

**Civil Defence Emergency Management  
Group Meeting  
Tuesday 6 September 2022 at 11.00am**

# **AGENDA**



## Civil Defence Emergency Management Group Meeting Agenda

Meeting to be held in the Council Chamber  
36 Water Street, Whangārei  
on Tuesday 6 September 2022, commencing at 11.00am

**Recommendations contained in the agenda are NOT decisions of the meeting. Please refer to minutes for resolutions.**

### MEMBERSHIP OF THE CIVIL DEFENCE EMERGENCY MANAGEMENT GROUP MEETING

Chair, NRC Councillor, Rick Stolwerk

WDC Mayor Sheryl Mai	KDC Mayor Jason Smith	FNDC Councillor Dave Collard
NZ Police Representative Superintendent Tony Hill	FENZ Representative Commander Wipari Henwood	NEMA Representative Chloe Marshall

### KARAKIA / WHAKATAU

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**TITLE:** Confirmation of Minutes - 14 June 2022

**From:** Nicky Hansen, PA to GM Community Resilience

**Authorised by** Victoria Harwood, Pou Tiaki Hapori - GM Community Resilience, on 30  
**Group Manager/s:** August 2022

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### Ngā mahi tūtohutia / Recommendation

That the minutes of the Civil Defence Emergency Management Group meeting held on Tuesday 14 June 2022, be confirmed as a true and correct record.

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### Attachments/Ngā tapirihanga

Attachment 1: 2022 06 14 CDEM Group Minutes Unconfirmed [↓](#) 



Civil Defence Emergency Management Group Meeting  
14 June 2022

## Civil Defence Emergency Management Group Meeting Minutes

Meeting held in the Council Chamber  
36 Water Street, Whangārei  
on Tuesday 14 June 2022, commencing at 11.00

### Tuhinga/Present:

Chair, Northland Regional Council Councillor, Rick Stolwerk  
Whangārei District Council Mayor, Sheryl Mai  
Kaipara District Council Mayor, Jason Smith  
Far North District Council Councillor, Dave Collard  
NZ Police Representative, Superintendent Tony Hill  
Fire & Emergency NZ Representative, District Manager Wipari Henwood  
National Emergency Management Agency Representative, Chloe Marshall

### I Tae Mai/In Attendance:

#### Full Meeting

Chair Penny Smart, Northland Regional Council (NRC)  
Councillor Colin Kitchen, NRC  
Group Manager - Community Resilience Victoria Harwood, NRC  
Northland CDEM, Graeme Macdonald  
Northland CDEM, Jenny Calder  
Northland CDEM, Tegan Capp  
Northland CDEM, Evania Arani  
Northland CDEM, Mana Wright  
Northland CDEM, Bill Hutchinson  
Northland CDEM, Sarah Boniface  
Northland CDEM, Rachel Hill  
Northland CDEM, Zach Woods  
WDC Representative, Cr Nicholas Connop  
Royal NZ Navy, Richard Mathers  
Royal NZ Navy, Peter Johnson  
NRC Secretariat, Nicky Hansen  
NRC Digital Coordinator – Social & Content, Meloney Tupou

The Chair declared the meeting open at 11.08am.

### Ngā Mahi Whakapai/Housekeeping (Item 1.0)

### Ngā whakapahā/Apologies (Item 2.0)

There were no apologies.

#### Moved (Mai / Smith)

That no apologies were received.

Carried

Civil Defence Emergency Management Group Meeting  
14 June 2022

### **Nga whakapuakanga/Declarations of Conflicts of Interest (Item 3.0)**

It was advised that members should make declarations item-by-item as the meeting progressed.

### **Confirmation of Minutes - (Item 4.1)**

**Report from Nicky Hansen, PA to GM Community Resilience**

**Moved (Stolwerk / Collard)**

That the minutes of the Civil Defence Emergency Management Group meeting held on 1 March 2022 be confirmed as a true and correct record.

**Carried**

### **Receipt of Schedule of Actions (Item 4.2)**

**Report from Nicky Hansen, PA to GM Community Resilience**

**Moved (Stolwerk / Mai)**

That the minutes of the Civil Defence Emergency Management Group meeting held on 1 March 2022 be confirmed as a true and correct record.

**Carried**

**Action: Item #2, Report to go to the Northland Forward Together meeting on 25 July 2022.**

### **NEMA Monthly Update (Item 5.1)**

**Report from Graeme MacDonald, Emergency Manager**

**Moved (Stolwerk / Mai)**

1. That the report 'NEMA Monthly Update' by Graeme MacDonald, Emergency Manager and dated 23 May 2022, be received.
2. That the "Partnership Charter" be received and endorsed.

**Carried**

### **Northland CDEM Group, CEG and Group Appointments (Item 6.1)**

**Report from Graeme MacDonald, Emergency Manager**

**Moved (Smith / Hill)**

1. That the report 'Northland CDEM Group, CEG and Group Appointments' by Graeme MacDonald, Emergency Manager and dated 3 June 2022, be received.
2. That the Civil Defence Emergency Management Group approves the appointment of Alistair Dunlop, Building Services Manager – Kaipara District Council, as a Group Controller, in accordance with Section 26 (2), Civil Defence Emergency Management Act 2022.

**Carried**

Civil Defence Emergency Management Group Meeting  
14 June 2022

*Secretarial note: The Chair thanked Sandra Broadman Group Controller for taking on this role and for her five year term with CDEM and work in this position. Nominations have been sort and John Burt, Kaipara District Council, CEG Representative will be the replacement Deputy Chair of the CEG.*

### **CEG Chair's Report (Item 6.2)**

**Report from Victoria Harwood, Pou Tiaki Hapori - GM Community Resilience**

**Moved (Stolwerk / Mai)**

That the report 'CEG Chair's Report' by Victoria Harwood, Pou Tiaki Hapori - GM Community Resilience and dated 3 June 2022, be received.

**Carried**

**Action: Northland Lifelines Group - Mayor Smith questioned the Tonkin and Taylor role in Te Tai Tokerau and where the report is presented and to who? Through the Chair, Tegan Capp updated that each council has had initial input and will report back as to the next steps in the report process.**

### **Update on Civil Defence Community Response Plans in Northland (Item 6.3)**

**Report from Evania Arani, Emergency Management Specialist; Tegan Capp, Emergency Management Specialist; Sarah Boniface, Emergency Management Specialist; Bill Hutchinson, Emergency Management Specialist and Laura Exton, Emergency Management Specialist – Kaipara**

**Moved (Stolwerk / Mai)**

That the report 'Update on Civil Defence Community Response Plans in Northland' by Evania Arani, Emergency Management Specialist; Tegan Capp, Emergency Management Specialist; Sarah Boniface, Emergency Management Specialist; Bill Hutchinson, Emergency Management Specialist and Laura Exton, Emergency Management Specialist – Kaipara and dated 3 June 2022, be received.

**Carried**

**Action:**

- Letter from CDEM to RNZ and NEMA about the removal of Radio Mast at Waipapakauri before 8 July 2022.
- This issue is to be raised to new Ministers' Civil Defence, Hon. Kieran McNulty and Broadcasting, Hon. Willie Jackson.
- Police and FENZ will raise through their agencies if there are temporary fixes before a more permanent solution.

### **Whakamutunga (Conclusion)**

The meeting concluded at 12.42pm.

**TITLE:**                    **Receipt of Action Sheet**

**From:**                    Nicky Hansen, PA to GM Community Resilience

**Authorised by**           Victoria Harwood, Pou Tiaki Hapori - GM Community Resilience, on 30  
**Group Manager/s:**    August 2022

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### **Whakarāpopototanga / Executive summary**

The purpose of this report is to enable the meeting to receive the current action sheet.


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### **Nga mahi tutohutia / Recommendation**

That the action sheet be received.

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### **Attachments/Ngā tapirihanga**

Attachment 1: CDEM Group Schedule of Actions - as at 30 08 2022 [↓](#) 

CDEM Group - schedule of actions					as of 17/08/2022	
Action Item	Meeting date	Item	Action	Responsible staff	Status	Notes
2	8/09/2021	Item 6.7 Multi-Agency Coordination Centre Verbal Update	Report on the Multi-Agency Coordination Centre to go to the Northland Forward Together meeting on 23 November 2021.	Graeme Macdonald	In Progress	<p><b>16/08/2022</b> - The 25 July 2022 request was postponed due to other priorities on FNT agenda.</p> <p><b>14/06/2022</b> - Postponed for other priorities. This will be presented at Northland Forward Together Meeting 25 July 2022.</p> <p><b>01/03/2022</b> - the 23 November 2021 meeting was postponed. Currently working on rearranging which meeting to bring this report to in 2022.</p> <p><b>10/11/2021</b> - it was agreed that this should be moved to a Northland Forward Together in 2022.</p>
3	14/06/2022	Item 6.2CEG Chair's Report - Far north CDEM Activities	Letter from CDEM to RNZ and NEMA about the removal of Radio Mast at Waipapakauri before 8 July 2022.	Graeme Macdonald	In Progress	<p><b>04/08/2022</b> - Letter received from NEMA. The Ministers have asked that RNZ and officials consider temporary and sustainable solutions and requested a follow up meeting before the end of the month.</p> <p><b>02/08/2022</b> - Minister for Broadcasting, Hon Willie Jackson, the Minister for Emergency Management, Hon Kieran McAnulty, RNZ Chief Executive Paul Thompson, and officials from the Ministry of Culture and Heritage and NEMA, met to discuss the proposed removal of the Waipapakauri mast, and two further masts planned for removal in the Far North over the next 24 months. An update on progress is awaited.</p> <p><b>14/06/2022</b> - To be raised with new Civil Defence Minister Kieran McAnulty and new Broadcasting Minister Willie Jackson.</p> <p><b>14/06/2022</b> - Police and FENZ to raise through their agencies.</p>
4	14/06/2022	Item 6.2CEG Chair's Report - Lifelines Group	Mayor Smith questioned the Tonkin and Taylor role in Te Tai Tokerau and where the report is presented and to who? Through the Chair, Tegan Capp updated that each council has had initial input and will report back as to the next steps in the report process.	Tegan Capp	In Progress	<p><b>16/08/2022</b> - Presentation to be delivered on this project in 6 September 2022 CEG / CDEM Group Meeting.</p>

**TITLE:** **National Emergency Management Agency September Update**

**From:** Graeme MacDonald, Emergency Manager

**Authorised by** Victoria Harwood, Pou Tiaki Hapori - GM Community Resilience, on 30  
**Group Manager/s:** August 2022

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### **Whakarāpopototanga / Executive summary**

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### **Ngā mahi tūtohutia / Recommendation**

1. That the report 'National Emergency Management Agency September Update' by Graeme MacDonald, Emergency Manager and dated 16 August 2022, be received.

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Attached for the information of the group is the September 2022 update from the National Emergency Management Agency.

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### **Attachments/Ngā tapirihanga**

Attachment 1: National Emergency Management Agency update for September [!\[\]\(d5d7044e5caf6907399af2dced8d6ff8\_img.jpg\)](#) 



## Report to the Northland CDEM Group – September 2022

### New Minister for Emergency Management

- On Monday 13 June it was announced that Hon Kieran McNulty, MP for Wairarapa, is the new Minister for Emergency Management, replacing Hon Kiritapu Allan, with effect from Tuesday 14th June.
- His role has a specific focus on regional issues and includes the Associate Transport (on regional transport) and Associate Local Government portfolios.
- Officials from NEMA have met with the new Minister and will continue to engage closely with him to brief him on the portfolio and hear about the Minister's priorities in this space.
- NEMA does not expect that the new Minister's focus or direction will significantly diverge from Minister Allan's on key priorities such as the Trifecta programme, working with iwi/Māori, and operational readiness.
- NEMA is looking forward to working with Minister McNulty and will engage with his office and Groups to facilitate opportunities for him to get to know the Emergency Management sector.
- NEMA is thankful to Minister Allan for her support of the emergency management sector during her two years holding the portfolio.

### Trifecta Programme

- The Trifecta Programme suite of work is a key priority for the Minister for Emergency Management and the National Emergency Management Agency (NEMA).
- The work is not a fundamental transformation of the emergency management system but will instead address a number of identified shortcomings to ensure that the system can meet current and future needs.

### New Emergency Management Bill

- Drafting of the Bill is underway with the intention to introduce it to the House of Representatives after the local government elections.
- There will be an opportunity to provide feedback via the Select Committee process.
- Written submissions to the Select Committee are likely to be called for in late November 2022, with hearings in early 2023.

### National Civil Defence Emergency Management Plan and Guide

- The review of the National Civil Defence and Emergency Management Plan and accompanying Guide is happening alongside the development of the new Emergency Management Bill to ensure alignment.
- As a result of feedback from stakeholders and the rapidly changing emergency management environment, the intention is that the new Plan is more accessible, user-friendly, and responsive as things change.
- NEMA is aiming to engage with sector partners on an early draft of the National Plan from October to December 2022.



## Monitoring, Alerting and Reporting Centre

- NEMA's new Monitoring, Alerting and Reporting (MAR) Centre went live on 27 June.
- The Centre is situated in NEMA's Wellington office and will be staffed with 24/7 awake capability.
- The Centre will take over the functions of NEMA's duty system, such as issuing Emergency Mobile Alerts.
- NEMA's Regional Emergency Management Advisors (REMA's) will continue to be the key point of contact for the regional Duty teams.
- Changes are not expected to impact the resourcing requirements or expectations on the CDEM Groups.

## New Zealand Response Teams

- In collaboration with CDEM Groups, a national accreditation process has been developed for the New Zealand Response Teams (NZRTs).
- The process is designed to provide assurance that the teams meet certain standards, and is also in line with the Technical Advisory Group (TAG) review commissioned by the Minister following the November 2016 Hurunui/Kaikōura earthquake and tsunami, and the 2017 Port Hills fire.
- All NZRTs must commit to the new accreditation process by December 2023.
- CEG endorsement is required for all NZRT specialised 'strands' outside of the framework's foundation skill requirements (e.g. swift water rescue).
- Existing Group-to-Group arrangements for NZRT support may be impacted under the revised system as only accredited teams will provide for out-of-region.
- CDEM Groups that do not currently have NZRTs may consider establishing teams under the revised system, which is now more robust and provides national oversight, governance and HSWA protections.

## Sector Wellbeing

- There are significant issues with staff burnout and fatigue across the emergency management sector.
- This is evidenced by the difficulties emergency management staff have had maintaining their wellbeing, and the number of staff who have recently left the sector.
- The National Emergency Management Development Group (NEMDG), comprising the 16 CDEM Group Managers and NEMA, established a Wellbeing sub-group to look at options to improve sector wellbeing.
- The Wellbeing sub-group has partnered with Hummingly to produce a wellbeing toolkit designed for emergency management staff.
- Group Managers and NEMA are assessing the feasibility and implementation costs of the wellbeing toolkit at the national and regional level.

## National Tsunami Strategy

- Tsunami preparedness is a key priority for the emergency management sector.





- There are programmes of work underway to enhance preparedness at local, regional, and national levels.
- NEMA and CDEM Group Offices have made a joint commitment to develop a National Tsunami Strategy to guide the sector in ensuring communities are tsunami ready.
- The development of this strategy will be a collaborative effort with the CDEM Groups and partner agencies e.g. GNS Science. The strategy will be delivered by the third quarter of 2023.
- This strategy will be supported by a National Tsunami Work Programme, which will combine the key tsunami work across NEMA, CDEM Groups and partner agencies and show the interdependencies across the sector.

### Flooding Campaigns

- Floods pose significant risks to communities across Aotearoa/New Zealand.
- NEMA has developed new public education campaigns to increase awareness of the dangers of flooding.
- These campaigns include print, social media, video, and radio ads for use during readiness and response.  
The campaigns will be delivered in two parts.
- **Part One:** The ***Get The Flood Out*** readiness campaign went live on Thursday 9 June.
- The campaign is designed to discourage people from entering floodwaters.
- It is targeted at those who may be more likely to place themselves at risk, such as younger males, and uses bold graphics and a play on words telling people to GTFO (get the flood out).
- **Part Two:** The ***Flood Waters are Deep Trouble*** campaign will be deployed when severe weather likely to result in flooding is forecast (particularly if a red weather warning is in place), or when flooding is already occurring.
- This advertising has a more serious and impactful tone.

### Local Government power to act during Local Government elections

During the period from the official announcement of the election results to the date of the first meeting of the local authority, a state of local emergency will only be able to be declared by the Minister for Emergency Management.

**TITLE:** Northland CDEM Group, CEG and Group Appointments

**From:** Graeme MacDonald, Emergency Manager

**Authorised by** Victoria Harwood, Pou Tiaki Hapori - GM Community Resilience, on 30  
**Group Manager/s:** August 2022

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### Whakarāpopototanga / Executive summary

This report provides an up-to-date list of members and key appointments for the Northland CDEM Group. The list of key appointments is available on the Northland CDEM Group plan webpage. Key appointments are also referenced in the group plan.

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### Ngā mahi tūtohutia / Recommendation

1. That the report 'Northland CDEM Group, CEG and Group Appointments' by Graeme MacDonald, Emergency Manager and dated 30 August 2022, be received.
2. That the CDEM Group appoint two new CDEM Group Controllers, Calvin Thomas WDC/NTA General Manager and Blair King FNDC Chief Executive.

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### Background/Tuhinga

#### Membership of the Northland Civil Defence Emergency Management Group:

- Cr Rick Stolwerk, Chairperson (NRC) - alternate Cr Colin Kitchen
- Cr Dave Collard (FNDC) - alternate Cr Kelly Stratford
- Mayor Sheryl Mai (WDC) - alternate Cr Nicholas Connop
- Mayor Jason Smith (KDC) - alternate Cr Anna Curnow
- Commander Wipari Henwood (Fire and Emergency NZ)
- District Commander Superintendent Tony Hill (NZ Police)
- Chloe Marshall, observer (NEMA)

#### Membership of the Coordinating Executive Group:

- Victoria Harwood (Chairperson, NRC)
- Andy Finch (FNDC)
- TBA (WDC)
- John Burt (KDC)
- Inspector Wayne Ewers (NZ Police)
- Assistant Area Commander Graeme Quensell (Fire and Emergency NZ)
- Sarah Hoyle (Northland Health)
- Ben Lockie (St John Ambulance)
- Chloe Marshall (NEMA) in observer role
- Liz Philips (Interim MoH Representative)
- Russell Watson (Northland Lifelines Group)
- Rachel Hill (Northland Welfare Coordination Group)
- Hone Dalton (Iwi Representative)
- Mariameno Kapa-Kingi (Iwi Representative)
- Snow Tane (Iwi Representative)

**Group Controllers:**

- Alistair Wells
- Blair King
- Calvin Thomas
- Graeme MacDonald
- John Burt
- Simon Weston
- Victoria Harwood

**Local Controllers for the Whangarei District:**

- Vacant

**Local Controller for the Kaipara District:**

- John Burt

**Local Controllers for the Far North District:**

- Alistair Wells
- Blair King
- Jacine Wamington

**Group Welfare Managers:**

- Rachel Hill
- Chris McColl
- Raewyn Smythe

**Local Welfare Managers:**

- Jenny Rooney (KDC)
- Paula Ulrich (WDC)
- Shayne Storey (FNDC)
- Mia Haywood (FNDC)
- Kylie Cox (FNDC)

**Group Recovery Manager:**

- Mark Trudinger
- Jenny Calder
- Graeme MacDonald

**Local Recovery Managers**

- Janice Smith (FNDC)
- John Burt (KDC)
- Vacant (WDC)

**Controller appointments**

Members of the group may recall from the June agenda item that several appointed Controllers had recently resigned. On 1 September the Northland CDEM Group had five appointed Group Controllers, about half of what we had appointed in December 2021. Since then, Simon Weston, WDC Chief Executive, has agreed to continue as a Group Controller.

Mark Trudinger has also joined the Northland CDEM professionals and is the Recovery Manager for the group.

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**Attachments/Ngā tapirihanga**

Nil

**TITLE:** CEG Chair's Report

**From:** Victoria Harwood, Pou Tiaki Hapori - GM Community Resilience

**Authorised by** Victoria Harwood, Pou Tiaki Hapori - GM Community Resilience, on 30  
**Group Manager/s:** August 2022

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### Whakarāpopototanga / Executive summary

This report provides a summary of activities undertaken by or directly related to the Northland Civil Defence Emergency Management Group over the period since the last CEG meeting in June 2022.

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### Ngā mahi tūtohutia / Recommendation

1. That the report 'CEG Chair's Report' by Victoria Harwood, Pou Tiaki Hapori - GM Community Resilience and dated 30 August 2022, be received.

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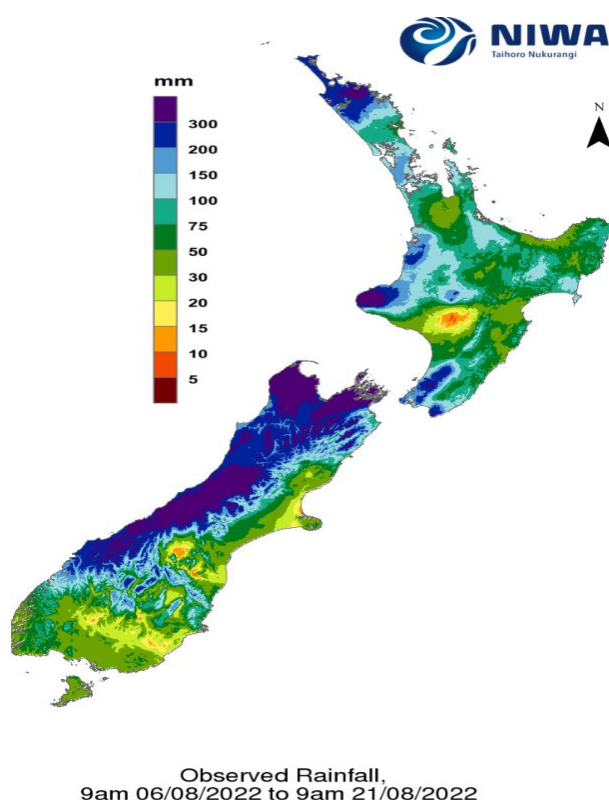
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#### 7.2.1. ACTIVATIONS AND RESPONSE – Graeme MacDonald, Emergency Manager

Two significant weather events have impacted Northland over the past months. The de brief document, Item 9.1, outlines the event that occurred on 23 and 24 July. A second event occurred on 17 and 18 August that resulted in widespread flooding and damage to roading in the Far North, particularly around Kaitia.

As a result of this event, SH1 Mangamuka is closed as assessments are carried out on damage to the road. Also, part of State Highway 10, Kaeo to Kaitia, was closed for a period.

Although there was widespread flooding there were only a small number of evacuations and requests for welfare assistance near Awanui. Of note, the Awanui river and the recent flood mitigation works carried out reduced the potential for flooding and damage to the Kaitia township.



### 7.2.2. CDEM GROUP OPERATIONS – Graeme MacDonald, Emergency Manager

#### Staff Movements

Since the last meetings there have been two further resignations from Claire Nyberg, Tsunami Projects and Mana Wright, Relationship Manager. The Tsunami Projects role has been advertised, interviews held, and a recommendation for appointment has been made.

The CDEM Relationship Specialist Role was established after a successful application to the Resilience Fund provided funding for the role for 1 year. If the role is to continue, then the funding to support the role will need to come from the Northland CDEM Group funds. The main purpose of this role is to focus upon iwi engagement and the Māori Engagement Action plan outlined in the Northland CDEM Group plan. **For the information of the CDEM Group, approval is sought from the CEG to fund the role for a further 12 months (\$90,000).**

#### Declarations in the immediate period post Local Government elections

As noted in the NEMA update the following arrangements exist in the event there is a need to declare a local emergency over the period post Local Government elections. During the period from the official announcement of the election results to the date of the first meeting of the local authority, a state of local emergency will only be able to be declared by the Minister for Emergency Management.

#### Service Level Agreements

Service level agreements for the three councils are in the process of being finalised, with both the FNDC and KDC having been signed off. The WDC SLA will be signed off in due course.

### **Marae Preparedness Planning**

From recent events over the past year and through our engagement with our Māori communities it has highlighted the need to refresh and update our Marae Preparedness Plan documentation. A word version of a templated plan is currently with a designer being refreshed and a few members of the team have been meeting regularly to workshop the content and to plan for a roll out with Marae who are interested in having their own plans in place. Members of the team plan to consult with some of our iwi partners in October before finalising all the documentation.

### **Multi Agency Coordination Centre**

A reviewed concept design has been developed for the Northland Multi Agency Coordination Centre together with updated quantity surveyor estimates. The updated concept has reduced the overall projected costs, however there is still a gap between what is currently budgeted and the proposed concept design. Work is continuing to identify where the additional funding will come from.

### **Generator Kaipara District Council Service Centre**

In early 2022 the NRC opened the new KDC service centre in Dargaville. The new building is used by both KDC and NRC personnel. Recently an agreement has been reached to use the new building as an Emergency Operations Centre (EOC) when required. The old Dargaville EOC was housed in the Memorial Hall annex, which is to be demolished. **NRC and KDC have agreed to install a generator and as part of the cost, for the information of the CDEM Group, approval is sought from the CEG for the CDEM Group funds to provide a one third share, \$15,000** of the total cost of approximately \$45,000. NRC and KDC will fund the remainder. A plan is being developed by the Kaipara Emergency Management Specialist to outline how the building will be set up and run as an Emergency Operations Centre.

### **7.2.3. WHANGAREI DISTRICT CDEM UPDATE – Tegan Capp, Emergency Management Specialist (EMS) and Evania Arani, Emergency Management Specialist**

#### **WHANGAREI DISTRICT COUNCIL CDEM CAPACITY AND CAPABILITY**

##### **Whangarei District Council On-Call Arrangements**

After undergoing the consultation process required by Whangarei District Council people and capability department, proposed changes to Civil Defence Emergency Management Duty PIM & Duty Officer Role and Responsibilities and On-Call Arrangements have been approved. The changes will take effect from 1 September 2022. This will see the Whangarei District Council duty roster aligning with the Northland CDEM Duty Roster- providing greater capacity for the delivery of CDEM in both the district, and for the region.

An 'Initial Actions' document has been developed and signed off by the Whangarei District Council Chief Executive. This document outlines the roles, responsibilities and expectations of staff fulfilling duty roles; and provides step by step guidance and prompts for actions they might be required to take in Civil Defence emergencies.

EMS have delivered a three-part training and induction programme with all Duty Officers and Duty PIM and have equipped all duty staff with On Call Folders- which includes hard copy procedures, guidance, contact information and other reference material relevant to the role.

