Community Wellbeing Trust**Statement of intent****For the year ending 30 June 2017****Prospective statement of cash flows**

	2015/16 Budget	2015/16	2016/17 Forecasts	2017/18 Forecasts	2018/19 Forecasts
Note	\$	\$	\$	\$	\$
Cash flows from operating activities					
Cash received from:					
Interest receipts	51,626	65,122	54,118	53,381	55,104
Dividends received	24,583	35,305	25,288	25,457	26,465
Cash applied to:					
Payments to suppliers	(20,756)	(25,223)	(24,784)	(24,878)	(24,963)
Net cash flows from operating activities	55,453	75,203	54,622	53,960	56,606
Cash flows from investing and financing activities					
Cash was received from (applied to):					
Sale (acquisition) of investments	(35,232)	122,420	151,070	42,426	39,987
Repayment of debt	-	(162,800)	(203,515)	(83,241)	(82,559)
Net cash flows from investing and financing activities	(35,232)	(40,380)	(52,445)	(40,815)	(42,572)
Net increase (decrease) in cash for the year	20,221	34,823	2,177	13,145	14,034
add: opening bank accounts and cash	322,552	296,968	331,791	333,968	347,113
Closing bank accounts and cash	342,773	331,791	333,968	347,113	361,147

6

Waikato District Community Wellbeing Trust
Statement of intent
For the year ending 30 June 2017

Statement of accounting policies

Basis of preparation

The Board of Trustees has elected to apply PBE SFR-A (PS) *Public Benefit Entity Simple Format Reporting – Accrual (Public Sector)* for Tier 3 entities on the basis that the Trust does not have public accountability (as defined) and has total annual expenses of less than \$2million.

Notwithstanding the comments above, the following Tier 2 PBE accounting standards have been applied:

PBE IPSAS 4 The effects of changes in foreign exchange rates; and,

PBE IPSAS 29 Financial instruments: recognition and measurement.

All transactions in the financial statements are reported using the accrual basis of accounting.

The financial statements are prepared on the assumption that the Trust will continue to operate in the foreseeable future.

Goods and services tax

The Trust is not registered for GST. All amounts in the performance report are inclusive of GST.

Significant accounting policies

Interest and dividend revenue

Interest revenue is recognised as it is earned during the year.

Dividend revenue is recognised when the dividend is declared.

Foreign currency transactions

Foreign currency transactions are translated into New Zealand Dollars using the exchange rate prevailing at the dates of the transactions. Foreign exchange gains and losses, resulting from the settlement of such transactions and from the translation at the end of the period exchange rates of monetary assets and liabilities denominated in foreign currencies, are recognised in surplus (deficit) for the year.

Grant expenditure

All grants made by the Trust are classified as discretionary.

Discretionary grants are those grants where the Trust has no obligation to award on receipt of the grant application. Such grants are recognised as expenditure when approved without condition by the Board and the approval has been communicated to the applicant. Discretionary grants made subject to conditions are recognised as expenditure when all conditions have been met.

Income tax

The Trust has charitable status and is exempt from income tax.

Waikato District Community Wellbeing Trust
Statement of intent
For the year ending 30 June 2017

Bank accounts and cash

Bank accounts and cash includes cash on hand and deposits held at call with financial institutions.

Investment portfolio

Components of the investment portfolio are classified as financial assets at fair value through surplus (deficit) for the year. The reason for this classification is that the portfolio is comprised of identified financial instruments which are managed together and for which there is evidence of short-term profit-taking.

All financial assets in the portfolio are classified as a current asset.

After initial recognition, financial assets in this category are measured at their fair values with gains or losses on re-measurement recognised in the surplus (deficit) for the year.

Creditors and accrued expenses

Creditors and accrued expenses are measured at the amount owed.

Waikato District Community Wellbeing Trust
Statement of intent
For the year ending 30 June 2017

Notes to the prospective performance statement

1. Finance income

Finance income comprises the interest component of portfolio income plus an allowance for interest received on the BNZ account.

2. Portfolio income

		2015/16	2016/17	2017/18	2018/19
		Forecasts			
		\$	\$	\$	\$
Interest	(21% of total)	57,640	53,104	53,459	55,576
Dividends	(10% of total)	35,305	25,288	25,457	26,465
Gains (losses)		(3,338)	174,483	175,652	182,606
Total portfolio income		89,607	252,875	254,568	264,647

3. Portfolio management fees

Management fees are calculated at 0.65% of the portfolio market value at the end of the previous year.

4. Other expenditure

		2015/16	2016/17	2017/18	2018/19
		Forecasts			
		\$	\$	\$	\$
Other portfolio expenses		800	800	800	800
Advertising		300	300	300	300
Annual return fee		51	51	51	51
Miscellaneous expenditure		60	101	100	100
Total other expenditure		1,211	1,252	1,251	1,251

Waikato District Community Wellbeing Trust **Statement of intent** **For the year ending 30 June 2017**

5. Grants expenditure

	2015/16	2016/17	2017/18	2018/19
	Forecasts			
	\$	\$	\$	\$
<u>Forecast grants expenditure for 2016 comprises:</u>				
<i>Prior year grants not yet paid</i>				
North Waikato Crime Prevention Trust	20,000			
Raglan Mountain Bike Club	20,000			
Glen Afton Pukemiro Society Incorporated	20,000			
	<u>60,000</u>			
<i>2016/2016 grants</i>				
Onewhero Old School Building Group	35,000			
Bush Tramway Club	31,096			
Ngaruawahia United Football Club Inc	30,500			
Te Kauwhata Committee Inc	40,000			
	<u>136,596</u>			
Forecast total grant expenditure 2015/2016	<u>196,596</u>			
<u>Forecast grant expenditure for the years 2017-2019</u>				
<u>is calculated as:</u>				
Surplus before grants		220,533	222,067	231,194
Less: capital maintenance charge (see note 11)		(69,274)	(72,172)	(75,115)
X 50%		<u>75,630</u>	<u>74,948</u>	<u>78,040</u>

6. Bank accounts and cash

	2015/16	2016/17	2017/18	2018/19
	Forecasts			
	\$	\$	\$	\$
<i>BNZ account</i>				
Opening balance	1,006	996	957	918
Fees and charges	(45)	(40)	(40)	(40)
Interest	35	1	1	1
Closing balance	<u>996</u>	<u>957</u>	<u>918</u>	<u>879</u>
Cash investments managed by GMI (see note 8)	330,795	333,011	346,195	360,268
Total bank accounts and cash	<u>331,791</u>	<u>333,968</u>	<u>347,113</u>	<u>361,147</u>

7. Other financial assets

	2015/16	2016/17	2017/18	2018/19
	Forecasts			
	\$	\$	\$	\$
Fixed interest investments				
Equity instruments	1,617,223	1,628,054	1,692,509	1,761,310
	<u>1,727,488</u>	<u>1,739,058</u>	<u>1,807,908</u>	<u>1,881,399</u>
Total other financial assets	<u>3,344,711</u>	<u>3,367,112</u>	<u>3,500,417</u>	<u>3,642,709</u>

Waikato District Community Wellbeing Trust **Statement of intent** **For the year ending 30 June 2017**

8. Managed portfolio

	2015/16	2016/17	2017/18	2018/19
	Forecasts			
	\$	\$	\$	\$
Opening balance	3,773,878	3,675,506	3,700,123	3,846,612
plus Income (return of 6.88% on opening portfolio value)	89,607	252,875	254,568	264,647
less Management fees (@ 0.65% of opening portfolio value)	(24,378)	(23,944)	(24,038)	(24,923)
less Other portfolio expenses	(800)	(800)	(800)	(800)
Plus(minus) Contributions (withdrawals)	(162,800)	(203,515)	(83,241)	(82,559)
Closing portfolio value	3,675,506	3,700,123	3,846,612	4,002,977
Closing portfolio is made up of:				
Cash investments (9%)	330,795	333,011	346,195	360,268
Fixed interest (44%)	1,617,223	1,628,054	1,692,509	1,761,310
Equity instruments (47%)	1,727,488	1,739,058	1,807,908	1,881,399
Total portfolio value	3,675,506	3,700,123	3,846,612	4,002,977

9. Creditors and other payables

	2015/16	2016/17	2017/18	2018/19
	Forecasts			
	\$	\$	\$	\$
<i>Creditors</i>				
1/12 th portfolio management fee	2,044	1,991	2,004	2,084
<i>WDC payable</i>				
Opening balance	162,118	203,515	83,241	82,559
plus Audit fees and other expenditure	7,601	7,611	7,611	7,611
plus Grant payments	196,596	75,630	74,948	78,040
less Repayments	(162,800)	(203,515)	(83,241)	(82,559)
Total WDC payable	203,515	83,241	82,559	85,651
Total creditors and other payables	205,559	85,232	84,563	87,735

10. Accrued expenses

	2015/16	2016/17	2017/18	2018/19
	Forecasts			
	\$	\$	\$	\$
Audit fee and disbursements	7,199	7,200	7,200	7,200
Bank audit and confirmation fee	40	40	40	40
Total accrued expenses	7,239	7,240	7,240	7,240

11. Capital maintenance charge

A capital maintenance charge has been allowed at 2% of total opening equity.

Waikato District Community Wellbeing Trust**Statement of intent****For the year ending 30 June 2017****12. Introductory fund**

The Trust was established with an initial capital contribution resulting from the transfer of 35% of funds previously held by the Waikato Foundation Trust as at 31 January 2012. This was recognised as revenue in that year and transferred to the introductory fund.

An allowance for capital maintenance, of no less than the CPI, will be made each year. (see note 11)

Other financial disclosures**Ratios**

The Local Government Act 2002 requires a statement of intent to include the projected ratio of equity to total assets.

The ratio of equity to total assets is forecast as follows:

2015/16	94.2%
2016/17	97.5%
2017/18	97.6%
2018/19	97.6%

Compensation

The Trustees will not seek any fees or expenses for work undertaken on behalf of Waikato District Community Wellbeing Trust.

Information to be provided to the Trustees

The Trustees will be provided with the following information:

- Within four months of the end of the financial year the audited financial statements plus a summary of how the Trust has performed against its objectives and performance targets;
- Quarterly reports on the performance of investments; and,
- A draft statement of intent for consideration in February of each year.

Open Meeting

To	Strategy & Finance Committee
From	TG Whittaker
Date	5 February 2016
Prepared By	J Vernon Resource Management & Strategic Planning Team Leader
Chief Executive Approved	Y
DWS Document Set #	1145951
Report Title	Draft Feedback to the Local Government New Zealand on 'A 'blue skies' discussion about New Zealand's resource management system.'

1. Executive Summary

The Resource Management Act (RMA) is now 25 years old and Local Government New Zealand (LGNZ) decided that it was time to undertake a serious look at New Zealand's environmental management framework. What should a 'fit for purpose' resource management regime which works for communities, businesses, regional economies and New Zealand's environment look like? To answer this question LGNZ put together a representative group of experts and practitioners and asked them to do some 'blue skies thinking' and this think piece has then been sent to Local Authorities for draft feedback.

2. Recommendation

THAT the report of the General Manager Strategy & Support – Draft Feedback to the Local Government New Zealand on 'A 'blue skies' discussion about New Zealand's resource management system.'- be received;

AND THAT the Committee recommends that the draft feedback to the Local Government New Zealand on 'A 'blue skies' discussion about New Zealand's Resource Management System' be approved retrospectively by Council.

3. Background

The 'Blue Skies discussion document about New Zealand's Resource Management System' from LGNZ (see *Attachment 2* for the full document) was received late December 2015 (well after the December round of committee and Council meetings). Feedback was due on 7 February 2016. Staff prepared draft feedback early January 2016 and sent the paper to (the submissions sub-committee) His Worship the Mayor and the chairpersons of the Council committees for comment. Comments were then included in the final draft feedback letter to LGNZ.

4. Discussion and Analysis of Options

4.1 Discussion

LGNZ asked MartinJenkins to prepare a discussion document because the Resource Management Act (RMA) Reform Bill proposing significant changes to the statute had recently had its first reading in Parliament. This Bill focusses on what decisions should be made centrally and what should be made locally. In addition the Government has asked the Productivity Commission to do some ‘blue skies’ thinking about the nature of New Zealand’s urban planning system. A final report is expected to be published towards the end of 2016.

This LGNZ ‘think piece’ highlights the question – is New Zealand’s resource management system still fit-for-purpose?

This ‘think piece’ has not answered the question whether the right option is “evolution” or “revolution” of the resource management system. What it has done is highlight the tensions within the current system and examined what New Zealanders want from a resource management system because local government is where communities look to, to provide certainty and direction about matters concerning ‘their’ place.

The document provides a synopsis on the current and emerging context regarding resource scarcity and competition for access, a changing society and that change is unavoidable. None of these assumptions are new or surprising for our Council given our current growth and strategic position between Auckland and Hamilton.

Resource management planning and decision-making processes have always had their tensions and challenges pre- and post the RMA 1991. It is unlikely that any central government, given the current Mixed Member Proportional representation model, is going to reform the Act by ‘revolution’. The preferred option will be ‘evolution’ which is the current central government position.

The importance of the document lies in the opportunity for local authorities to reflect on New Zealand’s resource management system and the hypothesis of blending land use, infrastructure planning and funding components of the LGA, RMA and LTMA into a single Planning Act and creating a separate Environment Act.

4.2 Options

Option 1 – Preferred Option

The preferred option was to provide feedback to LGNZ and then ask for retrospective approval from Council (*see Attachment 1*).

Option 2 :

Do nothing and miss an opportunity to influence LGNZ’s thinking from a ‘local perspective’.

Considerations

5.1 Financial

Nil.

5.2 Legal

Nil.

5.3 Strategy, Plans, Policy & Partnership Alignment

Nil.

5.4 Assessment of Significance & Engagement

There are no implications for Council's Significance & Engagement Policy.

5. Consultation

The following stakeholders have been/or will be consulted:

Planned	In Progress	Complete	
		√	Internal
			Community boards/Community committees
			Waikato-Tainui/Local iwi
			Households
			Business
		√	Council Committee Chairs

Comment (if any):

6. Conclusion

It is important that Council remains connected to LGNZ's position on matters of national importance such as the legislation that the Council operates under and provides feedback from a local perspective. Due to unworkable timeframes associated with the holiday period and timing of Council meetings, feedback was provided prior to approval by the whole of Council.

7. Attachments

1. Letter sent to LGNZ with Draft feedback comments.
2. Copy of the 'Blue Sky' discussion document prepared by MartinJenkins for LGNZ.

4 February 2016

Local Government New Zealand

PO Box 1214

Wellington 6140

New Zealand

Waikato District Council

Private Bag 544

NGARUAWAHIA 3742

Draft Feedback to the Local Government New Zealand

[A 'blue skies' discussion about New Zealand's resource management system](#)

This is feedback from the Waikato District Council (the Council) on “A *'blue skies' discussion about New Zealand's resource management system* “ prepared by Martin Jenkins for Local Government New Zealand (LGNZ).

The Council appreciate the opportunity to comment on the high-level discussion document. We agree that there is increasing resource scarcity and competition for access, particularly in our district which has the Waikato River running through it and we are experiencing rapid growth as a result of being situated between Auckland and Hamilton. We acknowledge there is a changing society both in our rural and urban communities and this poses significant challenges for the local government sector.

The Council covers almost all of the Waikato-Tainui rohe and part of Maniapoto and embraces the economic growth of our iwi partners. This is reflected through co-governance and co-management arrangements detailed in two Joint Management Agreements (JMAs).

Change is not something new for our New Zealand communities and legislation, either at a central or local government level, which has always had to adapt in response to resource management and use. Diversity is one of the beauties of our country whether it is physically, culturally, socially or environmentally and therefore we support the importance of local solutions for local issues where appropriate.

Council acknowledges the challenges of dealing with three different pieces of legislation (i.e. the Resource Management Act, the Local Government and the Land Transport Management Act) when it comes to fostering integrated planning. This is a point that Council has made at various times in the past in submissions to the Productivity Commission (Using Land for Housing Issues Paper) and on

amendments to the Local Government Act and Land Transport Management Act. Whilst the need for greater co-ordination amongst these Acts is required, it is also important that the process of interpretation and implementation is not compromised by any potential change that might make them more inefficient and ineffective. Council is not sure how this can happen but suggests any potential alignment between these pieces of legislation is properly trialled both at the legislative and operational levels based on test cases.

Legislation can, at the best of times be complicated for the public to understand and it is important that any changes do not make the situation more complex.

The Council acknowledges there will always be contrasting views about resource management planning and decision-making processes. It has always been a case of 'evolution' not revolution' and the Council does not envisage this situation changing. The Council is very keen to see the outcome of the current proposed legislative changes fully implemented before any more are promoted.

Once again thank you for the opportunity of commenting on the discussion document prepared by Martin Jenkins.

Yours sincerely

Allan Sanson

MAYOR

A 'blue skies' discussion about New Zealand's resource management system

A discussion document prepared for LGNZ by MartinJenkins

December 2015



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Foreword

Foreword

The Resource Management Act (RMA) is now 25 years old and has, for some time, been showing its age. Previous attempts at substantive reform have stalled for a number of reasons. As a result, LGNZ has decided that it is time to undertake a serious look at our environmental management framework. What should a 'fit for purpose' resource management regime which works for communities, businesses, regional economies and New Zealand's environment look like? To answer this question we have put together a representative group of experts and practitioners and asked them to do some 'blue skies thinking' and this thinkpiece is the result.

Over its lifetime the RMA has been subject to 21 substantive amendments with the result that it is now a very large, complex and unwieldy piece of legislation. Consequently one of the questions we now face is whether the focus should be on continued evolution or whether we need a more revolutionary approach to resource management.

There has been no shortage of debate. Changes have been made to institutional design, decision-making criteria and the balance between national direction and local autonomy. Yet no substantive change to the overall system has followed.

The timing of our thinkpiece has been propitious. An RMA reform Bill which proposes some very significant changes to the statute has recently had its first reading in Parliament. This Bill goes to the heart of the issue regarding what decisions should be made centrally and what should be made locally. In addition the Government has asked the Productivity Commission to also do some blue skies thinking about the nature of New Zealand's urban planning system. A final report is expected to be published towards the end of 2016.

As our thinkpiece highlights, these persistent questions, repeated amendments and experiments, and the current public debate on the resource management system beg the question – is New Zealand's resource management system still fit-for-purpose?

This thinkpiece has not answered the question whether the right option is "evolution" or "revolution" of the resource management system. What it has done is highlight the tensions within the current system and examined what New Zealanders want from a resource management system. I believe that LGNZ's 'blue skies' discussion document about New Zealand's resource management system will make a valuable contribution to the current debate over New Zealand's resource management framework and I'm excited that we have taken this lead. Local government is, after all, the sphere of government that communities look to, to provide certainty and direction about matters concerning place.



Lawrence Yule
President
Local Government New Zealand

1

A 'blue skies' discussion

1.1 Is New Zealand's resource management system still fit for purpose?

Is it safe to swim in that stream? How far can I extend my house? What path should this motorway follow? Can I grow oysters in this estuary? How should we manage the remnant patches of forest in our district to maintain a healthy population of kiwi? How much water can I take from this river?

Thousands of questions like these are asked every day across New Zealand – we answer them through the framework created by our resource management system.

New Zealand's resource management system spans conservation on public and the protection of biodiversity on private land; management of the coastal environment and Exclusive Economic Zone; management of the effects of resource use and development on land, air, freshwater; infrastructure planning, funding and delivery; governance and decision-making. It determines who gets to make decisions and how they are made. It prescribes the factors that decision-makers need to take into account and their relative weight in decisions. It also establishes a framework for balancing local aspirations and expectations with regional and national considerations.

Elements of New Zealand's resource management framework were considered world leading at the time of their introduction. The management philosophy of the Resource Management Act 1991 (RMA) – focused on managing the negative effects of activities rather than the activities themselves and nested within a framework that prioritises the healthy functioning of natural ecosystems – gave shape to emerging concept of “sustainable development”¹ and has influenced the design of many other resource management regimes around the world. On the other hand, some elements of the resource management framework have been slow to emerge and are just now starting to function – New Zealand's framework for managing its Exclusive Economic Zone, for instance.

Recent events such as the Canterbury Earthquakes and extreme pressure for growth in Auckland, as well as emerging issues such as changing climate and the spectre of sea level rise have begun to prompt questions about the performance of New Zealand's resource management framework in the contemporary context. How effectively can the system deal with natural hazards? Should

the same system should apply in metropolitan and rural New Zealand? Is the system flexible enough to ensure processes are proportional and efficient? How can the operational performance of councils be improved?

These questions are not new – the performance of our resource management system has been a routine topic of debate since its core elements were put in place in the late 1980s and early 1990s. Since its introduction the RMA, sitting at the heart of the resource management system, has been amended substantively 21 times to address emergent issues, gaps, oversights and inefficiencies, and is now a very large and complex piece of legislation. Although these concerns are not new, the debate over the performance of the resource management system has intensified in recent years, and we are living through a period of experimentation. Core attributes of the system, including governance arrangements, institutional design, decision-making criteria and the balance between national direction and local autonomy have been modified through targeted changes to the system across the country.

These persistent questions, repeated amendments and experiments, and the current public debate on the resource management system beg the question – is New Zealand's resource management system still fit for purpose?

1.2 Focus on the planning Acts at the core of New Zealand's resource management system

Before we can answer whether the resource management system is fit for purpose, we need to define the boundaries of what can be a rather diffuse system. Although the RMA is at the heart of the system, the Local Government Act (LGA) and the Land Transport Management Act (LTMA) (the Acts) have a significant bearing on the location, nature and timing of infrastructure development. Decisions under these three Acts affect the nature of both urban and rural development patterns and influence, or sometimes even determine, the extent of property rights and actions of individual land owners.

Similarly, decisions on the location of schools, hospitals and social services, or even the impact of regulations governing the supply of drinking water and sanitation requirements, all have implications for resource management planning and decision-making.

¹ <http://www.un-documents.net/our-common-future.pdf>

While the Acts that govern the management of New Zealand's Exclusive Economic Zone and conservation estate are undoubtedly part of the resource management system, they are largely focused on discrete issues and geographies, are less influenced by or dependent on decisions made through other Acts within the system and are somewhat self-contained.

Because of the influence they have on the exercise of private property rights, the extent to which they determine where, how and when public money is spent and the influence they have over New Zealanders' day-to-day interaction with the natural and physical environment, we believe that discussion on the future of the resource management system should rightly focus, at least in the first instance, on the planning statutes that sit at the core of the resource management system – the RMA, LTMA and LGA.

The RMA is the key statute for managing New Zealand's land, air, soil and water

Many regard the RMA to be New Zealand's principal legislation for environmental management. It is important to note, however, that while its purpose is to promote the sustainable management of natural and physical resources, sustainable management is defined broadly as “managing the use, development and protection of natural and physical resources in a way, or at a rate which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while-

- Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
- Safeguarding the life-supporting capacity of air, water, soil, and ecosystem; and
- Avoiding, remedying or mitigating any adverse effects of activities on the environment.”

The RMA, therefore, enables action within bottom lines. The RMA achieves this by:

- Defining the responsibilities of local and regional councils, and requiring them to develop plans that show how they will manage the natural and physical environment.
- Creating a hierarchy of regulatory planning documents – from national policy and standards, to regional policy statements and district and regional plans.

- Establishing processes for allocating resources and managing externalities of resource use – including the role of the Court in ensuring the quality, and legality of decisions, and safeguarding natural justice in resource management decision-making.

The LTMA sets out the planning and funding framework that channels around \$3 billion of central government funding annually into roading, public transport and traffic safety

Specifically the legislation:

- Establishes the hypothecated (dedicated) National Land Transport Fund that funds the NZ Transport Agency and local government to deliver land transport projects and services.
- Sets out the central and local government transport plans that must be followed in order to allocate funds from the National Land Transport Fund to projects and services.
- Establishes the NZ Transport Agency, which is responsible for allocating the National Land Transport Fund, co-funding local road and public transport activities, and managing the state highway network.
- Sets out approval regimes for tolling new roads and for public private partnerships.
- Sets out the legislative framework for planning and managing public transport.

The LGA provides the general framework and powers under which New Zealand's local authorities operate

The statute provides:

- The structure of local government and the mechanisms for altering that structure.
- Principles for the governance and management of local authorities and community boards.
- A governance and accountability framework for local authorities' involvement in arms-length organisations - council-controlled organisations and council organisations.
- A framework for consultation, planning, decision-making, financial management, and reporting – including requirements to produce long-term plans, annual plans, annual reports and pre-election reports.

- A range of obligations, restrictions and powers, including requiring local authorities to assess their communities' needs for water, and wastewater and sanitary services, and placing an obligation on local authorities to provide water services to ensure continued public ownership of water services.
- The powers of the Minister of Local Government in relation to local authorities.

Decisions under these three Acts at the core of the resource management system work together dynamically

Taken as a system, these Acts have a significant influence on the extent and health of the natural environment, the development of the human or physical environment, scope of private property rights, nature of resource-users' responsibilities, and the role and performance of public agencies. Political decisions under the LGA influence council strategy and direction, which are moderated through the framework provided by the RMA. Decisions under the RMA confirm the parameters within which local and central funding decisions made through the LGA and LTMA must operate. Through these Acts, therefore, decisions are made that:

- Determine the level of acceptable environmental impact associated with resource use and development;
- Shape the nature and determine the timing of urban growth;
- Allocate access to resources such as freshwater; and
- Set the conditions associated with use and development of resources.

Rightly or wrongly, these three Acts at the core of resource management system have been the source of significant criticism.

- The RMA has become a 'whipping boy' for those who see it as an inefficient handbrake on growth, and for those who feel it has failed to protect the environment from harmful use and development. Twenty-four years since its introduction the RMA has been amended 21 times² and is now nearly 700 pages in length including over 400 main clauses. The last five years alone have witnessed:

a significant overhaul of the RMA to speed plan-making processes and address anti-competitive use of the statute; the introduction of an Environmental Protection Authority and national consenting function; targeted reforms to change governance arrangements, introduce new decision-making criteria, and appeal processes in Auckland, Waikato and Canterbury; and a suite of regulations, policy statements, standards and non-statutory guidance. Over the same five-year period a series of technical advisory group reports and discussion documents have canvassed even more significant reforms to increase the competitiveness of our cities, facilitate infrastructure development and reform New Zealand's freshwater management regime.

- There is persistent tension over the performance of councils in terms of their environmental responsibilities and the efficiency of their operations – frustration persists despite efforts to improve processes over a number of years. Partly due to these frustrations, the purpose of the LGA has been narrowed to focus on service provision – encouraging councils to limit the scope of their aspirations. This tension is perhaps a symptom of underlying conflict in New Zealand between different views of the proper role of public agencies. Some believe councils should be custodians of a process for resolving disputes between different parties and managing externalities. Others believe they should be more active and take responsibility for 'place-making' and setting and achieving outcomes or visions desired by the community (recognising that resolving disputes between parties and a role in place-making are not mutually exclusive).
- The LTMA can find itself caught uncomfortably between the RMA and LGA, and its effectiveness hampered by lack of connection between the planning, funding and delivery elements of the resource management system – leading to time consuming and costly processes which we can scant afford.

² Not including indirect amendments to the RMA such as the introduction of the Housing Accords and Special Housing Areas Act 2013, the now repealed Foreshore and Seabed Act 2004 and its replacement, the Marine and Coastal Area (Takutai Moana) Act 2011, and the Resource Management (Temporary Commissioner and Improved Water Management) Act 2010.

Debate on whether the resource management system is fit for purpose appears to be driving towards change – the option of ‘no change’ or persisting with the almost annual cycle of tinkering does not appear to have much support. Rather, than “is change required” the question seems to be “how much change is required?” So what do we stand to gain from change, and what do we risk?

1.3 What do we stand to gain (or lose) from resource management reform?

New Zealand is blessed with easily the largest endowment of renewable natural capital of any country in the OECD, a relatively unspoilt environment and a developed economy.³

- New Zealand’s farming, forestry, fishing and horticultural industries are the backbone of the economy – 40 per cent of New Zealand’s foreign exchange earnings are from primary products, predominantly dairy, red meat and logs. The Government’s Business Growth Agenda aims to increase New Zealand’s ratio of exports to GDP to 40 per cent by 2025.
- New Zealand is a desirable destination for tourists and skilled migrants alike due in some part to the perceived purity of the natural environment, the ease of access to relatively unspoilt natural environments and the healthiness of our lifestyles. From being a relatively minor sector two decades ago, tourism now directly and indirectly contributes just over 7 per cent of New Zealand’s GDP and accounts for nearly 8.3 per cent of total employment. Despite having a lower GDP per capita than many countries we compare ourselves to (eg UK, Australia and Denmark) New Zealand performs very well on international comparisons of quality of life and general wellbeing⁴.
- New Zealanders themselves place a great deal of importance on the quality of the natural environment either for intrinsic or recreational reasons – in the 2005 Massey University Values Survey⁵ the environment was given priority over economic growth by most respondents and the majority of respondents considered that economic

growth should not occur at the cost of environmental damage, and prioritised preservation of the environment over economic growth.

The core elements of our resource management system have been in place for some time now – while there are frustrations with the system, people have a basic understanding of how it operates

We have collectively invested significantly in the system and our capacity and capability to operate within it. Entire areas of professional practice have grown around helping us understand and navigate it and it has many tools that we’re only just beginning to see the benefit of. In tandem with a process of continual refinement, procedural improvement and targeted interventions on acute issues, continuing to work with the devil we know has considerable appeal to many.

Regardless of perception, the country faces significant challenges in the form of rising income inequality, declining water quality where land is used intensively, localised strong population growth, extreme rates of biodiversity loss and steadily rising carbon emissions.⁶ The critical question is whether yesterday’s tools – despite their flexibility and the period of refinement they have been through – will be suitable to deal with tomorrow’s issues or allow us to seize the opportunities that tomorrow holds.

With the right framework for managing natural and physical resources New Zealanders could position themselves to enjoy extremely high levels of wellbeing and prosperity well into the future

If designed and delivered well, New Zealand’s resource management governance and decision-making framework could be a key to unlocking the country’s potential. Many of New Zealand’s most profitable enterprises are the most efficient in terms of resource use or environmental impact, and there is continuing growth in market demand or market appreciation for products that have been produced sustainably.

On the other hand the cost of a poorly designed and implemented resource management system can be extremely high. It may undermine quality of life, separate us further from nature, undermine our national brand and defer the ever-increasing cost of short-sighted decisions to future generations.

³ The World Bank “The changing Wealth of Nations” 2010

⁴ OECD (2015), Better life index, Website: <http://www.oecdbetterlifeindex.org/>

⁵ Rose, E. Huakau, J. Casswell, S. (2005), Economic Values: A Report from the New Zealand Values Study 2005, Massey University.

⁶ <http://www.mfe.govt.nz/publications/environmental-reporting/environment-aotearoa-2015>

These are costs we cannot afford and that many of us are no longer willing to tolerate.

There is a wide appreciation that we live in and are fundamentally dependent on the environment. There is also an appreciation that as well as providing intrinsic values the environment gives us ecosystem services that we can't or can't affordably replicate. From this stems unambiguous support for retaining an ethic of environmental stewardship in our resource management system with the ongoing health of the natural environment the central objective.

But in spite of consensus at this level, our current resource management system is the vehicle to reach compromise between the different social, cultural and economic values held by parties. A resource management system that is able to effectively defuse conflict, encourage and support sustainable production, facilitate growth in economic performance and increase social wellbeing would be an asset for New Zealand and would provide New Zealanders with a competitive advantage in an increasingly resource-constrained and resource-hungry world.

1.4 A roadmap for discussion

In many respects New Zealand's economy depends on natural resources – our productive and tourism sectors trade directly off the natural environment and what it provides, and our ability to attract and retain skilled workers in a global market is influenced by the way we manage our natural and physical resources. We make far-reaching decisions on the nature of private and public rights and responsibilities through the resource management system, and it is critical that we have the settings of this system tuned correctly.

It is time for a 'blue skies' discussion about the future of the resource management system

Against a backdrop of consistent change and with the promise of both more and more fundamental change on the horizon, Local Government New Zealand (LGNZ) believes it is timely to step back and consider the big picture and the long game.

Before we rush to a particular conclusion or push a particular solution to perceived problems, we should transparently and collaboratively explore what New Zealanders want to achieve

with their natural and physical environments, evaluate whether the resource management system is able to support this objective, investigate what a fit-for-purpose resource management system could look like, and carefully work through options for reform.

This thinkpiece reflects LGNZ's desire to stimulate a robust discussion about a fit-for-purpose resource management system in New Zealand.

This thinkpiece is intended to both prompt and assist a high quality national level discussion on what is required to deliver a fit-for-purpose resource management system. We begin by briefly discussing the context – both current and emerging – within which the resource management system needs to function. We then ask what kind of future New Zealanders want, and propose some common goals based on our day-to-day grassroots experience with New Zealand communities. This provides the contextual backdrop against which we discuss some issues with the RMA and the resource management system, and highlight some of the ways the New Zealand resource management system has been evolving to deal with these issues, along with trends in other jurisdictions.

Finally we discuss the case for change, propose some options for consideration and feedback and present a series of questions to stimulate feedback.

The concepts in this thinkpiece will be developed further through a process of public consultation and expert input – your feedback on the questions and options we raise will help us refine our position, which we will shape in the first half of 2016. We hope this position will complement the work of others active in this discussion and be debated alongside the views of other leading stakeholders in New Zealand's resource management system.

Noting that the government's legislative reform programme is continuing and that the Resource Legislation Amendment Bill (2015) will be working its way through Select Committee in the early part of 2016, we look forward to sharing the perspectives expressed in this thinkpiece with other stakeholders. We also look forward to working with the New Zealand Productivity Commission and Ministry for the Environment as they proceed with their own reviews of the urban planning and resource management systems respectively.

2

The current and emerging context

One's perspective on the performance of the resource management system – and whether and what changes may be required – is affected by one's personal objectives, values and world view, as well as those of the general society. Objectives, values and world views can change with time and context, and New Zealand in 2015 is a different place to New Zealand in the late 1980s and 1990s when the core elements of the resource management system were designed.

2.1 Increasing resource scarcity and competition for access

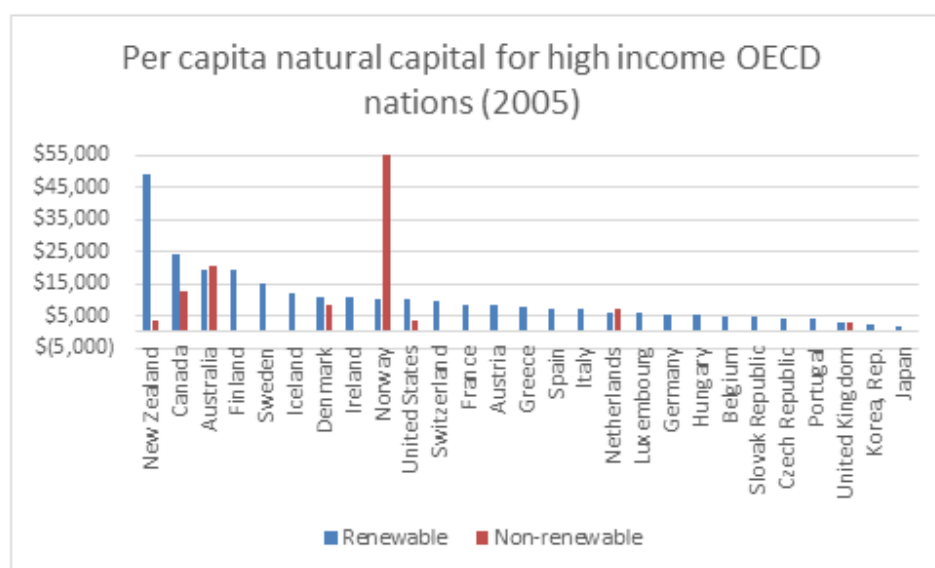
The United Nations projects that the global population could reach 10 billion soon after 2100. With new markets and a growing middle class in developing nations, many expect demand for commodities such as timber, meat and dairy to continue to rise.⁷

While New Zealand's climate and high levels of natural capital (see Figure 2.1 below) are a potential source of competitive advantage, domestically there is already significant competition for access to these resources between commercial, community and environmental interests.

Recognising the value of what we have

This competition for resources has emerged during a time of transition in New Zealand, where the country has moved from a pioneering mindset – where our economy, jobs and infrastructure were geared around primary production, resource extraction and export – to a more balanced modern economy with an increasingly important service sector. During this shift, the focus of our primary sector has, to a greater or lesser extent, embraced business models founded in environmental stewardship and long term profitability rather than the continued drive to increase the volume of production. We have also begun to measure the impact of our actions and decisions and this has only reinforced how valuable our resources are both nationally and globally.

Figure 2.1: Per capita natural capital for high income OECD nations



Source: World Bank

⁷ The World Bank "The Changing Wealth of Nations" 2010

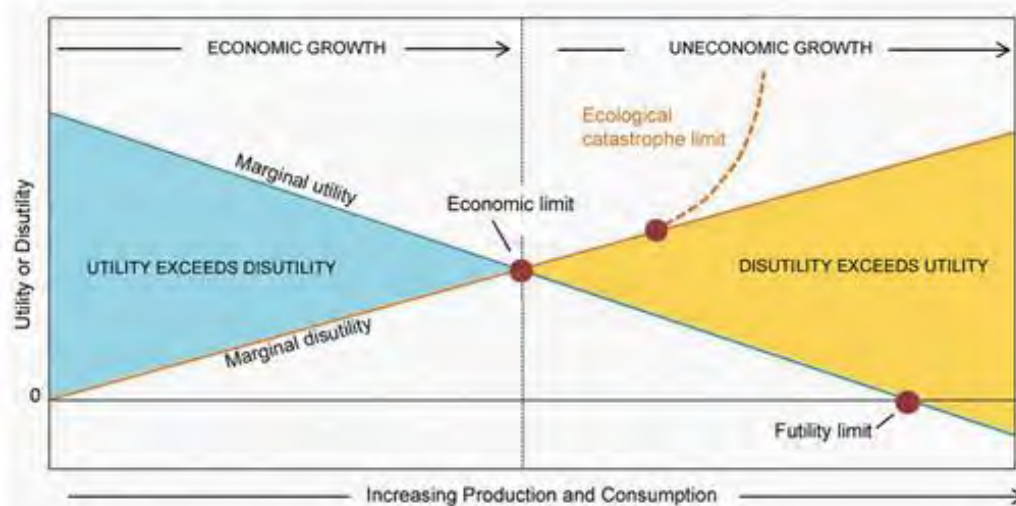
Since the 2007–2008 global food price crisis there appears to have been a worldwide increase in international acquisitions or long-term leases of arable land by companies or governments seeking to secure supply chains and insulate themselves from future price-shocks. The past few years have seen significant debate in New Zealand about the desirability of and ability to limit such acquisitions.

The dairy, fisheries, forestry and oil sectors all depend on resources provided by the natural environment, whether these be water, biodiversity, soil or fossil fuels. The environment also provides other important services such as carbon sequestration, water purification, flood management, and nutrient cycling. In addition to the direct contribution of primary products to New Zealand's economy, a large proportion of New Zealand's manufacturing sector relies on primary products as inputs, and large parts of the service economy exist to service primary and related processing industries. This provides a strong incentive to facilitate the production and export of primary products. At the same time, however, the role of tourism in New Zealand's economy is increasing, and our international attractiveness as a destination is largely based on natural attractions and a perception of environmental purity – potentially pitting these two strong aspects of our economy and society against each other.

Some commentators suggest that we have reached, or are close to reaching the global limit of growth in a “full world”

Our historical perception of a boundless and limitless world has been overtaken by human population growth and resource demands, and the drive for continuing increases in material wealth has in fact begun to undermine wellbeing.⁸ In a “full world” the limiting factor to growth is no longer access to technology and labour; rather it is the carrying capacity of the environment itself. In general terms, the benefits and costs of growth have converged (see Figure 2.2 below). While others suggest that we can ‘grow the pie’ through tactical investment that will make existing resources go further, such as through water storage, at some point we risk overreaching the carrying capacity of the environment.

Figure 2.2: Limits to growth



Source: Daly 2005, *Economics in a full world*

⁸ Beddow et al (2009) *Overcoming system roadblocks to sustainability: The evolutionary redesign of worldviews, institutions, and technologies*. PNAS. Vol 106., No. 8, pp 2483-2489

A particularly pressing and concerning example of this risk is the loss of productive soils. Estimates of soil loss vary depending on which classification of productive soil is used and what cause of productivity loss is a particular focus, but the trends are consistent – globally, we are losing staggering amounts of productive soil to desertification, salinisation, erosion and urban development. One estimate suggests the globe lost 150 million hectares of productive soil to urban development alone in the period 1985–2000.⁹ Other studies have shown crop yield reductions of between 30 and 90 per cent in Africa due to erosion, reductions of 25 to 50 per cent in Europe due to soil compaction, and an estimated 950 million hectares of the globe’s potentially arable land is affected by salinization.¹⁰

In New Zealand between 1990 and 2008, an average of 29 per cent of urbanisation occurred on productive soils (35 per cent in Auckland, 49 per cent in the Hawkes Bay, 34 per cent in Canterbury, 36 per cent in the Waikato and 27 per cent in the Bay of Plenty.) In addition to urbanisation, the expansion of lifestyle blocks or ‘hobby farms’ has impacted the potential utility of New Zealand’s most productive soils – they now occupy 873,000 hectares of New Zealand’s non-reserve land and 10 per cent of New Zealand’s productive soils.¹¹

A rough calculation of current rates of soil degradation suggests around 40 per cent of the globe’s agricultural soils are either degraded or seriously degraded. Under a business as usual scenario, degraded soil will mean that globally, 30 per cent less food will be produced over the next 20–50 years. This is against a background of projected demand requiring us to grow 50 per cent more food, as the population grows and wealthier people in countries like China and India eat more.¹²

2.2 A changing society

People and their wealth are concentrating in urban centres around the world – attracted by access to amenities, the prospect of jobs and proximity to markets

Reflecting this global trend the growth of New Zealand’s population, which is expected to reach 5 million by 2025, will be concentrated in the urban centres of the upper North Island, particularly Auckland (see Figure 2.3). Our expectations regarding the health of our natural environment also appear to be increasing.

While urbanisation increases the ability to pay for amenities and generates productivity benefits through agglomeration, the rate of population growth in Auckland in particular is putting pressure on the supply of housing, infrastructure and social cohesion. Perhaps most topical is concern about the unaffordability of the typical three-bedroom-with-land ‘kiwi home’, its wider social and cultural implications and the difficulty that urban planning regimes are having in providing for higher density housing typologies.

Efforts to increase supply through intensification of existing urban areas is variously challenged by highly fragmented land holdings, infrastructure capacity constraints or community opposition to new urban forms. Meanwhile, providing new land for development on the urban fringes can subject rural activities and extractive industries to reverse sensitivity pressures, and can prejudice future access to natural resource and be costly to service. There are also constraints on the supply of skilled labour to service this demand such as in the construction and transport sectors.

⁹ http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/use?cid=nrcs142p2_054028

¹⁰ Eswaran, H., R. Lal and P.F. Reich. (2001). Land degradation: an overview. In: Bridges, E.M., I.D. Hannam, L.R. Oldeman, F.W.T. Pening de Vries, S.J. Scherr, and S. Sompatpanit (eds.). *Responses to Land Degradation*. Proc. 2nd. International Conference on Land Degradation and Desertification, Khon Kaen, Thailand. Oxford Press, New Delhi, India.

¹¹ Andrew, R. and Dymond, J.R. (2012) *Journal of the Royal Society of New Zealand*. <http://dx.doi.org/10.1080/03036758.2012.736392>

¹² <http://world.time.com/2012/12/14/what-if-the-worlds-soil-runs-out/>

These pressures, coupled with broader infrastructure constraints, are giving rise to an acknowledgement of the need for innovative approaches to resource management. Bespoke funding and regulatory regimes are emerging, such as housing accords and potentially, transport accords between tiers of government. Public-private partnerships are being used to deliver infrastructure, schools and housing. Urban development agencies are emerging in Auckland and Christchurch hoping to stimulate large-scale brownfields redevelopment and the Government has received advice from the New Zealand Productivity Commission on how to change the way councils manage urban residential growth.

The challenges and opportunities of significant urban growth contrast starkly with the challenges facing rural local authorities with largely declining and aging populations

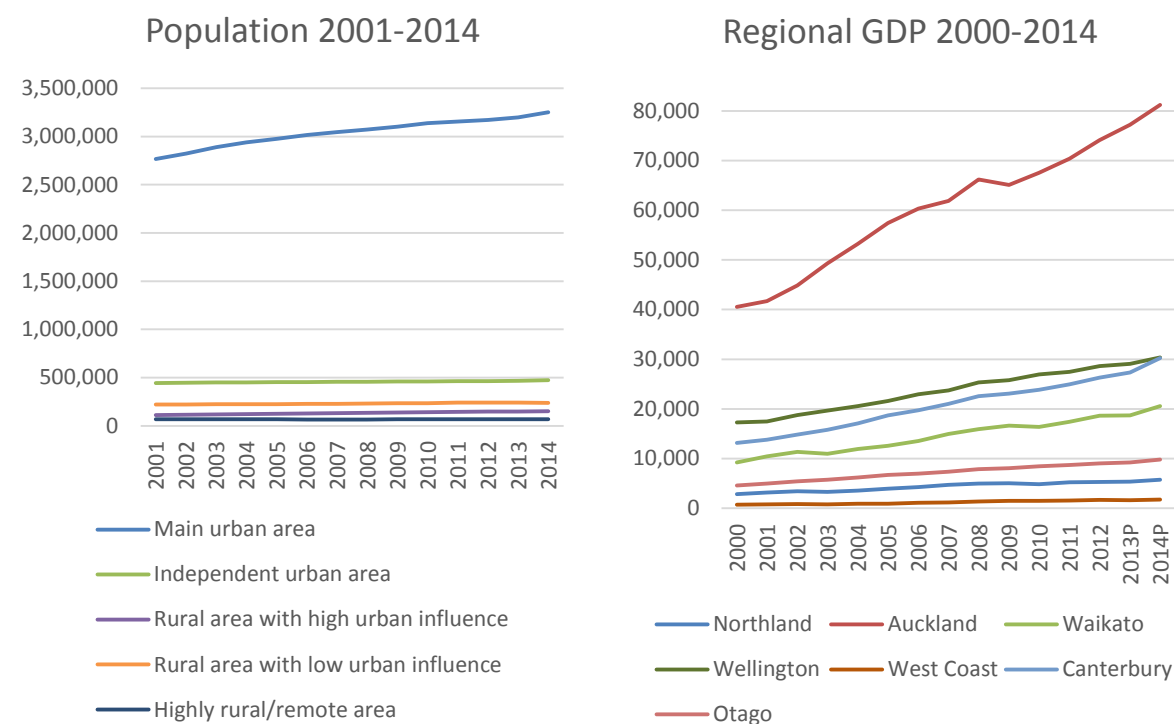
Some rural centres in New Zealand are thriving, with many benefiting from the trade in dairy products over the past two decades. But many of New Zealand's rural communities are struggling to define a new value proposition

in a changing world (eg their ports or rail networks no longer operate as they did, their factories have closed, or they experience seasonal swings in population due to tourism). These rural centres may struggle to provide services, maintain ageing infrastructure, and retain and attract investment and people.

What it means to be a 'New Zealander' is changing

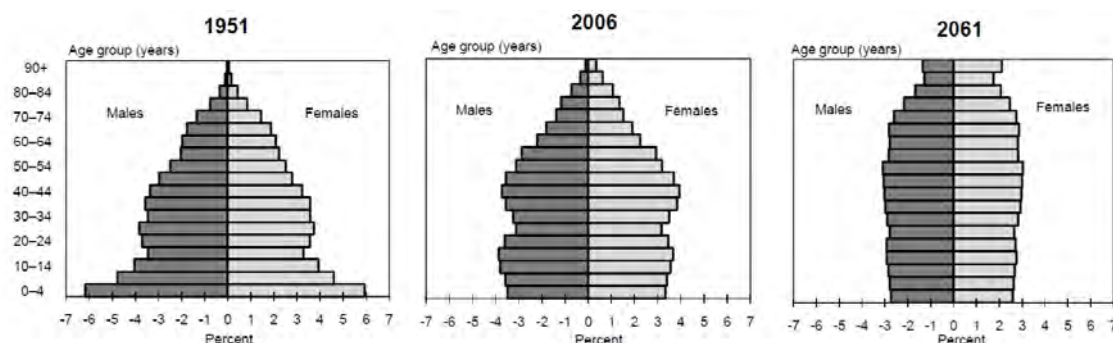
New Zealanders are living longer and having fewer children (see Figure 2.4). As the population ages, demands on many aspects of the resource management system will change. Retirees are more likely to move for recreational amenities or the natural environment, demands on urban transport infrastructure and housing needs are likely to change, and pressure on coastal areas and areas known for their natural beauty is likely to grow.

Figure 2.3: New Zealand regional population and GDP trends



Source: Statistics NZ

Figure 2.4: Estimated and Projected Age-Sex Distribution



Source: Statistics New Zealand

Māori are playing an increasingly important role in New Zealand's economy

In 2013, 5.6 per cent (\$11 billion) of overall GDP from New Zealand was attributable to the Māori economy. This arose from an asset base of \$42.6 billion, which was an increase of \$5.7 billion (or 15.4 per cent in nominal terms) from 2010¹³. The Treaty claim settlement process, and the financial and cultural redress that comes with it, will continue to shift the political and economic landscape in New Zealand with iwi taking a more significant role in both spheres as capacity grows. This will place pressure on the resource management system to be able to apply a Māori world view and develop new structures of governance and planning to manage resources.

While Te Tiriti o Waitangi and its principles are embedded in New Zealand's existing resource management system, the transfer of resources, rights and responsibilities and new governance arrangements are creating a new canvas of rights and interests on which the resource management system needs to be able to operate. The Ngāi Tahu settlement in 1998, the 2010 Waikato-Tainui Raupatu Claims Act and the recent agreement with Tūhoe are examples of local changes to resource management decision-making and governance frameworks to reflect the needs, rights and interests of local iwi. The progressive recognition of indigenous rights and interests represents a significant step in the evolution of New Zealand's resource management framework, an evolution that has some way to go still. As we begin to come to terms with tangata whenua rights and interests, and experiment with how they can be reflected in resource management decision-making and

governance arrangements, New Zealand's unique resource management system will continue to evolve to reflect the values of a changing population.

New Zealand's attractiveness as a destination for migrants is changing the cultural landscape and the values that influence resource management decision-making

Societal values in New Zealand have become increasingly diverse since the second half of the 20th Century and, as migration continues to change the demographics of New Zealand, so to do the values of the average New Zealander.

October 2015 saw a record net gain of 6,200 migrants. Net migration has been regularly breaking records since August 2014, when it surpassed the previous highest monthly net gain of 4,700 in February 2003. The year from October 2014 to 2015 showed a record net gain of 62,500 migrants, and was the first time New Zealand received a net gain in migrants from Australia since November 1991. During the year from October 2014 to 2015, New Zealand received 13,100 migrants from India, 8,600 from China, 4,900 from the Philippines and 3,700 from the United Kingdom. All regions across New Zealand had a net gain of international migrants in the October 2015 year, led by Auckland (29,000), and Canterbury (6,800). The next biggest net gains of migrants were in Waikato, Wellington, Bay of Plenty, and Otago. Just over half of all migrants who stated an address on their arrival card were moving to the Auckland region.

¹³ Nana, G., Khan, M. and Schulze, H. (2015) To Ōhanga Māori 2013 (Māori Economy Report 2013), Te Puni Kōkiri, Wellington, New Zealand.

Despite New Zealand's changing ethnic make-up, the values that brought the largest ethnic group to New Zealand – European immigrants or Pākehā – appear to be reasonably embedded in the national psyche. Attempts to increase density of housing in Auckland have, for instance, met with opposition, while declining rates of home ownership have been interpreted as a challenge to the “Kiwi dream.”¹⁴ That said, while “suburban ideals have been deeply ingrained in New Zealand since colonisation”¹⁵ and apartments in Auckland account for a significantly lower proportion of new housing stock compared to the major Australian cities of Brisbane, Melbourne and Sydney,¹⁶ higher-density living clearly appeals to some Aucklanders, while others are prepared to trade-off a preference for stand-alone houses in order to be situated close to desirable urban amenities and facilities.¹⁷

The increasing Asian (and particularly Chinese) population in Auckland has seen the demand for housing stock evolve in recent times. The media has presented a prevailing, if stereotypical view, that apartments and all that go with it – denser, urban living – are more desirable than houses for Chinese buyers.^{18 19} This almost complements the other prevailing view in New Zealand – that apartments aren't for Kiwis. The lingering colonial views are reflected in New Zealand having some of the largest houses, on a square meter basis, in the developed world²⁰ – having grown in size since the mid-20th Century, despite the number of individuals per household falling over the same period. As globalisation changes trading patterns, so to has labour movement, with two notable “circulatory” migration patterns having emerged in relation to New Zealand – trans-Tasman migration and migration between New Zealand and the Chinese “homelands” (Hong

Kong, Taiwan, and the People's Republic of China).^{21 22}

Recent migrants may have different views to those born and raised in New Zealand. However, many migrants appear to be attracted to New Zealanders' relationships with the environment and attempt to adopt these values themselves – for example, the Chinese Conservation Education Trust was founded in 2002 in cooperation with the then-Auckland City Council to educate the Chinese community on environmental issues.²³ One study, however, found that Chinese migrants were reluctant to change and expected society to change for them, compared to New Zealanders of Chinese descent, who had often largely adopted “Kiwi” culture.²⁴

2.3 An increasingly dynamic context

2015 is set to be the year where parties to the United Nations Framework Convention on Climate Change, including New Zealand, reach agreement on a “fresh universal, legal agreement to deal with climate change beyond 2020” replacing the Kyoto Protocol. This is likely to result in targets to reduce emissions below 1990 levels. However, New Zealand has been trending in the other direction. While our gross emissions have remained fairly stable since 2005, 2014 gross emissions were up 25 per cent on 1990 levels.

¹⁴ Guy Marriage (2010) Minimum vs Maximum: Size and the New Zealand House, Conference Paper (2010 Australasian Housing Researchers' Conference)

¹⁵ Ibid.

¹⁶ Milford Asset Management (2015) Auckland lacking apartments, Website: <http://milfordasset.com/auckland-lacking-apartments/>

¹⁷ Widdish, B. (2015). Housing choices and preference: a review of the literature. Auckland Council Technical Report, 2015/019

¹⁸ *New Zealand Herald* (2015) Why Chinese buyers are good, Website: http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11487191

¹⁹ Guy Olivier Faure (2002) China: New Values in a Changing Society, Website: <http://www.ceibs.edu/ase/Documents/EuroChinaForum/faure.htm>

²⁰ Jacob Greber (2009) Australia Builds World's Largest Homes as U.S. Dwellings Shrink, Website: <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aYPWMBbY5InU>

²¹ Cruickshank, Prue (2014) Communicating Social Change; Politics and immigrants, Website: http://www.unitec.ac.nz/eypress/wp-content/uploads/2014/12/Communicating-Social-Change_Politics-and-Immigrants-by-P.-Cruickshank.pdf

²² Ip, Manying (2012) Here, There, and Back Again: A New Zealand Case Study of Chinese Circulatory Transmigration, Website: <http://www.migrationpolicy.org/article/here-there-and-back-again-new-zealand-case-study-chinese-circulatory-transmigration>

²³ Durr, Eveline (2010) Urban Pollution: Cultural Meanings, Social Practices, Berghahn Books, New York.

²⁴ Kam Ho Chan, André (2009) The Differences between New Zealand-Born Chinese and Recent Chinese Immigrants in Hawke's Bay, Website: http://web.env.auckland.ac.nz/public/geog315/documents/acha279_su_mmary.pdf

It is expected that agriculture, which accounts for approximately 50 per cent of New Zealand's greenhouse gas emissions, will remain absent from the next international agreement. While this affords a degree of protection to New Zealand's agricultural sector (components of which are claimed to be among the most carbon efficient in the world) the burden of achieving carbon emission reductions will fall to other sectors of the economy.

Although we are currently trending in the wrong direction with respect to greenhouse gas emissions, New Zealand's economy and the lifestyle of New Zealanders may be becoming more carbon- and energy-efficient

While we may still be some way from decoupling economic growth from carbon, there are signs that we are becoming increasingly carbon efficient and have the capability to go much further. Battery technology has developed to the point where electric cars are mainstream and in the near future modern homes will be able to be powered by stored electricity. In spite of oil prices being lower than long-term predictions, falling costs associated with non-fossil fuel energy source technology is enabling the exploitation of new energy sources such as solar, offshore wind, tidal and wave energy. Some options will give rise to concerns about the occupation of coastal space and impacts on biodiversity, natural character and landscape values.

It is also becoming increasingly evident that some environmentally friendly behaviour can help the economy and people directly – switching to low-energy light bulbs and more energy efficient ways of heating houses does not only produce environmental benefits but saves people money; it is estimated that New Zealand could save around \$2.4 billion a year by using energy more efficiently. In a similar vein, since 1990, New Zealand's economy has become 27 per cent less energy intensive²⁵, in part due to the growth of the services sector (professional services, information technology, health care etc) as a proportion of the economy as a whole. The energy intensity of other parts of our lives is also declining; cars are becoming more fuel efficient and inner city living has grown in significant popularity since the late 1980s, particularly in Auckland and Wellington.²⁶ Further changes are expected as large cohorts of working adults move into retirement and demand different housing types, have greater expectations of access to amenities

and place different demands on transport infrastructure.²⁷ Equally, younger people are increasingly opting for our urban centres, and far fewer are choosing to drive.²⁸

New technologies have the potential to radically reshape how we interact with, understand and manage our environment

Remote sensing and drone technology are enabling us to monitor and manage our environment with an unprecedented degree of spatial and temporal resolution at an ever reducing cost. Biotechnology has significant potential to benefit the productivity, resource efficiency and environmental footprint of the primary sector. These technologies could hold the key to increasing the precision of our decision making as it relates to land- and water-use, the quality and accuracy of regulation, and the efficiency of resource use. They can, however, raise questions that central and local government have struggled to keep pace with including, for instance, questions relating to data ownership and access. We need to make sure we are able to take advantage of technological innovation without creating new problems. To do this we will need to find a balance between fast adoption of new ideas and technologies and the careful and sensible evaluation of risks.

The potential for technology to reshape cities and rural communities, by enabling remote working in the service and information technology sectors, has long been anticipated but is yet to materialise. Meanwhile automation is moving out of the factory and into the office tower. New consumer technology has great potential to improve the lifestyles of users, and their access to information and services. However, outside of the growth in e-waste and the modes of service delivery, the resource impacts of changes in consumer products are largely unknown. We will only be able to see with hindsight whether this is the second industrial revolution suggested by some commentators – described as a post-employment age – with profound implications for the role of the government and the social fabric of New Zealand's communities.

²⁵ Statistics New Zealand (2014) Energy intensity, Website: http://www.stats.govt.nz/browse_for_stats/snapshots-of-nz/nz-progress-indicators/home/environmental/energy-intensity.aspx

²⁶ Philip Morrison and Ben Schrader. 'Inner-city living - Inner-city revival', Te Ara - the Encyclopedia of New Zealand, updated 13-Jul-12 URL: <http://www.TeAra.govt.nz/en/inner-city-living/page-3>

²⁷ Ministry of Transport (2014) Briefing to the Incoming Minister, Website: <http://www.transport.govt.nz/assets/Uploads/About/Documents/Ministry-of-Transport-BIM-2014.pdf>

²⁸ Ibid.

New Zealand is becoming party to an increasing number of bi-lateral and multilateral trade and governance arrangements, which can open markets to trade and people. As well as providing access to international investment, innovations and cultures, they also act to amplify existing demand for export commodities. Some are concerned that increased international interdependence can, however, reduce regional autonomy and that trade and governance arrangements may limit the effectiveness of domestic environmental regulation and constrain local innovation.

2.4 Unavoidable change

Even if consumer preferences or behaviours change, new technologies or regulation reduce the environmental impact of New Zealand's economy, or if mitigation measures prove successful, global temperatures are expected to rise by approximately 1.5 degrees this century. This sets the scene for significant resource management challenges:

- The sea level is expected to rise in excess of 1 metre over the next 100 years, affecting the 65 per cent of New Zealand's communities and major infrastructure assets that are within close proximity to the coast.²⁹
- The frequency and intensity of weather-related natural hazard events such as drought, wildfire, coastal storm inundation and flooding are expected to rise.³⁰
- The distribution of precipitation is expected to change significantly, making New Zealand's drier regions drier and wetter regions wetter.³¹

As populations grow and as the drive for increasing material wealth continues, increasing pressure will be brought to bear on natural environments and ecosystems. Water quality and the productive potential of soils will become increasingly important, as will the ability to adapt in the face of a changing climate, sea level rise and the introduction of new technologies. The emerging and future context will be dynamic and increasingly complex.

²⁹ NIWA (2011) Planning on a sea-level rise of X?, Website: <http://www.niwa.co.nz/news/planning-on-a-sea-level-rise-of-x>

³⁰ IPCC (2014) Climate Change 2014: Impacts, Adaptation, and Vulnerability

³¹ Wratt, D. and Mullan, B. (2015) Climate change scenarios for New Zealand, NIWA, Website: <https://www.niwa.co.nz/our-science/climate/information-and-resources/clivar/scenarios>

3

**What kind of
future do New
Zealanders
want?**

New Zealand's communities are diverse and evolving – there are many different perspectives on what the future should look like and what contribution the resource management decision-making framework could or should play in bringing about this vision.

3.1 A common goal

Local Government New Zealand's perspective, born of a grassroots connection between councils and New Zealand's communities, and supported by the consistent findings of surveys run by councils and universities, is that New Zealanders place a great deal of importance on their relationship to the natural environment and the extent to which they are able to enjoy a healthy and balanced lifestyle. Our direct and day-to-day engagement with New Zealand communities leads us to conclude that New Zealanders share the common goal of a future characterised by strong communities, social equity, a sustainable economy, and a healthy environment. Underpinning this is that to maintain prosperity at current levels with a growing population we need substantial economic growth.