## COMMUNITY ENGAGEMENT ACTIVITIES

Tutukaka Marina Management Trust hosted a meeting with the Northland Regional Council Harbourmaster and four members of the Northland CDEM team on Thursday 23 June 2022 EMS supported the meeting at the Tutukaka marina as outlined in the Tsunami Projects Update.

**Hikurangi** community has now established an active Civil Defence community response group for the area. EMS met with a member of the group to review and update the community response plan, which was later presented to the full group at their July Civil Defence meeting. There were some minor amendments to be made and once this is complete it will be available for viewing through the Northland Regional Councils Civil Defence page.

**Tamaterau/Waikaraka** community response group now only have two active community response group members. A pamphlet drop was done to over 400 homes in the area trying to recruit new members and EMS attended the Tamaterau Hall society meeting as a guest speaker to present on Civil Defence, the importance of a community response group and what the role entails. The meeting was attended by approx. 15 people from the community with two people expressing interest to be involved. The hall society has requested another meeting be held solely for Civil Defence in the next couple of months to promote the group in the hope that a couple more members from the community will come forward wanting to be involved.

During the month of July, EMS were invited to the **Bupa retirement village** in Tikipunga to do a presentation on personal preparedness. This presentation was well attended and well received from the residents. From this engagement came the opportunity to do the same presentation to the **Kamo Seniors over 60s group** attended by 30 people. From this engagement there was some really good discussion around grab bags and medication and the need to connect in often with their peers and or neighbours. Support was also given to a few of the members with mobile phone downloads of the The NZ Red Cross Hazard App.

EMS staff attended the **Ruakaka Residents and Ratepayers** meeting to provide a presentation on Emergency Management in Northland as well as the Ruakaka Community Response Plan. Unfortunately, the Ruakaka CDEM Response Group Coordinator was unavailable to attend on the night but there was some good discussion with the group who are wanting to connect with the response group and to support them with their work in the community. EM specialist has connected the two groups together since the meeting and has offered her support by attending any further meetings as required.

**7.2.4. FAR NORTH CDEM UPDATE** – Sarah Boniface, Emergency Management Specialist (EMS); Bill Hutchinson, Emergency Management Specialist

### FAR NORTH DISTRICT COUNCIL CAPACITY AND CAPABILITY

#### FNDC CDEM Review

Due to staff turnover and natural attrition a gap analysis has been undertaken to assist the Far North District Council to determine what training and support may be required to maintain an effective response to CDEM related events.

Where applicable, any gaps have been identified and included in the work programme as part of the annual review of Service Level Agreements between councils.

Coordinated Incident Management, functional role courses and an exercise as below have been programmed for the Far North District Council in September and November 2022.



Date	Training	Venue / Location
12 & 13 Sept	Coordinated Incident Management	TBC - Kaikohe/Kerikeri/Kaitaia
14 Sept	EOC Function	TBC - Kaikohe/Kerikeri/Kaitaia
15 Sept	Planning Function	TBC - Kaikohe/Kerikeri/Kaitaia
16 Sept	Logistics Function	TBC - Kaikohe/Kerikeri/Kaitaia
Additional courses below can be scheduled subject to demand		
14 & 15 Nov	Coordinated Incident Management	TBC - Kaikohe/Kerikeri/Kaitaia
16 Nov	Intelligence Function	TBC - Kaikohe/Kerikeri/Kaitaia
17 November	Exercise	TBC - Kaikohe/Kerikeri/Kaitaia

### Emergency Operations Centre Preparedness

A review of Welfare Kits used for the setup of a Community Civil Defence Centre has been undertaken.

A check of laptop computers and associated EOC IT equipment has been carried out by the FNDC IT team to ensure operational readiness.

### FNDC STAKEHOLDER ENGAGEMENT

#### CDEM Fire / Emergency New Zealand Collaboration

EMS met with staff from Fire Emergency New Zealand Community Risk and Recovery Team on 29 June 2022. The purpose of the meeting was to provide an overview of Civil Defence Emergency Management and Regional and Local CDEM arrangements. It also provided opportunities to determine where we can work collaboratively together when developing Community Response Plans and identifying hazards and mitigation outcomes for communities.

#### Youth in Emergency Services Program

The Youth in Emergency Services program for the 2022-23 year is planned to be held in the Far North District in May next year. A preliminary meeting has been undertaken to determine the potential location and availability of venues. The tentative location will be in Paihia during the month of May 2023.

#### Kantar Research

Far North EMS were asked to participate in interviews relevant to the Kaimaumau Fire that occurred in December 2021. Of key interest to them was the Kaimaumau Community Response Plan and how this aligned to the fire response and community evacuations.

#### Moerewa Flood Mitigation Works and Site Visit

Far North EMS Sarah Boniface, hosted a meeting at Kawakawa on 1 July 2022 for key stakeholders from Northland Regional Council, Fire Emergency New Zealand, New Zealand Police and Far North

District Council (including Elected Members and Local Controllers). The purpose was to provide a stakeholder update on the scope of work and progress on the flood mitigation works being undertaken by the Northland Regional Council at Otiria. This was presented by Joseph Camuso, Rivers and Natural Hazards Manager.

Note: \$5.1 million of works will be carried out in three stages, starting with a \$500,000, 150 metre lower spillway from Pokapu Road to where it meets the Waiharekeke River. Replacement of the existing Pokapu Road Bridge and building a new three-span, 60-metre-long single-lane bridge is planned to start in December 2022



**Photo:** Joseph Camuso Rivers and Natural Hazards Manager (Far Right), explains scope of works.

### Fire Emergency New Zealand Exercise - SIMEX

Northland Civil Defence Emergency Management staff were invited to participate in a regional exercise hosted and run by Fire Emergency New Zealand at their Auckland Regional Coordination Centre on the 29 June 2022. The exercise was based on a regional storm event resulting in a major tank fire at the Marsden Point Oil Refinery.



**Photo:** L- R: Bill Hutchinson Northland CDEM, District Managers Wipari Henwood and Brad Mosby Fire Emergency New Zealand discuss tactical options



**Photo:** Regional Coordination Centre - Incident Management Team Briefing

## FAR NORTH COMMUNITY ENGAGEMENT ACTIVITIES

Community and engagement activities for the past quarter include:

- Ongoing support to develop a Community Response Plan for **Waimamaku**.
- Meetings with representatives of the Whitiara Marae to develop a Community Response Plan for the **Te Tii Community on Purerua Peninsula**.
- Meetings to support the **Moerewa Community** Response Group to review and update their Community Response Plan.
- Ongoing attendance at meetings and workshops in support of the continuation of the **Te Hiku Covid Response Group** (THCRG).
- A meeting was held with the Peria Principal and School Board of Trustees to assist with emergency planning arrangements for the school, should it be required to be used as an assembly area for the community during flooding or other emergency events.
- Attendance and participation in quarterly **Te Hiku/Far North Inter- Agency Hui**
- Collaboration meeting with **Auckland Emergency Management staff**.

### 7.2.5. KAIPARA CDEM UPDATE – Laura Exton, Emergency Management Specialist – KDC CDEM Capacity and Capability Activities

#### KAIPARA DISTRICT COUNCIL CAPACITY AND CAPABILITY

##### KDC Emergency Operations Centre (EOC) Exercise – Friday 8 July, Dargaville

It is part of the KDC/CDEM Work Programme to organise and hold an annual EOC Exercise once per year. After multiple COVID-19 related delays, on Friday 8 July, an Emergency Operations Centre exercise was held in the Dargaville Town Hall. Despite a few staff unable to attend due to illness, we had a great turnout with 17 KDC EOC members attending for the day. It was the first time the group had been in the same room together since pre-COVID.

Attendees were taken through their CIMS functions, the roles, and responsibilities of an EOC, and throughout the day worked on practical scenarios to challenge their planning, intelligence, operations, logistics, welfare, and public information management skills.

It was a great opportunity to reconnect, refresh the CIMS knowledge, and learn new skills.



There was plenty of positive feedback from the day, with attendees noting a newfound appreciation of other functions and the value of CIMS and being introduced to a new way of thinking / working.

A key action from this exercise is the refreshment of the virtual EOC environment in Microsoft Teams (and subsequent training on how to use it), and continued function training opportunities for KDC staff.



**Photo:** KDC EOC Workshop Facilitator lays out the scenario of the workshop: Tropical Cyclone Jenny.



**Photos above:** some great discussions and engagement during a team planning session.

Other activities of note:

Kaipara EMS met with the **KDC Health & Safety Coordinator** to discuss natural hazards specific to the KDC offices, Grab Bags, and the Tsunami Evacuation Policy for the Mangawhai office (as it is in a tsunami evacuation zone). There have been discussions around holding a Tsunami Hīkoi to align with a revamp of their tsunami evacuation plan.

Darlene Lang, KDC Relationship Manager for CDEM, had her final day at KDC on Friday 29 July. **The CDEM Portfolio has been handed over to a new KDC Relationship Manager, Jason Marris** (General Manager – Engagement & Transformation). An induction has been completed with Jason, and we are looking forward to working together to driving Civil Defence forward in the Kaipara District.

The Kaipara EMS, alongside CDEM colleagues, attended the **ANZ Disaster and Emergency Management Conference** Monday 25 July – Wednesday 27 July.

### **KAIPARA COMMUNITY ENGAGEMENT ACTIVITIES**

On Tuesday 2 August, the **Mangawhai Community Response Group** met in full for the first time in approx. one year. Attendees included Mangawhai representatives from Fire and Emergency NZ, NZ Police, St Johns, Surf Life Saving, the two Mangawhai Community Response Group Co-ordinators, the Kaipara EMS, and a Whangārei EMS. The purpose of this hui was to reconnect and discuss the future direction of the group, and how we can serve and educate the community together.

On Tuesday 9 August, Kaipara EMS met with **Te Whai Community Trust** Mangawhai to build whanaungatanga, share work programmes and discuss collaboration opportunities in the future.

The **Ruawai Community Response Group** are currently reviewing an updated draft Community Response Plan. The Kaipara EMS is meeting with the Ruawai Community Response Group Coordinator to discuss the changes on 23 August before presenting it to the group for final approval.

The **Paparoa Community Response Group Coordinator** has organised for a Civil Defence stall at the Saturday 27 August Paparoa Community Market. The stall is an opportunity for the community to ask questions about Civil Defence and the Paparoa Community Response Group, learn more about the key hazards impacting Paparoa and how to be prepared. The Kaipara EMS will be attending to support the Coordinator and has invited the other Kaipara Coordinators to attend and see if it's something they'd like to replicate in their own areas.

The **Whakapirau Community Response Group** have appointed a new Coordinator. An introductory meeting has been organized for Monday 26 September.

### **7.2.6. WELFARE COORDINATION GROUP (WCG) UPDATE** - Rachel Hill, Emergency Management Welfare Specialist

The **WCG next meets on 2 September 2022** with presentations on the Tai Tokerau Support Services Directory (Hearts and Minds – Linda Marsh), FENZ Community Readiness and Recovery Team (FENZ – Kim Boyce, Michael Champaloup and Kori Puckey) and the main feature for the meeting: Kaimaumau – A Community of Action (CDEM - Sarah Boniface and FENZ - Wipari Henwood).

Cluster leads will give updates on the progress of their activities and the draft Northland WCG Work Programme for 2022-2023 will be presented and confirmed.

Other normal general business includes an induction date for new members in October 2022, discussion around a WCG Response exercise in March 2023 and appointment of a new Alternative Group Welfare Manager Chris McColl from Northland Regional Council.

### **WCG work programme**

Attached is the draft Northland WCG work programme 2022/2023. A degree of flexibility will be required with the work programme as implementation of the Trifecta will potentially have an impact on CDEM Group welfare.

### **Welfare Needs Assessment- Project**

The WelNAS project is still ongoing. Once the data set of survey questions are complete and a few other issues are resolved testing will be undertaken of the system with CDEM and other staff to identify any other relevant survey questions or any other changes.

### **7.2.7. CDEM COMMUNICATIONS UPDATE – Zach Woods, Emergency Management Communications Specialist**

Communications demands since the previous meeting have largely mirrored the adverse weather events, with the July 23 and August 17 weather events seeing a spike in communications activities such as media enquiries and social media updates – this was also true to a lesser extent for the July 14 weather warning.

#### **Communication support is also being provided to the following activities and projects:**

- Closure of AM transmitter in Waipapakauri: RNZ's removal of this transmitter and communications around it have seen some media interest – with the Northland age writing an article on the issue. Northland CDEM provided its position on the issue to the age: <https://www.nzherald.co.nz/northland-age/news/far-north-locals-concerned-for-safety-after-rnz-closes-am-transmitter/GSZW7SIKRR7ZOE7DEZFEKFVEVE/>
- EOC recruitment video: Initial discussions around requirements have been had with Emergency Management Specialists and the NRC digital team. The script has been drafted with storyboarding and film scheduling to be done over the next few weeks.
- WDC duty PIM induction: Creation of training materials such as Facebook guidelines.
- New Tsunami siren testing and project: Photography and recording of the test, as well as flyers and drafting an initial communications plan. Communications plan to be reviewed once timelines and a new project lead have been established.

#### **CDEM Facebook page insights, June 13 – August 22:**

Page visit: 22,116

Facebook Page followers: increased 772

Total FB page followers as of August 22: 28,838

Estimated page reach\*: 135,546

As per normal trends, most new followers joined around July 24 and August 17 when the last two weather events occurred in Northland. Engagement has been largely positive with the majority of comments notifying friends and whānau of our posts or asking for further updates.

#### **Northland CDEM Web section insights, from 1 July – 21 August:**

Total page visits: 9,412

Most popular sections visited: In an emergency

Most popular topics in that section:

1. Is it open or closed: 5,119
2. Latest news and updates: 1,078

We have not prompted these links during this time, so this illustrates there is still some demand for information via the website and not Facebook – although Facebook remains our most popular channel.

*\*This is provided by Facebook and is based on the number of people who saw any content from your Page or about your Page.*

### 7.2.8. CDEM PROFESSIONAL DEVELOPMENT

Over the week 21 – 24 November 2023, Northland will host the Emergency Management Assistance Team (EMAT) Annual Deployment Camp at the Orongo Bay Holiday camp in Russell. A site visit with NEMA personnel was completed 3-4 August to identify scenario opportunities and look at opportunities for to integrate the home agency into EMAT training.

The programme for the week is being developed and will include a one-day desk top exercise, cultural development, and further training on technical and soft skills. The exercise scenario allows for a multi-agency response with a series of complex and novel problems.

The Northland CDEM team will be included in the exercise, providing the opportunity for the team to further develop capability.

#### CIMS Courses and overview

In July, Northland CDEM hosted two CIMS4 courses and an EOC exercise for KDC staff.

Initially, both CIMS courses were at capacity, however last-minute withdrawals meant the courses were run with less than preferred numbers. Due to pre-course work requirements, we are unable to cover the gaps left by last-minute changes and withdrawals of course participants. Agencies are requested to support their staff in the registration and attendance on CIMS4 courses.

Of particular note, the KDC exercise was well attended, and the feedback from the day was positive. Participants felt included, were able to ask questions about their function roles and discuss the scenario to make the most of the learning opportunity.

Date	Course	Attendees	Location
4 - 5 July	CIMS4	12	Whangārei
6 - 7 July	CIMS4	8	Whangārei
8 July	EOC Exercise (KDC)	18	Dargaville

The following training is scheduled to be held in Kaikohe, to enable FNDC staff to attend with minimum travel requirements. Northern based stakeholder and agency personnel are also invited to attend.

Date	Course	Location
12 – 13 September	CIMS4	FNDC, Kaikohe
14 September	EOC function	
15 September	Planning function	
16 September	Logistics function	
14 – 15 November	CIMS4	
16 November	Intelligence function	
17 November	EOC Exercise (FNDC)	

#### Other courses and training

Laura Exton, Rachel Hill and Jenny Calder continue with Te Reo learning.

Jenny Calder attended further EMAT training in early June, with the focus on satellite communications capability.

**2022 Australian & New Zealand Disaster & Emergency Management Conference and Gold Coast Police, District Tasking and Coordination Centre (DTACC) visit July 25 – 27**

Members of the Northland CDEM team recently attended the Australian & New Zealand Disaster & Emergency Management Conference (DEMC) in Australia and whilst there also took the opportunity to visit the Gold Coast Police, District Tasking and Coordination Centre (DTACC).



*Northland CDEM team members at the 2022 DEMC*

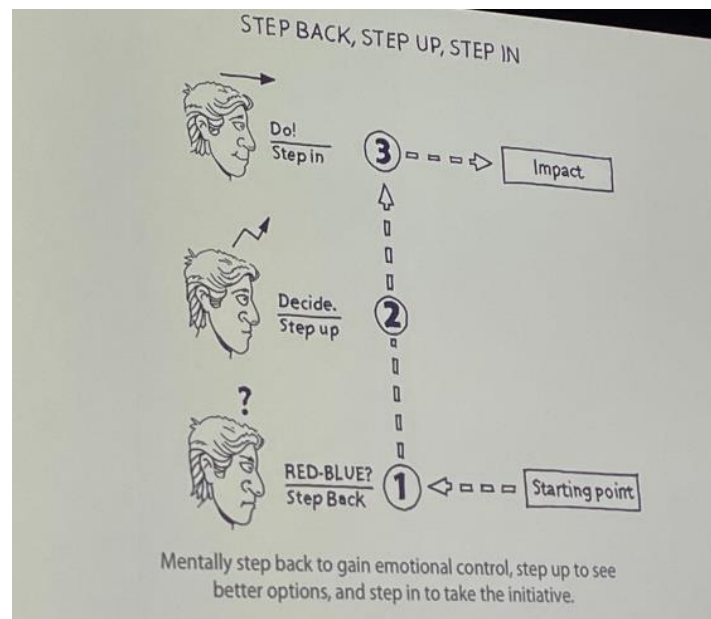
This year's DEMC centred around themes of the future of emergency management, performance under pressure, and how emergency management staff can better connect with their communities.

There were six keynote speakers and over 40 different presentations and sessions with the CDEM team attending a variety of sessions.

Of the keynote speaker one stood out for the team, Dr Ceri Evans, a Consultant Psychiatrist who specialises in supporting hi-performing teams to perform under pressure – he is perhaps best known for his work with the All Blacks for whom he has provided specialist consultancy since 2010.

Performance under pressure is a necessity within the CDEM team and the team found the simplicity of his Red-Blue mind model to be a very effective way of explaining how people behave under pressure. He also provided practical advice to help reframe stressfully situations, as illustrated by the below diagram:



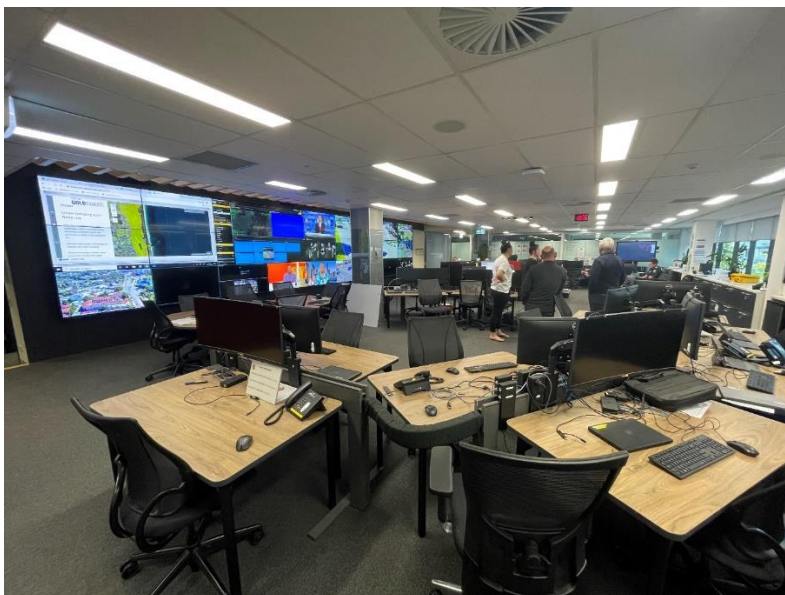


*In stressful situations or when you are feeling overwhelmed: mentally step back to gain emotional control, step up to see what options you have available, and step in to take initiative (put a timeframe on it).*

Some of the most popular presentations for the team were 'Why 'Trickle Down' Disaster Management Doesn't Work for Rural and Remote Communities' and 'Delivering Individual and Local Level Disability Inclusive Disaster Planning by and for People with Disability'. With some of the key insights from these being, communities and people with disabilities need to be involved in emergency management planning from the start, plans developed for groups without them are unlikely to work for them, and most importantly ask them (rural communities or people with disability) what they need and what's going to work for them.

These insights are already things we as a team try to incorporate when working with our communities, so it was great to see these reinforced by these speakers.

After the conference we had the privilege of being invited to see the Gold Coast Police, District Tasking and Coordination Centre (DTACC). With the CDEM team working on its own multi-agency coordination centre this was a great opportunity to gather some ideas and learnings from the Gold Coast team.



*Gold Coast Police, District Tasking and Coordination Centre (DTACC)*

This word class centre was built for the 2018 Commonwealth games and provided some great insights into multi-agency coordination centres such as, the importance of modular break out rooms, effective use of space (most walls and pillars can be written on like whiteboards) and being as flexible as possible with technology – as difference agencies have different system requirements.

Other Key learnings from this conference included:

- *Queenslanders with Disability Network* – person-centered emergency planning, co-designed workshops between Council and the disability sector, “*Nothing About Us Without Us.*”
- A reminder of the importance of connecting with a community prior to an emergency, so when something happens the relationship has been built and they feel empowered to take ownership of their response.
- Increased social connectedness in the community saves lives.
- “*Make sure you’re not swapping business cards in a disaster.*”
- The benefits, challenges, and shared learnings of Virtual Emergency Coordination Centres.

#### **7.2.9. NORTHLAND LIFELINES GROUP UPDATE** – Laura Exton, Emergency Management Specialist

The Northland Lifelines Group has recently completed a study to understand the risks arising from future climate changes to Northland’s lifelines infrastructure (Energy, Communications, Transport, Three Waters), and how these may change over time. The key findings and next steps for this project will be presented by Northland Lifelines Coordinator, Lisa Roberts.

An NCDEM Emergency Management Specialist attended the National Lifelines Group Programme Managers Quarterly meeting on Thursday 11 August.

The next Northland Lifelines Group meeting is being held on Wednesday 31 August.

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#### **Attachments/Ngā tapirihanga**

Attachment 1: Draft Northland Welfare Coordination Group Work Programme 2022 - 2023  





# Northland Welfare Coordination Group

## Draft Work Programme 2022 / 2023

## **Executive Summary**

The following represents the Welfare Coordination Group (WCG) purpose and work programme for the 2022 / 2023 period. It gives a general outline of the residual work to be carried over from the previous year and the intended work for the period.

## **Introduction**

Welfare response is a coordinated action undertaken by government and non-government agencies and organisations to ensure individuals, families, whanau and communities affected by an emergency are supported to cope with the event in the best possible way under the circumstances.

Successful delivery of welfare support depends on the ability of agencies to work together in a coordinated effort. This is achieved through agencies prior to an event understand risks and community vulnerabilities and having built relationships to reduce, prepare for, respond to and be able to recover from the event.

Welfare delivery in Northland is coordinated by the WCG. This group works across the four areas of activity of Civil Defence and Emergency Management (CDEM) known as the "4 Rs" – Reduction, Readiness, Response and Recovery to establish community resilience.

A work programme is created yearly by the WCG members to prioritise projects.

Currently there are national projects that have the potential to impact on how welfare delivers its services. These national projects include:

- "The Trifecta" - The National Emergency Management Agency (NEMA) has established a Regulatory Framework Review Programme. This is due to be completed mid-2023. Any subsequent changes adopted nationally will also need to be implemented regionally and this will see a need to be flexible with any work planning as these changes are incorporated.
- Needs Assessment Tools - NEMA is developing a new registration and needs assessment system – Awhina. Northland CDEM Group has been developing a welfare needs assessment to suit our Northland circumstances – WeINAS. Work is still being completed on both projects.

## **Plan Purpose**

This document has been created with the purpose of planning and coordinating the activities of the WCG for Northland over the 2022 / 2023 financial year.

The plan will be reviewed every year to reconfirm the WCG activities and priorities.

## **Developing the Work Programme**

The WCG Chair will meet with the Cluster Leads to discuss the activities for the work programme for the financial year (1 July to 30 June).

The work programme will be a standing item at each WCG Meeting and Northland WCG members will have the opportunity to discuss progress on projects and reprioritise if necessary.

The work programme is a living document and can be amended at any time with the approval of WCG members.

## **Work Programme Items for all members - 2022 /2023**

Topic	Action	Progress
<b>Iwi engagement</b>	Scope how CDEM and the WCG can strengthen relationships and partnerships focused on outcomes with Hapū, Iwi and Iwi providers within the emergency management framework.	
	Identify clusters Iwi can join to add value to these meetings and decision making	
<b>Priority groups</b>	Identify priority / at risk people and groups. Develop knowledge and understanding of their needs and how this impacts welfare delivery.	

## **Yearly Activities**

The activities in the yearly work programme will be undertaken by the Group Welfare Manager on behalf of the WCG over the calendar year:

<b>Topic</b>	<b>Activity</b>	<b>Progress</b>
<b>Support quarterly WCG meetings and general administration</b>	Coordinate attendance at meetings, prepare agendas, minutes, arrange venue, guest speakers and presentations.	
	Distribute meeting agenda/minutes in a timely manner.	
	Maintain the contact details of the WCG and ensure it is up to date and distribute to members.	
<b>Promote the activities of the WCG, engaging current members and recruitment of potential new members</b>	Identify and approach relevant welfare agencies to join the WCG.	
	Ensure current members are engaged and attending meetings.	
	Meet with representatives from welfare agencies at least yearly.	
	Coordinate at least one WCG induction per year.	
<b>Reporting on the WCG work plan.</b>	Quarterly progress reports.	
<b>Reporting to CEG and Northland CDEM Group</b>	Complete report for CEG and Northland CDEM Meetings quarterly on WCG projects and activities.	
<b>Involvement in NEMA welfare activities</b>	Represent WCG through engaging in the development of NEMA planning and guidelines. Group Welfare Manager and nominated members to attend the National Welfare Forum, workshops and meetings.	
<b>Incorporating national changes into regional planning</b>	Review, update and create key documentation relating to Northland Regional plans in line with National changes.	
<b>Civil Defence Centre</b>	Update Civil Defence Centre kits	



Topic	Activity	Progress
<b>Alternative Group Welfare Manager and Local Welfare Managers</b>	Meet at least six monthly.	
	Develop an effective working relationship with Alternative Group Welfare Managers and Local Welfare Managers to exchange information, support and discuss processes when responding to an emergency.	
<b>Volunteers</b>	Engage and work with other CDEM and Council staff to provide relevant training to ensure they have knowledge of their roles and responsibilities in a response.	
<b>Network of Networks</b>	MSD to host one formally meeting of the network of networks annually with an option to convene by except if necessary.	
<b>Training and exercises</b>	Identify Groups supporting Priority people. Work with Emergency Management Officers to form relationships and support these groups in relation to personal preparedness and in an emergency.	

## **Responsible Welfare Agencies Work Programme Items**

Cluster	Lead	Activity	Progress
<b>Registration and needs assessment</b>	CDEM	Complete the WelNAS software development	
		Conduct Needs Assessment Training	
		Develop Training material for WelNAS once completed	
<b>Inquiry</b>	Police	Hold a Cluster Meeting.	
		Complete training relating to Restoring Family Links (RFL) service.	
		Engage with Police National Headquarters in relation to the Persons Inquired for Platform and report back to WCG.	
<b>Care &amp; protection for children and young persons</b>	Oranga Tamariki	Hold a Cluster Meeting.	
		Deliver Civil Defence refresher training to each site in Oranga Tamariki in Te Tai Tokerau.	
<b>Psychosocial support</b>	Te Whatu Ora Te Tai Tokerau	Hold a Cluster Meeting	
		Update Psychosocial Support Plan	
<b>Household goods and services</b>	CDEM	Hold a Cluster Meeting.	
		Develop a Household Goods and Services plan. (Plan may be started but put on hold until Trifecta)	

Cluster	Lead	Activity	Progress
<b>Shelter &amp; accommodation</b>	CDEM / MBIE	Hold cluster meeting	
		Finalise the Northland Temporary Accommodation Plan (MBIE).	
<b>Financial assistance</b>	MSD	Review the Northland Financial Assistance Plan to incorporate learnings from the de-brief and update with any financial support changes post COVID-19.	
<b>Animal welfare</b>	MPI	Complete Northland Animal Welfare Emergency Management Plan.	
		Continue to formalise and develop a Regional Animal Welfare Emergency Management (AWEM) subgroup	
		Once subgroup in place; hold a tabletop exercise-based workshop with this group to introduce and implement the Northland AWEM plan.	

**TITLE:** Service Level Agreement work programs

**From:** Graeme MacDonald, Emergency Manager

**Authorised by** Victoria Harwood, Pou Tiaki Hapori - GM Community Resilience, on 30  
**Group Manager/s:** August 2022

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### Whakarāpopototanga / Executive summary

Service level Agreements for the Far North, Kaipara and Whangarei District Council have been updated for the 2022/23 years and as part of the review updated work programs have been agreed (attached).

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### Ngā mahi tūtohutia / Recommendation

That the report 'Service Level Agreement work programs' by Graeme MacDonald, Emergency Manager and dated 30 August 2022, be received.

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### Attachments/Ngā tapirihanga

Attachment 1: Kaipara District Council Work Programme [↓](#) 

Attachment 2: Whangarei District Council Work Programme [↓](#) 

Attachment 3: FNDC Work Programme [↓](#) 

### Appendix 3 - Work Plan July 2022 / June 2023

## Kaipara District Council Civil Defence Emergency Management Work Programme

Date: 01 July 2022 – 30 June 2023

#### PRIORITY KEY

Top priority
High priority
Medium priority
Ongoing priority

Activity	Objective	Scope	Status and Timeframe	Priority
<b>Reduction</b>				
<b>Reduction of Hazards</b>  (Refer to <b>section 5.3</b> , <i>Hazard Risk Reduction Action Plan</i> , p.26 of the NCDEM Group Plan 2021-2026).	Support sustainable management of hazards.	<ul style="list-style-type: none"> <li>Support, inform and guide Council to consider and integrate hazard risk reduction in their planning, policies, standards, consents, developments, and infrastructure, such as:                             <ul style="list-style-type: none"> <li>Consents</li> <li>Developers' requirements</li> <li>Climate change adaptation (eg. Ruawai)</li> <li>GIS hazard mapping tools</li> <li>Plans and policy amendments</li> <li>KDC Health &amp; Safety policies</li> </ul> </li> </ul>	As required	
<b>Readiness</b>				
<b>Community Resilience and Community Response Plans</b>  (Refer to <b>section 6.6</b> , <i>Readiness Action Plan</i> ,	Empower communities to prepare for and recover from emergencies.	<ul style="list-style-type: none"> <li>Engagement in the Tsunami siren testing (twice per year in September and April).</li> <li>Update CRG Coordinator contact details.</li> <li>Ongoing development and review of existing Community Response Plans</li> </ul>	As required	

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June 2022 v 1.0

Activity	Objective	Scope	Status and Timeframe	Priority
p.33 of the NCDEM Group Plan 2021-2026).	Maintain effective engagement with Community Response Group Coordinators.	<ul style="list-style-type: none"> <li>Maintain relationships with and provide awareness of Civil Defence information to existing Kaipara community groups: <ul style="list-style-type: none"> <li>Paparoa</li> <li>Whakapirau</li> <li>Matakohe</li> <li>Mangawhai</li> <li>Ruawai</li> <li>Kaiwaka</li> <li>Maungaturoto</li> <li>Waikarā</li> </ul> </li> <li>Engage and build relationships with Kaipara communities that do not currently have an active Community Response Group, e.g.: <ul style="list-style-type: none"> <li>Tinopai</li> <li>Pouto</li> <li>Waipoua Forest</li> </ul> </li> </ul>		
<b>Engage with Māori / Iwi with a focus on whakawhanaungatanga</b>  (Refer to <b>section 4.2, Māori Engagement Action Plan</b> , p.21 of the NCDEM Group Plan 2021-2026).	Assist Māori communities and marae in the development of community resilience through attending hui, supporting marae preparedness plans, and education.  Develop and nurture enduring relationships with Māori communities.	<ul style="list-style-type: none"> <li>Support and enable Māori communities within the Kaipara to build their resilience by: <ul style="list-style-type: none"> <li>Supporting the development of Marae Preparedness Plans;</li> <li>Working with the Māori communities to encourage personal preparedness;</li> <li>Providing CDEM education sessions if requested;</li> <li>Working with the KDC Iwi Liaison team to develop a deeper understanding of tikanga and building long-lasting relationships with Māori communities.</li> </ul> </li> </ul>	Ongoing	
<b>Community Education and Resilience Programmes</b>	Support community resilience and education through community	<ul style="list-style-type: none"> <li>Provide CDEM public education information to public initiatives (individuals, businesses, organisations, groups, local Māori, aged care structures, and other agencies) as requested.</li> </ul>	As required	

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June 2022 v 1.0

Activity	Objective	Scope	Status and Timeframe	Priority
(Refer to <b>section 6.6</b> , <i>Readiness Action Plan</i> , p.33 of the NCDEM Group Plan 2021-2026).	engagement and community planning.	<ul style="list-style-type: none"> <li>Engage in, and as requested assist with, NCDEM Group projects including: <ul style="list-style-type: none"> <li>Northland education centre preparedness (Tsunami Safer Schools)</li> <li>Northland Lifelines Group</li> <li>Northland Welfare Coordination Group</li> <li>Neighbourhood Support NZ in Kaipara</li> <li>Rural Support Trust in Kaipara</li> <li>Tsunami Siren Network Upgrade</li> <li>Marae Preparedness Planning toolkit</li> </ul> </li> </ul>	Ongoing	
<b>Standard Operating Procedures (SOPs)</b>  (Refer to <b>section 7.3</b> , <i>Response Action Plan</i> , p.42 of the NCDEM Group Plan 2021-2026).	Operating procedures are reviewed.	<ul style="list-style-type: none"> <li>KDC Emergency Operations Centre (EOC) and response forms are updated bi-annually to reflect current Group forms.</li> <li>KDC CDEM SOPs, Emergency Operating Procedures (EOP) and plans are reviewed as required, and a plan to update each developed.</li> </ul>	As required	
<b>Welfare</b>  (Refer to <b>section 6.6</b> , <i>Readiness Action Plan</i> , p.33 of the NCDEM Group Plan 2021-2026).	Plan for and provide Local level Welfare arrangements.	<ul style="list-style-type: none"> <li>Provide development opportunities for the KDC EOC Local Welfare Manager.</li> <li>Provide opportunity for KDC Welfare Manager to attend Northland Welfare Coordination Group meetings and planned workshops.</li> <li>Provide an opportunity for KDC Welfare team to participate in specific welfare training.</li> <li>Ensure updated CDC and welfare forms are available to EOC staff.</li> </ul>	Ongoing	
<b>Emergency Operations Centre (EOC)</b>  (Refer to <b>section 7.3</b> , <i>Response Action Plan</i> , p.42 of the NCDEM Group Plan 2021-2026).	Maintain sufficient EOC IT, GIS, facility and systems capability to enable response to a medium scale event.	<ul style="list-style-type: none"> <li>Support EOC IT to be operationally fit for purpose.</li> <li>Establish a virtual EOC.</li> <li>EOC staff contact lists are reviewed, updated, and distributed.</li> <li>Investigate the possible physical EOC locations in both Dargaville and Mangawhai, and provide feedback on shortfalls or considerations, including:</li> </ul>	Ongoing  As required  September 2022	

Activity	Objective	Scope	Status and Timeframe	Priority
		<ul style="list-style-type: none"> <li>IT capability in conjunction with KDC IT department</li> <li>Feasibility to host external agencies and partners supporting the EOC.</li> <li>Familiarise KDC CDEM staff with Northland GIS tools for use to support planning in the EOC.</li> </ul>	As required	
<b>KDC CDEM Capability and Capacity</b>  (Refer to <b>section 7.3, Response Action Plan</b> , p.42 of the NCDEM Group Plan 2021-2026).	Maintain and enhance KDC CDEM personnel capability and capacity.  Improve engagement with and training opportunities for KDC EOC staff.  Review and enhance the process for recruiting suitable staff to assist with EOC response.	<ul style="list-style-type: none"> <li>Provide an opportunity for KDC EOC staff to participate in a cyclical, annual, training program including a table-top exercise and CIMS4/EOC/Function courses.</li> <li>Support the development of the two appointed KDC Local Controllers (including RRANZ Course).</li> <li>Provide opportunity to KDC All Staff to learn about Kaipara CDEM.</li> <li>Provide opportunity for KDC Function Leads to attend Group or National training/workshops.</li> <li>Facilitate the trial of integrating the Community Engagement Team with an EOC.</li> <li>Provide CDEM induction content for newly elected Council members as needed.</li> <li>Include a CDEM induction in the KDC New Staff Induction programme.</li> <li>Work with KDC Human Resources to include CDEM training in KDC staff's Personal Development Pathways.</li> <li>Work on including KDC EOC roles and responsibilities into pre-identified KDC job descriptions.</li> </ul>	Ongoing  Ongoing  Quarterly All-Staff meetings Ongoing  December 2022  As required  December 2022  December 2022  2023	
<b>Relationships / Stakeholders</b>  (Refer to <b>section 6.6, Readiness Action Plan</b> , p.33 of the NCDEM Group Plan 2021-2026).	Enhance and promote CDEM through building relationships with key stakeholders.	<ul style="list-style-type: none"> <li>Facilitate the engagement of National Emergency Management Agency (NEMA) personnel with KDC.</li> <li>Attend CDEM Group and CEG meetings.</li> <li>Attend and present at KDC All Staff meetings.</li> <li>Facilitate liaison between CDEM, KDC, local Māori, DOC, and FENZ Iwi Liaison representatives across Kaipara.</li> </ul>	As required  Quarterly Quarterly  Ongoing	

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Activity	Objective	Scope	Status and Timeframe	Priority
		<ul style="list-style-type: none"> <li>Facilitate engagement between Community Response Groups and KDC Community Engagement Advisors.</li> <li>Attend the Emergency Services Coordinating Committee meetings.</li> <li>During response, provide updates to Kaipara community groups and stakeholders regularly.</li> </ul>	<p>Quarterly</p> <p>As required</p> <p>As required</p>	
<b>Lifelines</b>	Support the connectivity of lifeline utility organisations to improve infrastructure resilience.	<ul style="list-style-type: none"> <li>KDC Lifelines members participate in Lifelines work plan.</li> <li>Facilitate the Northland Lifelines meeting and attendance by relevant KDC staff.</li> <li>Support the National Lifelines Coordinator in delivery of lifelines management, through: <ul style="list-style-type: none"> <li>GIS updates,</li> <li>Annual checks of the Lifelines Emergency Contacts list,</li> <li>Review of the Northland Air Operations Plan,</li> <li>Review and initiation of the Northland Lifelines radio network.</li> </ul> </li> </ul>	<p>As required</p> <p>Quarterly</p> <p>Ongoing</p>	
<b>Public Alerting / Warnings</b>  (Refer to <b>section 6.6</b> , <i>Readiness Action Plan</i> , p.33 of the NCDEM Group Plan 2021-2026).  (Refer to <b>section 7.3</b> , <i>Response Action Plan</i> , p.42 of the NCDEM Group Plan 2021-2026).	Monitor warnings and provide advice for KDC and community response groups for their decision making.	<ul style="list-style-type: none"> <li>Testing of the tsunami siren network twice yearly (September and April).</li> <li>Enable facilitation and collaboration between Local and Group PIMs.</li> </ul>	<p>September 2022 / April 2023</p> <p>Ongoing</p>	

Activity	Objective	Scope	Status and Timeframe	Priority
<b>Tsunami Hazard Awareness</b>  (Refer to <b>section 6.6, Readiness Action Plan</b> , p.33 of the NCDEM Group Plan 2021-2026).	Provide public information and alerting on tsunami hazards.	<ul style="list-style-type: none"> <li>• <b>Indoor Tsunami Sirens:</b> <ul style="list-style-type: none"> <li>○ Facilitate and indoor siren sales and processes for Kaipara.</li> </ul> </li> <li>• <b>Tsunami Information Boards:</b> <ul style="list-style-type: none"> <li>○ Check existing installations and facilitate maintenance, as required.</li> </ul> </li> <li>• <b>Outdoor Tsunami Siren Network:</b> <ul style="list-style-type: none"> <li>○ Coordinate Kaipara tsunami siren renewals and maintenance.</li> <li>○ Update the central database for Kaipara tsunami sirens.</li> <li>○ Work with the NCDEM Group Emergency Management Specialist – Tsunami Projects to roll out the Outdoor Tsunami Siren Network Upgrade project in the Kaipara.</li> </ul> </li> </ul>	As required  Annual  Bi-annual Bi-annual  2022 - 2025	<div></div> <div></div>
<b>KDC CDEM Budget</b>	Opex and Capex Budgets.	<ul style="list-style-type: none"> <li>• Liaise with KDC Controller about where CDEM money is spent and can best value add to the KDC EOC team.</li> </ul>	Ongoing	
<b>KDC CDEM Radio and Repeater</b>	Investigate and provide feedback on options for a district wide emergency comms system.	<ul style="list-style-type: none"> <li>• Investigate the state of KDC CDEM communication equipment and provide feedback on a possible plan.</li> </ul>	October 2022	
<b>Response</b>				
<b>Response to Warnings / Emergencies</b>  (Refer to <b>section 6.6, Readiness Action Plan</b> , p.33 of the NCDEM Group Plan 2021-2026).	Respond effectively to CDEM emergencies by ensuring warnings and notifications of emergencies are distributed IAW response role.	<ul style="list-style-type: none"> <li>• Take part in the Northland on call duty roster as required.</li> <li>• Monitor and respond to emergency situations in accordance with agreed SOP's.</li> <li>• Participate in debriefings for KDC emergency response activities.</li> </ul>	As required	

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Activity	Objective	Scope	Status and Timeframe	Priority
(Refer to <b>section 7.3</b> , <i>Response Action Plan</i> , p.42 of the NCDEM Group Plan 2021-2026).		<ul style="list-style-type: none"> <li>Support KDC Controller / liaison during response phase.</li> <li>Contact and support Community Response Groups during an emergency response in Kaipara.</li> </ul>		
<b>Recovery</b>				
<b>KDC Recovery Management</b>  (Refer to <b>section 8.3</b> , <i>Recovery Action Plan</i> , p.49 of the NCDEM Group Plan 2021-2026).	Recovery arrangements for KDC align with national guidelines.	<ul style="list-style-type: none"> <li>Integrate KDC into Group recovery arrangements.</li> </ul>	As required	
<b>Management and Governance</b>  (Refer to <b>section 9.4</b> , <i>Management and Governance Action Plan</i> , p.60 of the NCDEM Group Plan 2021-2026).	Management and Governance are supported and appropriately updated on CDEM	<ul style="list-style-type: none"> <li>Provide support to elected member's attendance at the quarterly CDEM Group meeting.</li> <li>Provide CDEM updates to the Engagement and Transformation Group Report.</li> <li>Opportunities to attend the following KDC meetings should be sought:               <ul style="list-style-type: none"> <li>Monthly T3 meeting</li> <li>Quarterly All Staff meeting</li> <li>Monthly Health and Safety meeting</li> <li>Quarterly Transformation and Engagement meeting</li> <li>On arrangement, ET meeting.</li> </ul> </li> </ul>	Ongoing  As required  Ongoing	
<b>KDC CDEM Asset Management</b>	Capex Projects asset management.	<ul style="list-style-type: none"> <li>Review, maintain and update:               <ul style="list-style-type: none"> <li>Tsunami information boards</li> <li>Tsunami sirens.</li> </ul> </li> <li>Ensure KDC generators and radios are tested annually.</li> </ul>	Annually	

Activity	Objective	Scope	Status and Timeframe	Priority
<b>Continuing Professional Development Northland CDEM Staff</b>  (Refer to <b>section 6.6</b> , <i>Readiness Action Plan</i> , p.33 of the NCDEM Group Plan 2021-2026).	Professional development opportunities for Northland CDEM staff.	<ul style="list-style-type: none"> <li>Attend Duty Officer development/training.</li> <li>Continued CDEM professional development including:                             <ul style="list-style-type: none"> <li>National engagement opportunities,</li> <li>Function/EOC training, and</li> <li>Response and Recovery training.</li> </ul> </li> </ul>	Ongoing	

**PRIORITY KEY**

Top priority
High priority
Medium priority
Ongoing priority

## Whangarei District Council Civil Defence Emergency Management Work Programme

1 July 2022 – 30 June 2023

PRIORITY KEY

Top priority
High priority
Medium priority
Ongoing priority

Activity	Objective	Scope	Status and Timeframe	Priority
<b>Reduction</b>				
<b>Reduction of Hazards</b>  (Refer to section 5.3, Hazard Risk Reduction Action Plan, p.26 of the NCDEM Group Plan 2021-2026)	Improve and promote sustainable management of hazards  and;  Support risk reduction across communities, CDEM stakeholders and partners.	<b>Council</b> <ul style="list-style-type: none"> <li>Inform and guide council to consider hazard risk reduction in their planning, policies, standards, consents, infrastructure and developments as opportunities arise.</li> <li>Support review of any relevant district plan section reviews as they arise.</li> </ul> <b>Northland Transportation Alliance</b> <ul style="list-style-type: none"> <li>Engage on the 2021/27 Regional Land Transport Plan to ensure provision is made for widening the Ruakaka one lane bridge to support emergency evacuations.</li> </ul> <b>Environmental</b> <ul style="list-style-type: none"> <li>Support water resilience projects as they arise.</li> <li>Support flood mitigation and river management projects as they arise.</li> <li>Support climate change adaptation projects as they arise.</li> </ul> <b>Technical Experts</b> <ul style="list-style-type: none"> <li>Support education and engagement opportunities between technical experts, academics and communities in the district.</li> </ul>	<p>Ongoing</p> <p>As required</p> <p>In 2023, for 2024 review.</p> <p>Ongoing</p> <p>As required</p>	<b>Ongoing Priority</b>

Readiness				
<b>Community Resilience and Community Response Plans</b>  <i>(Refer to section 6.6, Readiness Action Plan, p.33 of the NCDEM Group Plan 2021-2026).</i>	Encourage and support communities to prepare for and recover from emergencies.	Maintain relationships and provide support to existing Community Response Groups including: <ul style="list-style-type: none"> <li>Engagement in the Tsunami siren testing (twice per year in September and April)</li> <li>Maintain up to date CRG coordinator contact details.</li> <li>Individual visits to community response group meetings, community meetings and events.</li> <li>Proactive support in maintaining existing Community Response Plans.</li> <li>Kanohi ki te kanohi information events with local CRG members and other key community contacts, such as shared morning tea, introduction to the team and EOC personnel.</li> <li>Stocktake, review and refresh community Civil Defence kits.</li> <li>Development of a Community Response Group toolkit.</li> </ul> Improve public awareness of Civil defence, including access to Community Response and Marae Preparedness material through social media, websites, newspapers, and leaflet drops.	Twice yearly (September 2022 and April 2023) As required As required  As required As required  Annually Ongoing  Ongoing	Ongoing Priority
		Engage and build relationships with Whangarei communities that do not currently have an active Community Response Group; such as: <ul style="list-style-type: none"> <li>Mangakahia</li> <li>Whakapara</li> <li>Akerama</li> <li>Pataua</li> </ul>	Ongoing	Top Priority
<b>Engage with Māori and Iwi with a focus on whakawhanaungatanga</b>  <i>(Refer to section 4.2, Māori Engagement Action)</i>	Assist communities and marae in the development of response and preparedness planning by facilitating and	Support and enable local Marae to develop Marae Preparedness plans.  Develop an understanding of each other's expectations, practices and honour tikanga by meeting kanohi ki te kanohi and building and nurturing relationships with representatives of Iwi/Hapū in Whangarei district.	Ongoing	Top Priority

<i>Plan, p.21 of the NCDEM Group Plan 2021-2026).</i>	attending hui and supporting plan development.  Develop and nurture enduring relationships with Māori <i>“Te pumau i te hononga ki nga iwi Māori”</i>	<ul style="list-style-type: none"> <li>○ Pataua Island- Te Waiariki / Ngati Korora</li> <li>○ Patuharakeke</li> </ul>		
<b>Community Education and resilience programmes</b>  <i>(Refer to section 6.6, Readiness Action Plan, p.33 of the NCDEM Group Plan 2021-2026).</i>	Enhance community engagement and promote community resilience.  and;  Promote key Civil Defence messages	<p>Provide ongoing CDEM public education to individuals, businesses, organisations, groups and agencies as required.</p> <p>Provide guidance and education to Schools and Early Childhood Education Centres as requested.</p> <p>Utilise opportunities to deliver CDEM public education as they arise.</p> <p>Engage in and where requested assist with group wide projects including:</p> <ul style="list-style-type: none"> <li>○ Marae preparedness</li> <li>○ Youth in Emergency Services</li> <li>○ Business sector events, supporting business continuity planning initiatives.</li> <li>○ Rural Support initiatives</li> <li>○ Community Response Group information sessions</li> <li>○ Invite and encourage community volunteers to attend Northland CDEM Forum 2023</li> </ul>	<p>Ongoing</p> <p>As required</p> <p>As required</p> <p>As required</p>	<b>Ongoing priority</b>
<b>Emergency Plans and Standard Operating Procedures (SOPs)</b>  <i>(Refer to section 7.3, Response Action Plan, p.42)</i>	Operating procedures are reviewed and updated.	<p>Develop an internal Dam Break Scenario map for use if CDEM is required to respond to incidents involving the following dams:</p> <ul style="list-style-type: none"> <li>○ Hopua te Nihotetea Dam (NRC)</li> <li>○ Wilson Dam (WDC)</li> <li>○ Whau Valley Dam (WDC) Once new modelling has been completed.</li> </ul>	<p><i>Completed 2021/22</i> <i>Completed 2021/22</i> 2022/23- awaiting new modelling</p>	<b>High Priority</b>

<i>of the NCDEM Group Plan 2021-2026).</i>		<p>Support the Tsunami Projects Manager with the development of Tsunami Response Plan (after inundation)</p> <p>Ensure WDC CDEM SOPs and plans are reviewed and updated as required including:</p> <ul style="list-style-type: none"> <li>○ Virtual EOC Plan</li> <li>○ EOP1 Emergency Operations Centre</li> <li>○ WDC Civil Defence SOP/Initial Actions- staff guide for responding to Civil Defence Emergencies.</li> </ul>	<p>As required</p> <p>By 31 October 2022 By 30 November 2022 By 31 August 2022</p>	
<p><b>Welfare</b></p> <p><i>(Refer to section 6.6, Readiness Action Plan, p.33 of the NCDEM Group Plan 2021-2026).</i></p>	Plan for and provide local level Welfare arrangements.	<p>Ensure Local welfare planning and arrangements align to Group welfare plans and arrangements. Assist Welfare Coordination Group work programme goals 2022/23.</p> <p>Recruit more WDC staff into trained EOC and welfare support roles.</p> <p>Support the Local Welfare Manager in attending Northland Welfare Coordination Group meetings and planned workshops.</p> <p>Attend Local Welfare Team meetings as required.</p> <p>Review and refresh Civil Defence Centre Welfare kits for WDC.</p> <p>Review and refresh community Civil Defence kits.</p>	<p>As required</p> <p>Underway</p> <p>Ongoing</p> <p>Ongoing</p> <p>July 2022</p> <p>Underway</p>	<b>Ongoing</b>
<p><b>GIS and Technology</b></p> <p><i>(Refer to section 7.3, Response Action Plan, p.42 of the NCDEM Group Plan 2021-2026).</i></p>	Enhance GIS, alternate communications and technological capabilities.	<p>Regularly test and charge CDEM and WDC Satellite Phones.</p> <p>Maintain alternate communications database and keep updated hard copy in EOC Cupboard with WDC Satellite Phone.</p> <p>Stocktake and test WDC EOC laptops at least twice annually.</p> <p>Ensure that WDC Assets (such as Tsunami Sirens and Tsunami Information Boards) are mapped using GIS</p>	<p>July/October/January/April</p> <p>July/October/January/April</p> <p>2 x annually</p> <p>Underway</p>	<b>Medium Priority</b>