3.2 A broad view of prosperity

We are moving beyond an inevitable trade-off between the economy and the environment

The resource management system is designed to prescribe clear limits that protect the healthy function of natural ecosystems and define the boundaries within which people can go about their business. Despite this, the practice of balancing economic value against environmental loss has arguably fostered an approach to decision-making that pits the economy against the environment, and has generated a culture of costly and divisive litigation. The general perception appears to be that councils are charged with regulating to protect the environment and that the RMA is an environmental protection statute. Too often the experience of councils is that users of the RMA have a preconception that it is an inevitable barrier to development that introduces unnecessary costs and limits options, that it is a weak statute designed to facilitate the environmentally damaging use and development of natural resources, or that councils have are tasked as

environmental regulators. These perceptions don't quite grasp the breadth of the role that councils play and the objectives they are charged with promoting through the various Acts that make up the resource management system.

It is possible these perceptions stem from a persistent perception that economic growth necessarily impacts negatively on the environment – a view that decisions must strike a balance between competing ends “the economy or the environment”. This approach can lead to decisions that trade-off environmental health against economic growth and rhetoric that casts environmental protection as an economic and social cost. But the economy and environment don't need to be in opposition. In fact, a sustainable, prosperous and equitable future requires regulatory and market systems that align the interest of the economy, society and environment.

New Zealand's clean green image is a source of comparative advantage that has been valued by as much as \$20.17 billion a year and 80 per cent of exporters believe this image is vital to their “export profile”.³²

However, at a more fundamental level our natural environment and ecosystems provide and sustain the resource base for New Zealand's primary export and tourism industries, underpin New Zealand's electricity generation system, and provide the aggregate and materials we use to build our cities and transport networks. They provide services such as water purification, pollination, climate regulation³³ and a buffer to coastal storm inundation, erosion and flooding. We value our ability to swim in rivers, lakes and our harbours without fear of getting sick, we wish to maintain and restore traditions of food gathering.

³² Stewart, Matt (2012) 100 per cent Pure Fantasy? Living up to our brand, Website: <http://www.stuff.co.nz/environment/8023412/100-Pure-Fantasy-Living-up-to-our-brand>

³³ Brown, Marie et al (2015) *Vanishing nature: facing New Zealand's biodiversity crisis* (Auckland) Environmental Defence Society

And while we all want a prosperous economy, competitive local businesses, thriving communities and connected cities that generate jobs our children can aspire to, most New Zealanders consider economic growth should not occur at the cost of environmental damage.³⁴ Echoing this sentiment the Land and Water Forum noted its belief, in its third report to the Government, that:

“... it is time to move past the perception that trading-off or balancing values against each other is an almost inescapable part of freshwater management. There are many ways to pursue environmental, economic and social benefits at once, including through accessing new water through efficiency gains and new infrastructure, adding value to our products and services, science and innovation, and leveraging off our environmental performance in export markets. The change we propose sets up the system towards outcomes which are advantageous to all parties, by encouraging people, enterprises and agencies to participate actively and collaboratively to devise and implement local solutions.”³⁵

Communities have continued to ask their councils to do more than simply provide local services

Over the past decade, councils have sought to promote the four pillars of social, cultural, economic and environmental wellbeing in New Zealand, with the support of their communities, even after changes to the purpose of the Local Government Act re-focused councils on the provision of local services, infrastructure and regulations. By doing so, councils have sought to enable and facilitate the development of natural and physical resources in a socially and environmentally responsible way – fostering decision-making processes and projects that deliver ‘win-wins’ across the ‘four wellbeings’.

This approach has enabled councils to develop strategies that promote sustainable growth, such as the Western Bay of Plenty’s SmartGrowth strategy, and plans that lead the way towards a prosperous future, such as the Auckland Plan with its vision of making Auckland the world’s most liveable city. Similar growth management strategies and spatial plans have been prepared from Invercargill and Queenstown Lakes in the south to Hamilton and Whangarei in the north. Much like the resource management system as a whole, their success as tools for managing the issues of the day is difficult to measure,

however, it is noted that a number of these documents have been resilient to changes in political environment and remain a light on the hill for those municipalities and in some cases their regions or sub-regions.

New Zealand is slowly joining an international movement that recognises GDP isn’t necessarily the best measure of performance

The adoption of this broad and balanced ‘four wellbeings’ approach is consistent with research on the relationship between economic growth and wellbeing. This finds:

“In a typical country, economic growth improves happiness other things being equal. But other things are not necessarily equal, so economic growth does not automatically go with increased happiness. Thus policy makers should balance the argument for more rapid growth against the arguments for supporting other forms of happiness. This applies to countries at every level of development.”³⁶

The New Zealand Treasury has for some time recognised that a healthy, prosperous and sustainable New Zealand will depend on much more than simply economic growth. Although The Treasury has retained its focus on promoting growth, maintaining macro-economic stability and measuring performance via GDP, it has acknowledged the value of a broader approach. In 2012 The Treasury introduced the concept of a living standards framework, and developed a tool to help prompt central government analysts to consider critical factors such as ‘sustainability for the future’, ‘increasing equity’ and ‘growing social capital’ when advising government ministers.

Other countries have taken this line of thinking a little further than the New Zealand Treasury. For instance, a French commission on the measurement of economic performance (released in 2009) criticised GDP as a measure of performance, on the grounds that it:

- ignores externalities or economic bads such as damage to the environment – by counting goods which increase utility; by failing to deduct bads or account for negative effects of increasing production (eg pollution), GDP overestimates prosperity and welfare
- does not take income inequality into account

³⁴ Rose, E. Huakau, J. Casswell, S. (2005), Economic Values: A Report from the New Zealand Values Study 2005, Massey University.

³⁵ Land and Water Forum (2012), Third Report of the Land and Water Forum: Managing Water Quality and Allocating Water

³⁶ World Happiness Report p66

- does not consider non-market activities such as leisure and recreation.³⁷

In a similar vein the OECD has stated that it is important to consider income, consumption and wealth together as part of a conceptual framework for measuring and managing economic performance. The OECD has adopted a broad view of wellbeing encompassing:

- material living conditions (or economic wellbeing), people's consumption possibilities and their command over resources;
- quality of life, non-monetary values that shape peoples' experience of life determine the opportunities they have and hold intrinsic value to an individual or community; and
- the long run sustainability of socio-economic and natural systems where people live, work and play.³⁸

Criticisms of narrowly focused measures of performance have gained traction in recent years and have prompted a number of countries and states around the world, including Canada, France, Australia and Bhutan, to adopt alternative, more broadly based measures of performance. Closer to home, Waikato Regional Council and Greater Wellington Regional Council have developed alternative measures of performance, building on the platform provided by the Genuine Progress Indicator. Gisborne District Council is also investigating the development of a broader evaluation framework to help guide its decision-making with the objective of delivering sustainable prosperity for the region.

3.3 Local solutions to local issues

The management of natural and physical resources is inherently complex and contextually sensitive. Decisions need to weigh local histories and aspirations, and place them in their regional and national context. Resource management decision-making processes need to give local people with local knowledge an adequate say in matters that affect them. Resource management systems also need to provide support to local communities if the issues they are dealing with are complex and have costs that fall locally and benefits that fall regionally or nationally.

Pushing decisions to lower tiers of government can empower local communities, make the most of local resources and knowledge, and help ensure that decisions are carried through to implementation. Importantly, devolution can help find new and innovative approaches to old problems³⁹ – in this regard it is notable that the United States Supreme Court described America's states as the 'laboratories of democracy'⁴⁰. Here in New Zealand, the New Zealand Initiative has proposed the establishment of Special Economic Zones as a means of tailoring policy reform to regional needs, encouraging regional economic development, and prototyping policy changes before scaling them up or rolling them out across the country.⁴¹

A key feature of a successful resource management system is its ability to reconcile the views and aspirations of different communities at local, regional and national scales.

Some decisions, however, need to be elevated to central government where doing so is in the regional or national interest. This may be where the nature or scale of an issue is beyond the capacity or capability of a local authority to address, or where the benefits of a decision fall locally but the costs fall regionally or nationally – or vice versa.

LGNZ thinks New Zealanders want a resource management system that allows communities to participate in developing locally-tailored frameworks – these would determine the level where decisions are made and what processes are used for reconciling different views and aspirations – but that at the same time avoids unproductive litigation on technical matters and prevents councils from having to 're-invent the wheel' to deal with common issues.

³⁷ Stiglitz, J.E., Sen, A., & Fitoussi, J.-P. (2009) Report by the Commission on the Measurement of Economic and Social Progress. Paris: The Commission on the Measurement of Economic Performance and Social Progress.

³⁸ OECD (2010c) "A Framework to Measure the Progress of Societies". Working Paper No. 34. STD/DOC(2010)5.

³⁹ Productivity Commission, More effective social services.

⁴⁰ New State Ice Co. v Liebmann: "a state may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country."

⁴¹ Crampton, E., Acharya, K., (2015) In the Zone: creating a toolbox for regional prosperity. The New Zealand Initiative. Wellington <http://nzinitiative.org.nz/site/nzinitiative/files/In%20the%20Zone%20WEB.pdf>

4

Views on New Zealand's resource management system

Resource management planning and decision-making processes almost inevitably bring different objectives and world views into contact. Contrasting views on matters like who should enjoy access to freshwater, how a city should grow and how much the presence of endangered native wildlife should constrain private property rights mean there will be very different perspectives on any given resource management decision or outcome. Some feel the resource management system is operating effectively and some feel it is broken – the task of evaluating the system’s performance is complex and fraught.

4.1 A high-level overview of system performance

Have changes to the resource management system been robustly justified or accurately targeted?

Although the Acts that make up the core of the resource management system have been amended frequently and repeatedly over the past decades, sometimes substantial reforms have been advanced without the benefit of robust and reliable information on system performance. It is arguable that this has led to a series of changes that address symptoms rather than root causes or part of the problem, but not the whole. Similarly, changes have potentially addressed one issue, but created another or shifted a problem from one part of the system to another.

For instance, the spotlight has fallen recently on the performance of councils as agents with responsibilities for implementing the RMA. In the absence of any substantive performance measures, compliance with statutory processing times seems to have become a proxy for the performance of councils in implementing their responsibilities. Steps have been taken to tighten procedural requirements and incentivise speedy processing, and councils have significantly improved rates of compliance with processing timeframes. But while efficient processing is important, it is possible to place too much weight on processing speed and not enough on the quality of outcomes. Focusing so intently on meeting processing timeframes may have encouraged (or reinforced) a culture of procedural compliance and discouraged proactive engagement and the adoption of a flexible client-centred or outcome-centred culture in councils. Emphasising data on compliance with processing timeframes may have also concealed the reasons why councils were slow to process applications, which could include them taking time to encourage an applicant to lodge consents that are more consistent with plans or likely to promote high quality or sustainable outcomes.

A lack of quality performance data may also have led to:

- Amendments to statute based on anecdote or individual headline-grabbing cases, rather than being based on clearly identified and evidentially justified failures of the resource management system or its constituent Acts. Some changes to the RMA, for instance, have been criticised for being “overly reactionary”, “a solution looking for a problem” or politically motivated.
- A tendency to try to solve problems through changes to the resource management system, when the root cause of the problem lies elsewhere. For instance, driving the release of land for urban land through the Special Housing Accords hasn’t and can’t address other issues that affect the supply and cost of housing, such as the nature of the supply chain, capacity and capability of the building sector, and the marketing strategies of real estate agencies.

There are competing views on the state of New Zealand’s environment but some key trends appear to be negative

Prior to 2015, two ‘State of the Environment’ reports had been produced in New Zealand – one in 1997 and one in 2007. Both were prepared in some haste with the authors forced to rely on whatever data was available. Perhaps unsurprisingly, these reports have been criticised for having unclear purposes, and for generating information that was not useful, trusted or independent, and plagued by significant gaps. The development of National Environmental Monitoring Standards, and the introduction of the Environmental Report Act 2015 (and with it the commencement of an Environmental Report Series) is a positive step towards filling the data gap. So too are changes to the freshwater management regime that specify catchment ‘accounting’, monitoring and reporting requirements, as well as annual progress reports towards meeting community-agreed objectives.

The first 'state of the environment' report in the Environmental Report Series – Environment Aotearoa 2015 – itself, however, notes there continues to be deficiencies in New Zealand's environmental reporting due to:

- a need for inclusion of greater Māori perspectives;
- little information on environmental pressures and impacts;
- need for more diverse data across environmental domains; and
- limited funding to target specific data improvement projects.

Environment Aotearoa⁴² evaluates New Zealand's environment at a general level rather than the performance of the resource management system. It does, however, highlight some important environmental issues:

- Air quality is improving – driven mainly by the shift to cleaner home heating, improvements in fuel and stricter emission limits on new vehicles.
- Metrics show that some aspects of freshwater quality are declining, especially in intensively farmed lowland and urban areas, while others have improved.
- The extent of agricultural land in New Zealand has not changed substantially since 1996 but its use has become much more intensive, leading to soil degradation,⁴³ increased sediment and nutrient leaching/runoff,⁴⁴ and contributing to substantially higher greenhouse gas emissions.⁴⁵

- Many indigenous species face extinction, including 81 per cent of resident bird species, 72 per cent of freshwater fish, 88 per cent of reptile, 100 per cent of frog, and 27 per cent of our resident marine mammal species. The risk of extinction is increasing for some species – since 2005, the threat increased for 7 per cent of our threatened freshwater, land, and marine species.
- Only 10 per cent of New Zealand's naturally occurring wetlands remain and other ecosystems, such as active sand dunes, are also substantially reduced.

We have an enviable stock of renewable natural resources – have we translated this into strong economic growth?

Although generally thought of as an environmentally-focused statute, the way we manage resources in New Zealand is strongly tied to our economic performance – the RMA has an explicit focus on providing for social, economic and cultural wellbeing and until recently the LGA had a similarly broad purpose.

Traditional metrics of economic performance per capita tell us our economy is growing but only fast enough to maintain a position at the top of the bottom half of OECD performance. Despite a recent lift in performance, due mostly to strong Chinese demand for dairy products and the rebuild of Christchurch, in relative terms New Zealand's economy has not advanced over the past two decades and has slipped when compared with Australia's.

New Zealand also has high levels of income inequality – the gap in incomes between the wealthiest and poorest households increased substantially between 1988 and 2014. Only two other OECD nations had their income inequality gap grow by more during this period and the OECD estimates this level of income inequality means New Zealand's economy grew 15 per cent less than would otherwise have been expected.⁴⁶

⁴² Ministry for the Environment & Statistics New Zealand (2015). *New Zealand's Environmental Reporting Series: Environment Aotearoa 2015*.

⁴³ Soil compaction and erosion are significant and widespread issues across New Zealand's agriculture land.

⁴⁴ Between 1989 and 2013, total nitrogen levels in rivers increased 12 per cent, with 60 per cent of monitored sites showing statistically significant increases. About 49 per cent of monitored river sites have enough nitrogen to trigger nuisance periphyton growth, and about 32 per cent of monitored sites have enough phosphorus to trigger periphyton growth.

⁴⁵ New Zealand's greenhouse gas emissions increased 42 per cent between 1990 and 2013.

⁴⁶ <http://www.stuff.co.nz/national/politics/68600911/Income-inequality-How-NZ-is-one-of-the-worst-in-the-world>

4.2 Commonly held views on the resource management system

New Zealand's resource management system is frequently criticised for its failure to arrest or turn around worrying downward trends in environmental health and sustainability. At the same time it is frequently criticised for failing to facilitate the productive use and development of natural resources. Is this a sign that the system is striking a balance between two opposing world views, or is it evidence that we are getting the worst of both worlds?

Because different values held by individuals and community groups are brought to bear in decisions on the use, development and protection of natural and physical resources, resource management decisions can be a 'lightening rod' for debate and conflict between competing world views. This means there can be as many opinions about the quality of a resource management decision as there are participants in a process. Although this complicates the task of evaluating the resource management system, there are some commonly expressed views on its performance:

- The time and cost of processes are excessive for all parties involved. The Auckland Regional Coastal Plan, for instance, took 12 years to develop and was finalised just in time to be superseded by the Auckland Unitary Plan. After purchasing a site, it took Foodstuffs 20 years to gain the necessary approvals to develop a planned Pak'n Save at Wairau Park in Auckland.⁴⁷ Practice in recent years has evolved following experiences like this and applicants and councils are beginning to take a more collaborative approach, where more emphasis is placed on "front-end" engagement with communities and regulators. Legislative changes to prevent frivolous and vexatious litigation, and anti-competitive behaviour have begun to work, as have changes to Environment Court practices that require expert conferencing and prioritise pre-hearing mediation. Greater emphasis on collaboration and communication has helped some complex projects move rapidly through resource management approval processes – Mighty River Power's application to develop the Nga Awa Purua power station attracted only a handful of submissions to the council hearing, which lasted less than a day, and attracted no appeals to the Environment Court.
- Consenting processes under the RMA are overly complex and litigious, which encourages regulatory authorities to avoid risk and focus on procedural compliance rather than the quality of an outcome – this often prevents officers from using discretion, and burdens small projects with disproportionate information and procedural requirements. On the other hand, there have been significant improvements in councils' processes in recent years. Decisions on minor matters are increasingly timely, while the use of pre-lodgement meetings is proving valuable in reducing the number of disputes between local authorities and applicants the system is required to mediate. Biennial reporting on RMA implementation⁴⁸ by councils also shows several positive trends. Resource consents are increasingly being processed on a non-notified basis with a marked trend toward less notification by regional and unitary authorities (7 per cent and 5 per cent notification rates respectively in 2012/13) and the continuation of low levels of notification of consents by Territorial Authorities (3 per cent in 2013). In 2012/13 fewer than 1 per cent of consents were subject to litigation and statutory timeframes were met in 97 per cent of all consent types. While these are encouraging trends, this information does not show us how many applications are "left on the drawing board", or how many applications are designed to ensure non-notification because the consenting regime is perceived to be too hostile – in both instances potentially "editing out" innovative proposals.
- It takes too long to make plans and decisions, which reduces flexibility, makes it harder to promote large-scale and ambitious projects, and makes our system slow to respond to emerging trends, new evidence, unintended consequences or new opportunities. On average, it has taken 6.3 years after a district plan has been notified for it to become operative, 6.1 years for a regional plan, 4.4 years for a regional policy statement and 2 years for a plan change.⁴⁹
- The inability of the system to respond quickly to emerging trends and new technology is partly a matter of practice. A draft district plan for Kamo was prepared in real time with the local community over five days of intensive community engagement in a process named the Kamo Place Race. While the need to subsequently follow the procedural requirements of the RMA meant that it was just over 12

⁴⁷ <http://www.nbr.co.nz/article/appeal-deadline-passes-pak-n-save-wairau-all-go-85446>

⁴⁸ Ministry for the Environment (2014), Resource Management Act Survey of Local Authorities 2012/2013

⁴⁹ Data provided by LGNZ

months before for the resulting plan change to become operative, it does demonstrate that at least to some extent, the limited flexibility and responsiveness in the RMA may be overcome by local authorities willing to loosen the reins and innovate outside of the formal system.

- The complexity of the RMA and the cost of engaging experts to buttress one's position makes it more difficult for individuals to compete with corporate entities, and is a barrier to community participation – individual community members regularly represent themselves at hearings or build a case off the information and evidence provided by councils. On the other hand, vested interests – including individual community members with NIMBY⁵⁰ and BANANA⁵¹ attitudes – have disproportionate power and too much scope to limit competition or thwart rezoning and development that would be in the wider public interest.
- The design of the resource management system allows, and sometimes encourages, conflict between government agencies and different tiers of government (central, regional and local). This can create costly and divisive debate and generate adversarial relationships between parties that would ideally be working collaboratively to promote common outcomes and deliver benefit for the New Zealand community as a whole.
- There is a strong and persistent view that the resource management system has, at its core, a focus on environmental protection. This complicates the process of balancing private and public interests and reconciling the relationship between private property rights and the public good. The relationship between (and different roles of) New Zealand's resource management and conservation systems is unclear and poorly understood.
- The broad ability to have a say in proposals that are of wide community interest applies necessary scrutiny and improves the quality of decision making. While narrowing the field of potential opponents may further speed the process and reduce the avenues for NIMBY or BANANA sentiments, the rejection of the New Zealand Transport Agency's Basin Reserve Flyover proposal by both a board of inquiry and the High Court, and the potential chilling effect on similar future proposals is considered by many to be a positive outcome. For better or worse, the outcome of this case may well have

been different had the field of potential opponents been narrowed.

- Plans and decision-making under the RMA, LTMA and LGA affect each other, all have different purposes, processes and criteria, and operate over different timeframes. This results in duplication and lack of clarity, demands considerable time and resourcing from all parties involved, and potentially frustrates efforts to promote innovative projects.⁵²
- There is geographic, temporal and financial misalignment between national, regional and local interests in relation to urban growth. Councils and government have struggled to agree where and when growth should occur in Auckland, for instance, and central government providers of physical and social infrastructure (including roads and schools) have struggled to align the timing of their investment and development plans with those of the council. In addition, too many of the costs of planning for, accommodating and delivering growth fall on local councils and communities, who can only recuperate these costs over the longer term through rates and service fees, which only exacerbates the difficulty of aligning the timing and location of investment.
- Central government has been slow to provide national policy direction and national environmental standards and, without this guidance, regional councils have had to develop their own approaches to managing complex and common issues. This has led to inefficiency and increased cost for ratepayers, and in some instances councils have struggled to deliver robust management frameworks in a timely manner. It has proven difficult, for instance, for some councils to set effective limits to protect and preserve the functioning of natural ecosystems. This is particularly the case in relation to the management of non-point source contaminants which has meant that the progressive intensification of agricultural activity and urban expansion has had a cumulative negative effect on many of New Zealand's freshwater ecosystems. More and better guidance from central government is required to support the effective implementation of environmental and planning regulations – a suite of well-integrated national policy statements and national environmental standards is well overdue.

⁵⁰ Not in my back yard

⁵¹ Build absolutely nothing anywhere near anything

⁵² MfE, building-competitive-cities-technical-working-paper pp 8-9

- Planning in urban areas appears to send perverse price signals regarding the best use of land, encouraging land banking on the one hand and the subdivision and urban development of productive (and irreplaceable) soils on the other.⁵³
- The resource management system doesn't have access to all the levers necessary to gain sustainable outcomes. For instance, copper from brake pads is a major contaminant in marine environments adjacent to urban roading networks. Councils and the Transport Agency don't have the power to control the design of brake pads or restrict the importation of copper pads. Similarly, health legislation requires water suppliers to meet 1 in 200 year security of supply requirements. This is outside the resource management system but is a significant driver of network design and water allocation decisions.
- Decisions made under the resource management system by councils, the Environment Court and Boards of Inquiry are difficult to predict, and can be inconsistent – as can be the quality of expert advice provided to decision-making bodies.
- Resource management is increasingly a multi-disciplinary endeavour and the number of disciplines required to inform quality decisions grows with the increasing specialisation of professions. While the size and location of some local councils presents challenges in attracting the right skillsets, in other jurisdictions the volume-driven demand for timeliness and consistency has increased reliance on procedures and check lists. In both cases the resource management practitioner is called on to draw the shortest line between the beginning and end of processes that are a platform for competing interests, budgetary constraints and statutory timeframes rather than focusing on the outcomes generated. To both of these ends the quality of decision making suffers, either by the inability to attract or retain the necessary skills, or by raising the importance of administrative, bureaucratic and political faculties above those needed for challenging professional judgements by qualified and experienced professionals.

The lack of agreed performance metrics and sporadic reporting on environmental performance makes it hard to take a clear position on these questions. The answer may become clearer as better information emerges in coming years, but in the meantime we can say that many important metrics of freshwater quality and

biodiversity are trending downwards, we are losing productive soil through compaction, sedimentation and urbanisation at an alarming rate, and there is little evidence that we have been able to translate New Zealand's stock of renewable natural resources into improved economic performance relative to other countries in the OECD.

We can also say that processes under the resource management system are time consuming, complex and often not proportional to the risk or impact of a proposal. There is also evident misalignment between the planning statutes under which decisions are made on the use and development of natural and physical resources. These factors are compounded by persistent issues around information, capacity and capability in councils and central government agencies. What is more difficult to say is whether these issues are due to the design of the resource management system, or whether they are due more to the way the Acts that make up the system are implemented – there are many instances of good and efficient outcomes, and practice is clearly evolving to be more evidence-based, collaborative and aligned with strategic objectives.

It is perhaps worthwhile noting that the Building Act, introduced about the same time as the RMA and with a similar focus on outcomes rather than prescription, has been amended over time to revert to a more prescriptive framework. Perhaps it is harder to successfully implement an enabling statute than the architects of the system in the late 1980s anticipated. Is it only now – with the benefit of two decades of practice and steps to improve the quality of monitoring data and national direction – that we have begun to see the resource management system working effectively?

< Evaluating the performance of the resource management system is a difficult and potentially divisive task – it is hard to define problems and perhaps a more fruitful approach would be to start by asking how we can do a better job? >

⁵³ Productivity Commission report, Using land for housing,

5

Evolution in New Zealand's resource management system

The complexity and importance of effective resource management governance and decision-making has been evident for many decades, as have global trends in environmental degradation and ecosystem disruption. There has been a sustained effort to ensure New Zealand's resource management framework remains fit for purpose – the almost annual changes to the RMA have become more ambitious and a series of ad hoc changes to governance and decision-making arrangements in recent years is evidence of a real willingness to experiment with key features of the system.

5.1 A drive to develop responsibly

Over the past decade there has been a global paradigm shift that has increased the importance of 'green growth' as a driver of policy and investment. During the same period in New Zealand there has been a marked drive from the government to increase the value gained from responsibly using New Zealand's natural resources. This has manifested as:

- A willingness to investigate the mineral resources located within conservation lands.
- Efforts to facilitate exploration of the mineral (including oil and gas) reserves in our Exclusive Economic Zone (EEZ) – including by creating a more robust regulatory regime within which this can take place.
- Targets for strong growth in the primary sectors (including fisheries and aquaculture) supported by: (a) direct government investment in water storage and irrigation schemes, (b) government intervention to break the political deadlock hampering water planning in Canterbury, and (c) the introduction of water quality and quantity limits to increase the certainty within which investment and regulatory decisions are made.
- Providing national policy support for the development of renewable electricity generation.
- Investing in the development and implementation of a series of national environmental standards (eg air quality.)
- Establishing of a national consenting framework to speed the processing of applications for nationally significant infrastructure (ie irrigation dams).

- Introducing the requirement for decisions to give effect to government policy statements rather than simply to choose options that deliver the best benefit-cost ratio⁵⁴.
- Introducing of a carbon emissions trading scheme.

In parallel to this drive to create wealth by developing natural resources, New Zealand's 'limits to growth' have become apparent – especially where the Government's strategy for achieving growth raises the potential for conflict between economic growth objectives, water quality objectives, efforts to maintain or reduce carbon emissions and the objective of protecting New Zealand's coastal and marine environments. Key markets overseas are increasingly demanding greater environmental credentials and the New Zealand public has demanded higher environmental quality – the 'social contract' that gave farmers latitude to maximise their production in order to generate economic spillover benefits for New Zealand has been challenged, for instance, and is in a state of evolution.

5.2 A drive to consider the big picture and national interest

Resource management plans and decisions in New Zealand are increasingly being forced to consider the longer term, reflecting a wider range of perspectives and accounting for complex and dynamic interactions within and between systems (institutional, environmental, social and economic).

⁵⁴ Pickford, Michael "State Highway Investment in New Zealand: the decline and fall of economic efficiency." *Policy Quarterly* (2013): 28-35.

This is translating into heightened cost–benefit analysis requirements, an increasing reliance on empirical data and evidence-based policy, and a trend towards more prescriptive central government direction (including through national policy statements and national environmental standards), a tightening of monitoring and reporting requirements, and the publication of independent national environmental accounts.

Although welcomed by many, some worry about the loss of local discretion that occurs as central government tightens the resource management framework and provides more national direction. In relation to the latter point, there are real concerns at the proliferation of loosely integrated national standards and policies, which have the potential to increase the complexity of the system and add an additional burden for councils. Councils are now required to reconcile potentially competing national directives – such as those to increase housing supply and water quality – as well as the competing objectives of communities at multiple scales. There will inevitably be discussions about the scope of the new National Plan Template and defining the line between central government direction and local discretion.

5.3 A willingness to tailor governance and decision-making arrangements

Improving the coordination of central and local government decision-making is of particular interest in New Zealand. Central government appears to recognise that national interventions at the regional and local level can complement national scale decision-making, and create scope for more innovative, diverse and direct policy approaches. Examples include:

- The Housing Accords and Special Housing Areas Act 2013 (HASHA) was introduced “to enhance housing affordability by facilitating an increase in land and housing supply in certain regions or districts identified as having housing supply and affordability issues”⁵⁵. Under HASHA, agreements (Housing Accords) can be reached between a local authority and the government on how they will work together to address housing related issues. These agreements provide new administrative arrangements as well as special decision-making powers and streamlined pathways for the assessment and approval of new development proposals in Special Housing Areas. Although clearly designed for Auckland, many other local authorities

have accessed the streamlined processes accessible via the HASHA.

- A partnership has been formed between Tauranga City, Western Bay of Plenty District, the Bay of Plenty Regional Council, tangata whenua, central government (particularly the NZ Transport Agency), businesses, education groups, industry and the community to respond to the significant growth pressures in the region. Operating under the name of SmartGrowth, the local government members and the chair of the Combined Tangata Whenua Forum have signed a memorandum of agreement committing them to implementing SmartGrowth (which now includes a spatial plan) under the LGA and RMA.
- A Marine Spatial Plan is in development for the Hauraki Gulf, which also has adopted a multi-stakeholder approach to address competing uses and environmental pressures on the Gulf. The Project Board consists of senior representatives from within five of the Sea Change – Tai Timu Tai Pari partner organisations – Auckland Council, Waikato Regional Council, key government departments and the Hauraki Gulf Forum. Each organisation contributes people, time and budget to the programme. The Steering Group is made up of 50 per cent iwi representatives and 50 per cent council and government agencies. It provides leadership and will recommend to councils and other agencies how the plan can be put into practice. The planning ‘pen’ itself is held by a Stakeholder Working Group, which has input from more than 130 people from a range of groups, from industry bodies to conservationists.

Neither SmartGrowth nor Sea Change – Tai Timu Tai Pari are embedded in statute. They are in effect, voluntary coalitions of the willing. However, both have a degree of commitment from the agencies that have responsibility for implementing the outcomes of these process through funding or regulation. While Sea Change – Tai Timu Tai Pari is at an early stage and is yet to bear fruit it has raised the expectations of many that will be difficult to step away from. In the case of SmartGrowth the multi-stakeholder collaborative approach has provided some resilience to changes in political environment and key personnel and is assisting coordination on the ground between local, regional and national agencies and the private sector.

⁵⁵ Section 4, Housing Accord and Special Housing Areas Act 2013

Will voluntary arrangements be enough or sufficiently enduring?

The relevance of this question is demonstrated by the recent history of regional growth planning in Auckland. The 1999 Auckland Regional Growth Strategy was adopted by the regional, district and city councils of Auckland following three years of intensive negotiation and stakeholder engagement, with the councils committing to aligning policy and funding to deliver the strategy just as the SmartGrowth councils have done. While its introduction was hailed as the product of an inclusive process that provided a unifying vision and certainty to land owners and development interests, Auckland local government authorities were later associated with poor community engagement, a lack of collective sense of purpose and regular disputes over urban growth and the provision of infrastructure. These were amongst the reasons cited by the Royal Commission on Auckland Governance ten years later in their case for change that paved the way for formation of the super city.

New and locally specific governance arrangements and decision-making criteria have emerged where the existing system has struggled to deal with pressing issues

In recent years central government has chosen in several instances to create new processes for local decision-making. Both the Auckland Unitary Plan and Environment Canterbury's Regional Policy Statements and RMA plans are being developed on the basis of perceived need for a streamlined process for concluding plans under the RMA.