		<p>systems and the WDC asset register is updated accordingly.</p> <p>Support WDC EOC GIS Staff professional development, support their involvement in the GEMA community and facilitate their attendance at ESRI User Conference.</p>	As required	
<p><b>Emergency Operations Centre</b></p> <p><i>(Refer to section 7.3, Response Action Plan, p.42 of the NCDEM Group Plan 2021-2026).</i></p>	EOC capability is maintained to enable local level response to a medium scale event.	<p>WDC EOC is exercised at least annually; including a variety of Local, Regional and Virtual scenarios.</p> <p>Support staff involvement in NEMA National Exercises and ShakeOut.</p> <p>WDC Controllers, WDC Duty Officers and WDC Duty PIM are trained and included in CDEM WhatsApp and CDEM Group Teams.</p> <p>EOC IT equipment is operationally fit for purpose, maintained and regularly tested.</p> <p>EOC staff contact and training lists are reviewed, updated and distributed to on call staff tri monthly.</p> <p>Develop Virtual EOC Plan.</p> <p>Conduct review of documentation in Kete, ensuring it is current and relevant.</p> <p>Establish an online document management platform for centralisation and sharing of information in response (i.e. Teams, Dropbox)</p> <p>Support partner agency exercises as opportunities arise.</p>	<p>Annually</p> <p>October 2022</p> <p>Induction and training underway</p> <p>Monthly- by WDC IT</p> <p>July/October/January/ April</p> <p>By October 2022</p> <p>By October 2022</p> <p>Underway</p> <p>As required</p>	<b>High Priority</b>
<p><b>WDC CDEM Capability and Capacity</b></p> <p><i>(Refer to section 7.3, Response Action Plan, p.42</i></p>	Enhance across council CDEM capability and capacity.	<p>Support the Group with the Multi-agency Coordination Centre project (WDC future EOC)</p> <p>Conduct EOC recruitment drive to encourage staff participation in CDEM activities and build on WDC capability.</p>	<p>Ongoing</p> <p>Underway</p>	<b>Top Priority</b>

<p><i>of the NCDEM Group Plan 2021-2026).</i></p>		<p>WDC staff are supported and encouraged to attend CDEM development and training opportunities such as CIMS, function training and EOC training.</p> <p>Support professional development of WDC CDEM Controllers (minimum 4)</p> <p>Facilitate attendance at specialist CDEM training opportunities for key roles e.g., EMPA Conference for PIMs, RRANZ for Controllers.</p> <p>Provide WDC Health and Safety staff with guidance on suitable evacuation arrangements.</p> <p>Support embedding relevant emergency management tasks and processes across WDC departments</p> <p>Maintain a regular presence at WDC to encourage relationship building (e.g., Hotdesking)</p> <p>Integrate WDC Duty Officers and WDC Duty PIM roster with Northland CDEM Roster and provide induction, training, and support to staff through the transition.</p> <p>Integrate debrief outcomes where applicable, into WDC CDEM processes and procedures.</p>	<p>Ongoing</p> <p>Underway</p> <p>As required</p> <p>As required</p> <p>As required</p> <p>Weekly</p> <p>Underway</p> <p>Ongoing</p>	
<p><b>Relationships/ Stakeholders</b></p> <p><i>(Refer to section 6.6, Readiness Action Plan, p.33 of the NCDEM Group Plan 2021-2026).</i></p>	<p>Enhance and promote CDEM and build relationships with key stakeholders</p>	<p>Review, rearrange and upskill WDC on call personnel to align with the CDEM on call arrangements.</p> <p>Facilitate WDC Civil Defence Response Meeting on 2 monthly basis, and encourage attendance by controllers, function managers, duty officers, duty PIM and response managers.</p> <p>Facilitate the engagement of National Emergency Management Agency (NEMA) personnel with WDC CEO, Mayor and Local Controllers.</p> <p>Attend the following meetings:</p>	<p>Underway</p> <p>2 monthly</p> <p>As required</p>	<p><b>High Priority</b></p>

		<ul style="list-style-type: none"> <li>Northland Lifelines Group</li> <li>Northland Welfare Coordination Group</li> <li>Emergency Services Coordinating Committee</li> <li>WDC City Safe</li> <li>WDC Community Development Committee</li> <li>WDC Community Group Managers meeting</li> <li>WDC all staff hui</li> </ul> <p>Provide CDEM overview and induction for new appointments</p> <ul style="list-style-type: none"> <li>General Manager- Community</li> <li>Mayor and Councillors, post-election 2022</li> </ul>	<p>August 2022 November 2022</p>	
<b>Database and communications</b>  <i>(Refer to section 7.3, Response Action Plan, p.42 of the NCDEM Group Plan 2021-2026).</i>	Maintain Northland CDEM stakeholder contact details including WDC EOC Staff, CRG Coordinators and Key Community Contacts.	<p>Maintain contact details for WDC EOC Staff, CRG Coordinators and Key Community Representatives in Northland CDEM GECC database and CDEM Contacts App.</p> <p>Ensure WDC Duty Staff are suitably trained in how to use the Contacts App to distribute emergency and/or warning messages.</p> <p>Ensure WDC Duty Officer phone number and <a href="mailto:CDEMdutyofficer@wdc.govt.nz">CDEMdutyofficer@wdc.govt.nz</a> is subscribed to National Warning System and PTWC.</p>	<p>Ongoing</p> <p>Ongoing</p> <p>Underway</p>	Ongoing
<b>Lifelines/Critical Infrastructure</b>  <i>(Refer to section 6.6, Readiness Action Plan, p.33 of the NCDEM Group Plan 2021-2026).</i>	Support collaboration amongst lifeline utilities/critical infrastructure agencies and organisations to improve infrastructure resilience.	<p>WDC Lifelines/Critical Infrastructure members participate in lifelines work plan and attend meetings.</p> <p>Support the National Lifelines Coordinator with the management of the Northland Lifelines Group.</p>	<p>Ongoing</p> <p>Ongoing</p>	Ongoing
<b>Public Alerting and Warnings</b>	Provide, maintain and support the development and testing of public	Bi-annual testing of the tsunami siren network.	<p>September 2022 and April 2023</p> <p>Ongoing</p>	High Priority

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(Refer to section 6.6, Readiness Action Plan, p.33 and section 7.3, Response Action Plan, p.42 of the NCDEM Group Plan 2021-2026).		<p>Monitor and respond to emergency situations in accordance with agreed SOPS's.</p> <p>Facilitate debriefings for WDC emergency response activities and report on outcomes, implementing changes as required.</p> <p>Support the WDC Duty Staff/WDC Controller and/or WDC liaison during response.</p> <p>Ensure that community response groups are contacted and supported during an emergency response.</p>	<p>As required</p> <p>As required</p> <p>As required</p> <p>As required</p>	
<b>Recovery</b>				
<b>WDC Recovery Management</b>  (Refer to section 8.3, Recovery Action Plan, p.49 of the NCDEM Group Plan 2021-2026).	Recovery arrangements for the district align with national guidelines	<p>Recruit and appoint a local Recovery Manager.</p> <p>Support local Recovery Manager to undertake professional development and training as opportunities arise.</p> <p>Support local Recovery Manager to build relationships with WDC recovery stakeholders.</p> <p>Assist relationship building between Group and Local recovery arrangements.</p>	<p>Underway</p> <p>As required</p> <p>As required</p> <p>As required</p>	<b>High Priority</b>
<b>Other</b>				
<b>WDC CDEM Budgets</b>  (Refer to section 9.4, Management and Governance Action Plan, p.60 of the NCDEM Group Plan 2021-2026)	Opex and Capex Budgets	<p>Conduct effective budget management as the budget owner of WDC CDEM Opex and Capex budgets.</p> <p>Quarterly reporting on forecasting and expenditure</p> <p>Report on current budget arrangements and make recommendations.</p>	<p>Ongoing</p> <p>As required</p> <p>As required</p>	<b>Ongoing Priority</b>
<b>Management and Governance</b>  (Refer to section 9.4, Management and Governance Action Plan, p.60 of the NCDEM Group Plan 2021-2026)	Management and Governance are supported and appropriately updated on CDEM	<p>Provide support to elected member's attendance at the quarterly CDEM Group.</p> <p>Provide an Operations Report and attend the monthly Community Development Committee meetings.</p> <p>Where requested provide updates and support to the WDC Senior Leadership Team.</p>	<p>3 monthly</p> <p>Monthly</p> <p>As required</p>	<b>High Priority</b>

		Attend WDC Community Group Managers meetings.  Provide CDEM Induction to new Councillors and Mayor post-election 2022; and new General Manager-Community.	Fortnightly  August 2022 and November 2022	
<b>WDC CDEM Asset Management</b>  <i>(Refer to section 9.4, Management and Governance Action Plan, p.60 of the NCDEM Group Plan 2021-2026)</i>	Capex Projects asset management	Review, maintain and update asset management plans for: <ul style="list-style-type: none"> <li>WDC EOC equipment, audio-visual, laptops, radios.</li> <li>Tsunami information boards</li> <li>Northpower tsunami sirens and new Tsunami Warning Sirens</li> </ul>	Ongoing	<b>Medium Priority</b>
<b>Continuing Professional Development Northland CDEM Staff</b>  <i>(Refer to section 6.6 Readiness Action Plan p.33 and section 4.2 Māori Engagement Action Plan p.21 of the NCDEM Group Plan 2021-2026).</i>	Professional Development opportunities for Northland CDEM staff	<p>Management and Leadership development training</p> <ul style="list-style-type: none"> <li>Controller Development (RRANZ Response and Recovery Leadership Development Programme)</li> <li>New Zealand Emergency Management Leadership Development Programme (NZ EMLDP).</li> </ul> <p>Undertake professional development opportunities as they arise, to support personal and professional growth (Toastmasters, leadership coaching, presentation skills etc.)</p> <p>Continued academic studies, such as Massey University Diploma in Arts – Emergency Management</p> <p>Continue pathway to learning Te Reo and Te Whariki raise cultural competency of CDEM staff in regard to Te Ao Māori.</p> <p>ArcGIS Pro training programme to develop and improve knowledge of GIS systems</p> <p>Complete Takatu, and encourage EOC staff to undertake online training</p>	<p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p> <p>Ongoing</p> <p>Underway</p> <p>Underway</p> <p>September 2022</p> <p>As required</p>	<b>High Priority</b>

		Attend conferences, seminars and events to support professional growth		
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### Appendix 3- Work Plan 2022/23

## Far North District Council Civil Defence Emergency Management Work Plan 2022-23

#### PRIORITY KEY

Top priority
High priority
Medium priority
Ongoing priority

Project	Goal	Description	Tasks	Responsibility	Priority
<b>Hazard Risk Reduction</b>  (Refer to section 5.3, Hazard Risk Reduction Action Plan, p.26 of the NCDEM Group Plan 2021-2026).	<b>Engage in hazard risk reduction activities</b>	Support risk reduction across communities, CDEM stakeholders and partners.	Support water resilience projects by representing CDEM at iwi, community, and council meetings.  Support river management projects by representing CDEM at iwi, community and council meetings and providing advice (focus on Otiria and Awanui river works projects).  Attend urban/rural fire interface initiatives as requested by FENZ.  Support requests from DHB regarding COVID-19 resurgence planning – focus on community-facilities.	Bill Hutchinson Sarah Boniface	



<b>Readiness</b> (Refer to section 6.6, Readiness Action Plan, p.33 of the NCDEM Group Plan 2021-2026).	<b>Engage with Maori / Iwi with a focus on whakawhanaungatanga</b>	Develop an understanding of one another's expectations and practices by planning and attending regular meetings with key stakeholders.  Assist communities/marae in the development of response and preparedness planning by facilitating and attending hui.	Where possible meet kanohi ki te konahi.  Facilitate and meet with representatives from Te Hiku and Ngapuhi Iwi (minimum - 3 meetings a year): <ul style="list-style-type: none"> <li>• Te Rawara</li> <li>• Ngaitakato</li> <li>• Te Aupouri</li> <li>• Ngati Kuri</li> <li>• Ngati Kahu</li> <li>• Ngapuhi</li> </ul> Organise and attend community meetings within the rohe to establish and maintain Community Response Plans: Waimamaku Mahinepua Okaihau Doubtless Bay Russell	Bill Hutchinson Sarah Boniface (supported by Mana Wright and Jenny Calder, CDEM)	
	<b>Encourage and provide for communities to prepare for and recover from emergencies</b>	Provide support to the Mid and Far North district existing Community Response Groups.	Pukenui Taipa Rawene Mitimiti  Russell	Bill Hutchinson Sarah Boniface	

		Ongoing development and review of Community Response plans.	Waikare Kawakawa Moerewa	Bill Hutchinson Sarah Boniface	
			Review the Kaitaia Evacuation Plan. Facilitate a meeting to update stakeholders on roles and responsibilities and flood protection work undertaken in KTA.  By 1 June 2023	Bill Hutchinson Sarah Boniface	
Readiness (continued)	<b>Maintain Emergency Operations Centre Capability (EOC)</b>	IT Equipment is tested, operational and fit for purpose bi-annually (minimum).  EOC documentation is reviewed and maintained for currency.	FNDC IT team to program and carry out bi-annual testing. By 1 December 2022 and 1 June 2023.  Forms and templates used in the EOC will be reviewed to ensure consistency.  By 1 December 2022 and 1 June 2023.	FNDC IT team (Supported by Bill Hutchinson and Sarah Boniface)    Bill Hutchinson Sarah Boniface	
	<b>Enhance and promote CDEM and build relationships with key stakeholders</b>	Encourage engagement of NEMA personnel with FNDC.  Attend CDEM Group and	Facilitate one visit of the NEMA Deputy Director to the Far North by 1 June 2023.  CDEM – Far North to attend all	Bill Hutchinson Sarah Boniface (Supported by delegated Regional Emergency Management Advisor)	

		CEG Meetings.	four CEG meetings.	Bill Hutchinson Sarah Boniface	
Readiness (continued)		Attend a minimum of two Lifelines meeting.	FNDC has appointed representatives attend all the Northland Lifelines Utility Group meetings.	Bill Hutchinson Sarah Boniface	
		Attend minimum of two Emergency Services Group Meetings.		Bill Hutchinson Sarah Boniface	
		Attend two Welfare Coordinating Group meetings per year.		Bill Hutchinson Sarah Boniface	
		Provide support to elected members for attendance at all four annual CDEM Joint Committee meetings.		Bill Hutchinson Sarah Boniface	
	<b>Enhance FNDC CDEM capability and capacity</b>	Training will be provided by Northland CDEM Group including, Coordinated Incident Management System (CIMS), Welfare, Recovery Manager and Controller development.	Liaise with FNDC to facilitate the following courses: <ul style="list-style-type: none"> <li>• CIMS</li> <li>• EOC function training</li> <li>• Planning function training</li> <li>• Logistics function training</li> </ul>	Bill Hutchinson Sarah Boniface Jenny Calder	

		Appoint minimum of 3 x FNDC controllers	<p>Training to take place in September and November 2022</p> <p>CDEM will assist in facilitation and training of controllers by way of controller training days and the completion of Response and Recovery Aotearoa New Zealand Course (RRANZ)</p>	Blair King	
	<b>Provide CDEM public education, information, and alerting</b>		<p>Ahipara Taupo Bay Tauranga Bay Te Ngaere Each community has a meeting by 1 June 2023</p> <p>Conduct bi-annual testing of the tsunami siren network and facilitate maintenance where required.</p>	<p>Bill Hutchinson Sarah Boniface</p> <p>Northland CDEM staff</p>	
<b>Response</b> (Refer to section 7.3, ResponseAction Plan, p.42of the NCDEM Group Plan 2021-2026).	<b>Monitor warnings and respond effectively to CDEM emergencies</b>	Take part in the Northland on call duty roster.		Northland CDEM staff	

Response (continued)		Liaise with Community Response Groups and support them during an emergency response.	<p>Direct phone contact with community response groups as required during events</p> <p>Monitor and respond to emergencies in accordance with agreed Northland CDEM Group Standard Operating Procedures (SOP'S).</p> <p>Support the FNDC Local Controllers / liaison during a response phase.</p>	<p>Northland CDEM staff</p> <p>FNDC and CDEM</p> <p>Bill Hutchinson Sarah Boniface</p>	
<b>Recovery</b> (Refer to section 8.3, RecoveryAction Plan, p.49of the NCDEMGPlan 2021-2026).	<b>Recovery arrangements for FNDC align with national guidelines</b>		Support Group Recovery Manager to engage with the appointed FNDC Local Recovery Manager.	Bill Hutchinson Sarah Boniface CDEM Group Recovery Manager	

**TITLE:** Northland Tsunami Readiness

**From:** Claire Nyberg, Emergency Management Specialist - Tsunami Projects

**Authorised by** Victoria Harwood, Pou Tiaki Hapori - GM Community Resilience, on 30  
**Group Manager/s:** August 2022

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### Whakarāpopototanga / Executive summary

This report is an update of the Northland Tsunami Readiness activities of the last three-month period including the upgrade Tsunami siren network an update of tsunami siren and testing the National Tsunami working group.

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### Ngā mahi tūtohutia / Recommendation

That the report 'Northland Tsunami Readiness' by Claire Nyberg, Emergency Management Specialist - Tsunami Projects and dated 30 August 2022, be received.

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### Background/Tuhinga

#### Tsunami Siren Testing- Sunday 25 September at 10am

Northpower and Top Energy have confirmed that all maintenance required post-testing from April 2022 has been carried out. The next test of the current tsunami siren network will be undertaken on **Sunday 25 September at 10am**. The Northland Tsunami Siren Network Activation and Testing SOP and Operation Siren Test Northland document have been updated in preparation for the next siren testing. Support promoting and managing media interest will be undertaken by the Group Public Information Manager.

#### Tsunami Siren Upgrade

Representatives from HSS Engineering, Denmark recently accompanied CDEM staff in visiting a selection of the proposed new tsunami warning siren sites on their trip to Northland. They also undertook a demonstration of the new tsunami siren, held at Graeme MacDonald, CDEM Manager's property in Maungatepere. The voice test message and siren warning tone were demonstrated. A flyer drop was made to neighbours within an approximately 2km sound radius advising of the demonstration as a precaution prior to the demonstration.

Representatives from the CEG, CDEM Group and interested Stakeholders attended the demonstration. This was an opportunity to test exactly what the sirens sound like when activated, both voice and siren, in the Northland environment and for those attending to engage with HSS engineering representatives.

Photos of the demonstration and recordings will be available as part of the engagement campaign.



The Northland sirens are three and five tiers and will be mounted on poles 8-10 metres tall, along with the cabinet hardware.

Project activities undertaken since the last agenda update include:

- Finalisation of the voice messaging for the sirens and alignment with NEMA tsunami advisories and warnings and EMA wording. These include 7 messages:
  1. Siren testing message
  2. Prepare to evacuate - possible threat
  3. Prepare to evacuate - tsunami threat
  4. Immediate evacuation
  5. Stay out message
  6. All clear message
  7. Tutukaka marina message
- Development of a GIS viewer to coordinate all the information layers required for community engagement, and the confirmation of siren locations. This viewer can also be used to capture any siren location changes as the project commences.
- A draft Communications Plan for the Tsunami Siren Network Upgrade has been created by the Public Information Manager (PIM) with assistance from the Emergency Management Specialist – Tsunami Projects. This plan will be a living document to capture new information or feedback from community consultation
- A presentation was delivered to key KDC staff, and a site visit was undertaken to confirm suggested new tsunami warning siren locations, within the Kaipara district. KDC staff were invaluable in terms of the knowledge they were able to bring to the project in regard to KDC property available now and in the future for siren placement. The next stage will involve wider Mangawhai community and stakeholder engagement.
- Information has been researched and prepared for the installation tender.

- Two transportable boards of the Tsunami Warning Siren (TWS) 293 model, made to scale, have been created to demonstrate to the community what the speaker housing at the top of the 10-metre pole will look like.

Progress has been made on clarifying resource consent requirements, determining locations for individual sirens, working with lines companies, and developing a timeline for the project.

The Emergency Management Specialist- Tsunami Projects role is currently being recruited. MWA Contracting, Alistair Wells, has also been engaged to project manage aspects of the project moving forward.

### **National Tsunami Working Group**

A National Tsunami Working Group (NTWG) strategy workshop was attended in Wellington on 21 June to input into the development of a National Tsunami Strategy. A summary report has been created and feedback was provided on the strategy development/consultation timeline and stocktake document developed from the workshop information. The purpose of the National Tsunami Strategy is to create a vision, mission, and objectives to ensure that all agencies are fulfilling their roles and responsibilities, to achieve national standards and priorities and achieve consistency across the 16 regional CDEM groups. Examples of priority work for consistency being discussed presently are the implementation of the blue lines to assist communities to know when they have reached 'safe zones', and the use of one tsunami inundation zone for public facing messaging and mapping, rather than the three zones used by most groups currently (red, orange and yellow).

### **Resilience Fund updates**

End of year reports were submitted for 2020/21 Northland Tsunami Siren Network Upgrade and the 2021/22 Kermadec Tsunami Response Plan. NEMA re-imbursed Northland CDEM the purchase of the first round of new tsunami warning sirens to the value of \$128k with the next \$122k rolled over to 2022/23 financial year and purchase of the next 25 tsunami warning sirens. An extension was sought for the 2021/2022 Kermadec Tsunami Response Plan application, for the project to be completed in the 2022/2023 year. NEMA have extended the funds until December 2023. A secondment has been secured with NZ Police to ensure the Kermadec Tsunami Response plan is completed to meet the new deadline. A project scope has been created.

### **Tonga Tsunami impact at Tutukaka**

Following on from the de brief, and opportunities for improvement identified, members of the CDEM group have meet with the trustees and manager of the Tutukaka Marina. At this meeting the CDEM team explained in detail the process during tsunami alerts or warnings and the activities carried out during the Tonga emergency. The trust was also able to outline its plan to mitigate impacts from tsunami in the future. Discussions also included the capability of the new tsunami siren network.

As a result of this event NEMA have made changes to the wording of its advisories and warnings to include information for those who maybe live in a marina or work in a marina during an emergency.

Changes have also been made to Operating procedures.

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### **Attachments/Ngā tapirihanga**

Nil





**TITLE:** 24/25 July 2022 Severe Weather Warning De-brief

**From:** Claire Nyberg, Emergency Management Specialist - Tsunami Projects

**Authorised by** Victoria Harwood, Pou Tiaki Hapori - GM Community Resilience, on 30  
**Group Manager/s:** August 2022

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### Whakarāpopototanga / Executive summary

A multi-agency de-brief took place 03 Aug 2022 to capture any learnings or improvements from the weather event experienced on the 25 and 26 July. Overall, the feedback from both stakeholders and the community has been positive for this event.

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### Ngā mahi tūtohutia / Recommendation

That the report '24/25 July 2022 Severe Weather Warning De-brief' by Claire Nyberg, Emergency Management Specialist - Tsunami Projects and dated 30 August 2022, be received.

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### Background/Tuhinga

On the evening of Sunday 24 and during the day on Monday 25 and Tuesday 26 July 2022, the Northland CDEM Duty Officer, Duty Controller, support PIM and Emergency Management Specialist- Whangarei, responded to a severe weather event which saw several road closures due to fallen trees, flooding, and slips across the region.

The coordinated response was supported by key stakeholders and partner agencies including Northland CDEM, Far North District Council (FNDC), Northland Regional Council (NRC)- Hydrology, Waka Kotahi, Fire and Emergency NZ (FENZ), Northland District Health Board (NDHB), Northpower, Top Energy, Whangarei District Council- Public Information Management (WDC PIM) and Northland Transport Alliance (NTA). Technical expertise from NRC Rivers and Hydrology departments and community intelligence from Community Response Group Coordinators across the region was highlighted as being integral to developing situational awareness and informing a successful response. A multi-agency debrief took place 3 August 2022, with many of the stakeholders mentioned previously attending in-person.

### Debrief aim

The debrief aim was to identify experiences from each stakeholder on the method of engagement, information collection, intelligence sharing, and lessons learned to enable a more effective response in future.

### Method

The debrief started with individual introductions of business as usual (BAU) roles and the function role performed during the event. This was followed by attendees recounting issues, improvement measures, and/or elements that were perceived as working or not – whether internal to their organisation or with Northland CDEM's processes or procedures.

### De-brief findings

Most of the impact of the event was on the roading and power networks, attributed to fallen trees, flooding and slips. Both Top Energy and Northpower will continue to work with private landowners to encourage vegetation clearing. FENZ also experienced an interest in linking up with this work and engagement with landowners.

The impact on networks was not large scale and was short in duration apart from any significant damage to the local roading network. Roding information was the key piece of information which both stakeholders and the public are keen to have timely access to. While improvements with reporting on road status's have improved, there is still an opportunity for better reporting through a Common Operating Picture (COP). A COP could build in some of the other important information from stakeholders to provide a more joined up picture of impacts. This could involve investment in greater live streaming of reporting from contractors in the field to the NTA. Coordinated key messaging would also consolidate the actions that Northlanders should take during a response and allow for consistent messaging across partner agencies.

Hydrology information is available on the NRC website, but improvements could include more frequent data collection during responses and the ability to forecast within catchments to assist with partner agency response actions. The early heads up from Civil Defence to stakeholder agencies was appreciated for forward planning purposes.

#### **Recommendations from this debrief**

The following points below are actions that Northland CDEM and stakeholders could undertake to improve efficiency during responses:

- Continued liaison with property owners with regards to vegetation removal to mitigate the risk of tree fall and slips affecting power lines
- Greater ability for NRC Hydrology to forecast affects in catchments to allow better forward planning for responding agencies
- Continued development of a Common Operating Picture (COP).

#### **Conclusion**

The response and ability to enable decisions being made were primarily due to the free-flowing nature of information and intelligence between all agencies. The weather predictions although slightly off in total amount, were reasonably accurate on timeframes – resulting in some flooding that did not affect the populace as much as historic cases.

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#### **Attachments/Ngā tapirihanga**

Nil

**TITLE:** **Update on Civil Defence Community Response Plans in Northland**

**From:** Evania Arani, Emergency Management Specialist; Tegan Capp, Emergency Management Specialist; Sarah Boniface, Emergency Management Specialist; Bill Hutchinson, Emergency Management Specialist and Laura Exton, Emergency Management Specialist – Kaipara

**Authorised by** Victoria Harwood, Pou Tiaki Hapori - GM Community Resilience, on 30  
**Group Manager/s:** August 2022

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### **Whakarāpopototanga / Executive summary**

The purpose of this report is to provide and update on the improvements that have been made to the Community Response Plan Map as recommended at the June CDEM and CEG Meetings.

Northland Civil Defence Emergency Management Specialists will be available to speak to the data shown within their respective district.

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### **Ngā mahi tūtohutia / Recommendation**

That the report 'Update on Civil Defence Community Response Plans in Northland' by Evania Arani, Emergency Management Specialist; Tegan Capp, Emergency Management Specialist; Sarah Boniface, Emergency Management Specialist; Bill Hutchinson, Emergency Management Specialist and Laura Exton, Emergency Management Specialist – Kaipara and dated 30 August 2022, be received.

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### **Background/Tuhinga**

The initial purpose of the map was to provide the Group with an overview of community response activities across the region and to help Emergency Management Specialists conduct a gap analysis.