Auckland's Independent Hearings Panel, which is appointed by the Government, is hearing submissions on the Proposed Auckland Unitary Plan independently of the Auckland Council. The panel will make recommendations on the final form of the plan, which will take effect when accepted by the council. Submitters will have the right to appeal the merit of decisions to the Environment Court if the council opts for an alternative to the panel's recommendations, or if recommendations are beyond the scope set by the original proposed plan and submissions to it.

The powers granted to Environment Canterbury's Commissioners, who are appointed by Government, enable them (under the RMA) to oversee the preparation of proposed planning documents, hear submissions and make final decisions.

However, in doing so they must have particular regard to the locally and collaboratively developed Canterbury Water Management Strategy (CWMS) that predates the statutory management of Canterbury Regional Council. The CWMS as well as being developed collaboratively, puts in place a collaborative approach to setting water quality and quantity limits at a catchment level, and creates a coordinating strategic framework within which catchment based collaborative processes can take place. Like the Auckland Unitary Plan process, the ability to appeal the merit of decisions is restricted.

The rationale for introducing the alternative planning processes in Auckland and Canterbury is in part based on a sense of urgency to translate strategy into action: in Auckland's case the Auckland Plan, in Canterbury the CWMS. However, it is also predicated on significantly greater upfront community engagement, which appears to be reflected proportionately in the extent to which parties have the right to appeal the merit of council decisions – a step that has been taken to facilitate a speedy process and to incentivise the full and good-faith participation of stakeholders in planning processes.

On another tack, the Waikato River Authority provides a useful illustration of the relationship between Treaty settlement legislation, the emergence of co-management regimes and the resource management system. The Authority is made up of five Crown appointees, including the Chairperson of the Waikato Regional Council, a nominee of the councils of the Waikato region, and five iwi appointees. The Authority's key strategy document, The Waikato Vision and Strategy, forms part of the Waikato Regional Policy Statement and so must be given effect to in subordinate regional and district planning documents. The Authority can also appoint 50 per cent of the membership of commissioners on regional council committees considering river-related resource consents. As the Authority also administers a \$210 million clean-up fund for the river,⁵⁶ this provides a specific example of an arrangement that seeks to align strategy, planning and funding.

⁵⁶ <http://www.waikatoregion.govt.nz/Community/Your-community/iwi/Waikato-River-co-management/Role-in-co-management/>

Examples of tailoring the system to resolve local issues have generated some outcomes that should be read as notes of caution

While HASHA has streamlined development approvals in Auckland and given early access to the provisions of the Proposed Auckland Unitary Plan, there are concerns that pressure to achieve targets set under the Housing Accord is leading to the release of land for urban development and approval of development proposals well ahead of planned or intended extensions to infrastructure networks. This has the potential to increase the burden on rate payers to forward-fund infrastructure that may remain underutilised for some time to come.

While collaborative approaches to addressing resource management issues provide a more constructive alternative to an adversarial approach, they are not necessarily faster or cheaper. In fact, the opposite may well be true. A significant commitment of resources (time/money/expertise) is required from both the authorities charged with facilitating a collaborative process and from the communities who need to be involved if the processes are to be meaningful. As evidenced by experiences to date in processes for setting limits for freshwater quality and quantity, collaborative processes are also often more lengthy, even if they are as hoped, more enduring. Together the investment required to enable effective collaborative process is considerable. While there remains appetite, local authorities, their communities and tangata whenua are already showing signs of being stretched by today's experiments and there is a risk of the system becoming overloaded if the take-up of collaborative practices runs ahead of local authorities and their communities' capacity to implement them.

Finally, while local tailoring is proving useful, it is generally focused around the management of a single issue. Be that giving effect to a Treaty settlement, water quality or housing affordability. In elevating the resolution of one issue, it is difficult to ensure that other interests are not unduly compromised as some commentators and industry groups are suggesting is occurring. An issue that is already raising tensions between urban Auckland interests and those of the Waikato – the tendency appears to be to tailor the system to address issues in our big centres but what effect is that having on surrounding regions?

5.4 A slow move to valuing ecosystem services

There is increasing interest in valuing natural systems by estimating the benefits they provide. This is captured in the notion of ecosystem services. Ecosystem services are the benefits provided by ecosystems that contribute to making human life both possible and worth living. They can be grouped into four broad categories: provisioning, such as the production of food and water; regulating, such as the control of climate and disease; supporting, such as nutrient cycles and crop pollination; and cultural, such as spiritual and recreational benefits.

Integrating 'ecosystem services thinking' into management frameworks provides a platform for those services to be accounted for in the same terms as competing interests and so weighed more accurately, as well as exchanged and potentially traded. Some find this a difficult concept to accept for both ideological and practical reasons – should nature be valued in this way and is it even possible?

Valuing nature opens the door to environmental offsetting – the practice of making an environmental improvement that is at least equivalent to environmental damage being done elsewhere

While there is considerable complexity involved in ensuring that the improvements are real and that they are equivalent to what is being lost, environmental offsetting has gained international traction in public and private sectors. The international Business and Biodiversity Offsetting Program (BBOP) is a collaboration of financial institutions, government agencies, environmental non-government organisations and businesses with significant environmental footprints, such as mining interests. Together, the members are testing and developing best practice on biodiversity offsets and conservation banking worldwide.⁵⁷ Some national and state government agencies have also adopted offsetting as key components of their resource management systems. In particular, Australia's federal government uses environmental offsets within the framework provided by its 1999 Environmental Protection and Biodiversity Conservation Act, and the state governments of New South Wales and Victoria both have well developed offsetting systems.

⁵⁷ BBOP (2015), Business and Biodiversity Offsetting, Website: <http://bbop.forest-trends.org/>

New Zealand has been slow to formally adopt environmental offsetting, and where it has been practiced it has been relatively ad-hoc with variable results. While there remains a lack of formal government policy on offsetting, it is increasingly finding its way into regional and district plan and policy documents. In 2014 the Department of Conservation released a good practice guide for biodiversity offsetting. The lack of demand for offsetting in New Zealand is likely due to the general absence of strict environmental bottom lines, which means there is no requirement to net-out environmental effects – it was this requirement that gave rise to demand for environmental offsets overseas.

5.5 Increasing customer focus and use of collaborative processes

Traditional approaches to resource management problem solving, policy development and decision-making have also begun to come under pressure. New approaches to policy development and decision-making have begun to emerge – collaboration has become a powerful and viable alternative to lobbying and litigation as we shift away from being a country of developers to being a country that is trying to find a sustainable and balanced economy and environment. The drive for collaboration has been motivated by a range of different reasons, including the desire to:

- reinforce the role of communities – both directly and through their elected representatives – in decision-making on resource management strategies, plans and policies;
- retain the role of lawyers and the courts in ensuring that the law is both applied properly and that natural justice is safeguarded, while recognising that resource management decisions – especially on matters of policy – often require social and value judgements that may be better made by politically accountable bodies;
- reduce the cost and increase the predictability of decisions;
- ‘unwind’ the ‘win–lose’ nature of resource management in New Zealand and foster a focus on ‘win–win’ solutions;
- build a shared base of information upon which to make decisions;

- gain public buy-in and build commitment to implementing policy and decisions; and
- reduce the influence of local government officials and/or redefine their role as facilitators and catalysts rather than drivers of policy.

Some commentators suggest the ‘rise of collaborative approaches’ we are currently witnessing is a result of the formal system of democracy becoming “increasing ineffective in accomplishing the ideas of democratic politics.”⁵⁸ Accordingly the focus is turning to questions of institutional design and decision-making processes.

A number of factors point to a system in flux, such as the Land and Water Forum’s recommended changes to resource management governance and decision-making, the experiments of several regional councils in collaboration, an increasing central government appetite for national direction, and the strong resistance of some parties to limit access to merit appeal rights. We have arguably begun a process of considering whether the design of our resource management institutions and governance processes are fit for purpose when it comes to resource management decision-making.

⁵⁸ Watson, V. (2014) Co-production and collaboration in planning – The difference, *Planning Theory and Practice*, Vol. 12:1, pp 62-76.

5.6 Recognition of the rights of the environment

A still uncommon but emerging international movement⁵⁹ has seen the granting of rights to the environment itself, rather than to the human users or managers of it. The signing in 2014 of Ruruku Whakatupua, the Whanganui River Deed of Settlement establishes the Whanganui River as a legal being with rights, powers, duties and liabilities.⁶⁰ While all parties exercising functions, duties or powers under the broad suite of resource management and related legislation must recognise and provide for the status of Te Awa Tupua⁶¹, the effect and effectiveness of this framework remain somewhat uncertain.

While a number of Iwi/hapu, look to this model as one that closely aligns with their world view, it remains unique in New Zealand. More recent Treaty settlements that have involved interests in the management of waterbodies continue to adopt and extend the more common co-management approach involving the establishment of new entities with equal Mana Whenua and Crown (including local government) representation, and with more direct links to the functions of local authorities. This reflects the international experience where the movement to grant rights to the environment is considered interesting and an approach with promise, but still so far outside of existing management paradigms that it is perhaps risky and to be approached with caution – for this reason these approaches do not appear to be gaining momentum too rapidly.

< If we extend the boundaries of ‘the system’ to include aspects enabled through government the resource management system quite clearly has the scope to enable tailored responses to local issues. Will these localised responses be enough to address the issues that prompted them? Will they create new issues or merely shift the problem? In many instances it is too soon to tell. If we think these localised responses are successful, however, should we continue to rely on *ad hoc* changes to the law to enable them, or should we view these responses as prototypes or signposts for reform? >

⁵⁹ For instance, in Bolivia the 2010 Law of the Rights of Mother Earth (Ley Corta de Derechos de la Madre Tierra) “seeks to recognize the rights of Mother Earth, as well as the obligations and duties of the Plurinational State and society to guarantee respect for these rights”. Those rights are prescribed in the statute to include the right to life, to live free of contamination and to restoration, amongst others.

⁶⁰ Ruruku Whakatupua – Te Mana o Te Awa Tupua (Signed, 5 August 2014) contains the agreed terms of a new legal framework for Te Awa Tupua which upholds the mana of the Whanganui River and recognises the intrinsic ties which bind the Whanganui River to the people and the people to the Whanganui River.

⁶¹ Te Awa Tupua is the legal entity that is the Whanganui River.

6

**What would a fit
for purpose
resource
management
system look like?**

Is the path to a fit-for-purpose resource management system one of evolution or revolution – should we aim to extend and improve the current system, or has the time come for fundamental reform?

LGNZ believes there to be a broad consensus that inaction is not an option and change is necessary. While the degree and pace of change may remain a point of contention there are common themes from across the spectrum of interests that provide a compass-bearing for the direction of travel and should form part of any future system regardless:

- The system needs to be capable of operating successfully in a context that is dynamic and different from the one in which the present system was designed – it needs to be flexible and adaptive.
- Any changes need to capitalise on the trend towards increasingly participatory process. These processes rely on the availability of quality data and the ability to translate and communicate it to lay audiences. They move the role of regulators from one of controller, to one of trusted advisor, interpreter and facilitator.
- The system has to be capable of facilitating the achievement of particular outcomes, not just the avoidance, remediation or mitigation of adverse effects.
- The capacity and capability of local authorities, the courts, central government agencies, sector groups and NGOs needs to be developed to match the current and future needs and demands of the system. To that end, any changes will need to be advanced hand-in-hand with measures to guide implementation, and to ensure that suitable capacity and capabilities are available where and when needed.
- If it is to address current shortcomings, the resource management system has to be more than merely a platform for resolving disputes between competing interests, or a tool for forcing externalities to be considered in decisions on resource use and development. It must be capable of aligning the efforts of communities, government and business towards achieving outcomes that advance common interests.
- The lack of alignment between core components of the resource management systems needs to be resolved to reduce duplication of process and to assist the alignment of strategy, planning and funding – particularly in urban areas experiencing growth pressure.

How much change is required and how rapidly should changes be progressed?

A number of options for reform have been raised by different players in the resource management system in recent years. These have ranged from: a continuation of gradual evolution punctuated periodically by more substantive issue- or location-specific reforms, through to fundamental reforms the likes of which we have not seen since the reforms of the mid-1980s.

While we think there is consensus that inaction is not an option and that change is necessary – to a greater or lesser degree – we need to progress with caution and avoid lurching to an idealised alternative. Reforms that substantively change governance and institutional arrangements can have significant transactional costs and can create substantial uncertainty for long periods of time. We must, on the other hand, avoid moving too slowly and losing opportunities to address today's acute issues.

6.1 A stepped programme of reform – from evolution to revolution

LGNZ favours a progressive or 'stepped' programme of change. One that starts with and builds from the current programme of change, and that increases the scope and degree of change only once the impact of amendments have been evaluated and understood. For this reason, LGNZ recommends that any reform programme should be underpinned by a transparent programme of evaluation, monitoring and review. This programme should be designed to reveal the effectiveness of changes in achieving desired outcomes in a timely and transparent way, and to underpin good quality decisions about the rate and scope of possible additional reforms.

Step 1: Continued improvement of the system

The current program of reforms is encouraging and moving, we think, in a positive direction. The Resource Legislation Amendment Bill gives formal recognition to collaborative processes for decision making and a wider suite of national policy direction accompanied by improved implementation guidance and interventions to ensure that repetitive debate on technical matters is reduced – possibly through further national standards and the introduction of a national planning template.

The Bill provides for bespoke interventions to respond to particular local demands. In addition, we may see additional accords under HASHA between central government and local authorities, the appointment of statutory managers with additional powers, an increased use of independent hearing panels and advisory panels, and the creation of co-management entities comprising representatives of the Crown and/or local authorities and mana whenua.

LGNZ supports this programme of continual improvement and bespoke interventions, and considers useful extensions to this program to include:

1. Providing more and clearer national direction in the form of national bottom lines across a range of environmental domains that are able to be targeted regionally (rather than nationally) or focused on ecosystem typologies – pure national bottom lines that apply everywhere are too blunt.
2. Increasing the weight or regard that is to be given to the achievement of positive outcomes in planning and decision-making.
3. Increasing the role of alternative dispute resolution approaches (ie mediation) and pre-hearing or pre-notification collaboration to reconcile the interests of different public agencies and tiers of government.
4. Further encouraging parties – including the courts and Boards of Inquiry – to jointly commission expert advice and technical input (ie modelling).
5. Gearing incentives to drive effective collaboration – eg as the Resource Legislation Amendment Bill provides for, encouraging councils to adopt collaborative processes and encouraging stakeholders to collaborate in good faith by limiting the ability of parties to appeal the merit of council decisions that give effect to the consensus recommendations of a collaborative group.
6. Allowing smaller councils to escalate difficult resource management issues that are beyond their capacity to address robustly or rapidly to a Crown-agent or agency.
7. Initiating an active program – led by central government – to monitor, harvest and spread lessons emerging from ‘prototype’ frameworks around the country for dealing with difficult resource management issues (eg in Auckland, Waikato and Canterbury for dealing with growth management, co-governance and diffuse contaminant management respectively).
8. Introducing a framework that enables environmental offsetting to achieve no net loss of value, where there are no viable alternatives and subject to the ability to demonstrate additionality and equivalence. This may go some way to compensating for adverse environmental effects that are otherwise ‘balanced out’ against positive, social or economic effects.
9. Allowing specified provisions in resource management plans to be quickly amended in response to certain pre-determined triggers. This may include for example: triggers for the release of development capacity through up-zoning of certain land once occupancy thresholds are reached; or reverting to input controls for nutrient management in agriculture if output controls fail to protect environmental bottom lines.
10. Providing for the use of negative discount rates when evaluating the impact of development proposals on natural ecosystems that are rare or irreplaceable, or deliver significant ecosystem services – thereby increasing the regard that must be given to their value in the medium and long term.

Step 2: Over-writing the core statutes within the resource management system

The changes outlined above may not be enough, however, to achieve the outcomes New Zealanders are looking for. Within a complex and dynamic system the risks of unintended consequences from issue-specific interventions are significant. These risks grow with the scale of issues our resource management system is charged with resolving. Continued tinkering implies the continued ‘parallel-evolution’ of the core statutes in the management system, potentially hindering efforts to achieve alignment on the ground and possibly making it harder to share the benefits of innovative location- and issue-specific interventions that prove successful.

LGNZ believes that following on from the programme of continual improvement described above, the RMA, LTMA and LGA should be “over-written” to improve their clarity, reduce their complexity and enhance their connectivity. A process of over-writing would provide an opportunity to:

- Re-craft provisions that are difficult or unwieldy by picking-up lessons that have been gained through practice;
- Harmonise processes and timeframes across aspects of the system (e.g. enabling the use of consultation under one statute to support decisions under another);
- Improve alignment between planning, funding and delivery decisions and tools; and
- Embed the lessons that have been gained from successful “localised experiments” into the resource management system.

The “over-write” should be accompanied by either:

- A suite of new provisions for dealing with metropolitan growth management issues – these could include provisions to ensure processes for dealing with small proposals that have little risk of material effect (i.e. house extensions) are proportionate, and provisions that coordinate land use and infrastructure planning and funding; or

- Greater ability to craft bespoke resource management arrangements at a local or regional level to deal with specific issues. These arrangements could enable changes to decision-making and governance arrangements within agreed parameters, and would have a sunset clause after which the expectation would be that arrangements would revert to normal (but this decision would follow a review and there would be an option to extend or embed the changed arrangements if they proved desirable). Similar ideas have been promoted recently by LGNZ under our funding review⁶² as “special zones” for growth, and by the New Zealand Initiative⁶³ under the umbrella concept of “special economic zones”. These concepts add to the discussion considerations of local variation in government policy on finance, migration, and foreign investment.

Decisions on which of these two approaches should be advanced at the same time as the “over-write” should be made transparently and draw on findings from the evaluation, monitoring and review programme established at the outset of the reform programme. That said, LGNZ believes there is significant merit in the concept of an “overwrite” and that this should be progressed as soon as possible following completion of the first step of reforms, and completed within three years of its initiation.

Step 3: Moving beyond evolution

In our view, although they have merit, there may be underlying issues that the measures in steps 1 and 2 are unable to address. We therefore support recent calls for a multi-party, independently mediated process for considering the need for and nature of more fundamental reforms. Any move towards more fundamental reforms is likely to imply changes to governance and institutional arrangements that could cause substantial disruption, uncertainty and cost. The more fundamental the reform, the more likely it is to have quasi-constitutional implications. This is because resource management reform has the potential to change the relationships between central government, local authorities and tangata whenua, as well as recalibrate the roles of our democratic and judicial institutions in decision making and oversight. Changes to the resource management system could also affect the nature of individuals’ rights and interests in resources in ways that are not yet clear. Accordingly, a multi-party and collaborative process,

⁶² LGNZ 2015, Local Government Funding Review 10 Point plan: incentivising economic growth and strong local communities.

⁶³ The New Zealand Initiative 2015, In the zone: Creating a toolbox for regional prosperity

supported by central government, is a necessary precursor to any decisions on fundamental reform that could have implications for governance and institutional arrangements.

The consideration of reform options that emerge from such a process would need to be underpinned by a shared understanding of the performance of the current resource management system, an agreed objective or vision for the future, and a shared platform of information upon which to base analysis.

Without prejudice to the development of alternative options as the earlier stages of resource management reform proceed, and noting that a full range of options should be evaluated if more fundamental reforms are contemplated, we suggest the following options should be amongst those considered:

- **Blending the land use, infrastructure planning and funding components of the LGA, RMA and LTMA into a single Planning Act and creating a separate Environment Act.**

While this could provide greater alignment between central and local investment decisions (including the purpose, timing and location of investment) and remove duplication, the radical changes to governance arrangements implied by such an approach could be expected to cause extreme upheaval that will take a long time, possibly decades, to settle.

- **Retaining the RMA, LGA and LTMA but installing overarching spatial planning legislation that sets the regional strategic direction and the high-level parameters within which the “implementation” acts of the LGA, RMA and LTMA are to operate.**

Driven by local authorities, a number of spatial plans have

already been developed with this intent. These ‘prototypes’ would provide rich pickings for learnings that could inform the design of a spatial planning framework designed to drive coordination across the RMA, LTMA and LGA under a single regional vision. To avoid adding complexity to clarify the hierarchy of resource management documents and decision-making institutions, such a plan could incorporate and replace the requirements of regional policy statements, and could be led jointly by regional councils and territorial authorities with input and support from central government agencies.

- **Changing financial signals to promote sustainable decision-making that integrates economic and environmental outcomes.**

Achieving these outcomes may require significant expenditure in the short-term to develop long-lived infrastructure, investment to enhance stocks of natural capital, or decisions to forego the short-term exploitation of natural resources to ensure a sustained flow of benefits. Options could range from the application of resource rents and changes to focus the tax regime on resource-use rather than income, to the application of negative discount rates when undertaking benefit cost analyses of proposals that may affect irreplaceable, rare or strategically placed natural capital, or to appropriately reflect the future value of long-lived infrastructure. Proposals to change financial incentives require specialist input and careful consideration. Their potential impact on existing and future rights means they can be controversial, but their potential as a tool for driving sustainable resource management decision making means, we believe, these options should be considered alongside the other options noted above.

7

Next steps in LGNZ's 'blue skies' programme

7.1 We want to hear your views

Before reaching a position on the nature, timing and degree of reform required to ensure our resource management system is fit for purpose, LGNZ is interested to hear your views on the matters and options raised in this thinkpiece.

We note that the Government's recently released Resource Legislation Amendment Bill has promoted some changes that align with options discussed in this thinkpiece. The proposal to introduce a national plan template, increase ministerial powers to intervene in local processes and establish new collaborative and 'fast-track' plan-making processes, in particular, respond to some of the matters we discuss in this paper. And the Productivity Commission's recently announced inquiry into the urban planning system has a wide terms of reference.

In addition to hearing your general views, and without wanting to limit the scope of your feedback, we are particularly keen to hear your perspectives on:

- Our decision to focus attention on the three core 'Planning Acts' at the core of the resource management system – the RMA, LGA and LTMA.
- Our assertion that the resource management system is a critical part of New Zealand's competitive advantage in an increasingly resource constrained world, and belief that if we get the settings of the resource management system right we could position New Zealanders to enjoy sustained high levels of prosperity and wellbeing.
- Whether we have adequately described the dynamic and increasingly complex context the resource management system needs to be designed to operate within.

- Our characterisation of the common goal we believe New Zealanders have with respect to resource management.
- Whether we have adequately captured the key perspectives and views on the performance of the resource management system in section 4 of this thinkpiece.
- Our characterisation of the 'evolution' evident in the resource management system as described in section 5 of this thinkpiece.
- The scope of options and 'stepped approach' we have suggested.
- How the government's resource management reform programme and, specifically, the proposals included in the Resource Legislation Amendment Bill (2015) would align with our proposals.

Different people and sectors will have a different view on the matters discussed in this thinkpiece and LGNZ welcomes recent indications that central government supports the concept of a multi-stakeholder collaborative process to move discussion forward on the resource management system.

We intend to take your views into account as we finalise our thoughts on the resource management system and as we engage with other stakeholders, the Ministry for the Environment and the Productivity Commission on this topic. We encourage you to send your feedback to us at:

clare.wooding@lgnz.co.nz; or
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Level 1, 117 Lambton Quay
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Open Meeting

To	Strategy & Finance Committee
From	V Ramduny Acting General Manager Strategy & Support
Date	4 February 2016
Prepared By	D Dalbeth Business Analyst
Chief Executive Approved	Y
DWS Document Set #	1144790
Report Title	2015-2016 Half-Year Non-Financial Report

1. Executive Summary

The purpose of this report is to provide the Committee with the second quarter non-financial results (year to date). This includes the 2015/2016 Long Term Plan (LTP) Key Performance Indicators (KPIs) and the Resident Satisfaction survey.

The results from each quarterly report will be used to inform the annual report at year end.

2. Recommendation

THAT the report of the Acting General Manager Strategy & Support – 2015-2016 Half Year Non-Financial Report – be received.

3. LTP KPIs

	2014/2015	2015/2016 YTD - 1st quarter	2015/2016 YTD - 2nd quarter
Achieved	27 (41%)	42 (68%)	52 (68%)
On track	7 (11%)	6 (10%)	7 (9%)
Not achieved	32 (48%)	14 (22%)	18 (23%)
TOTAL MEASURES	66	62	77

These figures show the year to date status, so the second quarter results include both quarters. Seventy seven KPIs are being reported in the second quarter of this year. There are a total of 98 KPIs to be reported in the Annual Plan, the remaining 21 KPIs can only be measured annually.

Attached to this report is Appendix 1 2015-16 2nd quarter LTP KPI report.

4. Residents Satisfaction Survey

The second quarter results are from a random sample of 100 residents surveyed by the National Research Bureau (NRB).

It is important to note that while the KPIs show the status of the year to date, the residents satisfaction survey results are from the second quarter only.

Attached to this report is Appendix 2 Survey Trend Graphs 2nd quarter, Appendix 3 NRB 2nd Quarter Summary and Appendix 4 NRB Comments from Outcomes 2nd quarter.

Some of the key trend observations from the quarterly results include:

Increasing Satisfaction Levels

- Public libraries - Satisfaction with public libraries increased from 97% in the first quarter to 98% in the 2nd quarter. 2015's figure was 95%.
- Recycling – Satisfaction with Recycling Services increased from 82% in the 1st quarter to 88% in the 2nd quarter. This is tracking similar to last year's figure of 84%.
- Rubbish – Satisfaction with Rubbish collection improved over the last 5 years to 90% last year. This year's results have continued the trend with 94 % in the 1st quarter and 92% in the 2nd quarter.
- Animal Control – Stock and Dog Control satisfaction dropped from 77% in the 1st quarter to 74% in the 2nd quarter, up from 67% in 2015.
- Public libraries - Satisfaction with public libraries increased from 97% in the 1st quarter to 98% in the 2nd quarter, continuing the upward trend from 95% in 2015.
- Footpaths – Satisfaction has continued to improve, 69% in 2015, 70% in the 1st quarter and 77% in the 2nd quarter.
- Unsealed Roads – Satisfaction is tracking similar to last year, 46% in 2015, 47% in the first quarter and 60% in the second quarter.
- Water – Satisfaction with the piped water supply increased last year to 79% and is slightly decreasing from 76% in the 1st quarter and 70% in the 2nd quarter.
- Wastewater – Satisfaction increased to 90% last year, 100% in the 1st quarter of this year and a drop to 88% in the 2nd quarter.
- Participation – Satisfaction with residents who feel they have the opportunity to participate in the way the Council makes decisions went from 64% last year to 73% in the 1st quarter and 69% in the 2nd quarter.

Things to watch

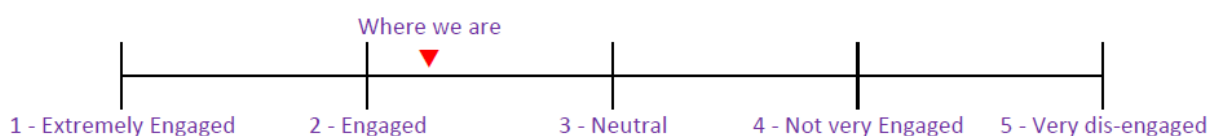
- Contact - Overall satisfaction with the service received by those who have contacted the council offices increased from 59% in the 1st quarter to 74% in the 2nd quarter. 2015's figure was 70%.
- Roads – Satisfaction with the standard of roads overall improved slightly from 53% in the 1st quarter to 60% in the 2nd quarter. 2015's figure was 56%.
- Stormwater – Satisfaction slightly decreased from 47% in the 1st quarter to 45% in the 2nd quarter. 2015's figure was 48%.
- Parks and reserves - Satisfaction with parks and reserves (including sports fields and playgrounds) decreased from 95% in the 1st quarter to 80% in the 2nd quarter. 2015's figure was 91%.
- Public toilets - Satisfaction with public toilets decreased from 70% in the 1st quarter to 64% in the 2nd quarter. 2015's figure was 67%.
- Building services - Satisfaction with building and inspection services had a dramatic increase last year to 69%. It decreased to 48% in the 1st quarter and increased to 63% in the 2nd quarter.

Engagement

Engagement is measured from 5 key questions in our Residents Survey.

1. Satisfaction with the way council involves the public in the decisions it makes
2. Satisfaction with Rates Spending
3. Satisfaction with Community Spirit
4. Satisfaction with Quality of Life
5. Satisfaction that Council makes decisions that meet the needs and aspirations of their residents

Residents are asked for their satisfaction on a scale of 1 to 5 and the results from these 5 questions form an engagement index. The first quarter result was 2.25, the second quarter improved to 2.19 which makes the year to date index of 2.22 which meets the target of 3 or less.



Outcomes - Councillors asked for 2 questions to be added to this survey.

1. Is there any one thing about the Council's actions, decisions or management in the last few months that comes to mind as something you do like or approve of?
2. Is there any one thing that comes to mind with regard to the Council's actions, decisions or management in the last few months that you dislike or disapprove of?

25% of residents in the 2nd quarter say there is a Council action/decision/management they like or approve of, down from 33% in the 1st quarter. 29 % say there is a Council action/decision/management they dislike or disapprove of in the 2nd quarter, up from 21% in the 1st quarter. Verbatim comments are available in Appendix 4 NRB Comments from Outcomes 2nd quarter.

New LTP Measures:

There are 8 new LTP measures detailed below that depend on data from the Residents Survey. Respondents were asked if they feel they have the opportunity to be involved and participate in the way the Council makes decisions, 69% said yes they feel they have the opportunity, but only 22% said they had actually tried to participate. The results from the first 5 questions below are based on the answers from this 22% of residents.

New Measures – no trend data available	Target	1st quarter result	2nd quarter result	Trend
The public are consulted about the right issues	60 %	53 %	32%	↓
Information about key community issues is easily accessible	60 %	58 %	50 %	↓
Information available on these issues is clear and instructive	60 %	47 %	55 %	↑
There is a suitable range of consultation options available	60 %	69 %	47 %	↓
There is sufficient time and opportunity available to provide feedback	60 %	55 %	52 %	↔
Average level of effort to conduct business with council	≤3	2.7	2.5	↑
Satisfaction with the resolution of a request with council	70 %	47 %	63 %	↑
Satisfaction of residents that they were able to contact their councillor/Mayor as and when required	100%	75 %	78 %	↑

5. Conclusion

The results from the first half of the year are an indication from our residents on how Council is performing. The comments and results allow Council to focus on improvements to services before the final results at the end of the 2015-2016 financial year.

6. Attachment

Appendix 1 2015-16 2nd quarter LTP KPI report

Appendix 2 Survey Trend Graphs 2nd quarter

Appendix 3 NRB 2nd Quarter Summary

Appendix 4 NRB Comments from Outcomes 2nd quarter



Waikato District Council

Scorecard Report

Period: Jul-15 - Dec-15

Scorecard Name

2015-18 LTP A Year to Date KPIs

Date From

01-Jul-2015

Date To

31-Dec-2015

LINKED ITEMS

UNIT

TARGET

ACTUAL

INDICATOR

2015-18 LTP Monthly KPIs

The percentage of aggressive dog behaviour complaints, where immediate risk to public safety is present, that has council personnel on site within 1 hour

%

95.00

97.78



COMMENTS:

During the month of December we met our response time targets for aggressive dog complaints 95.00% of the time. This gives us a year to date figure of 97.78% which is above target. This result reflects the commitment that the Animal Control Officer's have in keeping our community safe.

Further reminders and checking will be done to ensure that Officers are accurately recording their response times within their service requests. This will continue to give us an accurate record of the level of service we are providing our community.

The percentage of complaints regarding stray stock that have council personnel on site within 1 hour

%

95.00

87.79



COMMENTS:

During the month of December we met our response time targets for livestock trespassing on roads 72.22% of the time. This gives us a year to date figure of 87.79% which is below our target of 95.00. This result is disappointing. It may be the result of poor recording rather than actual response time. This is under investigation.

The number of dog owners on the selected owner policy list (i.e. good dog owners) for known dog's increases by 5% each year

%

2.50

2.00



COMMENTS:

The total number of owners currently on the selected owner policy has increased from 1,508 to 1,539 (31 owners). This is a 2% increase so far this year which is below our target.

To assist us to meet the end of year target, we have initiated a promotion that encourages dog owners who are eligible for the reduced fee to apply for a property inspection. This promotion began in the middle of December and will continue through January. We have already had an increase in applications which will be completed next month.

This initiative allows the Animal Control Officers to have positive interactions with our "good dog owners" who we do not normally interact with.

The percentage of existing buildings with building WOFs that are monitored and audited for compliance annually

%

16.50

21.65



COMMENTS:

We have exceeded the target this month by focusing resource to achieve the required outcome. We continue to focus resource in this area over the next quarter to ensure the KPI is met.

The percentage of buildings that provide sleeping care or paid accommodation which are audited for compliance annually

%

49.98

38.63



COMMENTS:

We have exceeded the target this month by focusing resource to achieve the required outcome. We continue to focus resource in this area over the next quarter to ensure the annual target of 100% is met.

The percentage of swimming pools that are inspected for compliance annually	%	20.00	100.00	
COMMENTS: In response to new Council Policy we require customers permission to inspect pools for compliance. Where permission has been granted we have inspected 100% of these pools. (14 in total) Provided there are no changes to this legislation we are on track to inspect all permitted pools for compliance this year.				
The percentage of building consent applications which are processed within 20 working days	%	100.00	96.90	
COMMENTS: 96.9% achieved the target this month. Consents are up 22.7% from this time last year . We are still currently trying to recruit an additional processing officer for the Tuakau office.				
Percentage of resource consent applications which are processed within the statutory time frames	%	100.00	100.00	
COMMENTS: All consents were processed within statutory timeframes.				
% service requests completed within targets	%	80.00	87.30	
COMMENTS: .				
Percentage of books that are less than 5 years old	%	50.00	68.00	
COMMENTS: The age of our collection represents the focus of the Library staff to meet the needs and requests of their communities. The culling policy is currently under review to ensure that the library collection meets customer needs and the growth of the district. This review will be completed by the end of the 2015/16 financial year.				
Percentage of books that are less than 10 years old (excluding reference, specialist items, local history and core stock of long term value)	%	100.00	88.00	
COMMENTS: The library collection represents new and current material and is well regarded by our communities as received through regular feedback. The 2015/2016 culling programme is currently underway (delayed by six months due to resourcing) to remove aged stock. This will see Waikato District Libraries meeting this KPI by the beginning of the next calendar year.				
Reliable daily access to free Internet service at all libraries (excluding supplier issues)	%	100.00	95.22	
COMMENTS: The APNK free internet service, including WIFI, has not experienced any downtime at any location since the July when Ngaruawahia Library was being renovated. The service at Raglan has been extended (late in December) by installing hardware to increase the distance that this service is available. The decision was made to do this due to large congestion of customers at the Raglan Library and Council office because of the influx in tourists. The success of this will be monitored over the remainder of the summer with the hope that the WIFI extension will see tourists enjoying the service whilst frequenting other businesses within the Raglan township.				
Percentage of registered food premises inspected/audited annually	%	50.00	58.85	

COMMENTS: 12 food premises were inspected in December. At the end of December there were 260 food premises registered. For the first half of the year 153 inspections of the 260 food premises have been carried out. This is on track to meet the service level target of 100% of registered food premises inspected during the year.

The percentage of medium risk or higher fee category licensed premises that are inspected annually	%	50.00	19.67	

COMMENTS: During the first half of the year 12 of the 61 medium or high risk fee category licences were inspected. Inspections of licensed premises are not spread evenly throughout the year. The remaining premise inspections are programmed to be completed by the end of June 2016.

Percentage of excessive noise complaints responded to within agreed timeframes. (Due to geographical characteristics of the district response times will vary in different parts of the district)	%	90.00	83.71	

COMMENTS: 661 excessive noise complaints were received in the first half of the year. Of these 21 were not received by the contractor due to system issues and operator error. The system issues were largely resolved with changes to the system made in August. There are still occasional issues with calls being incorrectly assigned by the afterhours call centre operator. Staff are working with the call centre operator to minimise this. There were also problems with the contractors response time to complaints during the first 2 months of the year. Staff have worked with contractor to improve their performance and note an improvement in the level of service being provided. However it is still below the required level. Staff are continuing to work with the contractor to improve their response times.

Percentage of environmental health complaints responded to within agreed timeframes	%	95.00	94.69	

COMMENTS: 23 complaints were received in December of which 21 were responded to within timeframes. Of the two not meeting timeframes, one was 2 days and the other 6 hours late. A total of 113 complaints were received by the team in the first half of the year. 107 of these were responded to within timeframes, being just under the service level target. The team is continuing to actively monitor complaints to meet timeframes.

The percentage of all landuse consents that have been issued and are current that have been monitored for compliance in the past 2 years	%	75.00	72.00	

COMMENTS: 366 resource consents have been monitored out of the 509 consents that were due to be monitored over the past 2 year period. The majority of the 143 that have not been monitored are for either subsidiary dwellings or other low risk activities which are monitored on a 5 yearly basis. To allow more accurate reporting to occur, the programming of this work will be reviewed and a clear schedule of works will be established for each year.

Percentage of time that pool water meets the NZS5826 Part 1 Water Standards : 2000 code of practice for the operation of swimming pools	%	95.00	91.83	

COMMENTS: Results for the Huntly and Ngaruawahia Pools, contractor is required to meet standard 90% of time therefore meets their requirements. Current report for Tuakau pool is not available yet. Continue to monitor progress.

The percentage of customer service requests relating to roads to which we respond within the timeframes specified.	%	80.00	93.16	

COMMENTS: 117 requests for work on our roads were received during December and 109 of them were responded to within the timeframes set. 4 of the 8 that failed had targets falling within the Christmas holiday period and were attended to as quickly as staff were able. The other 4 have all been responded to but were outside of the targets. The performance for the 6 months to Dec 2015 is 82.33% responded to on time

The percentage of customer service requests relating to footpaths responded to within the timeframe specified in LTP	%	80.00	88.89	

COMMENTS: 9 Requests for urgent footpath works were received during December. 8 were responded to within 4 hours while the other was responded to early the following day. Performance for the 6 months to December is 95% with 57 out of 60 requests responded to within target times.

Percentage of minutes of all open meetings that are made publicly available via the Council's website	%	100.00	100.00	

COMMENTS: Target met.

2015-18 LTP Quarterly KPIs

Level of Customer effort	#	3.00	2.50	

COMMENTS: A positive move in Customer Effort with level of difficulty in dealing with council dropping from 2.7 to 2.5.
The comments received indicate that it is still individual moments that make life difficult or easy for our customers when dealing with council.
This involves things like being available for customers, getting back to customers, explaining negative outcomes properly, etc.

Percentage of respondents / customers who are satisfied or very satisfied with the resolution of their request of council	%	70.00	63.00	

COMMENTS: There has been a dramatic improvement in the quarterly results in regard to satisfaction with 'service received' and with 'resolution of requests'. This is a positive response to the efforts staff have made when interacting with our customers.

Percentage of respondents who are satisfied or very satisfied with the overall service received when contacting the Council	%	75.00	74.00	

COMMENTS: There has been a dramatic improvement in the quarterly results regarding satisfaction with 'service received' and with 'resolution of requests'. This is a positive response to the efforts staff have made when interacting with our customers.

Council maintains a minimum number of trained staff to fulfil core Emergency Operations Centre roles	#	30.00	30.00	

COMMENTS: We currently have over 100 staff at different levels of CDEM training able to work in the EOC. Our current capability exceeds the minimum of 30. CDEM foundation courses are still being run regularly for new staff, and current staff wishing to participate in CDEM activities.

Currently 18 Staff have attended the newly available CDEM Intermediate training.

Over the next quarter we will continue to deliver foundation training, and participate in intermediate training hosted by the Group Emergency Management Office. We are also working on our Welfare Team capability and will be delivering Civil Defence Centre training in late Jan.

Percentage of Customers who are satisfied with Parks And Reserves, including sports fields and playgrounds overall	%	80.00	87.50	

COMMENTS: Increased staff and contractor attention to ensuring all customer requests are actioned within timeframes and that service levels are being achieved has seen survey results meet the target for the past quarter.

Percentage of Interments completed within the requested timeframe	%	95.00	100.00	

COMMENTS: All interments completed with the requested timeframe. Customers satisfied with outcomes. Staff trained and followed all processes for burials correctly. Staff will continue to follow correct guidelines.

Percentage progress of the Playground Strategy implementation plan	%	50.00	85.00	

COMMENTS: On Target to complete all action 16 identified implementation actions from the playground strategy. 12 have been completed, 2 have been scoped and equipment ordered, 1 awaiting on tree removal, and 1 waiting on contractors price. All actions will be completed in the next quarter

Percentage of customers who are satisfied with Public toilets in the residents satisfaction survey	%	75.00	67.00	

COMMENTS: Increased patronage over the warmer months, particularly in Pokeno and Rangiriri
Increased graffiti
We are ensuring CRMs are attended to promptly

Percentage of buildings that require a warrant of fitness that comply	%	50.00	86.00	

COMMENTS: On target to have all buildings BWOFed this year. 86% of buildings received BWOF to date and comply for the year. Still require 14% of buildings to be checked for the year.

The number of times that bags or bins are missed in Council's kerbside collection	#	200.00	96.00	

COMMENTS: Just under the limit for half way through the year (first quarter 51 & second quarter 45), on track for meeting this yearly target

The percentage of kerbside collection complaints that are resolved within agreed timeframes.	%	100.00	94.00	
COMMENTS: 160 out of 170 complaints resolved within agreed timeframes, year to date. Due to the process changes implemented by the Waters Team the issue from last quarter have been improved with 96% of complaints being resolved within timeframes (92/96)				
The number of flooding events that occurs in the district	#	5.00	0.00	
COMMENTS: On tracking for meeting this target				
The number of habitable floors affected in a stormwater flooding event expressed per 1000 properties connected to the councils stormwater system per event	#	0.30	0.00	
COMMENTS: On track for meeting this target				
The median response time to attend a flooding event, measured from the time that Council receives notification to the time that service personnel reach the site.	m	480.00	0.00	
COMMENTS: On track for meeting this target				
The number of complaints received by Council about the performance of its stormwater system, expressed per 1000 properties connected to the stormwater system	#	4.00	1.78	
COMMENTS: Figure quoted includes roading stormwater complaints Stormwater complaints only is 0.9. On track for meeting this target				
The number of dry weather sewerage overflows from the territorial authority's sewerage system, expressed per 1000 sewerage connections to that sewerage system	#	5.00	2.61	
COMMENTS: On track YTD. Although slightly higher than we would like, the number of complaints are down from last quarter. This quarter is at 1.08 per 1000.				
The median attendance time where Council attends to sewage overflows resulting from a blockage or other fault in its sewerage system, from the time that Council receives notification to the time that service personnel reach the site.	m	60.00	27.00	

COMMENTS: On track YTD with a median of 27 minutes.

All 12 calls met the 60 minute timeframe this quarter, with a median of 26.

The median resolution time where Council attends to sewage overflows resulting from a blockage or other fault in its sewerage system, from the time Council receives notification to the time personnel confirm resolution of the blockage or other fault.	m	240.00	100.00	

COMMENTS: On track YTD with a median of 100 minutes.

12 out of 12 calls resolved within required timeframe of 240 minutes this quarter with a median of 121 minutes.

The total number of complaints received by Council about odour, system faults, blockages, response to issues with its sewerage system.(expressed per 1000 connections to the sewerage system):	#	25.00	3.15	

COMMENTS: On track YTD.

13 complaints this quarter at 1.17 per 1000.

The median on site attendance time for an urgent call out where Council attends a call-out in response to a fault or unplanned interruption to its networked reticulation system	m	60.00	28.00	

COMMENTS: On track YTD with a median of 28 minutes.

All 48 calls met the 60 minute timeframe this quarter with a median of 25 minutes.

The median resolution time for an urgent call out where Council attends a call-out in response to a fault or unplanned interruption to its networked reticulation system	m	240.00	77.00	

COMMENTS: On track YTD with a median of 77minutes.

47 out of 48 calls met the required timeframe this quarter of 240 minutes with a median of 71minutes.

The median on site attendance time for a non-urgent call out, where Council attends a call-out in response to a fault or unplanned interruption to its networked reticulation system	Days	1.00	1.00	

COMMENTS: On track YTD with a median of 1 day.

138 out of 139 complaints met the 1 day timeframe this quarter.

The median resolution time for a non-urgent call out where Council attends a call-out in response to a fault or unplanned interruption to its networked reticulation system	Days	5.00	1.00	
<i>COMMENTS:</i> On track YTD with a median of 1 day.				

138 out of 139 calls met the 5 day timeframe this quarter.

The total number of complaints received by Council about drinking water clarity, taste, odour, water pressure or flow, continuity of supply and response to any of these issues (expressed per 1000 connections to the water system)	#	17.00	9.29	
<i>COMMENTS:</i> On track YTD. A large number of complaints about Flow and Pressure this quarter due to issues with the manifold installations in Huntly, these complaints should drop now that those installations have been completed.				

63 complaints this quarter at 4.76 per 1000.

Council's level of compliance with resource consents for discharge from its stormwater system, measured by the number of abatement notices, infringement notices, enforcement orders and convictions received in relation those resource consents.	#	0.00	0.00	
<i>COMMENTS:</i> WRC audits our resource consent compliance on an annual basis.				
From these audits a level of compliance is determine by WRC on a per consent basis. In addition to providing a level of compliance, WRC can also issue letters of direction, abatement notices, infringement notices or enforcement orders, if they feel that WDC has a significant non-compliance.				
Over the last compliance period WDC's Stormwater discharge was found to be complaint with resource consents.				

Council's level of Compliance with resource consents for discharge from its wastewater system, measured by the number of abatement notices, infringement notices and enforcement orders	#	2.00	0.00	

COMMENTS: WRC audits our resource consent compliance on an annual basis.

From these audits a level of compliance is determine by WRC on a per consent basis. In addition to providing a level of compliance, WRC can also issue letters of direction, abatement notices, infringement notices or enforcement orders, if they feel that WDC has a significant non-compliance.

WDC has not been issued any abatement notices, infringement notices or enforcement orders, nor had any convictions, but has received two letters of direction for the last compliance period (One for Raglan WWTP and One for Meremere WWTP). Other WDC Wastewater sites were compliant.

The Waters team are investigating method of addressing the issues raised in the letters of direction and are planning corresponding works in order to improve compliance.

Council's level of Compliance with resource consents, measured by the number of Convictions for discharge from its wastewater system,	#	0.00	0.00	

COMMENTS: WRC audits our resource consent compliance on an annual basis.

From these audits a level of compliance is determine by WRC on a per consent basis. In addition to providing a level of compliance, WRC can also issue letters of direction, abatement notices, infringement notices or enforcement orders, if they feel that WDC has a significant non-compliance.

During the last compliance period WDC has experienced a small number of Wastewater spills from our Wastewater system, though, WDC has not been issued any abatement notices, infringement notices or enforcement orders, nor had any convictions for our Wastewater system.

The Waters team continues system improvements, maintenance and upgrade programs to reduce the number of Wastewater system faults and improve LOS.

The extent to which Councils drinking water supply complies with part 4 of the drinking water standards (bacteria compliance criteria)	#	18.00	18.00	

COMMENTS:

- All 18 zones were compliant with part 4.4 of the DWS for the period.
- Compliance with DWS 4.3 for water leaving the treatment plant is now being reported on.

The extent to which Councils drinking water supply complies with part 5 of the drinking-water standards (protozoal compliance criteria)	#	13.00	0.00	

COMMENTS: Quarterly compliance assessments are submitted with supporting data to MoH drinking water assessors (DWA). The DWA then determine compliance with the drinking water standards.

Currently WDC has not been able to claim compliance with part 5 of the drinking water standards due to unreliable data.

The Waters team have recently made improvements to the SCADA system to improve data reliability and as a results all WTPs are now monitoring compliance with part 5 if the DWS and WDC will be claiming Log credits achieved as well as reporting on transgressions.

Due to the lack of historic data a reasonable assessment of past compliance can not be accurately made.

Number of enquiries that generate through the Open Waikato website	%	20.00	33.33	

COMMENTS: Eight enquiries were received over the Oct - Dec quarter which is two more than the previous quarter. Two of these enquiries were via the 'Contact us' web mail link and four were via the Open Waikato email account. An assessment of the ad campaign impact on enquiries will be held come the end of February 2016.

Percentage of councils business continuity processes implemented	%	20.00	20.00	

COMMENTS: Progress against this KPI is tracking as scheduled. Overall process has been created and many processes undertaken in Service delivery Group and also Information Technology. An internal project is in place within the 'Our Plan' programme to prioritise the processes and capture all those related to creating a resilient business. The project commences 19th Jan and will be completed before 30 June 2016.

Satisfaction of residents that they were able to contact their councillor as and when required	%	100.00	78.00	

COMMENTS: The result (78%) is an improvement on the last quarter result (75%). Our communications team will ensure that the contact details of councillors appear regularly in The Link as a way to further enhance the profile of our councillors. Councillor contact details are always available on Council's website or through the Council Call Centre. Some of our councillors also write regular columns for community newspapers with their contact details.

Number of upheld objections/appeals lodged against election process	#	0.00	0.00	

COMMENTS: No election processes were undertaken through this quarter.

Percentage of Council decisions that comply with statutory requirements	%	100.00	100.00	

COMMENTS: All decisions made by Council thus far have complied with statutory requirements. The Significance and Engagement Policy has not been triggered in terms of the financial impact of any of the decisions. Business and reporting templates will continue to prompt consideration of impacts on the business and compliance. A financial assessment is currently being undertaken with regards to Year 2 of the LTP to ascertain if there are any significant departures from what was adopted in June 2015.

Percentage of residents who feel they have the opportunity to be involved and participate in publicly-notified Council projects and processes, to help Council make informed decisions.	%	68.00	69.00	

COMMENTS: The result (69%) is above the target. It confirms that Council's approach with regards to engagement is sound. Opportunities for engagement have been provided through the website, community open days, The Link newsletter, hearings etc. Over the past three months Council has been engaging with the community on the Public Places Bylaw, various changes to the District Plan (in particular Plan Change 14 (Raglan Rezoning) and Plan Change 9 (Election Signs), Significant Natural Areas, working with the community regarding their request for an extension of refuse and recycling for Pukekawa, Neighbourhood Parks Reserve Management Plan and options for addressing erosion at Sunset Beach in Port Waikato amongst others.

The percentage of projects in identified areas of growth and as contained in the Long Term Plan, which are on track or completed.

%

100.00

96.96



COMMENTS: Residential growth - Tamahere, Te Kauwhata, Tuakau and Pokeno. Industrial growth - Horotiu, Tuakau and Pokeno.

66 projects identified as in the Growth areas - 53 are on track (34 are developer led) with 11 complete, 2 on hold (possible Te Awa use).

Staff will continue to monitor projects and ensure that they are aligned to Council's strategic direction.

Number of discretionary grant funding rounds undertaken per year

#

2.00

2.00



COMMENTS: The discretionary funding round was undertaken on time with record number of application received.

The percentage of community funding/grant recipients meeting grant obligations, as evidenced through accountability reports

%

50.00

75.00



COMMENTS: The second discretionary grant funding round was completed in October 2015. The next funding round will take place in the first quarter of 2016.

Percentage of customers satisfied that council engages with the community regarding the right issues

%

60.00

32.00



COMMENTS: While the result (32%) is well below the target it should be noted that 48% of respondents are 'neutral' and 5% 'don't know'. Only 15% are 'dissatisfied'. Council continues to implement its Community Engagement Strategy and its Significance & Engagement Policy. The issues that Council engages upon is also driven by legislative requirements. There are a number of channels the public can use to inform Council if they feel they would like to be engaged on a particular issue. Over the past three months Council has been engaging with the community on the Public Places Bylaw, various changes to the District Plan, Significant Natural Areas, working with the community regarding their request for an extension of refuse and recycling for Pukekawa, Neighbourhood Parks Reserve Management Plan and Options for addressing erosion at Sunset Beach in Port Waikato amongst others.

Percentage of customers satisfied with the ease of access to information regarding key community issues

%

60.00

50.00



COMMENTS: The result (50%) is a drop from the previous quarter's result (58%). Twenty-one percent of respondents are 'neutral' and 29% dissatisfied. Information will continue to be provided to the community through various means (e.g. website, social media, The Link, through community open days, letter drops, counter pamphlets etc). Staff are also always on hand to address any request for information. Council is confident that it has a sufficient repertoire of tools through which information can be made easily accessible to the public.

Percentage of customers satisfied that the material available on key issues is clear and provides sufficient information to allow feedback

%

60.00

55.00



COMMENTS: Although the result (55%) is below the target it is an improvement on the last quarter's result (47%). Our communications team helps with the review and layout of information provided to the public. It may be a case of the complexity of the issue for the public rather than with the information provided. Council will endeavour to continue to simplify complex issues without detracting from legislative requirements. We are continuously looking at best practices or the way information is provided by other councils to improve our approach.

Percentage of customers satisfied that council provides a suitable range of options and avenues to engage through	%	60.00	47.00	

COMMENTS: While the result (47%) is well below the target it should be noted that 39% of respondents are 'neutral' and 8% 'don't know'. The first quarter result was 69%. Council continues to provide a range of tools with regards to engagement. These include: online (submissions and feedback forms), community 'open days', community market days, newsletter (The Link), letter drops etc.

Number of publicly shared reports assessing Council's progress against its goals and objectives	#	1.00	1.00	

COMMENTS: Achieved target by delivering the first quarterly report to Council then made publicly available on councils website for the first time in November. On track to deliver second quarter results in February.

Percentage of customers satisfied that Council provides sufficient time and opportunity for engagement with the community	%	60.00	52.00	

COMMENTS: While the result (52%) is below the target it should be noted that 34% of the respondents are 'neutral'. Fourteen percent are dissatisfied. The times and opportunities for engagement are agreed to by councillors as they have a good understanding of their respective communities. Council provides appropriate time for engagement - be it for community open days, hearings etc. For hearings, an equal amount of time is allocated for each submitter to present to ensure fairness and efficiency for the process. The result falling short may not be reflecting the direction given by council. Staff will continue monitor the results and recommend changes if required.

Iwi ki te Haapori - Number of joint committee meetings held per annum	#	2.00	2.00	

COMMENTS: The Waikato-Tainui hui was postponed by the iwi a few days before. The Maniapoto hui was postponed to 2016 due to the election of new iwi members. In both cases WDC were ready to go ahead with the hui.
Over the next quarter both Waikato-Tainui and Maniapoto hui dates will be set.

Iwi ki te Haapori - Number of identified or notified breaches/objections under Joint Management Agreements, MOU's and MOA's	#	0.00	3.00	

COMMENTS: Both the Maniapoto and Waikato-Tainui MOU's were effectively breached as the minimum requirement is for two hui per year but the 2nd hui were not held in both cases. However, these breaches were instigated and agreed by the iwi. Council was ready to meet in both cases. the MOU with Nga Uri O Mahanga is in breach as the annual review and meeting has not been held, despite numerous requests from Council.

Iwi ki te Haapori - Number of formal governance hui held between council and iwi / hapu groups

#

1.50

0.75



COMMENTS: In the October - December period there were no formal governance hui held. There was only one request for hui, from Ngati Haua, but that was unable to be held before Christmas. This meeting is set down for the week of the 11 Jan.

2015-18 LTP Half Year KPIs

Net Promoter Score (level of likelihood that library users will recommend to friends and family their library as a place to go)

%

80.00

93.12



COMMENTS: The first of the biannual Library surveys for the 2015/16 financial year was conducted in December. For this question there were 189 customers from across the district that responded. 176 of those said that they were likely (33) or extremely likely (143) to recommend their library to friends or family. This is the first time we have measured net promoter for this part of our business and the results are pleasing. Our focus for the next survey will be to increase the total number of respondents through improved engagement and better utilising online channels.

Level of customer satisfaction that the quality of libraries resources meets their needs

%

90.00

93.28



COMMENTS: The first of the biannual Library surveys for the 2015/16 financial year was conducted in December. For this question there were 253 customers from across the district that responded. 176 said that they were very satisfied, and 60 satisfied, that their library resources met their needs. Our focus for the next survey will be to increase the total number of respondents through improved engagement and better utilising online channels.

Net Promoter Score (level of likelihood that business owners will recommend WDC as a district to do business in)

%

20.00

106.00



COMMENTS: The Net Promoter Score as at November 2015 was +0.5% compared to -8.0 in November 2014 and -16 in April 2015. The average NPS rating was 8.3 for November 2015 compared with 8.0 in November 2014 and 7.9 in April 2015. These results indicate less detractors and more promoters with promoters being 26.0% of respondents. The difference between November 2015 and April 2015 in both the NPS and the average NPS rating is statistically significant. The NPS improved by +8.5 percentage points between November 2014 and November 2015 which equates to a year on year average improvement of 106%. Another survey will be run in April 2016 and then a decision will be made on the base line and survey timing.

The percentage delivery of the Economic Development strategic work programme

%

40.00

60.00



COMMENTS: The two key deliverables up to December 2015 were the adoption and submission to MBIE of a new Digital Enablement Plan and the adoption of an economic roadmap refresh named the economic development strategy (EDS). Both these key projects have been delivered on time and budget. Future projects will be determined with the finalisation of the EDS implementation Plan in March 2016. The implementation plan projects will be prioritised and any projects identified for activation and completion by end of June 2016 will be included in this measure.

The percentage of community response plans completed

%

7.00

10.00



COMMENTS: Currently Te Kauwhata and Port Waikato have completed plans. Huntly is in the final stages of their plan.

The following are also under development:

Tamahere

Raglan

Eureka

The following are in the initial stages or preparing to commence the process:

Ngaruawahia

Pokeno

Council manages local participation in the national Get Ready, Get Thru campaign annually	%	100.00	100.00	

COMMENTS: In September 2015 council participated in 'Get Ready Get Thru' week. This commenced with the national earthquake drill with all our offices undertaking 'drop, cover, hold' at 9.15am. After the drill staff participated in a mini first aid exercise. For the remainder of the week our libraries distributed preparedness information and collateral to support the CDEM message. The Waikato CDEM group also supported the delivery of Disaster House by the Group Emergency Management Office.

Percentage of natural areas (categorised in parks strategy) which have had restoration efforts undertaken	%	4.00	4.26	

COMMENTS: Natural area enhancement on target. Sites contributing to this include Raglan bush and beach reserve as well as lakes such as Kainui, Are Are and Rotokauri.

Percentage of development areas that have co-ordination plans for forward works programming and development requirements complete.	%	0.00	0.00	

COMMENTS: Work on a development plan for Pokeno is about 70% complete. No other development areas require a development plan.

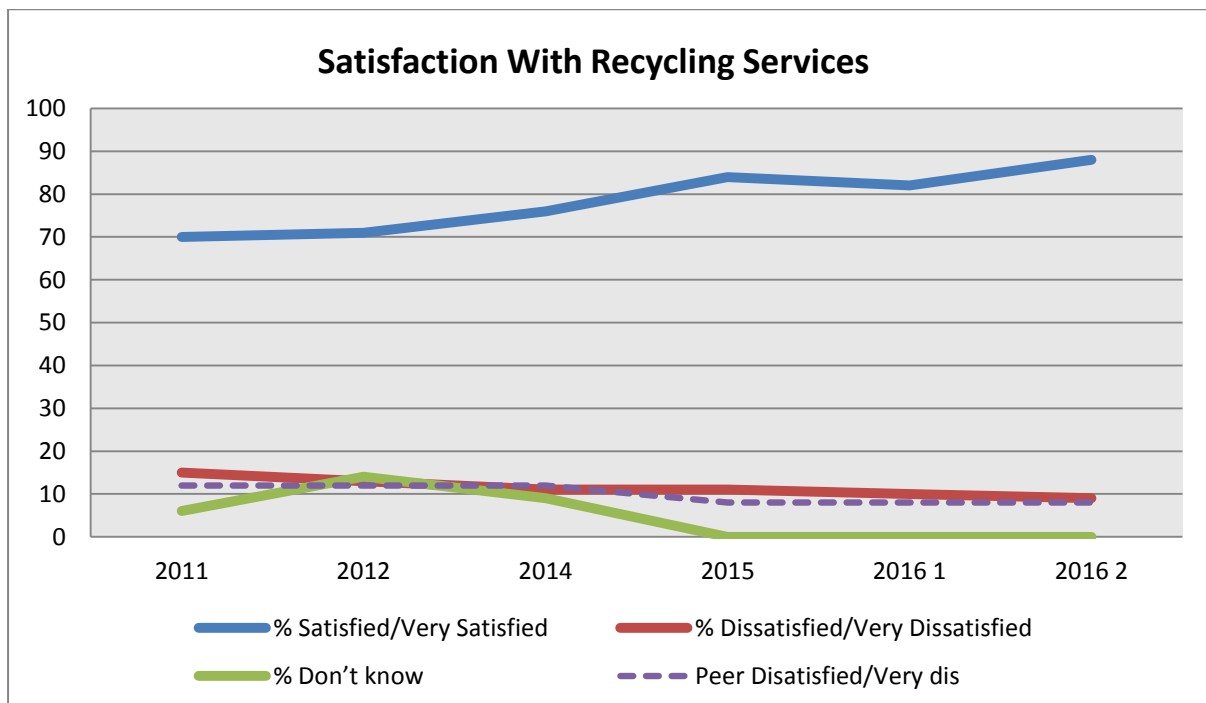
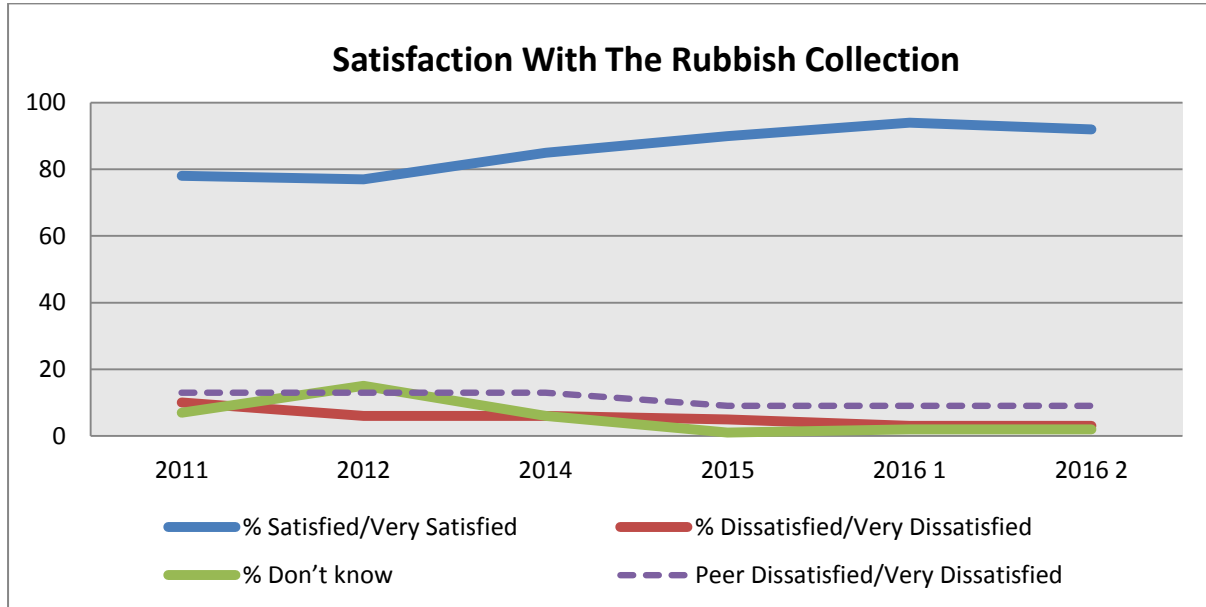
The change from the previous financial year in the number of fatalities and serious injury crashes on the local road network, expressed as a number.	#	1.00	-1.00	

COMMENTS: At the end of October 9 fatal and serious injury crashes have been recorded in the NZTA crash database. This is 1 less than for corresponding period last year.