This has identified the need to create a multi-faceted interactive viewer to include community response group, status, activity, links to community response plans and marae preparedness plans.

Northland CDEM have engaged the services of a geospatial consultant to build this viewer, which is in the final stages and will be complete by end of 2022.

In the static images provided in Figures 1 and 2, data is displayed on one map showing three sets of information.

- Northland Community Response Groups – status indicated by symbols
- Northland Community Response Plans – status indicated by symbols with links available to electronic plans available on website
- Northland Community Response Plans – territorial local authority (TLA) shown by colour



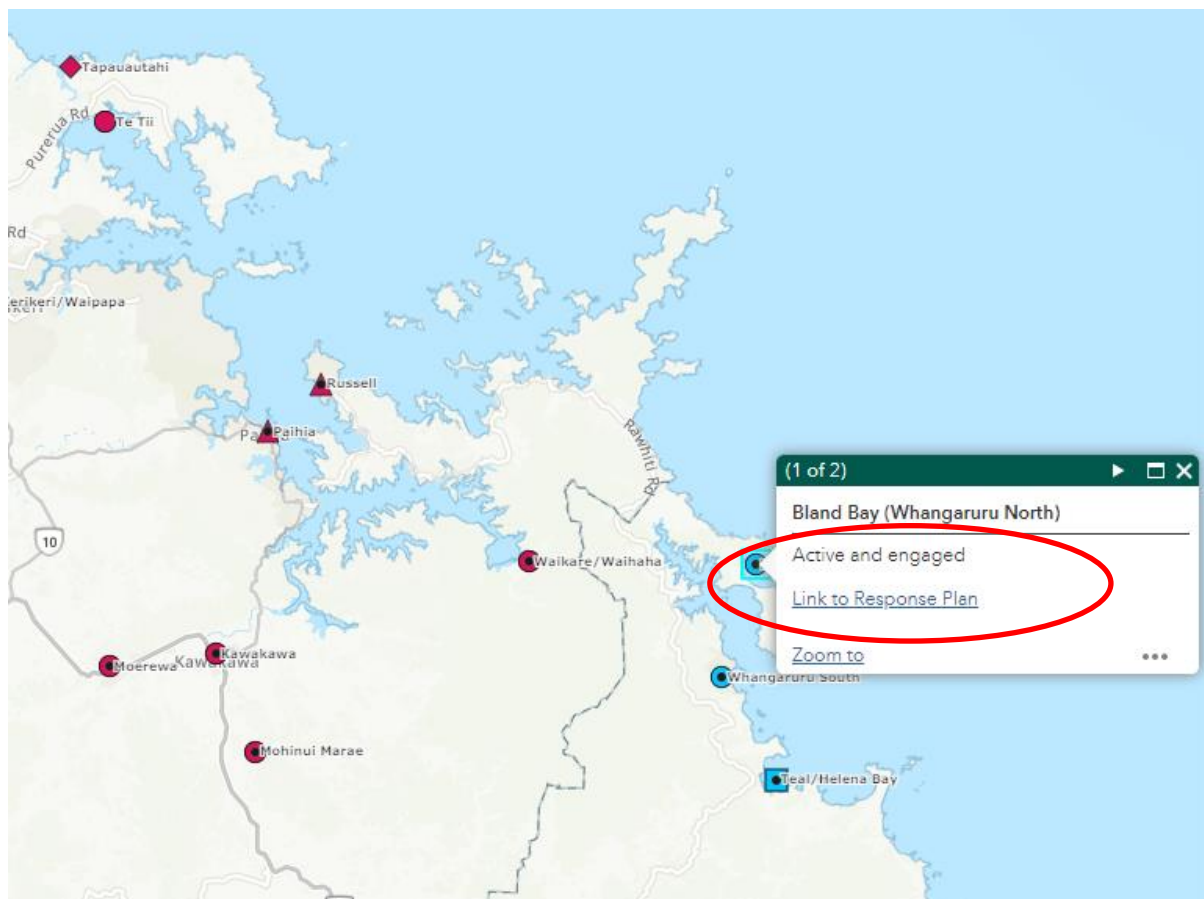


Figure 2:  
Image showing individual Community Response Group status, including (where available) link to electronic version of Community Response Plan.

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### Attachments/Ngā tapirihanga

Nil

**TITLE: Northland Lifelines Group Climate Change Risk  
Assessment Report and Presentation**

**From:** Laura Exton, Emergency Management Specialist – Kaipara

**Authorised by** Victoria Harwood, Pou Tiaki Hapori - GM Community Resilience, on 30  
**Group Manager/s:** August 2022

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**Whakarāpopototanga / Executive summary**

The Northland Lifelines Group has recently completed a study to understand the risks arising from future climate changes to Northland's lifelines infrastructure (Energy, Communications, Transport, Three Waters), and how these may change over time.

A presentation from Lisa Roberts, Northland Lifelines Group Chair, on the key findings and next steps for the project will be played to the CDEM Group.

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**Ngā mahi tūtohutia / Recommendation**

That the report 'Northland Lifelines Group Climate Change Risk Assessment Report and Presentation' by Laura Exton, Emergency Management Specialist – Kaipara and dated 22 August 2022, be received.

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**Background/Tuhinga**

Not Applicable

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**Attachments/Ngā tapirihanga**

Attachment 1: Northland Lifelines Group Climate Change Risk Assessment Report June 2022 [📄](#) 



# NORTHLAND LIFELINES GROUP INFRASTRUCTURE CLIMATE CHANGE RISK ASSESSMENT

**JUNE 2022**





# Document control

This report, version 1.0, has been issued to Northland Regional Council.

Prepared by: Michelle Meaclem, Keith Spencer-Edgar

Reviewed by: Alex Cartwright, James Hughes

Authorised by: Richard Reinen-Hamill

# Applicability

This document has been prepared for the exclusive use of our client Northland Regional Council and members of the Northland Lifelines Group, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client and members of the Northland Lifelines Group, without our prior written agreement.

The results in this document are for comment from the Northland Lifelines Group and are subject to change, and as such, should not be relied upon.





### Key project information

- The project aim is to understand the risks arising from future climate changes to Northland's lifelines infrastructure (Energy, Communications, Transport, Three Waters), and how these may change over time.
- A non-spatial impact screening was undertaken prior to the spatial analysis to identify key focus areas for the spatial assessment.
- 76 of the 344 NLG critical sites are exposed to at least one hazard, and 18 sites exposed to two. There is a higher proportion of critical sites exposed to fluvial flooding compared to other coastal hazards across the three time horizons, associated with the larger hazard areas.
- The energy sector has the largest length of exposed lines, with 2,200 km identified as exposed to fluvial flooding. However, this is primarily associated with overhead lines, with impacts limited to access issues rather than physical damage.
- Highest exposure for all sectors associated with flooding with approximately 15% of point assets within each sector exposed across all time horizons.
- Project limitations included limited temporal datasets, inconsistencies with asset data supplied, and asset duplicates.

Future next steps which the Northland Lifelines Group should consider include:

- Assessing the potential service impacts arising from at risk assets.
- Interrogate heatmaps and establish hazard based hotspots to further focus adaptation efforts
- Prioritise high and extreme assets, establishing adaptation actions and associated costs
- Site level investigations for top risks within each sector
- Incorporation of remaining NLG Organisations' data
- Develop an asset information standard to reduce data manipulation for assessments
- Acquire better spatial flood hazard information to refine risk ratings, increasing the number of scenarios modelled.
- Use polygons (footprints) for all assets assessed in future.

# Contents

## Overview and methodology

- Key terms
- Project aim and scope
- Assessment method
- Risk assessment criteria

## Non-spatial impact screening

## Geospatial hazard data and associated limitations

## Critical sites summary

## Spatial risk assessment

- Transport assets
- Energy assets
- Water assets
- Telecommunications assets
- Solid waste assets
- Ward and District summary

## • Potential next steps

## Appendix A – Transport Results

## Appendix B – Energy Results

## Appendix C – Water Results

## Appendix D – Telecommunications Results





# Overview and methodology



**Adaptation:** The process of adjustment to actual or expected climate and its effects.

**Asset:** The physical hardware (e.g. pipes, wires), software and systems to own, operate and manage Lifelines Utilities (energy, transport, telecommunications, water).

**Consequence:** Consequence is defined as the effect, result, or outcome of something occurring. Consequences can be both positive and negative, however for this assessment the use of the term focuses on negative consequences directly associated with an impact asset.

**Exposure:** The presence of people, livelihoods, species or ecosystems, environmental functions, services, and resources, infrastructure, or economic, social, or cultural assets in places and settings that could be adversely affected.

**Hazard:** The potential occurrence of a natural or human-induced physical event or trend or physical impact that may cause loss of life, injury, or other health impacts, as well as damage and loss to property, infrastructure, livelihoods, service provision, ecosystems, and environmental resources.

**Lifeline Utilities:** Lifeline utilities are entities that provide essential infrastructure services to the community such as water, wastewater, transport, energy and telecommunications.

**Mitigation (of climate change):** A human intervention to reduce the sources or enhance the sinks of greenhouse gases.

**Representative concentration pathway (RCP):** A suite of future scenarios of additional radiative heat forcing at Earth's surface by 2100 (in Watts per square metre), which is the net change in the balance between incoming solar radiation and outgoing energy radiated back up in the atmosphere. Each RCP can be expressed as a greenhouse gas concentration (not emissions) trajectory adopted by the IPCC for its Fifth Assessment Report (AR5) in 2014.



**Resilience:** The capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and Transformation. Note this is closely related to the concept of adaptation.

**Risk:** The potential for consequences where something of value is at stake and where the outcome is uncertain, recognizing the diversity of values. Risk is often represented as probability of occurrence of hazardous events or trends multiplied by the impacts if these events or trends occur.

**Vulnerability:** The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt.



## PROJECT AIM AND OBJECTIVE

The project aim is to understand the risks arising from future climate changes to Northland's lifelines infrastructure, and how these may change over time.

The focus of the assessment was on direct climate change impacts on lifeline utility assets.

The objectives of the project were to:

- Confirm an **appropriate risk assessment framework/methodology** to identify, quantify and prioritise climate related risks to infrastructure assets
- **Assess the impacts and risks** relating to potential **climate change hazards** on Northland's lifelines infrastructure assets
- Develop **recommendations for future climate change work** relating to Northland Lifeline Utilities

The intended use of the project information is to:

- Inform more detailed lifeline utility planning for climate change.

- Inform emergency management planning for future state hazards.
- Inform more detailed community planning being undertaken by local authorities.
- Raise awareness of the potential impacts of climate change in the lifelines, CDEM and local government sectors.

## RISK ASSESSMENT SCOPE

The risk assessment was based on RCP 8.5 (following recommendations within the National Climate Change Risk Assessment (NCCRA) Framework). RCP 8.5 is a high-end, high emissions scenario that is useful for testing the outer bounds of climate risks. There were two components of the risk assessment, non-spatial analysis and geospatial analysis.

Non-geospatial analysis was undertaken for temperature/drought, fluvial flooding, coastal inundation, coastal erosion and extreme weather events (such as wind and storms).

Geospatial analysis was undertaken for three hazards which were identified as having the largest risk profile in the non-spatial analysis: coastal erosion, coastal inundation and flooding.

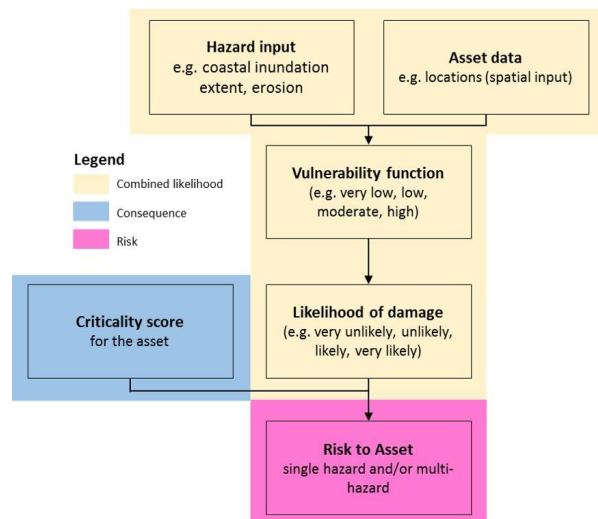
The three time horizons assessed included present, mid-term (2080), and long term (2130)



## ASSESSMENT METHOD

The risk framework established for this project is based on AS5534:2013 (Climate change adaptation for settlements and infrastructure – A risk-based approach), which utilises likelihood and consequence to quantify risk (see key terms). We have adapted the AS5534 framing of risk to provide integration with the Intergovernmental Panel on Climate Change's (IPCC's) framework for risk, associated with hazard, exposure and vulnerability (utilised in the NCCRA Framework).

The flowchart of the assessment method is shown below, illustrating the spatial assessment steps. The yellow area illustrates the steps to generate the *combined likelihood of damage* score (combining hazard exposure and vulnerability data). This is then integrated with *criticality* (blue) to give a *risk* score (pink).



## VULNERABILITY AND CRITICALITY

To establish a vulnerability score for each asset class, information was elicited from workshops held in December 2021 and January 2022. These workshops identified key asset classes within each sector and captured information around vulnerability criteria across each identified asset class.

A four-point scale vulnerability rating was applied at the asset class level. Where there was more detailed information in terms of an individual asset's vulnerability (i.e., based on its material or condition), a vulnerability rating was derived to provide a more refined vulnerability rating.

Combined likelihood is the combination of hazard likelihood and vulnerability scores and defines the likelihood of damage that an asset may receive from a particular hazard.

Criticality is defined by the consequence of the asset failing and how severe the impact would be. A five-point scale criticality score rating was provided based on the three approaches:

1. Utilise asset criticality provided by each organisation at the asset level
2. Utilise asset information as a proxy for criticality, as agreed with workshop participants (i.e., ONRC)
3. Deriving a criticality score at the asset class level from project team experience.



## THE RISK ASSESSMENT STEPS EXPLAINED

Building on the flow chart on page 8, each step of the assessment process is documented below.

1. An asset is assessed against a hazard and given a *hazard likelihood* rating.

Likelihood	Qualitative Description (non- spatial)	Quantitative Description (spatial)
Very likely	Very often, expect this to occur in any given year	For project specific definition, refer to Page 15.
Likely	Quite often, this could occur in any given year	
Unlikely	May happen, this could occur but is not expected	
Very unlikely	Rare, this is not expected to occur.	

2. This is combined with the *vulnerability* rating for that asset class and hazard combination.

Vulnerability	Score
High	4
Moderate	3
Low	2
Very Low	1

3. *Hazard likelihood* and *vulnerability* ratings are combined to provide a *combined likelihood of damage* rating.

Category	Score
VL- Very likely	4
L- Likely	3
U- Unlikely	2
VU- Very unlikely	1

4. Taking the *combined likelihood of damage* with *criticality* provides risk.

Risk	Rating
Extreme	5
High	4
Moderate	3
Low	2
Insignificant	1

## Calculating Combined Likelihood Of Damage

Combined likelihood			Hazard likelihood			
			Very Unlikely	Unlikely	Likely	Very Likely
			VU	U	L	VL
Vulnerability Score	Very low	1	1VU	1U	1L	1VL
	Low	2	2VU	2U	2L	2VL
	Moderate	3	3VU	3U	3L	3VL
	High	4	4VU	4U	4L	4VL

## Calculating Risk

Risk			Criticality				
			Very low	Low	Moderate	High	Very high
			1	2	3	4	5
Combined likelihood	Very unlikely	VL	1VU	2VU	3VU	4VU	5VU
	Unlikely	UL	1UL	2UL	3UL	4UL	5UL
	Likely	L	1L	2L	3L	4L	5L
	Very likely	VL	1VL	2VL	3VL	4VL	5VL

RISK ASSESSMENT

Spatial analysis of the three hazards was undertaken using a two-step approach:

- 1. Binary assessment of whether an individual asset was exposed for the three time horizons
- 2. If exposed, a hazard likelihood rating was established for each time horizon.

We provide summaries of risk, broken down by:

- Four key lifelines sectors
- Lines, points and area asset classes
- Key individual assets per sector.

PARTICIPATING ORGANISATIONS

An extensive data collection process from Northland Lifelines Utilities was undertaken from November 2021 to March 2022. Of the 21 organisations engaged with, 21 responded with data (or have usable data through the NLG Critical Sites List). The level of information provided by each organisation varied in completeness and structure.

The assessment includes over one million individual assets (as points, lines and polygons).

Sector	Respondents	Percentage of datasets with vulnerability information	Percentage of datasets with criticality information
Energy	5 (100%)	10%	0%
3 Waters	3 (100%)	67%	67%
Transport	6 (100%)	17%	33%
Teleco	5 (100%)	0%	20%

*Note that many organisations provided partial information, however percentages reflect organisation responses.*

Omapere Wharf and Boat Ramp (Northland New Zealand, 2021)



# Non-spatial impact screening

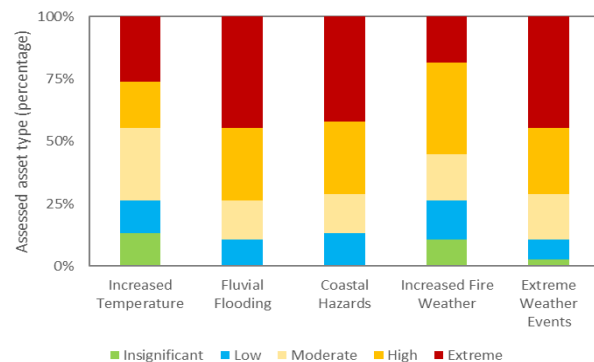


# NON-SPATIAL IMPACT SCREENING

The impact screening aimed to identify key focus areas to be taken forward for spatial assessment within this Lifelines Infrastructure Climate Change Risk Assessment. Focus was given to differing asset classes within each lifelines sector, considering both the combined likelihood of damage (as a product of hazard exposure and vulnerability) along with criticality at the asset class level.

**No spatial component is considered in the impact screening and therefore assumes that all assets are exposed to each hazard, providing a static view of impact that is agnostic of time horizon. Ratings for vulnerability and criticality were established by stakeholder elicitation and agreed during a review period.**

The screening identified that the transport sector has the highest impact profile (shown by the highest orange and red in the table across). With exposure being the driving change in risk over time, this reinforces the need for a spatial assessment to better understand risk across all sectors and asset classes.



Fluvial (river) flooding and coastal hazards were identified as having the largest risk profile, reinforcing the taking them forward for focused geospatial assessment.

ASSET	Increased Temperature	IMPACT			
		Fluvial Flooding	Coastal Hazards	Increased Fire Weather	Extreme Weather Events
ENERGY	Conductor above ground	Moderate	Low	Low	Extreme
	Conductor underground	Low	Moderate	Moderate	High
	Poles	Insignificant	Moderate	Moderate	Moderate
	Transformers and ground mounted assets	Low	High	High	Moderate
	Sites	Moderate	Extreme	Extreme	High
	Pipes	High	Extreme	Extreme	Moderate
TELCO	Buildings/facilities	Moderate	High	Moderate	Moderate
	Poles	Low	Moderate	High	Extreme
	Cables/Ducts	Extreme	Extreme	Extreme	Extreme
	Cabinets, Pits & Pedestals	Extreme	Extreme	Extreme	High
	Manholes	Low	Moderate	Moderate	Low
	Exchange buildings/Data centres	Extreme	Extreme	Extreme	Extreme
TRANSPORT	Office & Buildings	Low	High	Moderate	Low
	Road	Extreme	Extreme	Extreme	Extreme
	Bridge	Moderate	Extreme	Extreme	Extreme
	Footpath	Moderate	Low	Low	Moderate
	Airport	Extreme	Extreme	Extreme	Extreme
	Seaport	High	High	High	Extreme
	Drainage	Insignificant	Moderate	Moderate	High
	Retaining wall/Sea wall	Moderate	Extreme	Extreme	Extreme
	Railway tracks	Extreme	Extreme	High	Extreme
	Railway Tunnels	High	Extreme	High	Extreme
	Railway Signals and Communications	Extreme	Extreme	High	Extreme
	ITS	Extreme	Extreme	High	Extreme
WATER	Structure	High	Extreme	Extreme	High
	Pipes	High	Extreme	Extreme	High
	Manholes	Insignificant	Low	Low	Insignificant
	Pumps	Moderate	High	High	High
	Buildings/facilities	Moderate	High	High	High
	Reservoir	Moderate	High	High	High
	Stopbanks	Insignificant	Moderate	Low	Moderate
	Treatment facilities	High	High	High	Extreme
	Inlet/Outlet	Moderate	High	High	Moderate
	Groundwater Source	High	High	High	High
	Valves	Insignificant	Low	Low	Low
	Plant Structures	Moderate	High	High	High
	Water Intake	Extreme	Extreme	Extreme	Extreme
	Open Channels	Extreme	Extreme	Extreme	Extreme

*Note that while extreme weather events normally focuses on winds and storms, stakeholders also included landslides when considering ratings.*



# Geospatial hazard data and associated limitations



Northland Regional Council provided the following hazard layers for the risk assessment which were used for hazard likelihood scenarios. This is important to understand the limitations of the spatial assessment.

Hazard	Layer Name	AEP	Time Horizon	Climate Change scenario
Fluvial Flooding		10% AEP	Present Day	
		2% AEP	Present Day	
		1% AEP + CC	Present Day	
Coastal erosion	CEHZ1	66% AEP	2080	0.33 m SLR (RCP 8.5M)
	CEHZ2	5% AEP	2130	0.85 m SLR (RCP 8.5M)
	CEHZ3	5% AEP	2130	1.17 m SLR (RCP 8.5H+)
Coastal inundation		Present Day MHWS-10	Present Day	
	CFHZ0	1% AEP	Present Day	
		MHWS-10	2080	0.6 m SLR
	CFHZ1	2% AEP	2080	0.6 m SLR (RCP 8.5M)
		MHWS-10	2130	1.2 m SLR
	CFHZ2	1% AEP	2130	1.2 m SLR (RCP 8.5M)
	CFHZ3	1% AEP	2130	1.5 m SLR (RCP 8.5H+)

Differing hazard scenarios were considered to determine a hazard likelihood where possible. A two-step process was applied to assess hazard likelihood, firstly to:

- Assess whether an asset is exposed or not, then;
- Taking forward those assets that are identified as exposed to a given hazard and providing a rating of the hazard likelihood.

The two-step approach to assessing hazard likelihood was achieved for both coastal inundation and coastal erosion (refer to table below for criteria). To quantify hazard likelihood a four-point scale was used: **very likely, likely, unlikely** and **very unlikely**.

Given that climate change has not been accounted for in all hazard scenarios (e.g. fluvial flooding), differing scenarios have been used to reflect likelihoods across timeframes.

Time Horizon	Hazard	Very unlikely	Unlikely	Likely	Very likely
Present Day	Fluvial/pluvial (river / surface) flooding	1% AEP + CC		2% AEP	10% AEP
	Coastal inundation (inc. sea level rise)	2% AEP + 0.6m SLR	1% AEP		
	Coastal erosion	2080 66% 0.33m SLR			Present day
2080	Fluvial/pluvial (river / surface) flooding		1% AEP + CC		2% AEP
	Coastal inundation (inc. sea level rise)	1% AEP + 1.2m SLR		2% AEP + 0.6m SLR	
	Coastal erosion	2130 5% 0.85m	2080 66% 0.33m SLR		Present day
2130	Fluvial/pluvial (river / surface) flooding			1% AEP + CC	
	Coastal inundation (inc. sea level rise)	1% AEP + 1.5m SLR	1% AEP + 1.2m SLR	2% + 0.6m SLR	1% AEP
	Coastal erosion	2130 5% 1.17m SLR	2130 5% 0.85m SLR	2080 66% 0.33m SLR	

*Note gaps in likelihood are a result of limited temporal hazard data provided.*



FLUVIAL HAZARD LAYERS

Three Annual Recurrence Interval (ARI) fluvial hazard layers were provided. The extent of these across the region are shown to the right, with a snapshot of each ARI below.



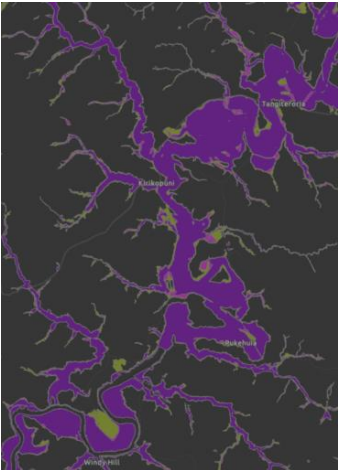
10 Year



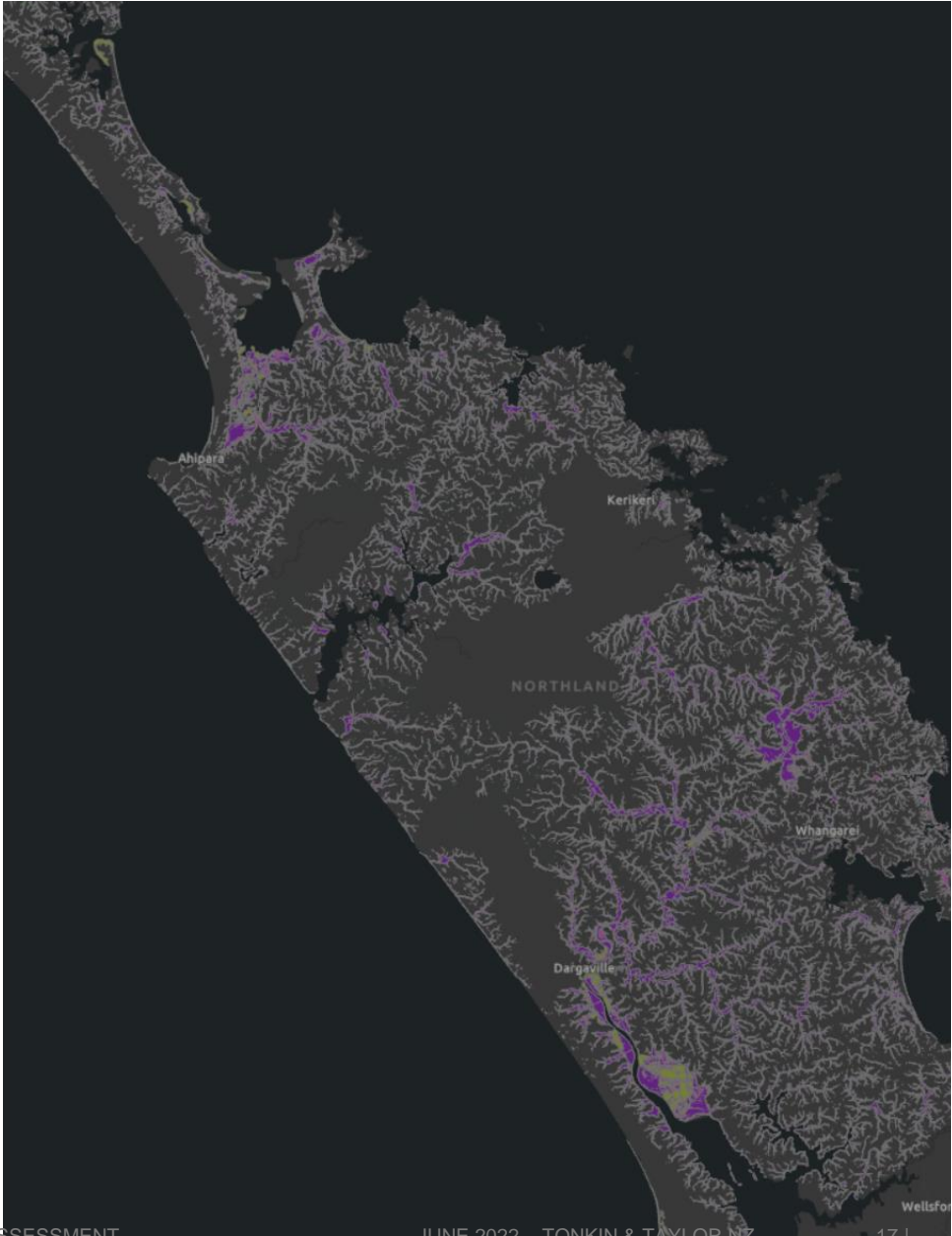
50 Year



100 Year + CC



All Layers





OASTAL HAZARD LAYERS (EROSION AND INUNDATION)

ne layers provided for coastal erosion and coastal inundation are shown below. The hazard layer names are those used by Northland Regional Council.