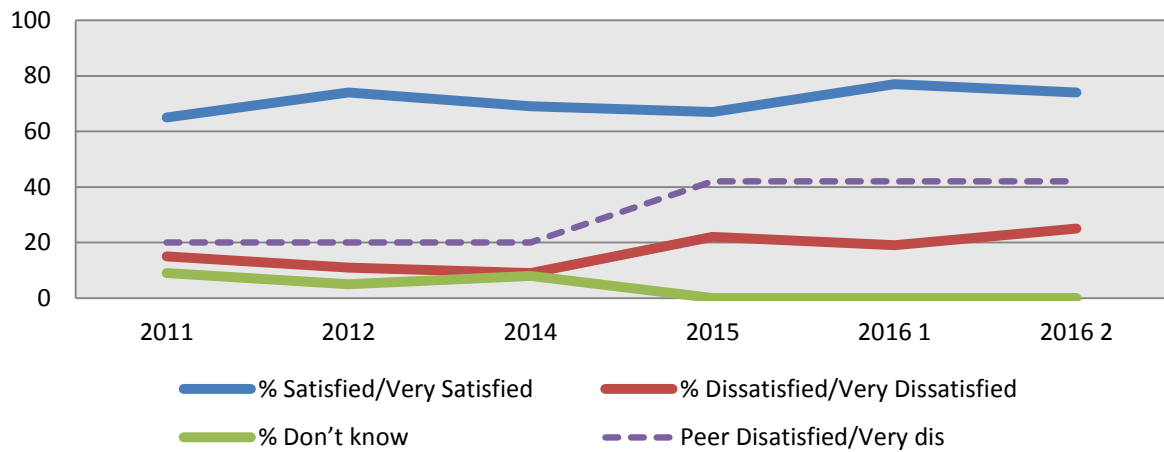
Overall Performance	%	0.00	0.00	

Residents Satisfaction Survey Trend Graphs – Second quarter

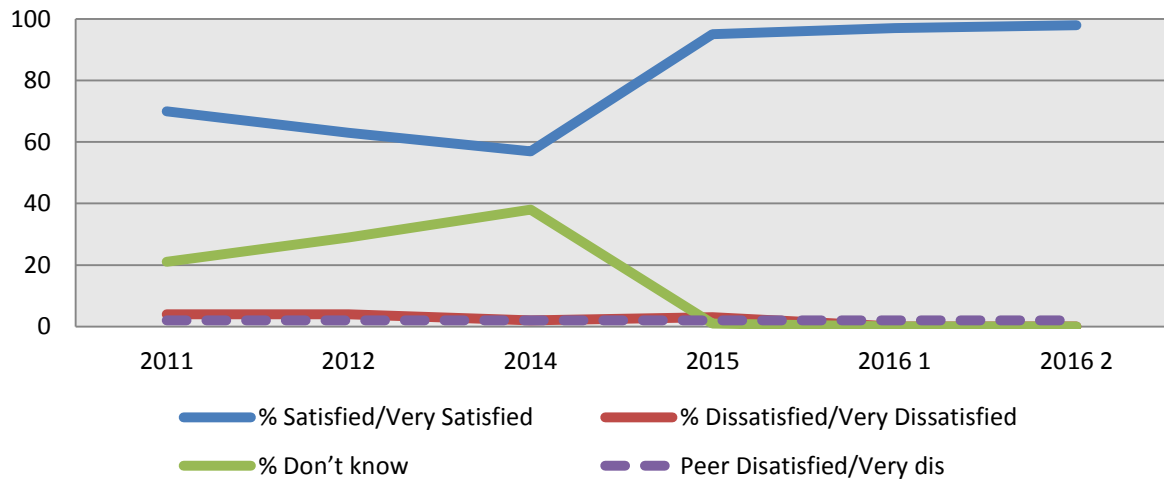
- 2016 1 is the first quarter result
- 2016 2 is the second quarter result



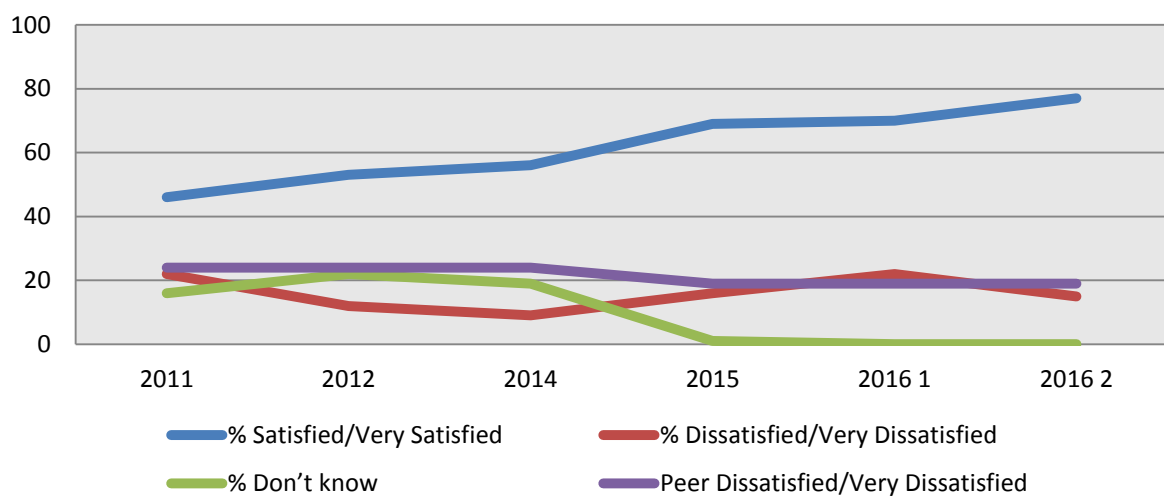
Satisfaction With Animal Control (ie, Stock And Dog Control)



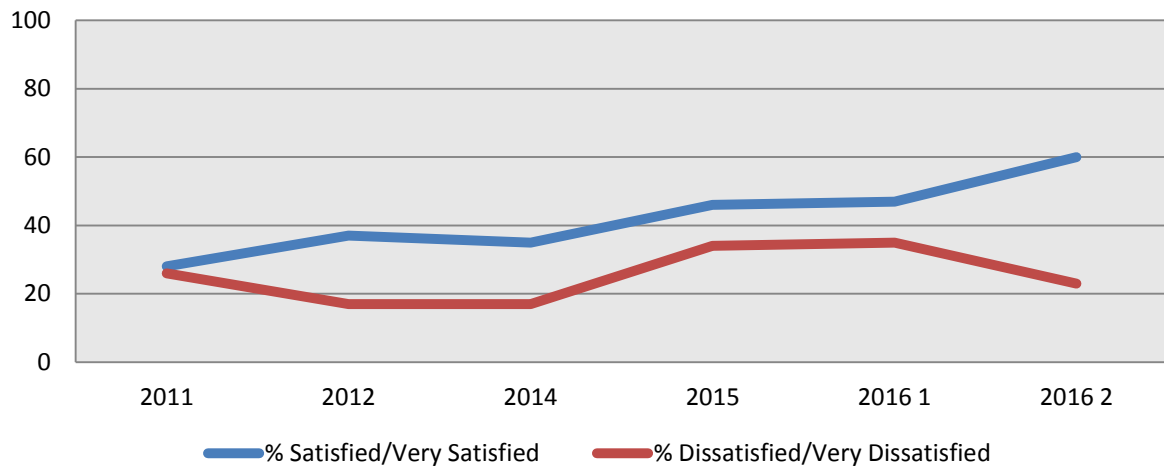
Satisfaction With Public Libraries Overall



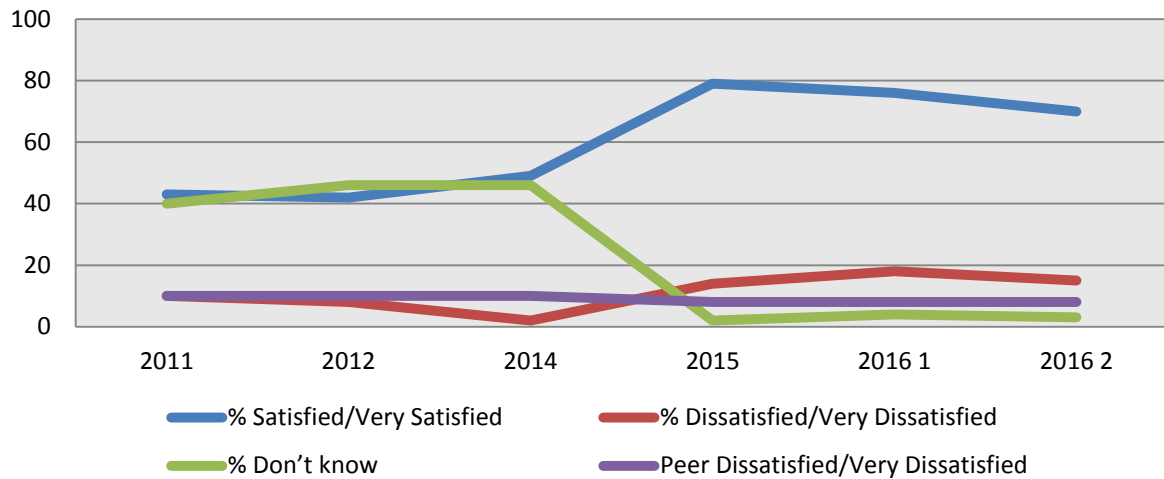
Satisfaction With Footpaths



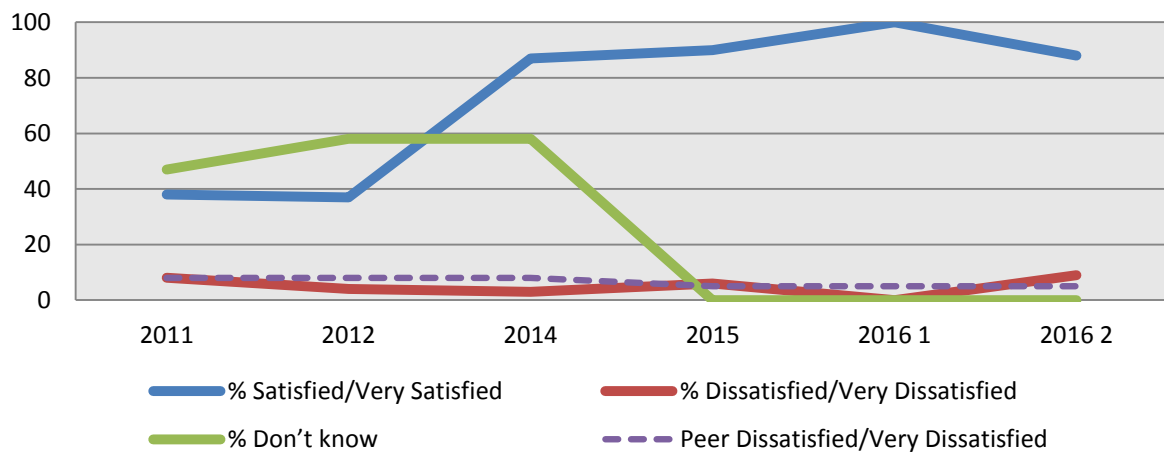
Satisfaction With Standard Of Council's Unsealed Roads



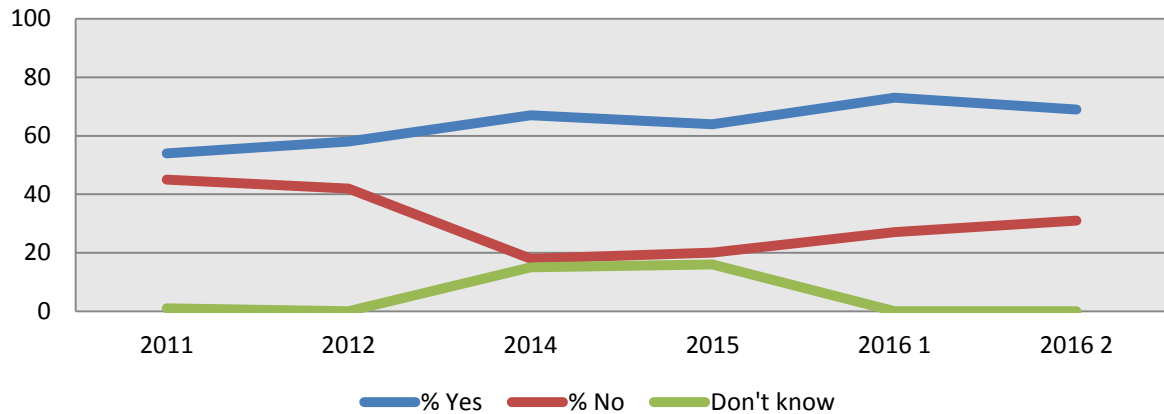
Satisfaction With Water Service



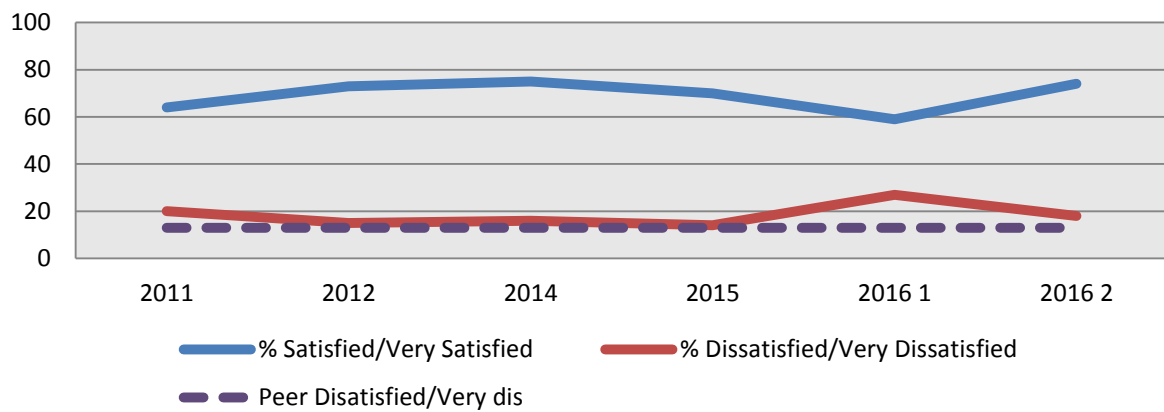
Satisfaction With The Wastewater Services (ie, sewerage system)



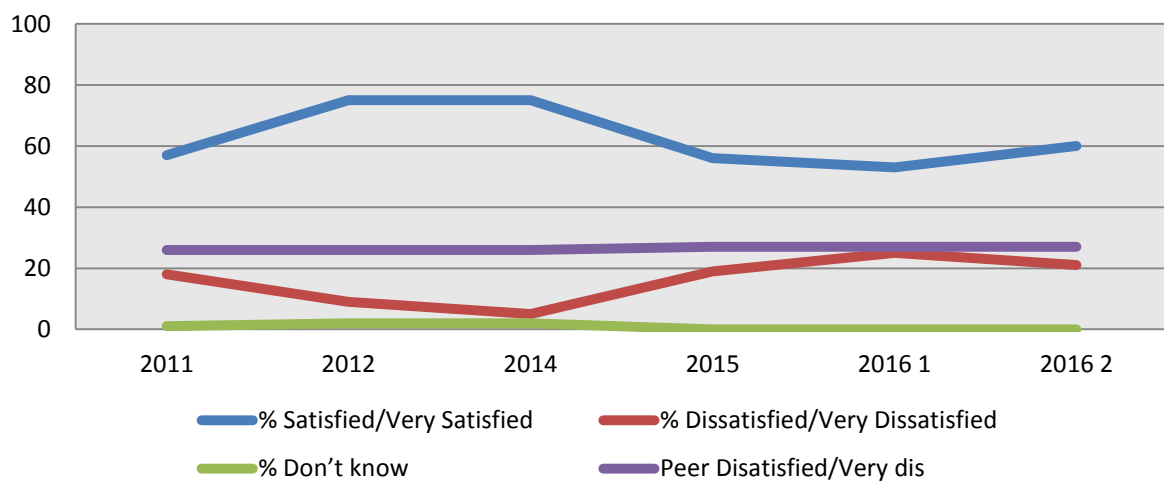
Do Residents Feel They Have The Opportunity To Be Involved And Participate In The Way The Council Makes Decisions?



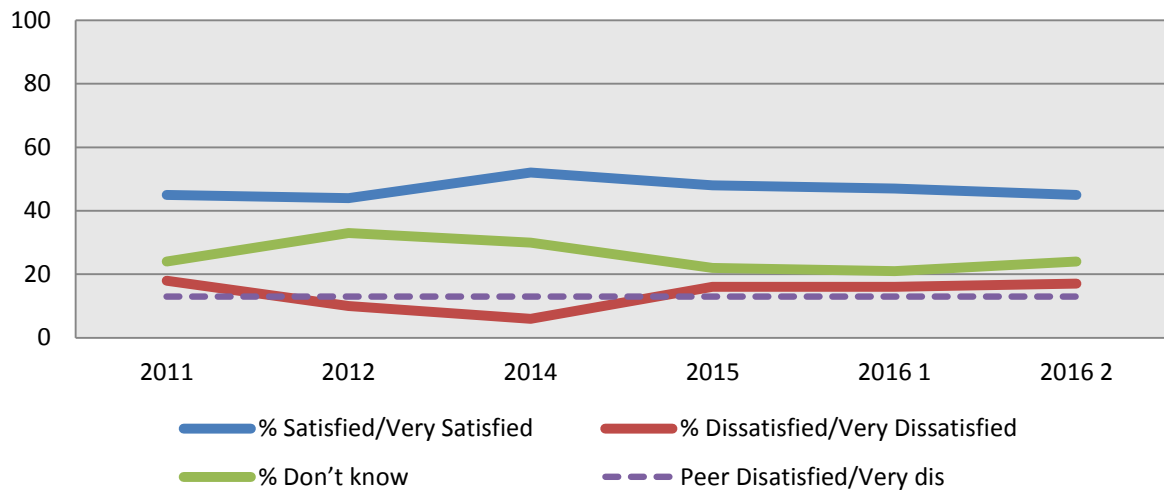
Overall Satisfaction With The Service Received When Contacting The Council Offices



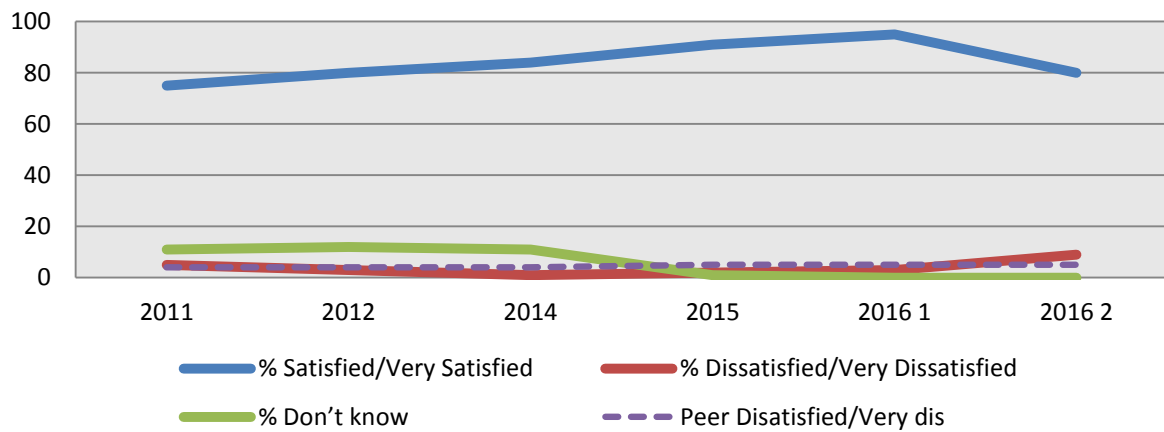
Satisfaction With The Standard Of Council Roads Overall



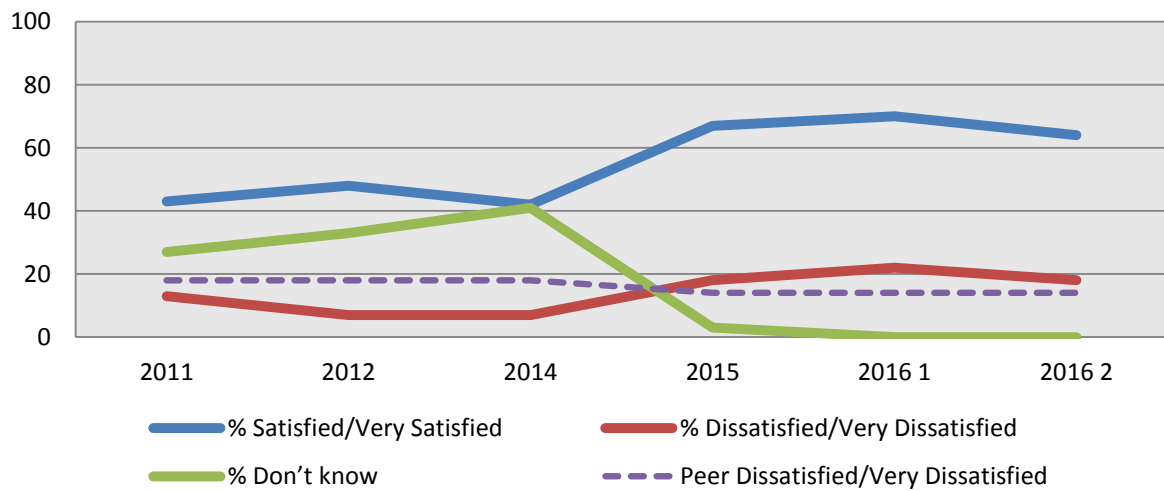
Satisfaction With Stormwater Services Overall

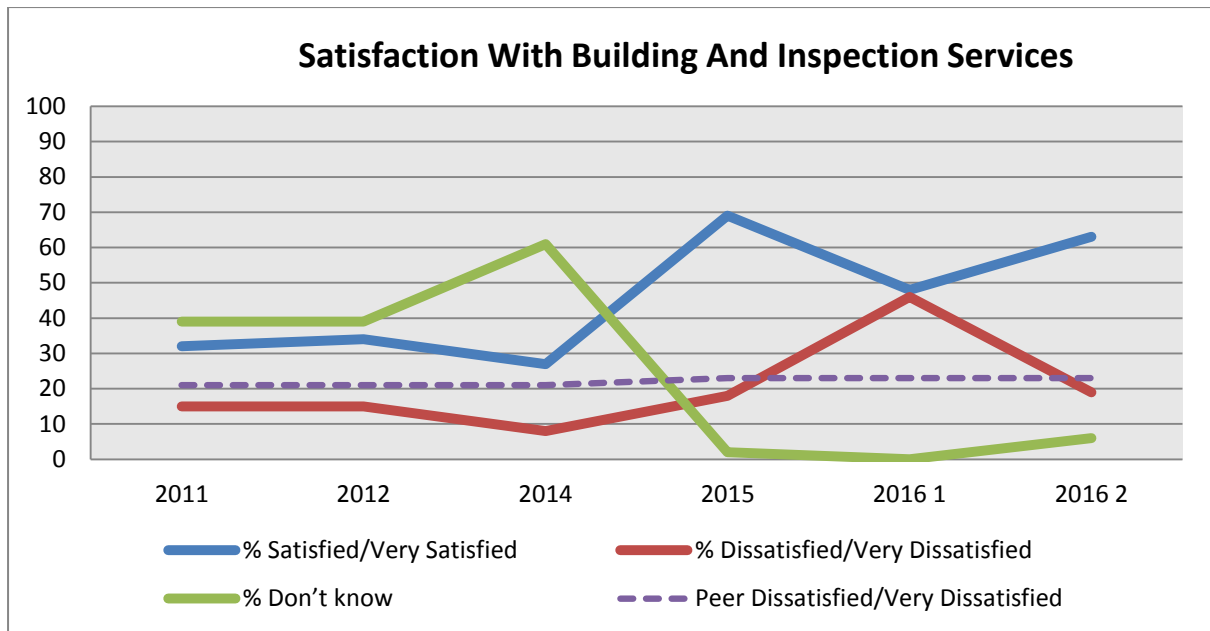


Satisfaction With Parks And Reserves, including sports fields and playgrounds



Satisfaction With Public Toilets






NATIONAL RESEARCH BUREAU LTD

PO Box 10118, Dominion Road, Auckland 1446, New Zealand

 Tel: (09) 6300-655, Fax: (09) 6387-846, Web: www.nrb.co.nz

To: Debbie Dalbeth

From: Ken Sutton and Janette Simpson

Of: Waikato District Council

Date: 26 November 2015

Dear Debbie,

**QUARTERLY SUMMARY OF
ONGOING SATISFACTION SURVEY RESULTS - QUARTER 2**

The following is a quarterly summary of your Ongoing Satisfaction survey results for the period: Friday 11th September - Thursday 19th November, based on 100 respondents.

If you have any queries, please give one of us a call.

Kind regards,

Ken Sutton

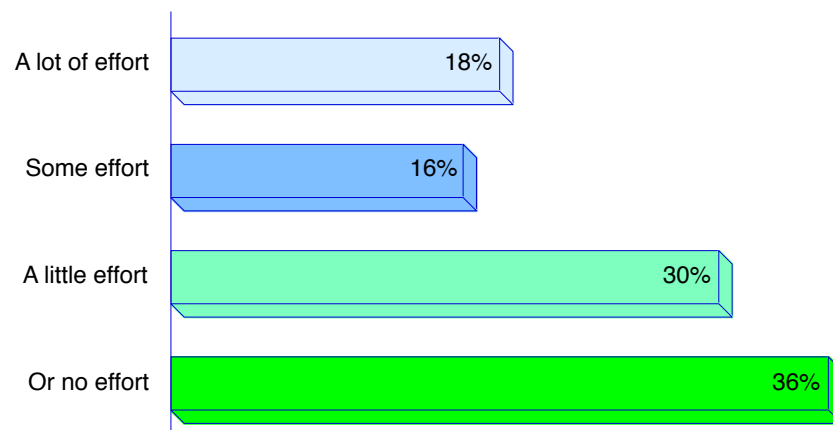
Janette Simpson

NATIONAL RESEARCH BUREAU LTD

CONTACT WITH COUNCIL

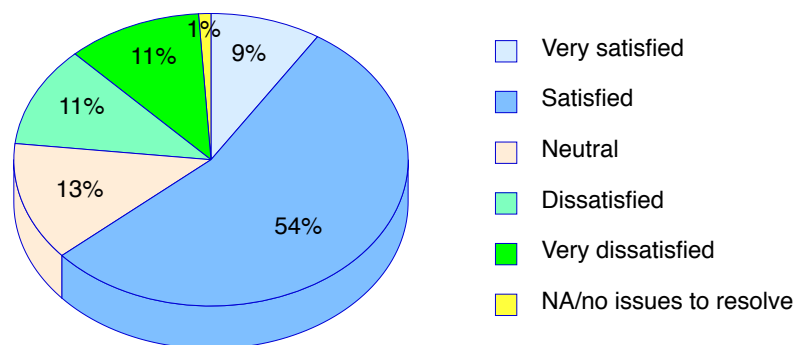
51% of residents have contacted Council staff at the Council offices or service centres by phone, in person and/or by email, in the last 12 months.

How Much Effort Did It Take To Conduct Business With Council ...



Base = 53[†]

Satisfaction With How Issue Was Resolved

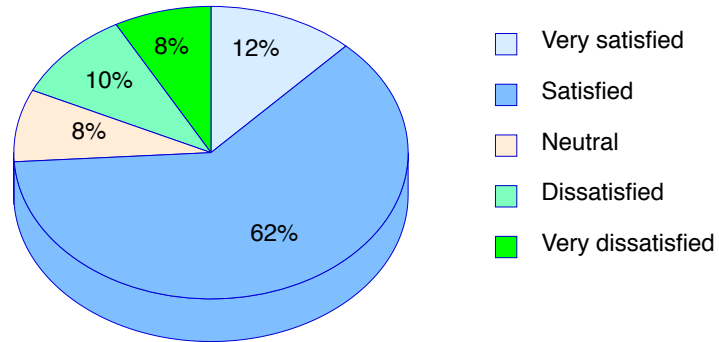


Base = 53[†]

(Does not add to 100% due to rounding)

[†] those residents who say they have contacted Council in last 12 months

Satisfaction With Overall Service Received



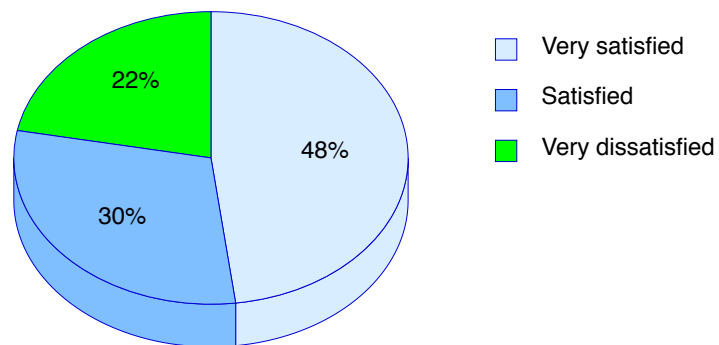
Base = 53[†]

[†] those residents who say they have contacted Council in last 12 months

Contact With Councillors/Mayor

In the last 12 months 6% of residents have contacted, or attempted to contact, a Councillor (including the Mayor).

Satisfaction That They Are Able To Contact Them Should The Need Arise ...