Coastal Erosion Hazard Layers

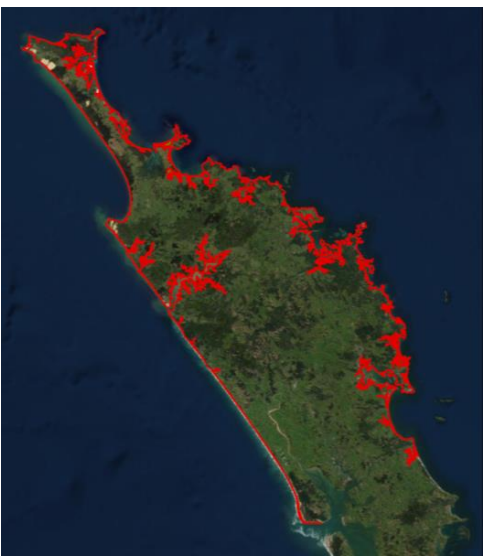


All layers (with enlarged scale)



**Dark blue:** CEHZ1- 66% AEP at 2080 0.33m SLR  
**Medium blue:** CEHZ2 – 5% AEP at 2130 0.85m SLR  
**Light blue:** CEHZ3 – 5% AEP at 2130 1.17m SLR

Coastal Inundation Hazard Layers



All layers (with enlarged scale)



**CFHZ0 Dark** (most likely) - 1% AEP Present day  
**CFHZ1** – 2% AEP at 2080 0.6m SLR  
**CFHZ2** – 1% AEP at 2130 1.2m SLR  
**CFHZ3 Light** (least likely) – 1% AEP at 2130 1.5m SLR

# ASSESSMENT LIMITATIONS

This assessment utilised available information provided by Lifeline Utilities representatives, including hazard and asset data along with their expert view on asset vulnerability and criticality. Given the number of differing organisations, and resulting variation in completeness of information, numerous assumptions and associated limitations were noted to enable this assessment, both in relation to asset, hazard and criticality information.

For hazard data, limited temporal datasets results in difficulty in quantifying uncertainty into the future with regards to risk. Fluvial flooding provides a good example of this, with exposed assets not increasing through the three time-horizons. This is a result of having only three modelled scenarios (or ARIs), which are utilised to understand likelihood across all three time-horizons.

For asset data, inconsistencies in supplied information limits the assessment. This includes both the spatial location of asset data, and the underlying information around vulnerability and criticality. To manage this, vulnerability and criticality ratings were established at the asset class level (e.g., poles are more vulnerable to flooding than overhead conductors). Information at the individual asset level was then included (where available) as a variant.

Attempts were made to remove duplicate information wherever possible, however it is noted that where organisations provided datasets with multiple entries of the same site, these may be double counted in the results. Conversely, where organisations do not have their assets recorded within the databases, these will have not been assessed.

Using Taipa Transfer Station as an example, the provided spatial location of the asset is a point, rather than its footprint (polygon). This site should be identified as exposed to fluvial flooding. However, as the point does not intersect with the hazard layer, the geospatial analysis did not consider this asset exposed.



Furthermore, when considering sites and locations, no allowances are made for the site level mitigations that could be in place (such as finished floor levels). Sites could be identified as exposed and at risk, however there are site level mitigation measures that reduce the risk, which are not accounted for.





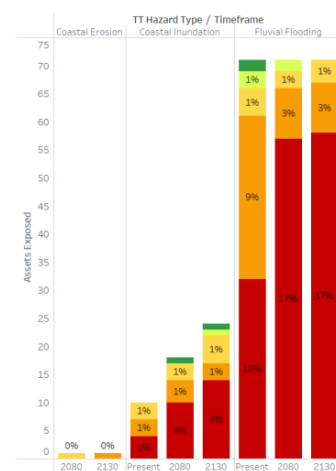
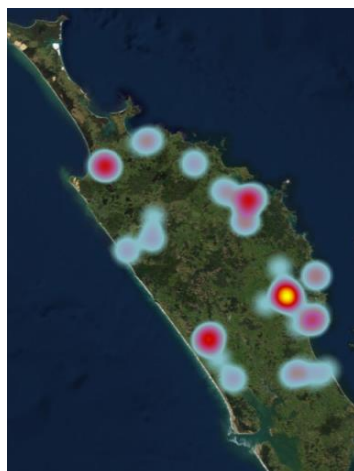
# Critical sites summary



Northland Lifelines Group maintain a list of critical infrastructure and community sites, with their own three-tier criticality rating of nationally, regionally and locally significant.

### HIGH AND EXTREME RISK LOCATIONS

Of the 344 critical sites identified by Northland Lifelines Group, 76 sites are exposed to at least one hazard, and 18 sites are exposed to two. These sites are concentrated near the main towns. There is a higher proportion of critical sites exposed to fluvial flooding compared to other coastal hazards across the three time horizons, associated with the larger hazard areas.



Key findings include:

- Assets rated high (4) and extreme (5) risk are concentrated in areas of higher populations. 67 of these sites are **from fluvial flooding**, 17 sites from **coastal inundation** and 1 site from **coastal erosion**.
- 32 sites are identified at extreme (5) risk of **fluvial flooding** in the present day. This is made up of:
  - 12 Emergency service sites
  - 4 Energy sub-station sites
  - 14 Water sites (primarily pumps)
  - 1 Telecommunications site
- Three water pumps and one energy site are identified at extreme (5) risk to **coastal inundation** in present day: *East Coast Wastewater PS 8, Robert Street PS, Whangārei Heads PS and Mangawhai Zone Substation*
- One Emergency Services site is exposed to **coastal erosion**, rated as moderate (3) risk in 2080 and major (4) risk by 2130:
  - FNDC - South Hokianga Memorial Hall- Opononi*

*Note transport sector assets limited to three airports and one seaport within the critical sites list.*





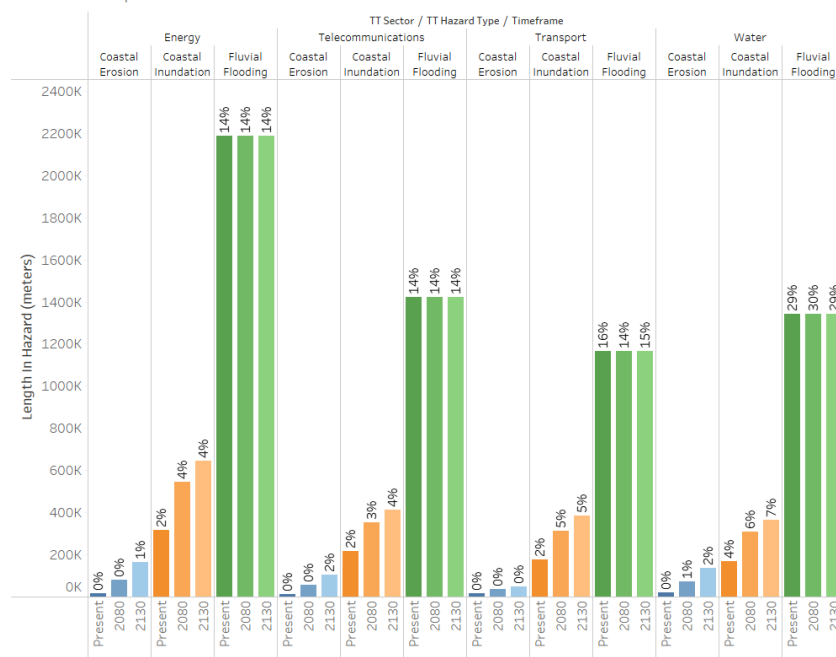
# Spatial risk assessment



This high level spatial risk assessment involved overlaying asset data with hazard layers. The risk assessment primarily focused on asset damage, however, in some cases, risk reflects disruption of access to the asset (as opposed to damage). The vulnerability of underground assets to damage (from inundation) varies by asset type and will be primarily associated with scour, along with increased prevalence of water ingress (e.g. for wastewater networks). For those underground and overground assets (e.g. overground conductors) that are not exposed or physically damaged, a risk rating is still provided, noting that this reflects risk of disruption to access.

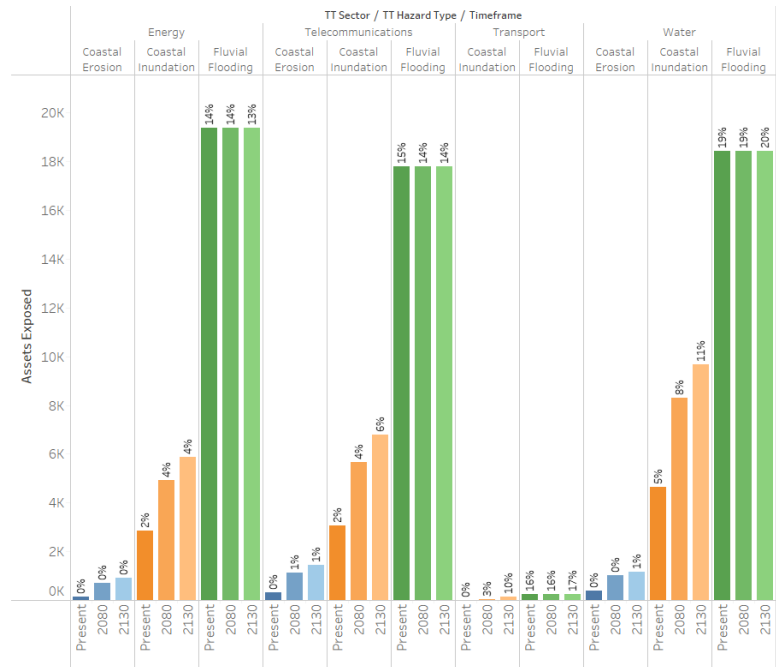
## EXPOSURE ASSESSMENT SUMMARY (POINT AND LINE ASSETS)

Line Assets Exposure



Key trends for line assets in the exposure assessment:

- The energy sector has the largest length of exposed lines, with 2,200 km identified as exposed to fluvial flooding. However, this is primarily associated with overhead lines, with impacts limited to access issues rather than physical damage.
- For telecommunications, transport and water line assets, 1,200 - 1,400 km are exposed to fluvial flooding currently.
- For coastal inundation, under 5% of asset lengths are exposed across most sectors, with Water pipes had 7% exposure by 2130.
- Limited assets are exposed to coastal erosion across all sectors, with less than 1% exposed by 2130 for energy, telecommunications and transport sectors.



Key trends in the point assets exposure assessment:

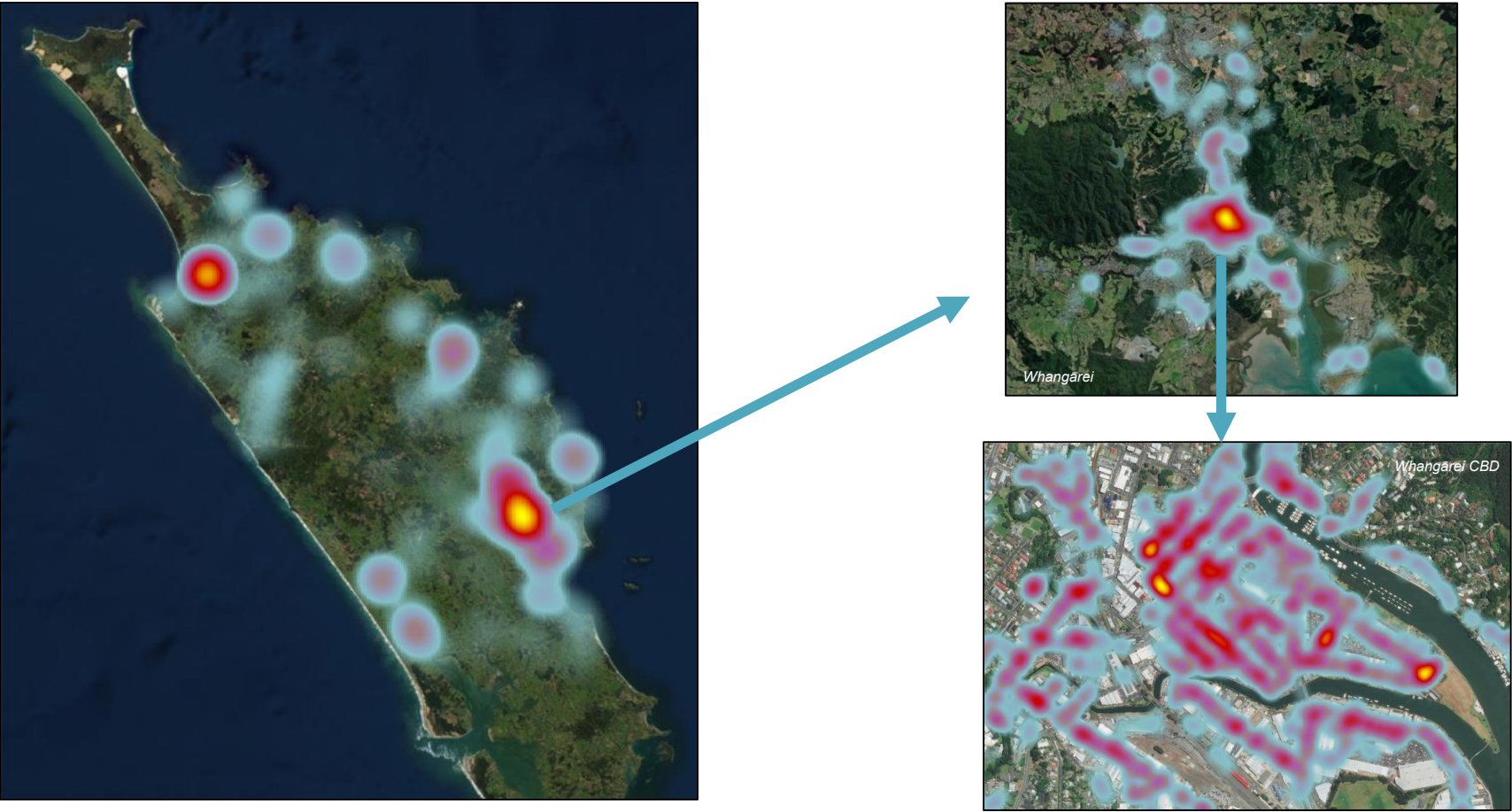
- Highest exposure for all sectors associated with flooding with c.15% of point assets within each sector exposed across all time horizons.
- This equates to over 18,000 point assets for each of the energy, water and telecommunications sector assets.
- Less than 6% of all sector assets are exposed to coastal flooding across future scenarios (up to 2130), bar the water sector where 11% of point assets are exposed by 2130.
- Limited assets are exposed to coastal erosion across all sectors, with less than 1% exposed by 2130.





FOCUSING ON HIGH AND EXTREME RISKS

On a regional scale, a map was created to visualise areas which had a higher concentration of assets at high and extreme risk. The map suggests that there are more assets at high and extreme risk in more densely populated areas.

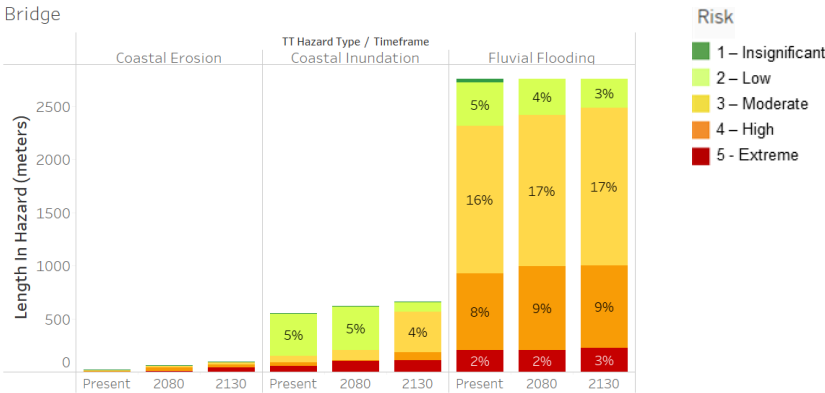




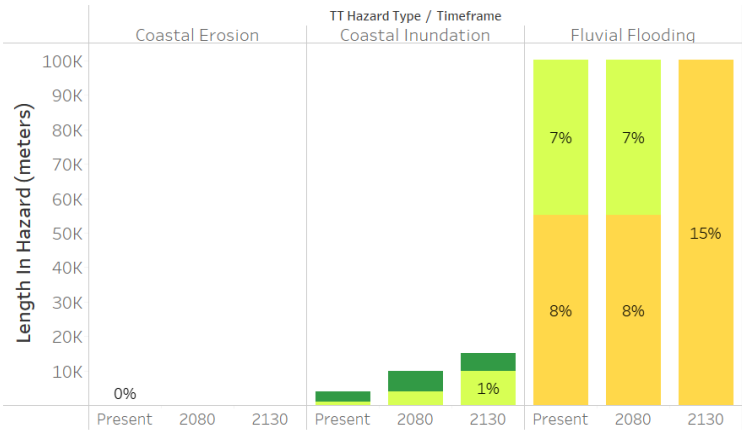


A significant proportion of transport assets are exposed and at risk of fluvial flooding, across the three time horizons considered. The complete assessment of transport asset classes can be found in Appendix A. Key findings of the risk assessment included:

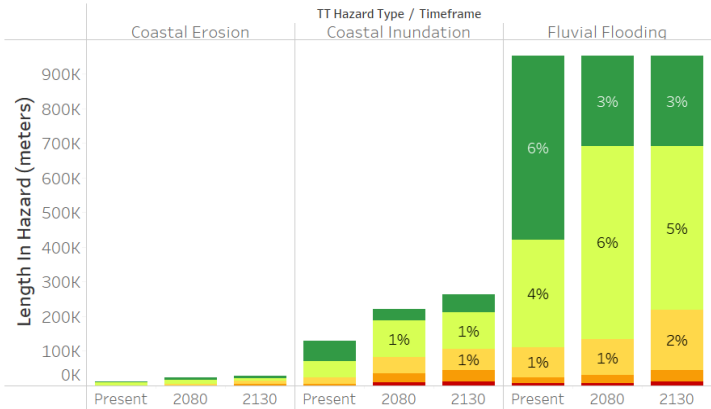
- 950 km of roads are exposed and at risk to fluvial flooding, with 50 km at high or extreme risk by 2130.
- For railways, approximately 100 km of track is exposed to fluvial flooding, which is all at moderate or lower risk across all time horizons.
- Bridges are shown to have a high risk profile with respect to coastal and fluvial flooding. This is largely due to them being physically located within floodplains (which they have specifically been designed for). Further site specific analysis would be required to understand specific risk levels for bridges in relation to future climate conditions.



Railway Track



Road



CRITICAL TRANSPORT ASSETS IN FOCUS

**Northport** is New Zealand’s northern most commercial port and is located at Marsden Point. It is a significant part of the freight network in Northland and the North Island. Northport will be exposed to coastal inundation under future climate scenarios and a disruption to port operations may cause significant economic losses for the region. As indicated in the table below, in the 2130 scenario, Northport is likely to be at moderate risk to coastal inundation.

Northport	Present day	Mid-term (2080)	Long term (2130)
Fluvial flooding	N/A	N/A	N/A
Coastal inundation	N/A	N/A	
Coastal erosion	N/A	N/A	N/A

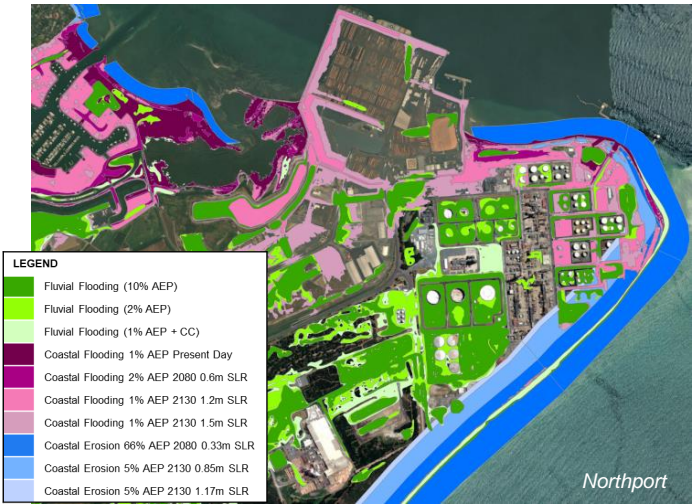
Insignificant

Low

Moderate

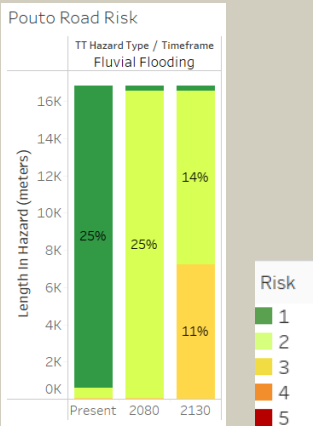
High

Extreme

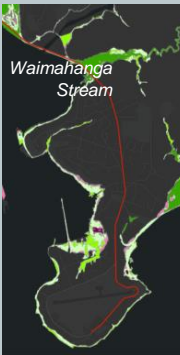


**Pouto Road** has been labelled as “one of the great anchors of Kaipara” and provides residential access, as well as economic and tourism benefits. Pouto Road is exposed to fluvial flooding.

It is noted that the risk rating for Pouto Road varies along its entire length. On average, it is at low risk to fluvial flooding in the present, 2080 and 2130 scenarios.



**Whangārei District Airport** is not exposed to fluvial flooding, coastal inundation or coastal erosion. Access from the north of the airport is exposed at Waimahanga Stream, where flooding occurs (Riverside Dr/ Onerahi Rd).



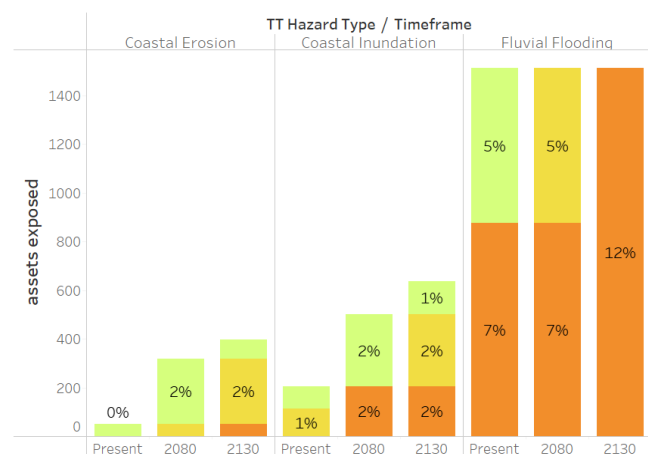


2,200km of energy line assets and 19,000 energy point assets are exposed to fluvial flooding. The results of the risk assessment of the energy sector can be found in Appendix B. Key findings of the assessment included:

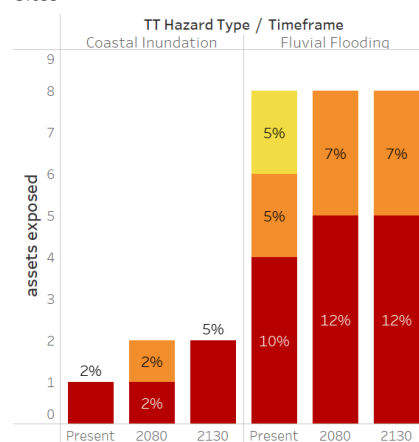
- ~1,500 transformers and ground-mounted assets are at risk of fluvial flooding. All are at high risk by 2130, 12% of the overall asset count.
- ~17,000 poles are at risk of fluvial flooding, with ~16,000 at high or extreme risk by 2130.
- There are 8 energy sites exposed to fluvial flooding, these are all at high or extreme risk across the 2080 and 2130 scenarios.

Sites include communication sites, load control sites and zone substations for electricity, along with transmission sites for natural gas and sub-sites for fuel.

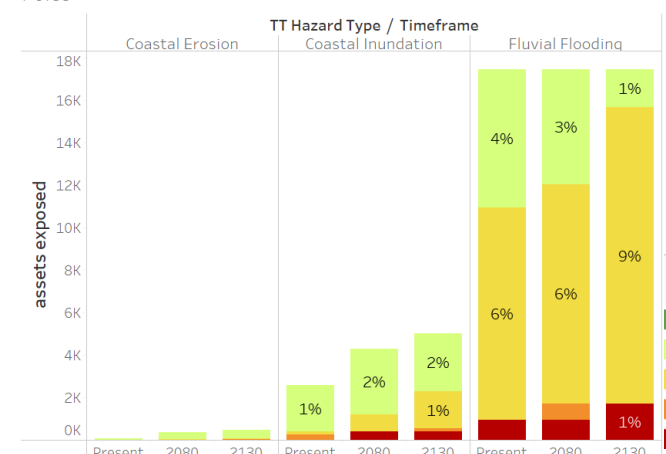
Transformers & Ground-Mounted Assets



Sites



Poles

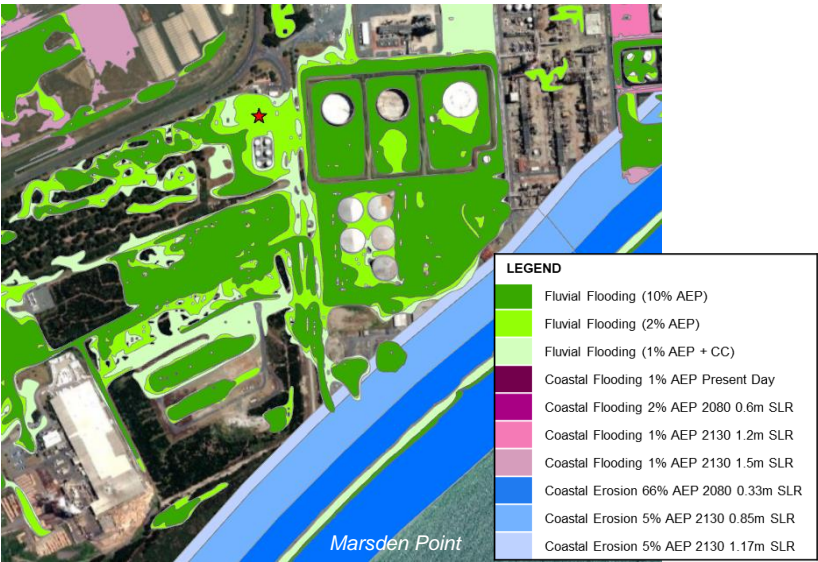




CRITICAL ENERGY ASSETS IN FOCUS

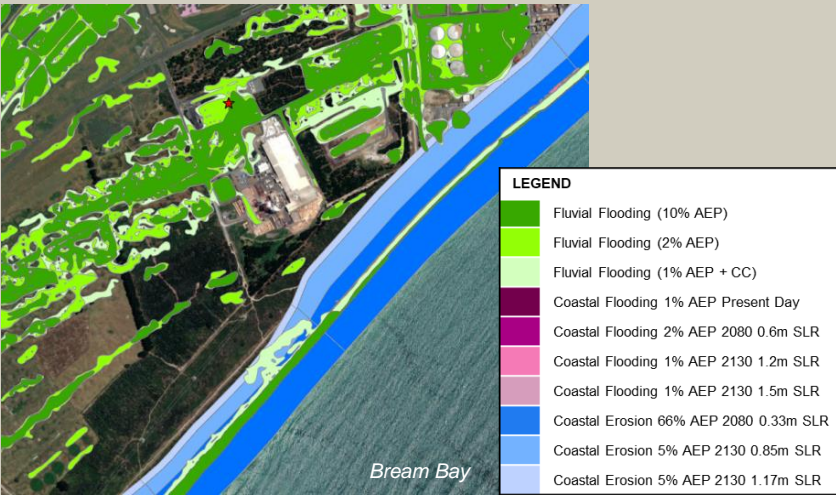
**Marsden Point Terminal** (Mair Road) imports refined fuel. The storage tanks create a buffer between the supply and the distribution vehicles. This terminal is exposed to fluvial flooding and its failure would interrupt the region’s fuel stations. In the present day, the site is at high risk to fluvial flooding. However, by 2080, the site is at extreme risk.

Marsden Point Terminal	Present day	Mid-tem (2080)	Long term (2130)
Fluvial flooding			
Coastal inundation	N/A	N/A	N/A
Coastal erosion	N/A	N/A	N/A
	Insignificant	Low	Moderate
		High	Extreme



**Bream Bay GXP and Substation** is an important link for Northland. Bream Bay Substation is exposed to fluvial flooding. The impact of failure includes loss of power to the terminal, port operations and 1,325 customers. In the present day, 2080 and 2130 scenarios, Bream Bay GXP and Substation are likely to be at high risk to fluvial flooding.

Bream Bay GXP & Substation	Present day	Mid-tem (2080)	Long term (2130)
Fluvial flooding			
Coastal inundation	N/A	N/A	N/A
Coastal erosion	N/A	N/A	N/A
	Insignificant	Low	Moderate
		High	Extreme



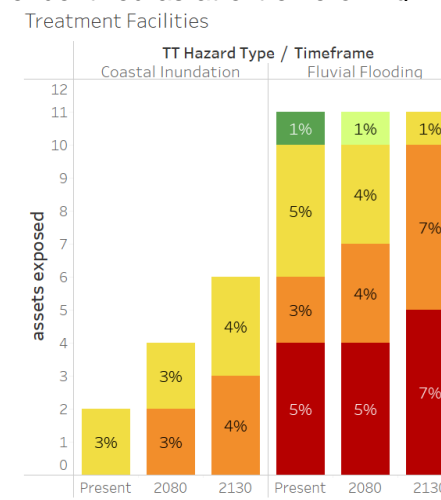
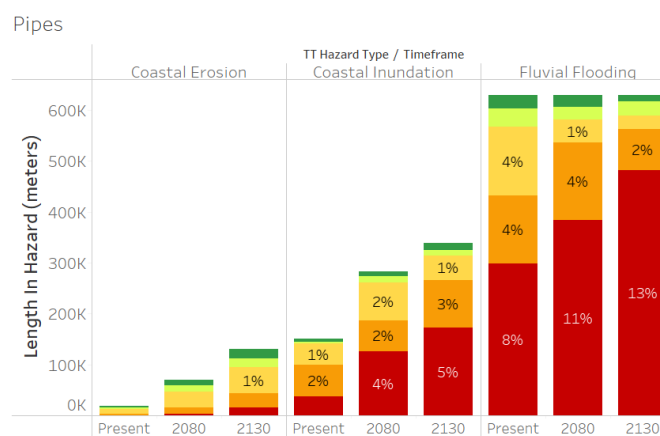
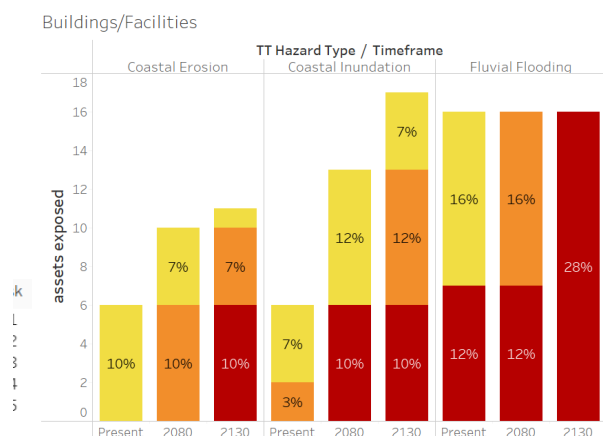


Water sector assets include assets relating to drinking water, wastewater, stormwater and flood protection. Approximately 30% of water line assets and over 20% of water point assets are at risk of fluvial flooding. The remaining results of the risk assessment of the water sector can be found in Appendix C.

### THREE WATERS ASSETS

Three water assets include pipes, treatment facilities, buildings/facilities, manholes, valves, pumps, inlets/outlets. Key findings include:

- 17 buildings/sites are at risk of coastal inundation by 2130. 13 of these are at high or extreme risk.
- ~500 km of pipes are rated at extreme risk of fluvial flooding by 2130. This risk is associated with high exposure, high criticality, and increased vulnerability to scour. Given that the majority of pipes are underground, this risk associated with scour is considered conservative and will require further refinement at an organisational level.
- Treatment facilities are at risk of both coastal inundation and fluvial flooding. 14% of treatment facilities are identified as at extreme or high risk of fluvial flooding by 2130.



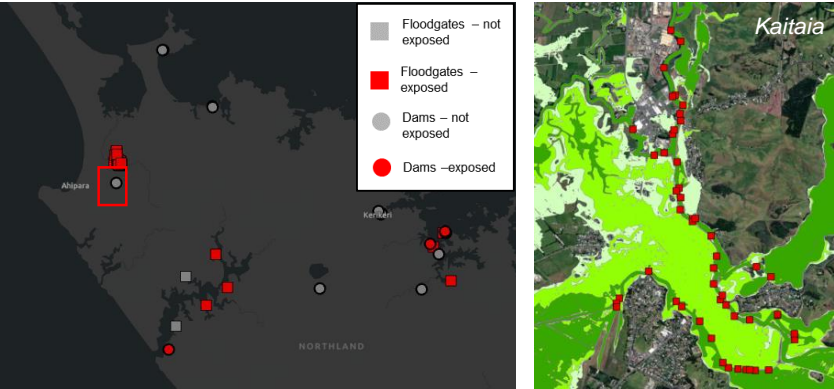
FLOOD PROTECTION ASSETS

Flood protection assets include stop banks, detention dams, floodgates, flood walls and spillways. These assets are expected to be highly exposed by the nature of the service they provide (i.e. generally located in the floodplain).

Further assessment is required to understand whether these assets are designed to operate effectively with climate change. New assets should be designed with climate change considered.

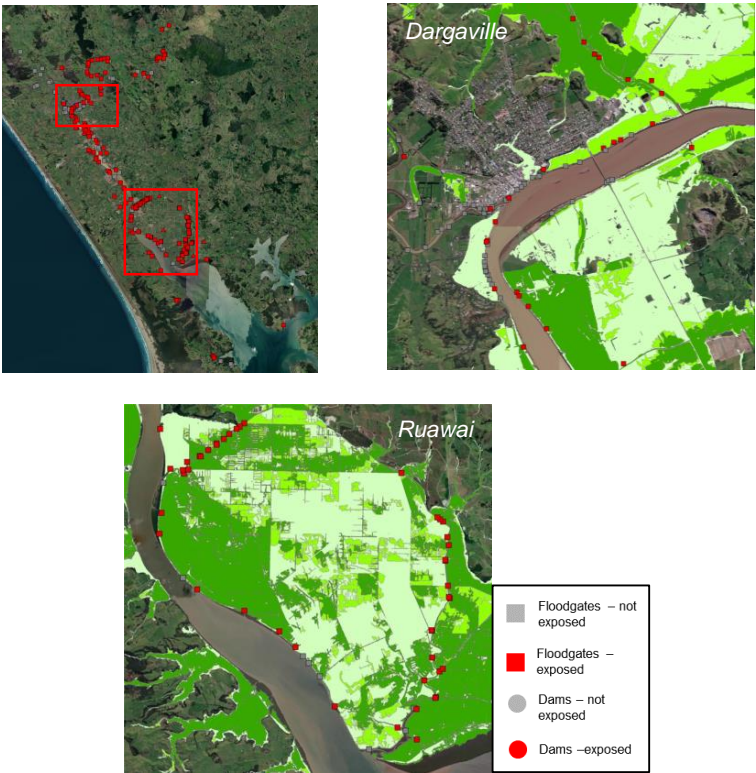
Far North District Council

The maps below indicate that the majority of FNDC's flood protection assets are exposed to fluvial flooding.



Kaipara District Council

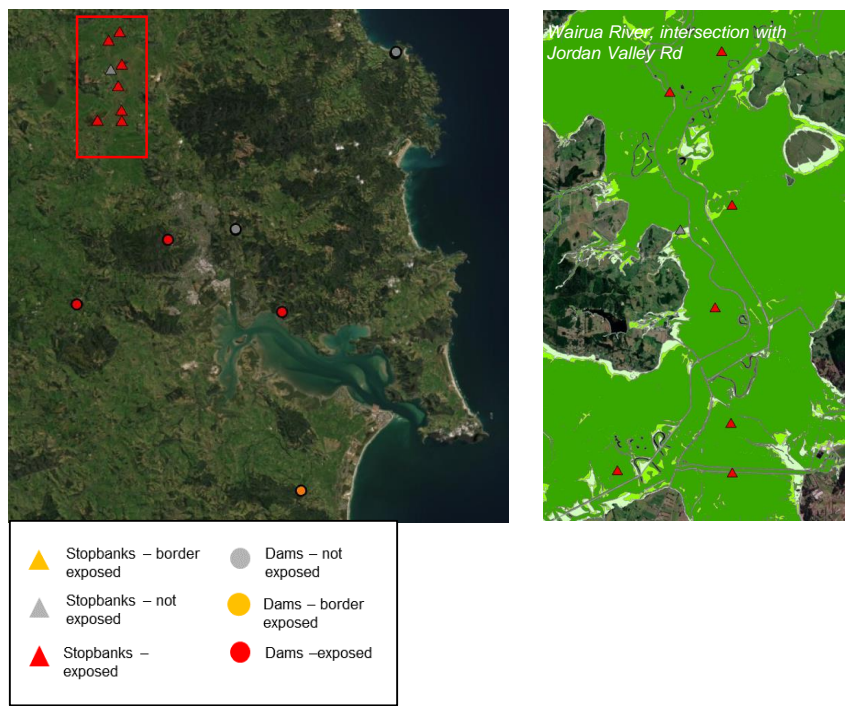
Over 75% of KDC's floodgates are exposed to a hazard. The images below show the extent of exposure some flood protection assets in Kaipara face.





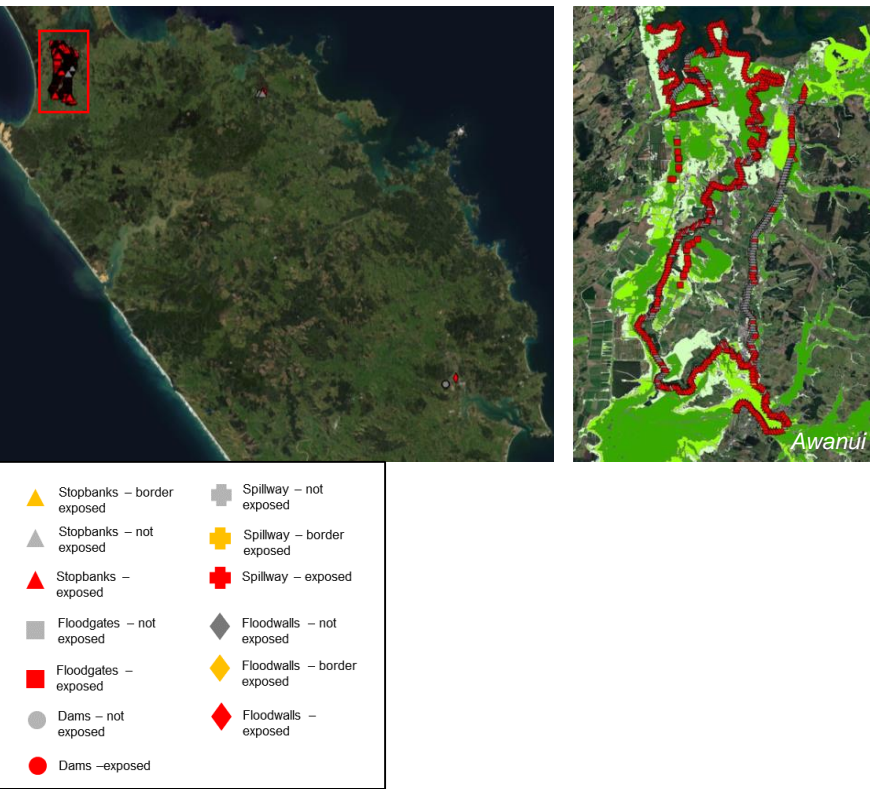
Whangārei District Council

The majority of Whangārei District Council’s stopbanks and dams are exposed to fluvial flooding.



Northland Regional Council

The majority of Northland Regional Council’s stopbanks, flood gates and flood walls are exposed to fluvial flooding. The maps below show the exposed assets in the region and a focus on the Awanui area.



CRITICAL WATER ASSET IN FOCUS

The **Paihia Wastewater Treatment Plant (WWTP)** services the communities of Paihia, Waitangi, Opua and Haruru. It is noted that there will be minimal impacts if the WWTP fails as the ponds are able to buffer for long periods.

Paihia WWTP is exposed to fluvial flooding. The risk assessment shows that the WWTP is at moderate risk in the present day, high risk in the 2080 scenario and extreme risk by 2130.



Paihia WWTP	Present day	Mid-term (2080)	Long term (2130)		
Fluvial flooding					
Coastal inundation	N/A	N/A	N/A		
Coastal erosion	N/A	N/A	N/A		
	Insignificant	Low	Moderate	High	Extreme



# TELECOMMUNICATIONS ASSETS

1,400km of line assets and over 17,000 point assets are at risk of fluvial flooding. Similar to the other sectors, more telecommunication assets are at risk of fluvial flooding compared to the coastal hazards. The remaining results of the risk assessment of the telecommunications sector can be found in Appendix D. Key findings of the assessment include:

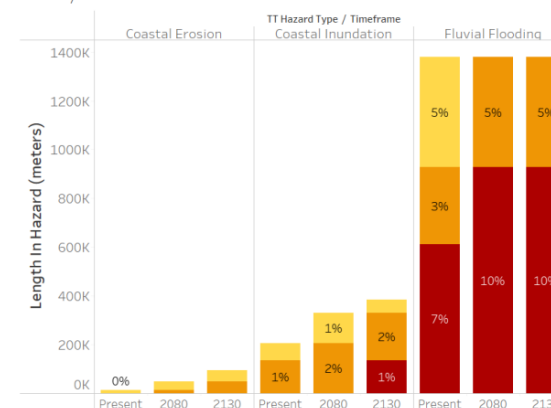
- By 2130, all (~450) telecommunication poles exposed to fluvial flooding will be at high risk.
- Telecommunications cables and ducts are at risk of fluvial flooding. In particular, ~950 km are at extreme risk.
- 9 telecommunications offices & buildings are currently at risk of fluvial flooding. However, 4 of these will be at extreme risk by 2080.

Risk ratings are driven by exposure, vulnerability and criticality. Cables and ducts were considered by NLG participants to have a higher vulnerability to fluvial and coastal hazards than poles, along with an increased criticality. Carrying out further analysis to establish individual poles with higher criticality will provide further refinement of risk.

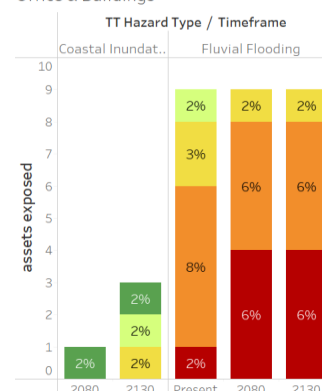
## Risk



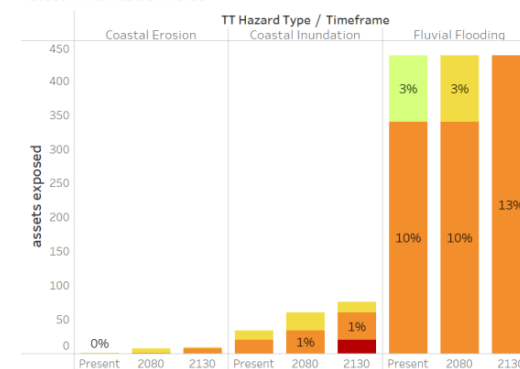
## Cables/Ducts



## Office & Buildings



## Telecommunication Poles



CRITICAL TELECOMMUNICATIONS ASSETS IN FOCUS

Tai Tokerau House is an intermediate transmission linking site between Whangārei and Auckland.

The risk assessments shows that it is at extreme risk to fluvial flooding in the present day, 2080 and 2130 scenarios.

Tai Tokerau House	Present day	Mid-term (2080)	Long term (2130)
Fluvial flooding			
Coastal inundation	N/A	N/A	N/A
Coastal erosion	N/A	N/A	N/A

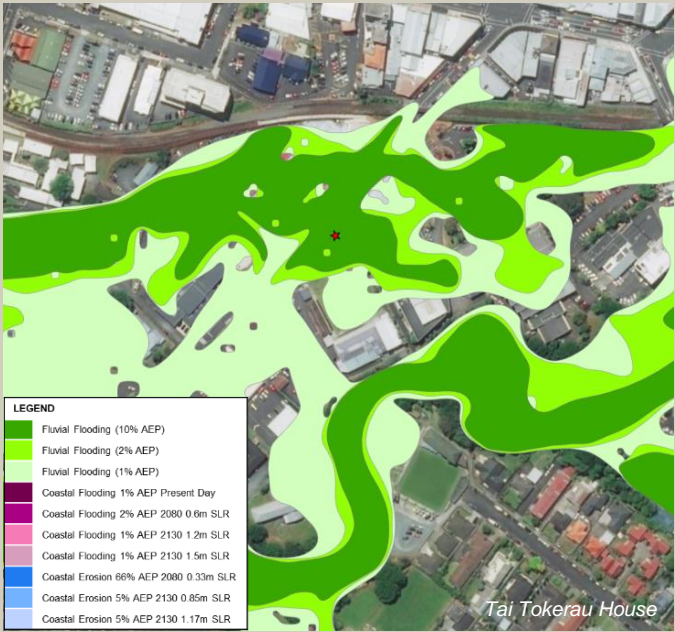
Insignificant

Low

Moderate

High

Extreme



Whangārei Spark Site is a main exchange and is exposed to fluvial flooding.

The risk assessments shows that it is at high risk to fluvial flooding in the present day, 2080 and 2130 scenarios. Failure would impact the Whangārei CBD, hospital, central police station and cell sites.

Whangārei Spark Site	Present day	Mid-term (2080)	Long term (2130)
Fluvial flooding			
Coastal inundation	N/A	N/A	N/A
Coastal erosion	N/A	N/A	N/A

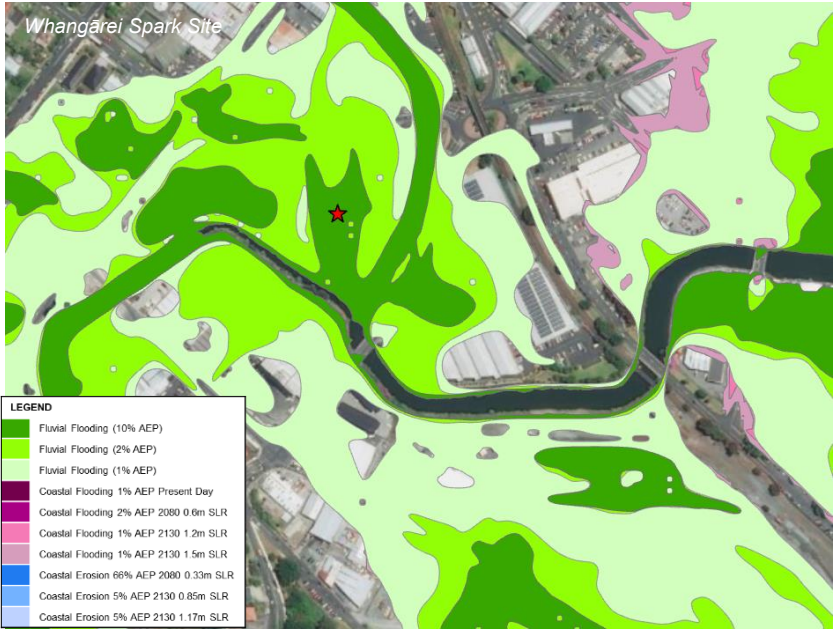
Insignificant

Low

Moderate

High

Extreme

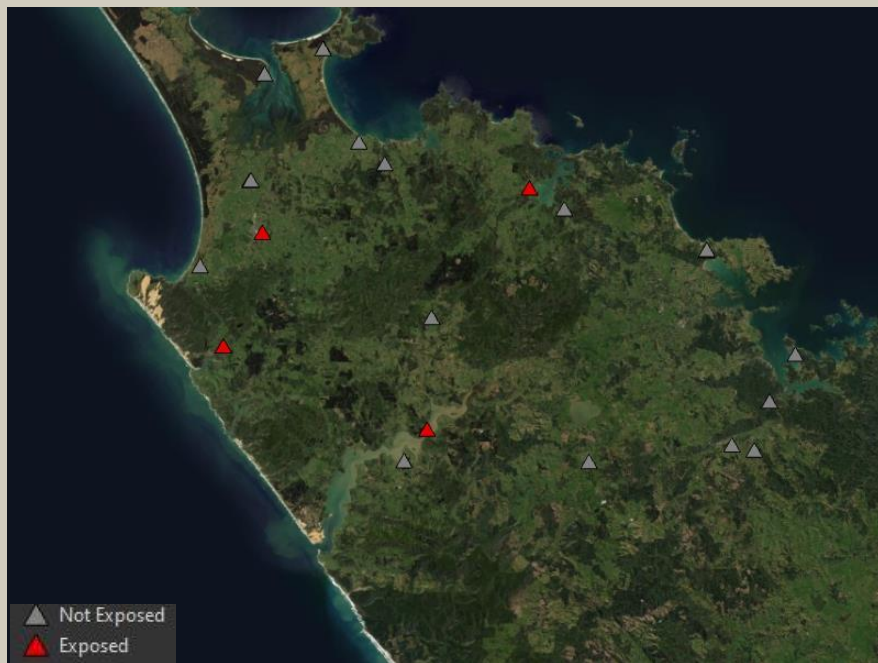




Solid waste assets have been assessed for exposure to fluvial flooding, coastal inundation and coastal erosion only. A risk assessment was out of scope. NLG could consider assessing risk to solid waste sites using MfE 2019 closed Landfill Risk Assessment method.

A total of 62 solid waste sites across the region were assessed for exposure, with 19 (30%) exposed to one or more hazards.

#### Far North District Council solid waste asset exposure



There are 5 of the 23 FNDC solid waste sites exposed to one or more of the three hazards.

Kohukohu Road Refuse Transfer Station is exposed to both fluvial flooding and coastal inundation hazards, as shown in the images below.



Kohukohu Road Refuse Transfer Station

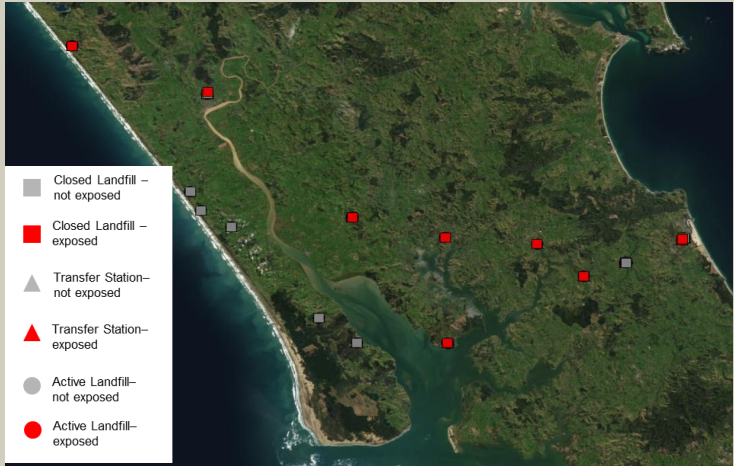


Kohukohu Road Refuse Transfer Station



KDC SOLID WASTE EXPOSURE

KDC has 13 of the 28 closed landfill assets which are exposed to fluvial flooding, coastal inundation and coastal erosion.