Base = 7[†]

Caution: small base

[†] those residents who say they have contacted or attempted to contact a Councillor in last 12 months

SATISFACTION WITH SERVICES AND FACILITIES - OVERALL

	Very satisfied/ Satisfied %	Neutral %	Dissatisfied/ Very dissatisfied %	Don't know %
Standard of Council's roads overall (excluding State Highways)	60	19	21	-
Stormwater services	45	14	17	24

SATISFACTION WITH COUNCIL SERVICES/FACILITIES - USERS

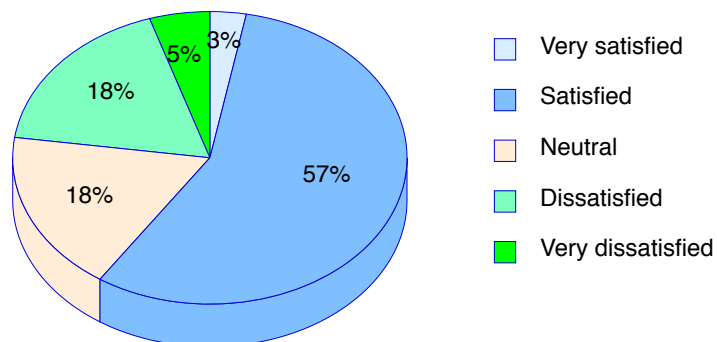
	Base	Very satisfied/ Satisfied %	Neutral %	Dissatisfied/ Very dissatisfied %	Don't know %
Public libraries	44	98	2	-	-
Recycling services	82	88	3	9	-
Parks and reserves, including sports fields and playgrounds [†]	56	80	12	9	-
Footpaths	70	77	8	15	-
Animal control, ie, stock and dog control [†]	*14	74	-	25	-
Public toilets	*28	64	18	18	-
Building and inspection services [†]	*18	63	11	19	6

* caution: small base

[†] does not add to 100% due to rounding

Unsealed Roads - Users

*Driven On An **Unsealed** Council Road*

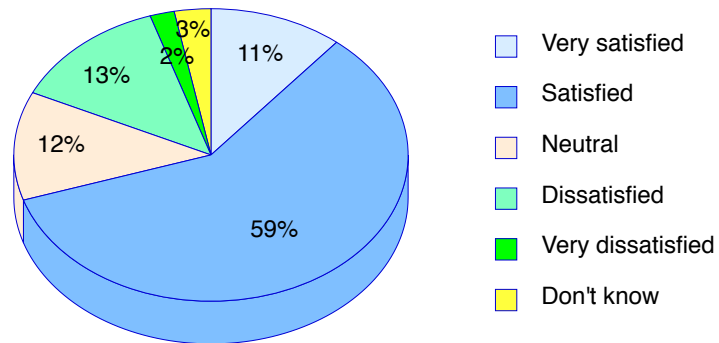


Base = 33
(Does not add to 100% due to rounding)

SATISFACTION WITH SERVICES PROVIDED BY COUNCIL

Water Supply

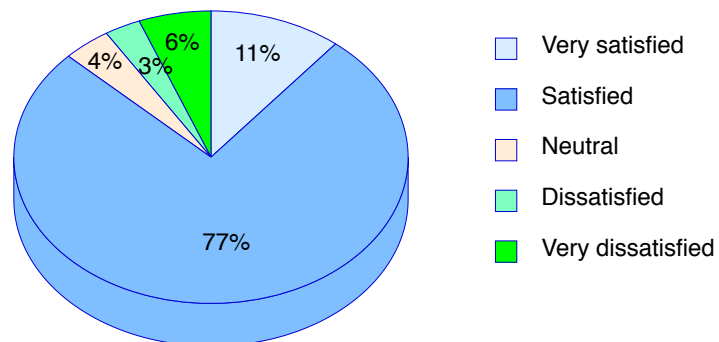
Council Provided Piped Water Supply



Base = 50

Wastewater Services

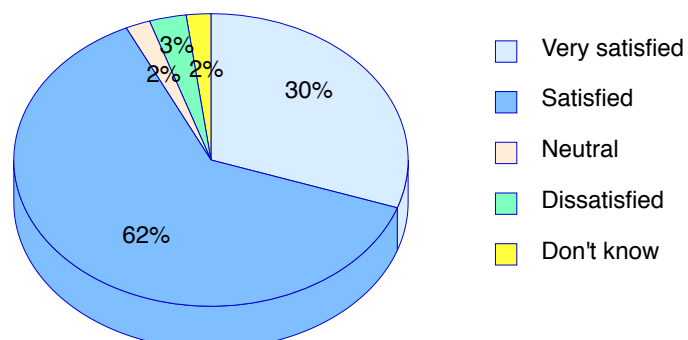
Council Provided Sewerage System



Base = 35 (Does not add to 100% due to rounding)

Rubbish Collection Service

Council Provided Regular Rubbish Collection Service



Base = 86 (Does not add to 100% due to rounding)

LOCAL ISSUES

Governance/Democracy

69% of residents feel that as a ratepayer or resident they have the opportunity to be involved and to participate in the way the Council makes decisions, while 31% say they don't.

22% of residents have tried to participate in Council's decision making process

Level Of Satisfaction

	Very satisfied/ Satisfied %	Neutral %	Dissatisfied %	Don't know %
Information available on these issues is clear and instructive [†]	55	23	23	-
There is sufficient time and opportunity available to provide feedback	52	34	14	-
Information about key community issues is easily accessible	50	21	29	-
There is a suitable range of consultation options available [†]	47	39	8	6
The public are consulted about the right issues	32	48	15	5

Base = 21

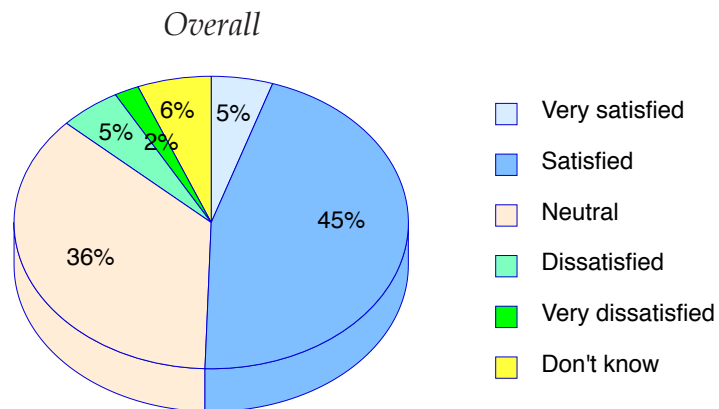
Caution: small base

(those residents who say they have tried to participate in Council's decision making process)

% read across

[†] does not add to 100% due to rounding

Overall Satisfaction With The Way Council Involves The Public In The Decisions It Makes



(Does not add to 100% due to rounding)

Participation In Decision Making Process

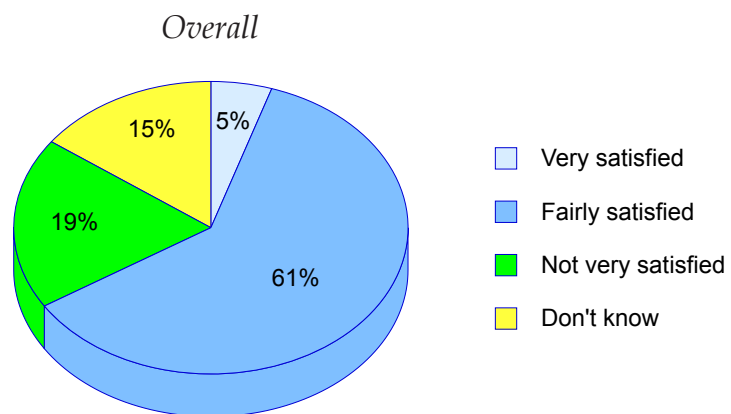
In general 16% of residents are interested in participating in Council's decision making process, 35% say they are not, while 45% say it depends on the issue. 4% of residents are unable to comment.

Outcomes

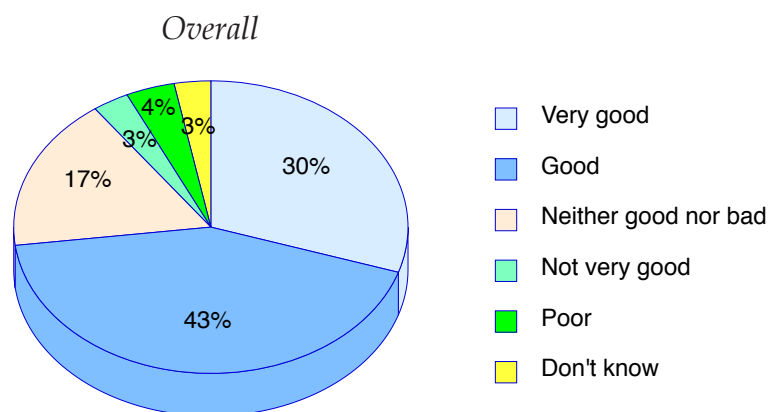
29% of residents say there is a Council action/ decision/ management they **dislike or disapprove** of, while 25% say there is a Council action/ decision/ management they **like or approve** of.

Community Engagement

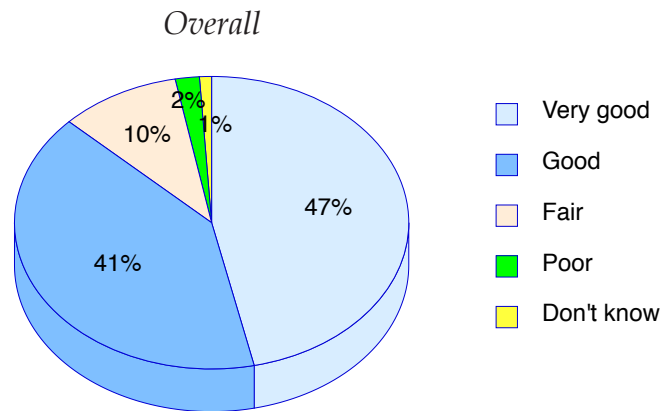
Satisfaction With Rates Spending



Community Spirit



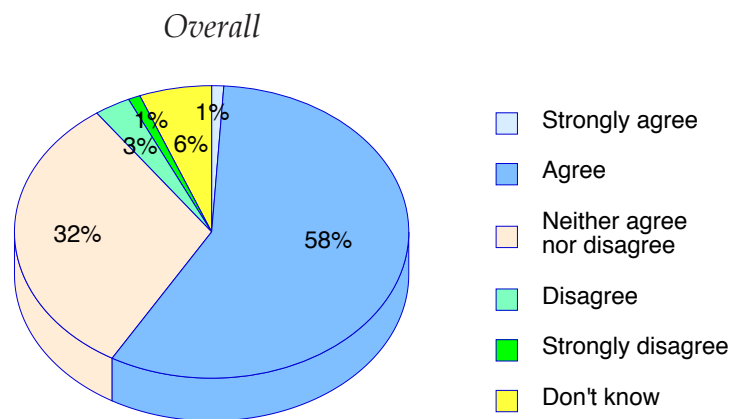
Quality Of Life



(Does not add to 100% due to rounding)

Council Consultation And Community Involvement

Council Makes Decisions That Meet The Needs And Aspirations Of Their Residents?



(Does not add to 100% due to rounding)

"Is there any **one thing** that comes to mind with regard to the Council's actions, decisions or management in the last few months, that you **like or approve** of? What is it and Why?"

I like the fact that I can go to the council offices and the service is fantastic. I like the smallness and personal touch.

- You think it's a thing that is functioning and working - get value for your rates money. They value your time and get you in and out quick.

Receptionist gave us fantastic service - she was very, very helpful and went out of her way to help.

- They treated us respectfully.

Recreation reserve

- Great recreational reserve/sports fields/in Tamahere/for the community

Park by Tuakau Shopping Centre

- Doing that up at the moment looks great

I like the fact that the method of rubbish collection is being looked at in regard to recycling

- It will make it less wasteful of energy and resources.

Wonderful new parks in Tuakau

- Shows that the ratepayers being used for the people

Planting

Tree planting

- Fruit trees planted in Les Batkins Reserve Tuakau

Matariki

- Competition that runs through all the libraries across the Waikato area, great includes all the towns.

Footpath

- Taipairi Ave new footpath awesome

Address things like rubbish lying around quickly

- They did it quickly

Community days and initiatives by the library staff

- Get to know the local councillor and can approach them face to face easily, feel like you are being heard

Parks and gardens are nicer

- More pleasant to use

Keep raglan tidy no rubbish etc sportsfields are good but need more rubbish bins

- Place looks good

A lot of effort being put into Pokeno at present by council

- It is good for Pokeno

I got in touch with them about a water leak and they called very, very promptly - within 24 hours - and fixed the problem.

- Saved money on my water bill. Bill came today and it was \$30 less than the previous two bills so the leak had been there a long time.

They care for Matangi Road very well.

- It makes for pleasant walking on.

Cleaned out a few streams because we had floods before

- We were getting really big floods and now that they've cleaned out the creek the difference is amazing.

A complaint was laid against us and the council came out and assessed the situation and they were very fair.

- They were really non-confrontational about it - they came in with an open mind and they were really, really good - I was really impressed. There was no breach of regulations and they told us immediately.

We used to use the Huntly hall for badminton but then they stopped us using it because it needed repairs and we are still waiting to be told when the repairs will be done.

Since the change from Auckland, our road frontages have been maintained better

- It looks better and they are more proactive.

I think the approval of consent for the development of Opoturu Road, development is a step forward for the town

- I think it is forward-thinking. It will bring in new money. We need to move forward.

The inorganic collection is a great idea.

- It stops people dumping on the roadside and it gives people the opportunity to clean up their properties without having to go to the dump.

General services here at Port Waikato is the best. They have put money into it and it's looking quite good.

- It's improved the look of the place and makes things a bit safer and everything looks spick and span and they've done work on the beach and cleaned it up.

The Tamahere hub - it's a good thing that it is being developed.

- 40 homes will be built down here and they'll need the facility to provide for it.

"Is there any **one thing** that comes to mind with regard to the Council's actions, decisions or management in the last few months, that you **dislike or disapprove** of? What is that?"

They say one thing and do another and then you have to do the other rather than what you first agreed too. They say one thing and do another.

- Don't know where you stand when they take so long - you can't plan for the future.

They've been negligent in their handling of the cleanfill in Tuakau. They've been dishonest in their answers. It's ongoing but it's still not resolved. They will not even meet with me.

- They won't meet with me and you can't resolve anything without being honest and sitting round the table but they have to refused to do this with me.

Rates have gone up too much - we haven't seen any difference in the way things are done in terms of the services that are offered to us - they haven't changed at all but there are more things on bill

- Don't feel it justifies the rate amounts that we are being charged. It seems like there's nothing extra being offered than there was 20 years ago.

I'm a rural ratepayer and we subsidise an enormous amount of rates. The rating system is inherently unfair.

- Because I pay a lot of rates for services which I do not use or do not have access too, i.e. parks and reserves, water supply, waste water and sewerage.

We live in a residential area and the council has allowed a business to set up in a quiet street. It was rural and was re-zoned and now they are putting up a large workshop and it makes a lot of noise.

- I moved here to get away from noises in the city because I am a shift worker and now it is all spoiled and the council seems to think it's alright if the business line the inside of the building it will lessen the noise but there are noisy trucks and race cars which shouldn't be allowed in this area anyway. Law Crescent, Horotui.

Sub contractors

- Subcontractors for cleaning/maintaining the township/Huntly/cleaning and mowing/ needs attention not up to standard

The train services from Tuakau

- I think the decisions with having the services out this way.

They could take better care of the lighting system. The lights are off and on all the time.

- The lights are faulty. You need lighting in a small place like this for safety. Outside the St Margarets church in Te Kauwhata, Also there is one that has been out for over 6 months in Pioneer Way carpark

Seem fixed on the environment, anything that you want to do has to be environmentally checked out

- Because it stops progress and things get bogged down

Waiuku forestry new entrance there are a number of televisions dumped on the left here and have been there for at least two years. 500m before the entrance on the main road

- They are an eyesore

Repair work on the roads

- Doesn't last very long

Development of the Tamahere village and it being an English village

- It is all a bit twee lots of other options

Not happy with them putting in water meters.

- Just think it is more money taking by the council - you pay enough in rates.

The partial installation of the water meters. No public consultation about them - the toby boxes were just put in - meters still to go in them.

- They did it without consultation and we have the biggest river in NZ going right past our door so don't think we should have to pay for it.

Rates

- Rates very high and don't understand how its broken dow. Paying for services that we don't actually receive.

The council put in a cycleway behind his property without consultation and while promising a fence it hasn't happened. Despite having a letter saying council will put in fence now saying they didn't.

- Council went back on their written word and haven't put in a fence

Won't let them transfer a title so they can sell the front paddock because in an environmental area.

- Wont be able to sell that land

Rubbish collection- replacing bins with bags that have to be paid for.

- Place will become messy with rubbish bags broken into by dogs etc

Council can't do everything for everyone, shouldn't go into debt

- Should only do what we can afford and not keep increasing rates

In the Tuakau borough but not on council sewerage

- Pokeno on it and line goes past her house but they are still not on it

Paying for rubbish bags is not good when already pay for rates

- Shouldn't pay twice

Toilet in Te Kauwhata the cost seems to be exorbitant

- It seems a lot of money for a toilet

Need to do more for the youth of Pokeno, need public transport to Pukekohe. There is nothing for teenagers like a skate park etc in Pokeno

- Kids now doing graffiti and things need entertainment

To do with underpasses with cattle. They required every farmer t have an underpass and we have a dead end road so it is not necessary for an expensive underpass.

- Unnecessary

I've heard that we may have to fence off waterways and the issue is who would pay for it.

- Because of the cost.

Restrictions being put on home-based businesses make me feel that they just want white-collar workers out here - they want to keep up the Tamahere image. They don't want businesses such as mowing business

- I think it is discriminatory. Lifestyle blocks are still productive land and you should be able to base your business from home but sometimes the zoning prevents this. The original zoning laws were adequate so putting in an extra barrier precludes people from running a home-based business.

We used to use the Huntly hall for badminton but then they stopped us using it because it needed repairs and we are still waiting to be told when the repairs will be done.

- Because we can't plan anything as the season is over and we still don't know if we can get it next season. We had the hall booked and bought refreshments which we now cannot use because they are out of date.

They are spending an awful lot of money on roads that are not being used. Couch Road is an example - only 3 houses on this road and they are widening it.

- I think it is a waste of money. Nobody had a problem with it and it was already tar-sealed so there was need for it to be upgraded.

The resource consent issue which is still not resolved. It's cost me a lot of money and if I want to go ahead, I have one quote of \$80,000 and this doesn't include third part experts passing the buck

- Left me very much out of pocket and my incentive to set something up has destroyed the hope and vision of two young people who wanted to do something constructive.

Water issue - trying to set up a council-controlled entity and a report is an indictment on the councils' inability to work together.

- Read the report and it's just an indictment on them. They need to work together.

Open Meeting

To	Strategy & Finance Committee
From	T G Whittaker General Manager Strategy & Support
Date	16 February 2016
Prepared by	A Diaz Finance Manager
Chief Executive Approved	Y
DWS Document Set #	1149907
Report Title	Financial Performance Summary for Period Ending 31 January 2016

I Executive Summary

This report provides a summary of the financial performance against the first year of the 2015/25 Long Term Plan and those projects carried forward from the 2014/15 financial year.

The report focuses on revenue and expenses, capital expenditure, summary treasury risk management policy compliance and highlights possible areas of concern and policy breaches. At the end of January, council continues to have a policy breach in relation to interest rate cover. The proportion of fixed rate borrowings was expected to return to agreed limits within the 90 day period stipulated within the policy, however, re-profiling of capital works has reduced the underlying total debt assumption. Staff will work with Council's treasury advisors on appropriate corrective actions.

This is the first time the financial reporting is being presented to the Committee in this format. Continued refinements will be made in accordance with feedback from the Committee to improve reporting of organisational performance.

2 Recommendation

THAT the report of the General Manager Strategy & Support – *Financial Performance Summary for the Period Ending 31 January 2016* – be received;

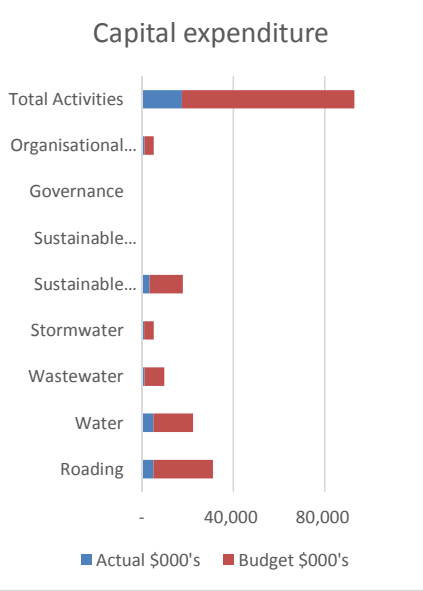
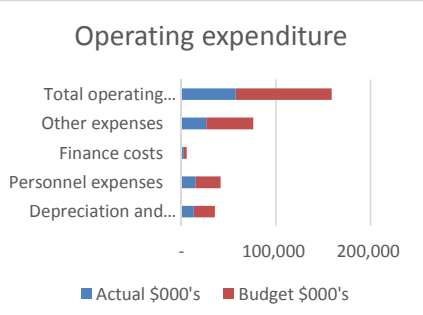
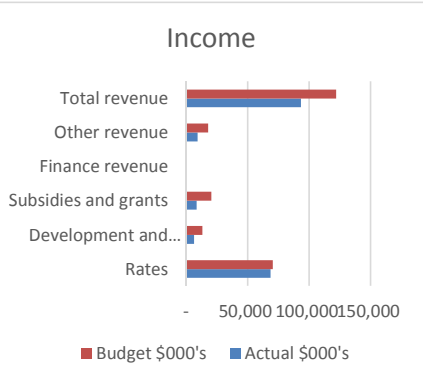
AND THAT the Committee acknowledges the continued breach of the proportion of fixed rate borrowing treasury risk management policy limit.

3 Attachments

Financial performance summary

AT A GLANCE

Income and operating expenditure is largely on track. Development activity (uplift of consent) which is currently behind year-to-date expectations tends to improve in the final quarter of the financial year. Staff vacancies in the first half of the year have led to lower personnel expenses. Capital programmes have been re-profiled to allow for expected construction timeframes and actuals are tracking closely to the revised target (\$47 million).



FINANCIAL PERFORMANCE SUMMARY

For the period ending 31 January 2016

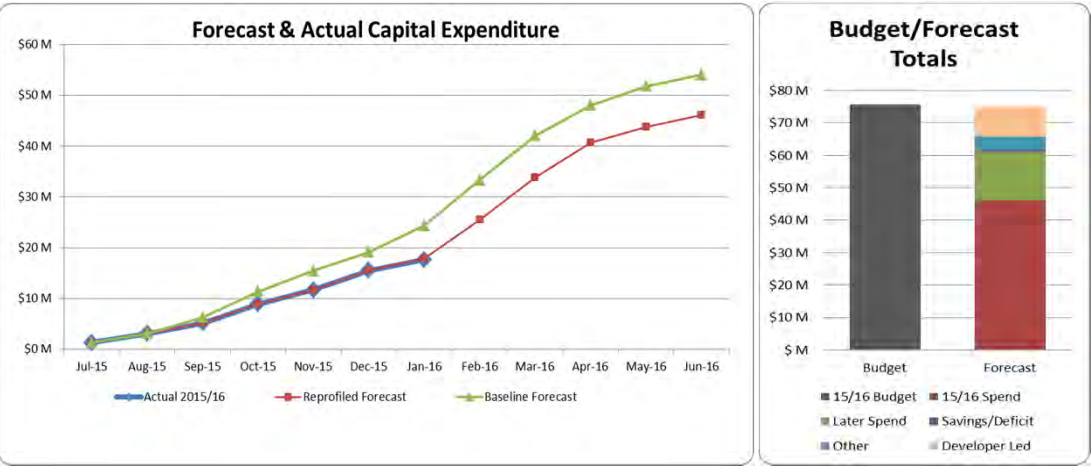
	Actual \$000's	Budget \$000's	% usage	Variance \$000's	Ref.
Revenue					
Rates	68,756	70,583	97%	(1,827)	1
Development and financial contributions	6,501	13,057	50%	(6,556)	2
Subsidies and grants	8,450	20,377	41%	(11,927)	3
Finance revenue	516	100	516%	416	6
Other revenue	9,312	17,876	52%	(8,564)	
Total revenue	93,535	121,993	77%	(28,458)	
Expense					
Depreciation and amortisation expense	13,172	22,303	59%	(9,131)	
Personnel expenses	14,926	26,673	56%	(11,747)	4
Finance costs	2,767	3,007	92%	(240)	6
Other expenses	26,604	49,577	54%	(22,973)	5,7
Total operating expenses	57,469	101,560	57%	(44,091)	
Surplus (deficit) before tax	36,066	20,433	177%	15,633	

- Year-to-date net operating surplus of \$36 million is significantly higher than the budgeted full year surplus of \$20 million.
- The main contributors to the variance are as follows:
- Income**
- 1 Favourable - Rating income with the exception of water-by-meter charges has been recognised in full for the year (timing difference only)
 - 2 Unfavourable - Development contributions are lower than expected (\$1.1 million year to date variance).
 - 3 Unfavourable - Subsidy income is approx. \$3.4 million behind year-to-date expectations (timing variance only on capex)
- Expense**
- 4 Favourable - Current staff vacancies are the main contributor to the positive variance (\$633,000 year-to-date variance)
 - 5 Favourable - Operational expenditure for the three waters area expected to increase in the next quarter.
- The governance activity has unspent discretionary funds (community boards and other). A number grants to external parties are yet to be uplifted.
- Watch Points**
- 6 Development timing in Pokeno has led to an increase in both interest income and interest cost. This permanent variance will alter individual DC reserve balances for the 2015/16 year with no impact on general rate.
 - 7 Early indications show that costs related to leaky building and animal control legal processes may require additional funding. An update will be provided as the year progresses.

Net Operating Surplus (Deficit) Breakdown	Actual \$000's	Budget \$000's	Variance \$000's	Favourable / Unfavourable
Roading	2,439	13,527	(11,088)	U - Contribution and subsidy income
Water	5,864	3,319	2,545	F - Activity expenditure low
Wastewater	4,239	(9)	4,248	F - Activity expenditure low
Stormwater	2,257	1,210	1,047	F - Activity expenditure low
Sustainable Communities	1,725	4,423	(2,698)	U - Low external grant and subsidy income
Sustainable Environment	1,716	(1,586)	3,302	F - Timing on licensing activities. Building deposits
Governance	455	312	143	F - Unspent Community Board discretionary funds, low consultancy spend
Organisational Support	(3,621)	(763)	(2,858)	U - See note 6 above
Total Group of Activities	15,074	20,433	(5,359)	
Remaining general rate income	20,992			F - See note 1 above
Surplus (deficit)	36,066	20,433	15,633	

Capital expenditure	Actual \$000's	Budget \$000's	% usage
Roading	5,133	26,058	20%
Water	5,221	17,299	30%
Wastewater	1,319	8,548	15%
Stormwater	1,102	4,178	26%
Sustainable Communities (halls, pools, toilets, walkways etc.)	3,455	14,534	24%
Sustainable Environment (landfills)	87	354	25%
Governance	81	214	38%
Organisational Support (plant, offices/libraries & IM)	1,205	4,164	29%
Total Activities	17,603	75,349	23%

- It is anticipated that 62% of the capex programme will be spent by year end.
- The re-profiled forecast takes into account:
- a) \$14.9 million of budgeted works will either straddle the financial year end or be deferred
 - b) \$9.3 million of works is developer led
 - c) \$4.1 million relates to planned changes to work programmes (e.g. re-scoping, updated costings)
 - d) \$642,000 of anticipated savings



Treasury Policy compliance	Policy limit	Actual	Compliance
Prudential limits			
Percentage of net external debt to annual revenue	<150%	47.60%	√
Net interest expense on net external debt as a percentage of total annual revenue	<20%	3.70%	√
Net interest expense on net external debt as a percentage of annual rates	<25%	5.40%	√
Interest rate risk controls limits (interest rate exposure)			
Fixed interest proportion	55%-90%	95%	X
<i>Borrowings with interest rate re-pricing more than 12 months forward accounts for a larger proportion of councils total borrowing than stipulated by policy limits. This has not been rectified within 90 days as re-profiled capital expenditure has impacted the underlying expected debt levels.</i>			
1-3 years	15%-60%	15%	√
3-5 years	15%-60%	24%	√
5 plus years	15%-60%	61%	X (60.54%)
Liquidity/funding risk (access to funds)			
Liquidity	>110%	145.00%	√
Broken down:			
0-3 years	15%-60%	54%	√
3-5 years	15%-60%	15%	√
5 years plus	10%-40%	31%	√

Open Meeting

To	Strategy & Finance Committee
From	TN Harty General Manager Service Delivery
Date	15 February 2016
Prepared By	C Clarke Roading Manager
Chief Executive Approved	Y
DWS Document Set #	1149985
Report Title	Te Kauwhata Heavy Traffic Bypass – Removal of Designation

I. Executive Summary

The Te Kauwhata Heavy traffic bypass is included in the Te Kauwhata Structure Plan and is intended to improve safety and amenity in the village by diverting trucks away from the Main Road. A designation was obtained for the bypass route in 2009 that lapses in 2029. With growth less than anticipated, and increased land and construction costs the project is unlikely to be viable until approximately 2050, long after the designation lapses. In the meantime, Council is faced with continuing to buy lands affected by the designation, as has already occurred in 2015. The 2015-25 LTP includes budgets for land purchase and construction of the bypass for which Council should levy development contributions. These contributions would place a heavy financial burden on potential investors to the area. Indications are that development may accelerate should the proposed bypass be removed. This view is widely held across staff.

2. Recommendation

THAT the report of the General Manager Service Delivery – Te Kauwhata Heavy Traffic Bypass – Removal of Designation - be received;

AND THAT the General Manager Service Delivery is requested to undertake the formal process to remove the designation.

3. Background

The Te Kauwhata Bypass designation is part of the Te Kauwhata Structure Plan. The designation was notified in 2009 and lapses in 2029. The bypass was originally proposed to meet the objectives of the structure plan in which it provides an alternate route from the town centre, for heavy vehicles.

At this time there is no significant change from the expectations and objectives in the Te Kauwhata Structure Plan that invalidates the long term need for the project. However, slow growth and higher costs mean that the project is likely to be significantly more expensive and provide lower benefits over a 30 year infrastructure planning horizon than originally forecast.

The costs of the bypass could negatively affect the potential for growth in Te Kauwhata because of the high additional Development Contributions that Council would need to levy

on new titles in order to fund the project. While the bypass project was developed to support the growth in the area, it could have the opposite effect and, stifle it (as evidenced by submissions to our Development Contributions Policy during 2015).

Therefore it is prudent to review the need for the designation.

4. Discussion and Analysis of Options

4.1 Discussion

The purpose of the bypass designation was to provide for safety and efficiency of the road network, improved amenity for the community and users of the town centre provide and easier access to proposed and current industrial areas.

Some of the expected outcomes from the bypass included:

- Safety enhancements due to the removal of heavy traffic from the town centre.
- Transportation efficiency due to a reduced travel time (a calculated saving of 65 seconds).
- Amenity value for the town centre (reduction of noise and improved visual aesthetics).

The technical study for the designation was undertaken in 2009. At that time there were several underlying assumptions that influenced the outcomes of the decision-making process. Six years on, the situation has changed and this has prompted a review of the Te Kauwhata heavy vehicle bypass project proposal and the underlying assumptions.

In particular, the following facts are now evident:

- Growth in Te Kauwhata is significantly less than expected (currently at 3% compared to the predicted 8%).
- Mandatory property purchase by Council as a result of the designation is proving to be much more costly than anticipated.
- The expected benefit of using the bypass to transport materials for construction of the Waikato Expressway is no longer valid.
- The cost of the bypass is now assessed at \$9.5 million compared to an original estimate of \$7.5 million.
- The original evaluation did not consider the cost of maintaining the new road.

In terms of the ultimate structure plan objectives, there do not appear to be any significant changes that affect the function and purpose of the designation in the long term. However, growth is significantly slower than initially forecast, construction costs are estimated to be higher and early land costs are significantly higher than previously expected, resulting in increased loan costs. Vehicle crash savings are highly unlikely to justify construction of the alternative route, even with significant traffic increases. The bypass length is not significantly different to the existing route through the town centre, and therefore vehicle operating cost and time travel savings are not considered substantial. For the project to be supported by the community, it implies a willingness to pay for the improved access, safety or amenity in the village centre, in addition to the tangible benefits.

The project is heavily reliant upon amenity outcomes, rather than safety and transportation benefits to justify its inclusion in Council's Long Term Plan. The early project costs and the level of funding required could place a heavy financial burden on potential investors to the area. Indications are that development would be accelerated should the need for the high development contribution associated with the proposed bypass be removed permanently.

Internal analysis strongly suggest that it is extremely unlikely that the project is going to be economically justified for over 30 years and would be likely to achieve a tangible Benefit Cost Ratio (BCR) of 1 around 2050. To achieve a typical funding priority with NZTA a minimum BCR of 2 relies on intangible benefits that appear reasonable in the long term, but are hard to support if construction were to be in the short to medium term because of lower growth and lower traffic volumes.

The structure plan and designation expected construction over 20–40 years. Currently, growth rates appear to be around 25% of those expected when first analysed, which suggests that the need for the bypass would be significantly delayed, and the costs of protection significantly increased. Achieving a designation for more than 20 years in the current planning environment is very difficult.

If the Council wishes to uplift the designation the Resource Management Act requires notice to be given to all landowners and other affected parties.

4.2 Options

4.2.1 Leave the Designation in Place

There is negligible cost to Council in maintaining the actual designation unless there are land purchase costs associated with it. These land costs can arise if a landowner on the designated route wants the Council to purchase land affected by the designation. Such an instance occurred in 2015 where Council spent approximately \$800,000 to purchase property. Therefore, it is prudent to retain a contingent budget for land purchase in the current budgets. The current LTP has a budget of \$800,000 per year for 10 years for land purchase.

The benefit of retaining the designation is that the route is protected. However the designation will lapse in 2029 unless Council either gives effect to it by commencing construction, or obtains an extension by showing that substantial progress is being made towards construction. The project is unlikely to be viable before 2050 so it is extremely doubtful that Council will be able to utilise the designation or show progress, therefore there is no benefit in retaining it now.

4.2.2 Remove the Designation

If the designation is removed then Council either accepts traffic on Main Road in perpetuity or finds an alternative corridor at some future time.

The costs of not having the designation and requiring it in the future would arise from property cost increases because of property improvements. The effects may also be greater if land use in the corridor changes, which may mean that a future notice of requirement is not successful and an application for a designation is not supported.

The benefits would be that the possibility of being required to purchase land early would be removed from Council planning and that development contributions would no longer be levied for the project, which would remove a reasonably clear impediment to development in the area.

5. Considerations

5.1 Financial

The current LTP has budgets for this project extending until 2025. These can be removed

or altered through the next LTP process in 2018-2028. This project has not been included in Council's roading development contribution for Te Kauwhata pending investigation on the appropriateness of the project. This reduced the level of roading contribution from \$20,128 to \$4733 for 2015/16.

Land has been purchased. If the project is not to proceed, this land could be re-sold, or alternatively retained and leased, which would generate some income. The element of roading contributions that relate to this land purchase would have to be refunded. Given the low levels of development in the structure plan area this is expected to be minimal.

5.2 Legal

The Resource Management Act prescribes a process for the removal of a designation which will be followed. In summary, this process requires a formal notice to Council, affected landowners and other affected parties such as KiwiRail, that the designation is no longer required. Council will then remove the designation from the District Plan.

5.3 Strategy, Plans, Policy & Partnership Alignment

Without the bypass some of the goals and aspirations of the Structure Plan may not be achieved.

- Through traffic is not removed from the town.
- Access to the industrial zones could possibly be more restrictive.
- Loss of a safer additional railway crossing.
- Loss of a buffer between the residential and industrial zones.
- Possible loss of future light industrial development.

5.4 Assessment of Significance & Engagement

The budget changes that arise if the project is to be deferred are significant. Therefore it is proposed that these changes are implemented during the preparation of the next LTP which is required to go through a full public special consultative process.

6. Consultation

The following stakeholders have been/or will be consulted:

Planned	In Progress	Complete	
	✓		Internal
		✓	Community boards/Community committees
✓			Waikato-Tainui/Local iwi
✓			Households
✓			Business
✓			KiwiRail, NZTA

7. Conclusion

Changes to the growth, land costs and increased construction costs mean that the Te Kauwhata Bypass project is unlikely to be viable until about 2050. The designation will lapse in 2029 and so it is very unlikely that it will be able to serve its purpose of protecting the land until the project is ready to proceed. In the meantime, development contributions that are being levied to fund the project are hindering development. Therefore it is recommended that the designation is removed.

8. Attachments

- Gray Matter report “Te Kauwhata Heavy Traffic Route: Project / Designation Review”



17 April 2015

Roading Team
Waikato District Council
15 Galileo St
Private Bag 544
Ngaruawahia 3742

Gray Matter Ltd
2 Alfred Street,
PO Box 14178
Hamilton, 3252
Tel: 07 853 8997
Fax: 07 855 5160

Attention: Wayne Furlong

17_71

Dear Wayne

TE KAUWAHATA HEAVY TRAFFIC ROUTE: PROJECT / DESIGNATION REVIEW

Waikato District Council (WDC) engaged Gray Matter Limited to review the designation for the Te Kauwhata Bypass, including the risks, costs and benefits of keeping or removing the bypass designation M104.

This letter details our review, and as agreed (refer to SFA 14/344, dated 12/03/15), includes:

- = Background Information
 - o Review of previous information including the NOR and Structure Plan
 - o Review of additional information provided by WDC regarding existing and expected traffic and population
- = Review of costs
- = Coarse review of potential economic efficiency
- = Conclusion and recommendations

The purpose of the designation is to provide for safety and efficiency of the road network, improved amenity for the community and users of the town centre and easier access for industrial areas.

In terms of the ultimate structure plan objectives, there does not appear to be any significant change affecting the function and purpose of the designation. However, growth appears to be significantly slower than initially forecast, and construction costs are likely to be higher. The project costs appear likely to exceed funding available from development contributions and early land costs appear to be significantly higher than previously expected, and will result in increased loan costs.

The heavy vehicle bypass route is unlikely be economically feasible in the foreseeable future. Economic benefits are unlikely to match costs and the project may not be affordable based on current development contributions for roading in Te Kauwhata.

1. Background Information

1.1. Population

WDC has a settlement plan for Te Kauwhata with planned staging of residential growth that would result in the following residential populations¹:

¹ Now embedded in RPS Table 6D FutureProof Tables

http://www.waikatoregion.govt.nz/PageFiles/10522/2320314_RPS_Decisions_1_Feb_2013.pdf

Year	Population	New Residential Lots	Growth rate (annual)
2006	1,020		NA
2021	3,430	700	8.4%
2041	5,825	1600	2.7%
2061	7,675 ²	2400	1.4%

Census data shows that in 2013, 1,473 people usually lived in Te Kauwhata. This is an increase of 279 people, or 19 percent, since the 2006 Census, or an annual population growth rate of about 3% compared to the expected 8% leading up to 2021.

The lower growth rate is not unexpected and in many areas development and growth has been delayed as a result of the global financial crisis.

However, in Waikato District, growth in Pokeno has continued which may be reducing demand for Te Kauwhata. Alternatively, developers may have been waiting for completion of the Rangiriri Section of the Waikato Expressway, expected next year. Waikato DC is currently processing subdivision applications for 129 lots on Wayside Road and 30 lots off Waerenga Road. The 2021 forecasts suggest 700 new lots over 15 years (around 50/year) so 180 new lots is equivalent to three or four years growth.

1.2. Traffic Volumes

The following are traffic counts taken on Main Road in Te Kauwhata:

Year	ADT	Source
2002	2,151	WDC RAMM data
2004	956	WDC RAMM data
2007	2,700	Project report on traffic predictions
2013	1,489	WDC RAMM data (estimate)
2015	3,649	Opus special traffic count

Traffic growth rates in the table above are inconsistent, and any considered in isolation is unlikely to be a good representation. The growth between 2007 and 2015 is equivalent to a growth rate of around 16% per year. The inconsistency could in part be explained by construction traffic for the Waikato Expressway when Te Kauwhata traffic would have increased significantly but otherwise appears likely to be due to local growth unless there were special event or other unusual circumstances. An increase of 1,150vpd would be equivalent to a peak increase around 120vpd. Based on 1.1 – 1.4 peak hour trips/household, the growth would be explained by 100 new households. North of Main Road development is well established.

A prediction made in 2009 for the traffic volume on Main Road in 2021 was 4,809vpd³, based on 700 new lots (consistent with Futureproof). For this to occur, traffic volumes would need to increase by 4.7% per year from now (assuming the current volume is around 3,500vpd).

1.3. Purpose of the Route: Notice of Requirement and Te Kauwhata Structure Plan

The Te Kauwhata Heavy Traffic Route was designated in 2009 in conjunction with the Te Kauwhata Structure Plan, developed to manage the effects of growth.

² 7,800 by 2061 in Structure Plan (<https://www.waikatodistrict.govt.nz/Documents-Library/Files/Documents/District-Plan/Waikato-District-Plan/Variation-13--Te-Kauwhata-Structure-Plan/Variation-13.aspx>) – notified in 2009 and based on WDC Growth Strategy 2009.

³

The structure plan (Variation 13, 16 July 2011) identifies the following issues relevant to transport:

- = conflicts with heavy and through traffic;
- = poor connectivity and a lack of transport options;
- = inefficient development of infrastructure;
- = conflicts between land uses.

The key transport objective is “A land transport network that provides for all transport modes, and contributes towards creation of the Te Kauwhata village character, is developed”. The explanation (15A.3.10 Land transport) includes: “Heavy and through traffic have negative impacts on the environment, including noise, vibration and reduced safety associated with high traffic volumes. This traffic should be separated from the village road network by the alternative route. The alternative will safeguard amenity within the village and provide a safe and efficient transport network. This will be achieved by the designation of an alternative route to the south of the existing village that will link Waerenga Road and Te Kauwhata Road.”

The Notice of Requirement stated “The public work and designation are reasonably necessary for achieving the objectives of the Waikato District Council because the proposed road will ensure the long term safe functioning of the Te Kauwhata road network, in particular improved industrial traffic and through traffic flows. The proposed road will also improve the safety and amenity of businesses and residents along the urban length of Waerenga Road/Main Road and Te Kauwhata Road.”

The report to Council dated 10 May 2011 regarding the designation stated Construction of the route is likely to be staged, and will probably commence within 20 years and be complete in 50 years.

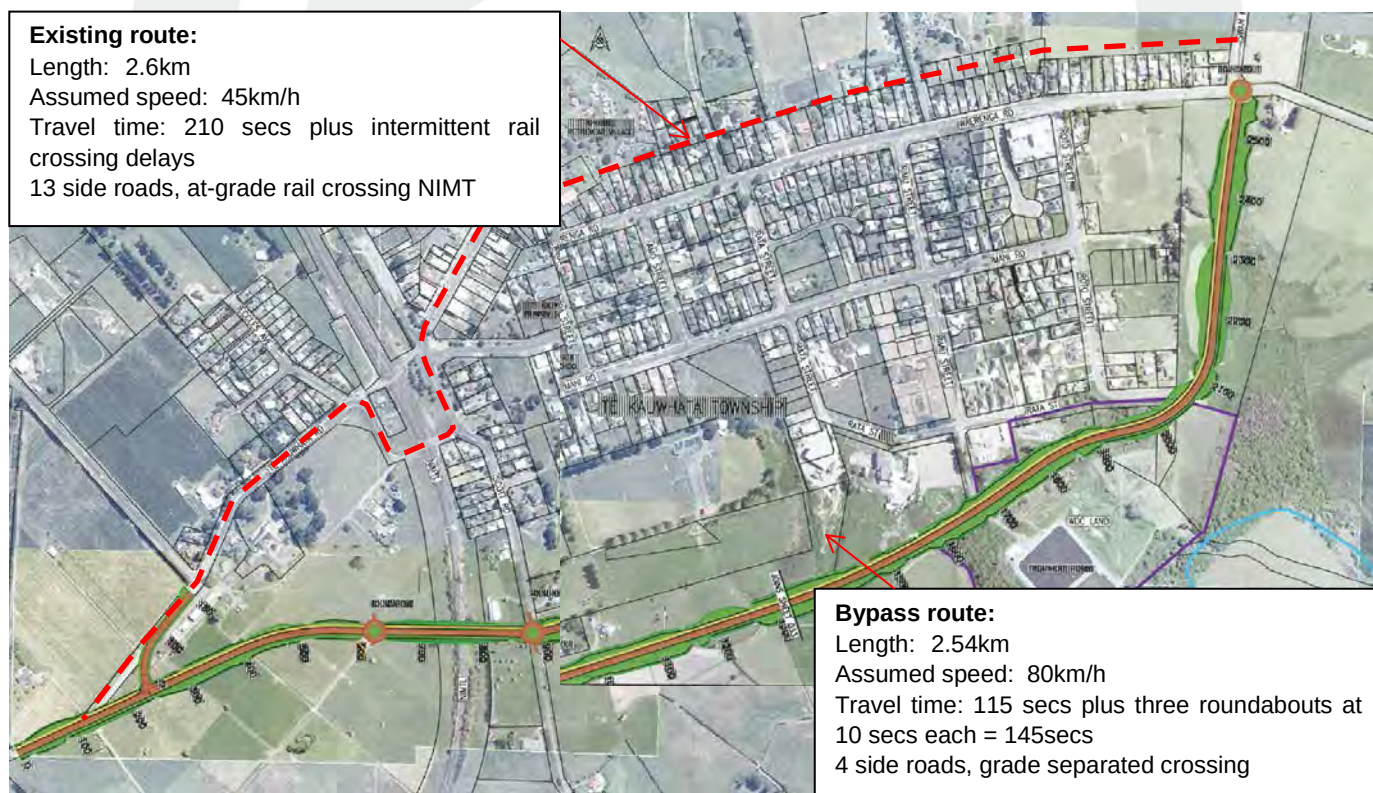


Figure 1. Existing and Alternative Routes (Compiled from NOR Drawings BBO, November 2009)

2. Costs of Maintaining Designation and Costs of Alternative Route

The Costings Report prepared by BBO in March 2009 suggests a construction cost of around \$7.1M (\$2.8M/km). This estimate was based on a desktop evaluation and may have underestimated the potential cost of ground improvements required due to contaminated land and poor ground conditions

and a live rail crossing. We suggest allowing an additional 30% contingency. A construction cost of \$9.5M may be more realistic.

The project requires approximately 12.5ha of land affecting 17 owners including a small area of road and larger areas of council-owned land at the wastewater treatment plant (approximately 2ha). For a nominal land value of say \$80,000/ha (Industrial \$110K/ha, Rural grazing \$30K/ha and swamp \$8K/ha) and ignoring council land, the property costs would be in the order of \$1,000,000 - \$2,000,000 depending on purchase arrangements and dealing with injurious effects.

The costs of the alternative route can be considered in three parts:

- = Early property costs – before Waikato DC wishes to build the road –
say 30% of total = \$150K - \$300K
- = Just in time property costs – when Waikato DC wishes to build the road -
say \$500,000 to \$1,000,000
- = Construction costs - when Waikato DC wishes to build the road -
say \$11M (\$9.5M plus \$1.5M allowance for investigation, design and management of delivery).
- = Total Costs, including fees and property-
say \$12M - \$13M.

This is an important distinction. There is negligible cost to Council in maintaining the designation unless there are land costs associated with it. Land costs can be imposed on Council through Resource Management Act Section 185 which states that the Environment Court may order taking of land:

“S185 Environment Court may order taking of land

(1) An owner of an estate or interest in land (including a leasehold estate or interest) that is subject to a designation or requirement under this Part may apply at any time to the Environment Court for an order obliging the requiring authority responsible for the designation or requirement to acquire or lease all or part of the owner's estate or interest in the land under the Public Works Act 1981.”

You advised that WDC was recently required to purchase a directly affected property at \$800,000 and is unlikely to recover much from the balance areas outside the designation. The Council Resolution supporting the designation allowed for \$200,000/year for 5 years to cover land. The cost of land ownership (based on 6-8% annual loan costs) for assumed acquisition scenarios would be:

Property Cost	Annualised (Say 7%)	NPV costs of holding land for say	
		20 years (USPWF ⁴ = 11.81)	40 years (USPWF = 15.49)
\$800,000	\$56,000	\$661,000	\$868,000
\$1,400,000	\$98,000	\$1,157,000	\$1,518,000
\$2,000,000	\$140,000	\$1,653,000	\$2,169,000

Table 1. Indicative Potential Costs of Holding Property

The cost of protecting the corridor is therefore negligible at present but could rise to around \$100,000/year depending on whether Council is ordered to buy land. This is highly sensitive to the

⁴ 6% discount rate - Uniform Series Present Worth Factor (USPWF) NZTA Economic Evaluation Manual)

particular property, Council's policies on property acquisition and what the nett costs of acquisition may be. For example, at the east end, 126 Waerenga Road is valued at \$835K capital value.

For a scenario with land 20 years early at \$1,400,000 it would take development contributions for local roading of round \$6,000 from approximately 200 lots just to cover the loan costs (NPV) over 20 years.

3. Benefits of Alternative Route

The main benefits of the route therefore appear to be:

- = Tangible – safety – crash reduction, efficiency – reduced travel time
- = Intangible – economic – access to potential industrial development, enhanced amenity (mainly noise and vibration) and opportunity for streetscape development in village centre.

The following sections quantify the potential benefits and what may be required to achieve funding priority based on current NZ Transport Agency project evaluation criteria.

In order for the bypass to be economically viable, benefits would need to outweigh the costs. For a benefit cost ratio of 2, the net present annualised value of the benefits would need to be more than \$1.7M. If the alternative attracts 2,500vpd (most of current daily traffic on Main Road), there would need to be benefits of around \$1.80/vehicle (equivalent to 3.5 minutes travel time reduction on a 3.5minute journey) to achieve it. The benefits required are very unlikely to be achieved without significant traffic growth, diversion to the alternative, and travel time savings.

Benefits comprise safety benefits, time travel benefits and vehicle operating cost savings.

3.1. Safety

There may be some crash benefits, as removing heavy vehicles from the village centre may reduce crash rates. We are not aware of any significant crash issues along the existing route. NZTA CAS data shows that in the last five recorded years (2009-2013), only four crashes have been recorded. Two were minor injury and two were non-injury, equivalent to an average annual crash cost of \$10 – 15K.

Based on NZTA Economic Evaluation crash costs of around \$244,000 for two injury crashes⁵ in five years, the maximum crash saving available based on current crashes would be around \$1.4M (Net Present Value (NPV) over 30 years) or \$100K annually.

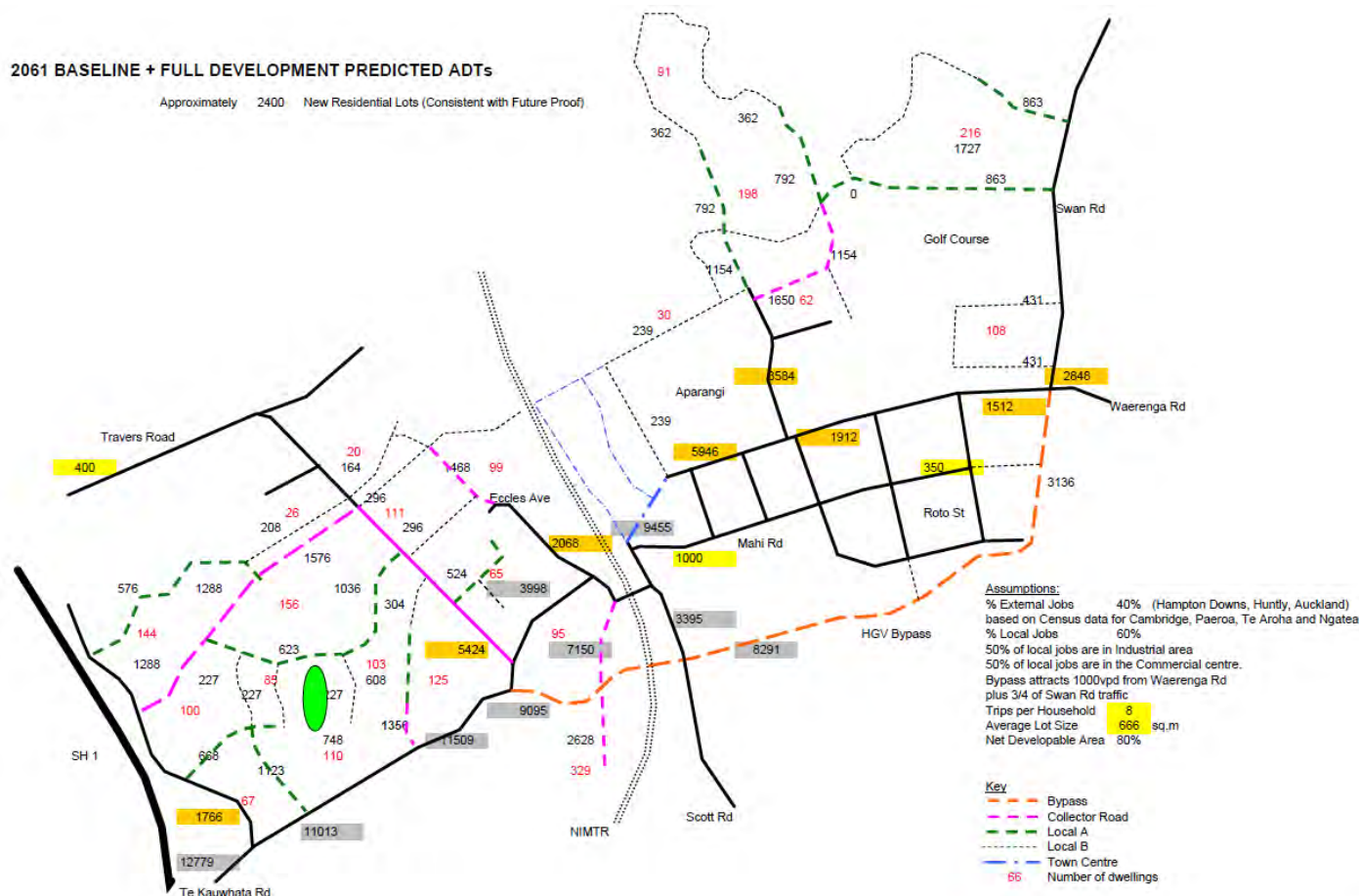
This is extremely conservative. In reality only a small proportion of crashes would involve HCVs and would be avoided with a heavy vehicle route. That level of saving would be unlikely because not all traffic would divert to the alternative route and the alternative route's higher speed would mean higher crash severity and costs likely to offset any savings from reduced likelihood.

Crash savings would be highly unlikely to justify construction of the alternative route, even with significant traffic increases.

3.2. Travel Time Efficiency

The bypass length is not significantly different to the existing route through the town centre, and therefore vehicle operating cost and time travel savings are not substantial. The potential saving from increased speed environment (80km/h assumed compared to 45km/h existing) of around 65 seconds/vehicle, presuming no additional intersection delays.

⁵ EEM all injury crashes – most generous evaluation approach. Minor crashes and non-injury crashes in a 50km/h zone would be around \$25K and \$2.5K respectively.



19/08/2009

Figure 2. 2061 Forecast traffic

The forecast traffic on Main Road in 2021 is around 4,800 vpd. Assuming half the traffic uses the alternative⁶, the annual travel time savings⁷ would be in the order of \$524K/year, equivalent to around \$7.5M NPV.

The NOR forecast up to 8,300vpd on the bypass for full development in 2061, including around 5000vpd local traffic (increase from east to west) from urban development which would not achieve the full benefit

Presuming that the average saving for bypass users is half that of the full travel time saving, the benefits available would be around \$13M.

Travel time savings would increase linearly with traffic on the bypass, so the break-even point (BCR = 1)⁸ would be likely to be shortly before full development, or 2061.

3.3. Intangible Benefits – Willingness to Pay

If crash savings are \$1.4M and the maximum travel time savings in 2061 are around \$13M, then the benefit cost ratio of constructing the road (in 2061) would be $\$14.4M/\$12M = 1.2$.

Typically a medium benefit cost ratio (around 2 or better) would be required for a project to achieve funding priority, so \$24M benefits would be needed, meaning a shortfall of around \$8M.

For the project to be supported by the community, that implies a willingness to pay for the improved access, safety or amenity in the village centre, in addition to the tangible benefits. Annualised at 7%, \$8M represents \$560,000/year, or \$1500/day. The intangible benefits would be for the users of Main

⁶ This is optimistic since the diagram shows a lot of traffic appears to be related to the industrial earea at the west end near Scott Road.

⁷ Based on NZTA EEM rural strategic values of \$31.81/veh-hr, 2,500vpd and 365 days/year, USPWF (30 years) of 14.174, 65 seconds TT saving/vehicle = \$7.43M.

⁸ \$12M project costs including land = \$12M travel time benefits

Road that desire enhanced amenity. In 2061 there would be 2400 new residential lots, or \$230/year each to get \$560,000. For an enhanced village centre, that does not appear unrealistic. However, there would still be over 5,000 vehicles/day including heavy vehicles accessing the town centre. Significant gains would probably require a streetscape upgrade or similar.

If the road is constructed earlier, there would be fewer tangible benefits and the benefits shortfall would be greater (around \$15M to achieve a BCR of 2), and spread across fewer households. In 2021 (700 new lots), that would be equivalent to \$1500/year in additional local contribution (presumably rates). In my opinion, at more than half typical residential annual council rates, that is unrealistic, and borne out by the low community demand evident for the project.

4. Discussion

From the evaluation above, it appears extremely unlikely that the project is going to be economically justified for over 30 years and would be likely to achieve a tangible benefit cost ratio of 1 around 2050. To achieve a typical funding priority with a minimum BCR of 2 relies on intangible benefits that appear reasonable in the long term, but are hard to support if construction were to be in the short to medium term because of lower growth and lower traffic volumes.

The key decision for Waikato DC at this stage is therefore not whether to construct the project, but whether the costs of retaining the designation outweigh the costs of removing it and either accepting traffic on Main Road in perpetuity or finding an alternative corridor. My understanding of alternatives is that the designated route is the most practicable option, with other routes eliminated because of cost or poor efficiency for traffic attraction.

The costs of retaining the designation will be from early land purchase forced by landowners and could be in the order of \$1 -2M depending on property specifics. If circumstances change and the project is eliminated in future, Council would be able to dispose of the property so the actual costs would be less.

The costs of not having the designation and requiring it in the future would arise from property cost increases because of property improvements. The effects may also be greater if land use in the corridor changes, which could mean that a notice of requirement is not successful and a designation is not supported.

The costs of deciding now not to build the road in the future may be in deterring future development, loss of access to industrial land, etc. and compromising Council's growth strategy and structure planning.

The structure plan and designation expected construction over 20 – 40 years. Currently, growth rates appear to be around 25% of those expected, with suggests that the need would be significantly delayed, and the costs of protection significantly increased. Achieving a designation for more than 20 years in the current planning environment is very difficult.

5. Conclusion

The heavy vehicle bypass route is unlikely be economically feasible in the foreseeable future. Economic benefits are unlikely to match costs. Residential development appears to be taking place in Te Kauwhata, slower than anticipated. There does not appear to be any industrial development taking place.

The likely property costs should be reviewed.

The decision on whether or not to keep the designation should be made considering the intangible benefits, which include less noise, smells, and improved amenity for the community and users of the town centre (noting that the road would still be busy) and easier access for industrial areas, and the principle of delivering the structure plan.

Since the case for retention is contingent on growth in Te Kauwhata, it would be worth monitoring this and reviewing the justification following the next census.

There does not appear to be any significant change from the expectations and objectives in the Te Kauwhata Structure Plan that invalidates the need for the project. However, slow growth and higher costs mean that the project is likely to be significantly more expensive and provide lower benefits over a 30 year infrastructure planning horizon.

If you have any questions, please do not hesitate to contact me.

Yours sincerely

A handwritten signature in blue ink, appearing to be 'Al', is written over a large, faint, light-grey circular watermark that dominates the lower half of the page.

Al
Civil / Transportation Engineer

Attachment 1: Notice of Requirement Plans



Attachment 2: Comparative Costs – km rates

Project	Cost	Length	Kilometre Rate (\$M/km)	Comments
Hamilton Ring Road (Crosby Road to Cambridge Road)	\$80M	6km	\$13.3M	Sourced from TIO. Total project cost, includes property, professional fees and construction. Mainly 4 lanes – Rail crossing
Hamilton Ring Road Extension (Crosby Road to Fifth Ave)	\$30M	3km	\$10.0M/km	4-lane, median divided urban arterial. Construction cost only, excludes property and professional fees.
Waikato Expressway – Ngaruawahia Section	\$190M	12.3km	\$15.4M/km	Construction cost, source: (http://www.nzta.govt.nz/projects/ngaruawahia/) Includes major crossing of Waikato River and significant interchange structures Likely to include property costs
Southern Links – East/west state highway link	\$172M	12.6km	\$13.7M/km	Scheme estimate (June 2012), includes three grade separated interchanges and crossing of the Waikato River. Construction cost, excludes property and professional fees.
Te Awamutu Western Arterial	\$54M	4.6km	\$11.8M/km	Highly skewed rail crossings, significant earthworks 4 intersections 2 lane



Open Meeting

To	Strategy & Finance Committee
From	GJ Ion Chief Executive
Date	13 November 2015
Prepared By	LM Wainwright Committee Secretary
Chief Executive Approved	Y
DWS Document Set #	1094403
Report Title	Exclusion of the Public

1. Executive Summary

To ensure that the public are excluded from the meeting during discussion on Public Excluded items.

2. Recommendation

THAT the report of the Chief Executive – *Exclusion of the Public* - be received;
AND THAT the public be excluded from the meeting during discussion on the following items of business:

1. Confirmation of Minutes – 23 November 2015
2. Receipt of Audit & Risk Subcommittee Minutes - 10 December 2015
3. Sundry Debt Write Off - Expired Debt

This resolution is made in reliance on section 48(1)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by section 7 of that Act which would be prejudiced by the holding of the relevant part of the proceedings of the meeting in public are as follows:

That the public conduct of the relevant part of the proceedings of the meeting would be likely to result in the disclosure of information where the withholding of the information is necessary to:

- a) Protect members, or officers, or employees of any local authority, or any persons to whom section 2(5) of the Local Government Official Information and Meetings Act 1987 applies, from improper pressure or harassment;
- b) Enable the local authority holding the information to carry out, without prejudice or disadvantage, commercial activities;
- c) Protect the privacy of natural persons, including that of deceased natural persons;

AND THAT the exclusion of the public from the whole or relevant part of the proceedings of the meeting is necessary to enable the local authority to deliberate in private on its decision or recommendation in any proceedings before the local authority where a right-of-appeal lies to any Court or Tribunal against the final decision of the local authority in those proceedings.