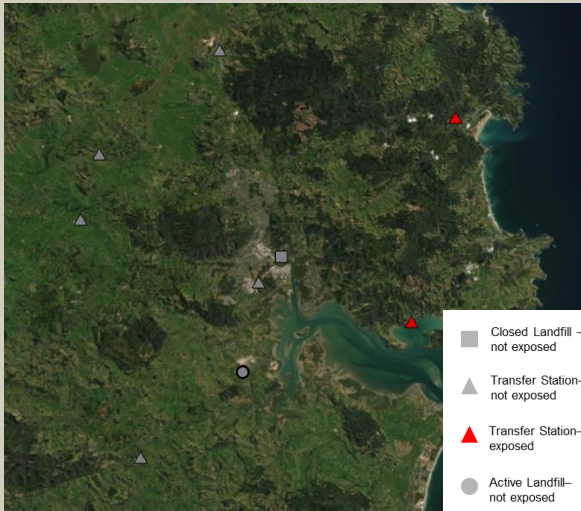


The image above shows the exposure of several closed landfill assets, with one inserted below shown north of Dargaville.

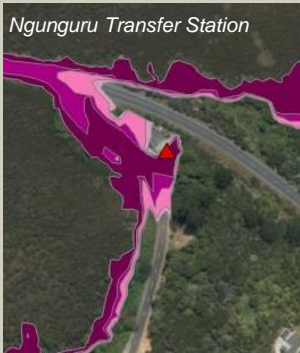


WDC SOLID WASTE EXPOSURE

WDC has 11 sites with 2 transfer stations (Ngunguru Transfer Station and Parua Bay Transfer Station) exposed to both fluvial flooding and coastal inundation.



The exposure of Ngunguru Transfer Station to both fluvial flooding (left) and coastal inundation (right) shown below.

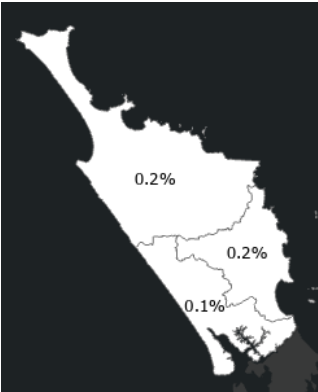




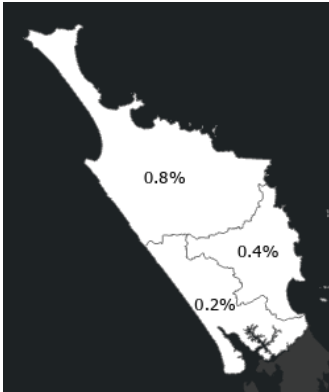
**EXPOSURE BY DISTRICT – LINE TYPE ASSETS**

The maps show the percentage length of line assets in each district which intersect with the hazard layers.

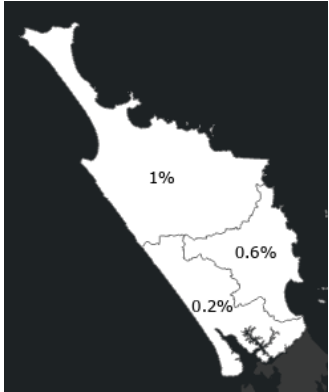
Whangārei and Kaipara have over 15% of line type asset length exposed to fluvial flooding. By 2080, 5% of lifeline assets in Whangārei will be at risk of coastal inundation.



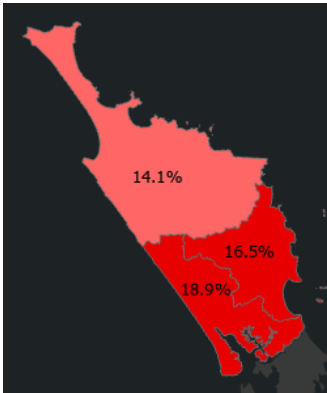
Erosion – Present



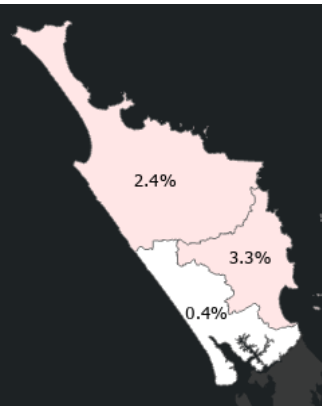
Erosion – 2080



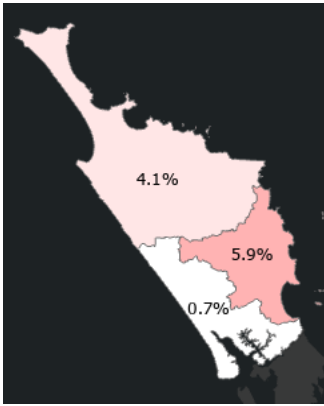
Erosion – 2130



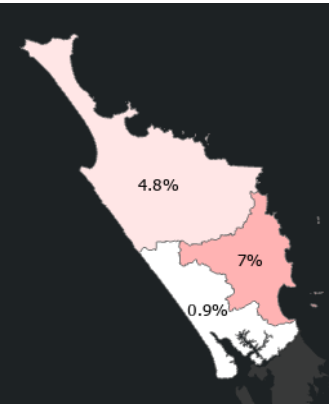
Fluvial Flooding



Inundation – Present



Inundation – 2080

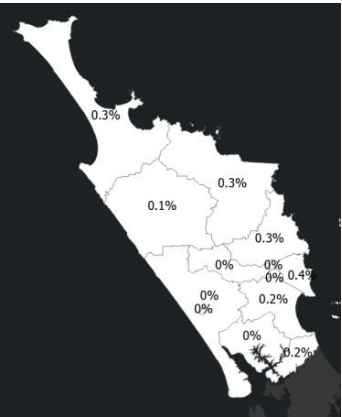


Inundation – 2130

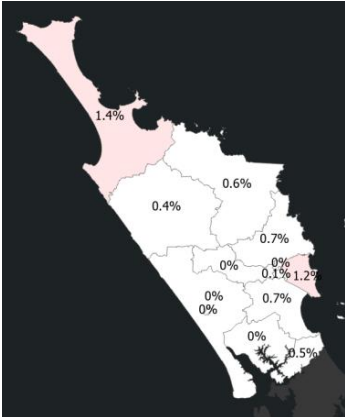
**EXPOSURE BY WARD – LINE TYPE ASSETS**

The maps below show the percentage length of line assets in each ward which intersect with the hazard layers.

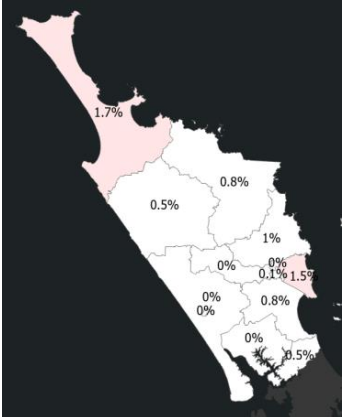
Wards in all three districts have over 20% of the total length of their line type assets at risk of fluvial flooding.



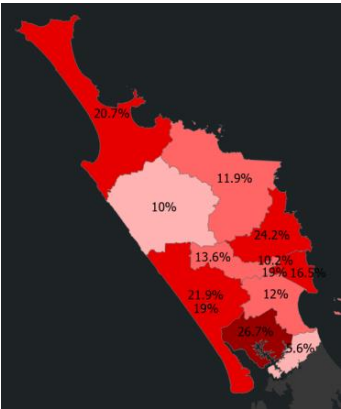
Erosion – Present



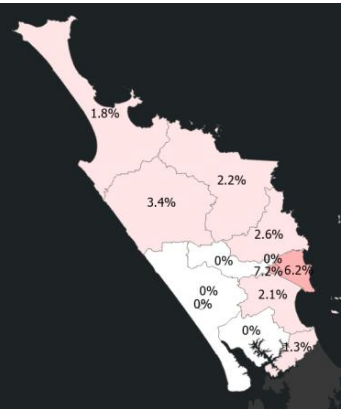
Erosion – 2080



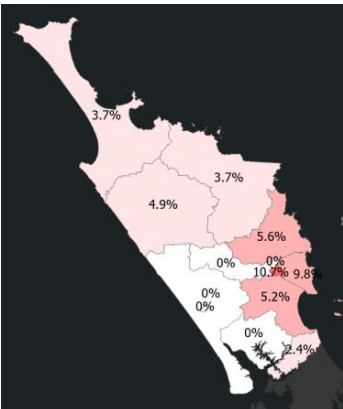
Erosion – 2130



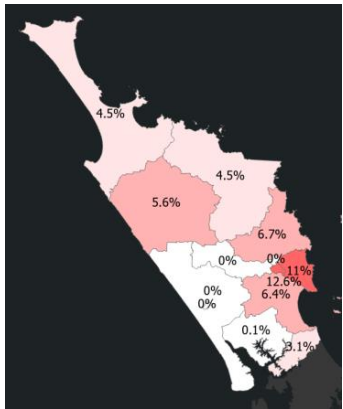
Fluvial Flooding



Inundation – Present



Inundation – 2080

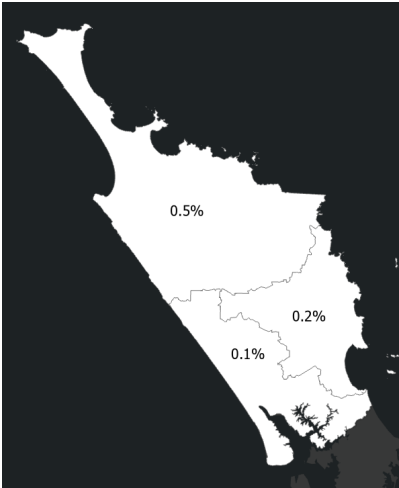


Inundation – 2130

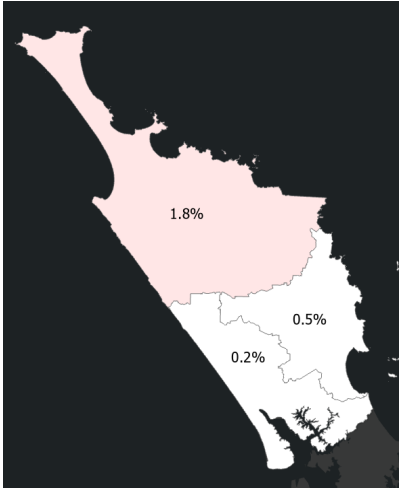
**EXPOSURE BY DISTRICT – POINT ASSETS**

The maps show the percentage of point type assets in each district which intersect with the hazard layers.

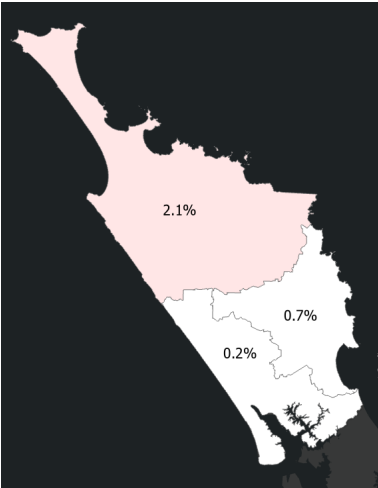
Whangārei and Kaipara have over 15% of point assets exposed to fluvial flooding. By 2080, Whangārei will also have over 5% of the point type assets at risk of coastal inundation.



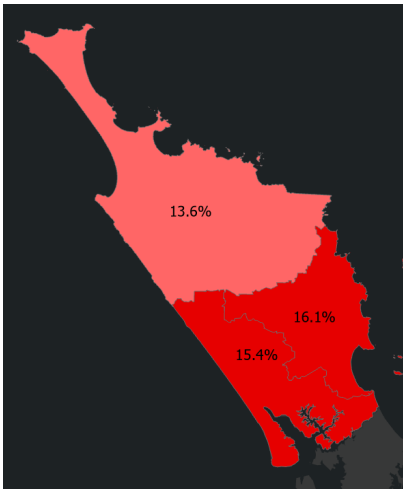
Erosion – Present



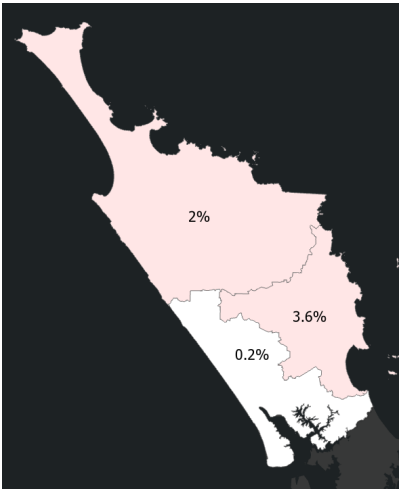
Erosion – 2080



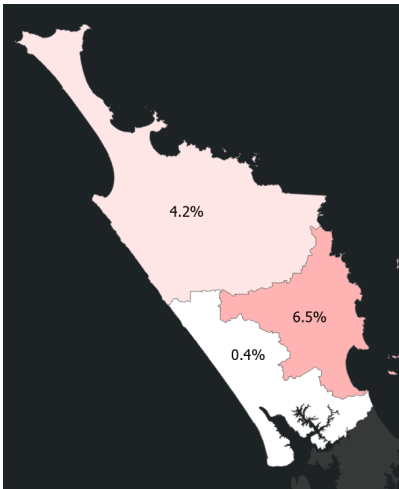
Erosion – 2130



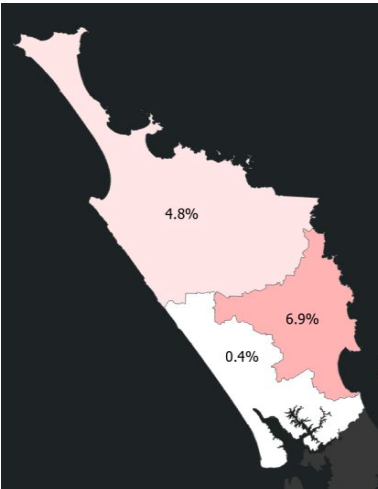
Fluvial Flooding



Inundation – Present



Inundation – 2080

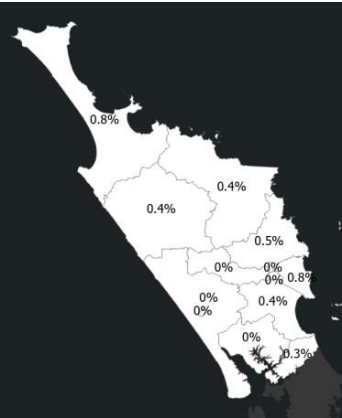


Inundation – 2130

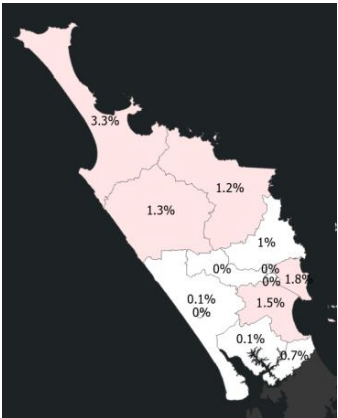
EXPOSURE BY WARD – POINT ASSETS

The maps below show the percentage of point assets in each ward which intersect with the hazard layers.

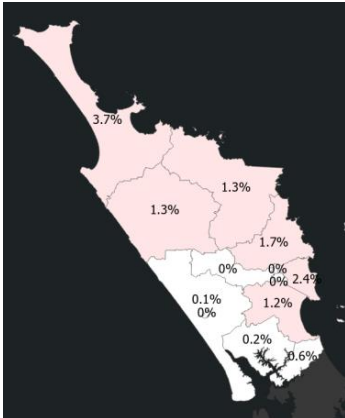
There are wards in all three districts which have over 20% of the point type assets at risk of fluvial flooding. Coastal inundation will proportionally affect more Far North District wards and Whangārei wards more than Kaipara wards. By 2130, three wards in the Far North will have over 1% of point assets at risk of coastal erosion.



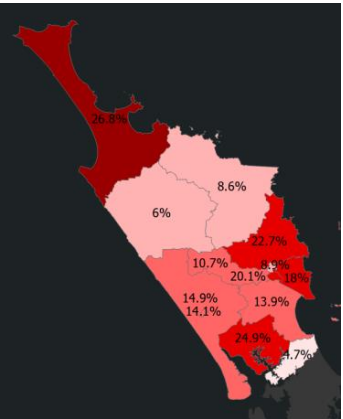
Erosion – Present



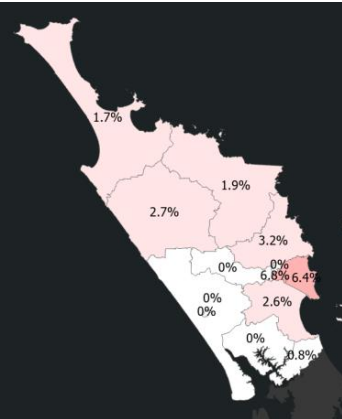
Erosion – 2080



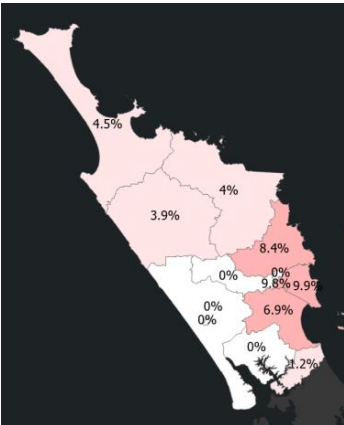
Erosion – 2130



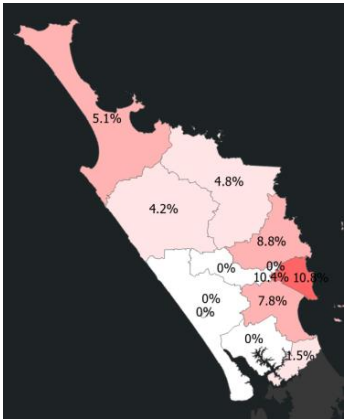
Fluvial Flooding



Inundation – Present



Inundation – 2080



Inundation – 2130



# Potential next steps



This high-level risk assessment has provided Northland Lifelines Group with insights into climate change risk now and into the future.

Future next steps which the Northland Lifelines Group should consider include:

- Assessing the potential service impacts arising from at risk assets.
- Interrogate heatmaps and establish hazard based hotspots to further focus adaptation efforts
- Prioritise high and extreme assets, establishing adaptation actions and associated costs
- Site level investigations for top risks within each sector
- Incorporation of remaining NLG Organisations' data
- Develop an asset information standard to reduce data manipulation for assessments
- Acquire better spatial flood hazard information to refine risk ratings, increasing the number of scenarios modelled.
- Use polygons (footprints) for all asset assessed in future.

# APPENDICES

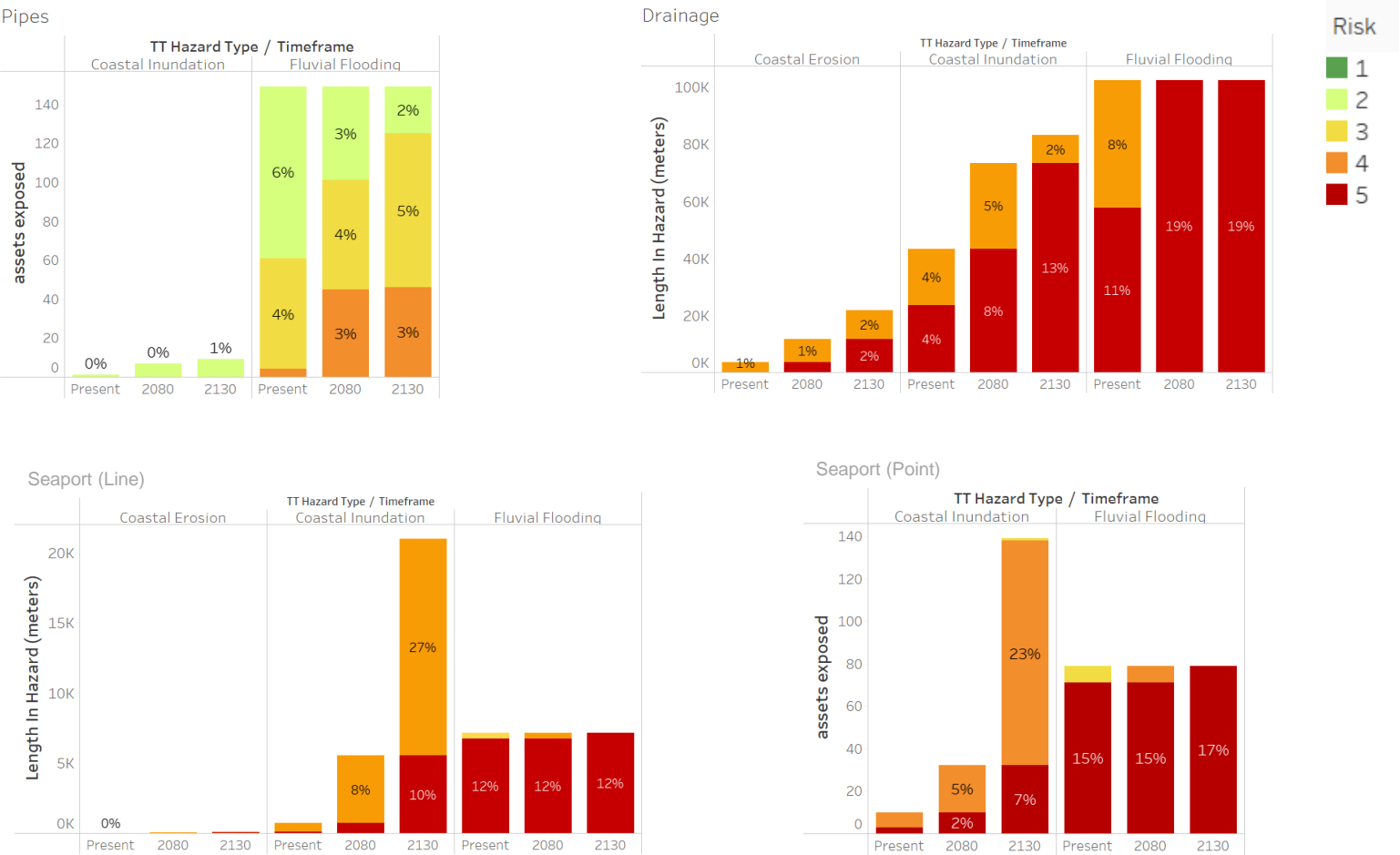


1019890 NORTH AND LIFELINES GROUP INFRASTRUCTURE CLIMATE CHANGE RISK ASSESSMENT

JUNE 2022 TONKIN & TAYLOR NZ

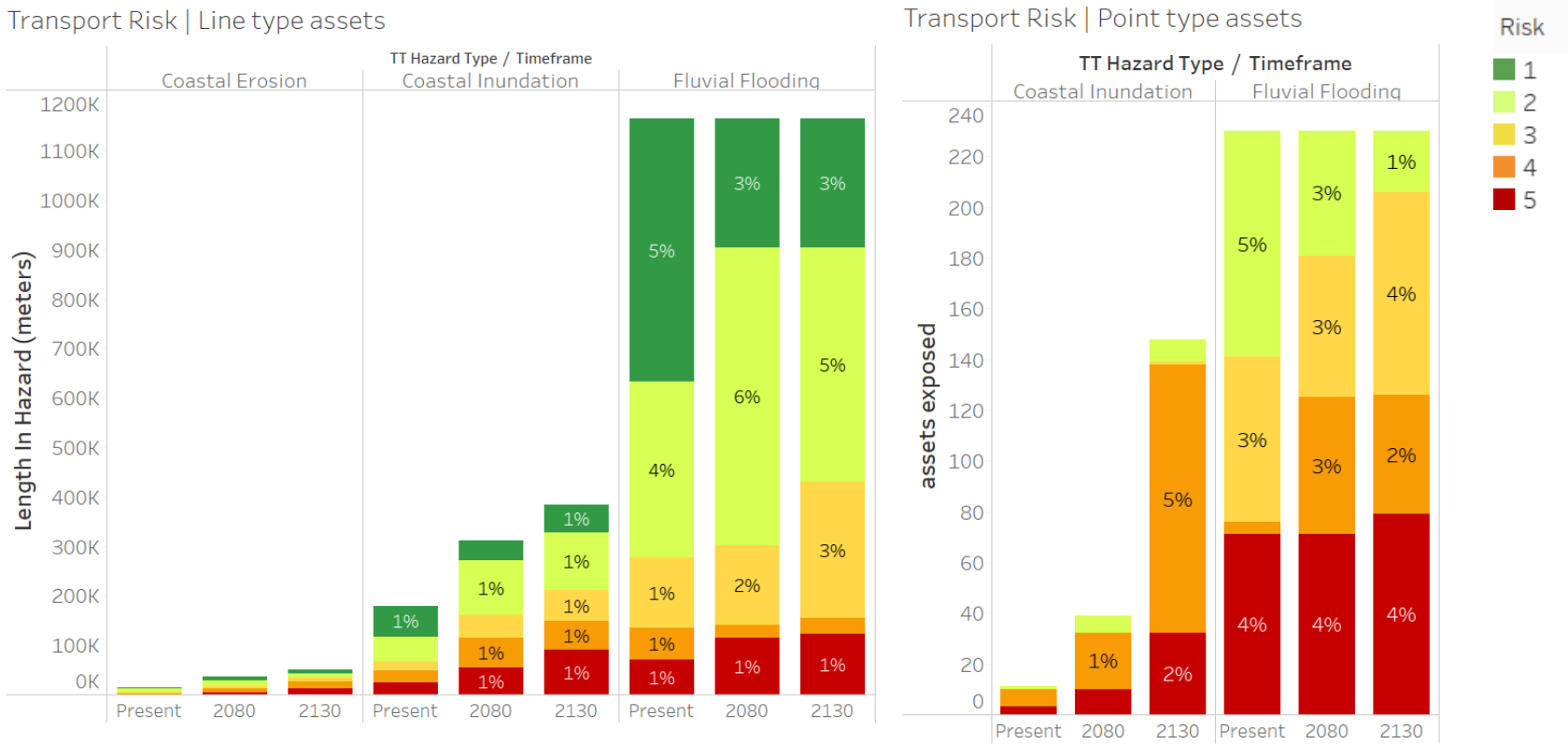
141

# APPENDIX A - TRANSPORT RESULTS



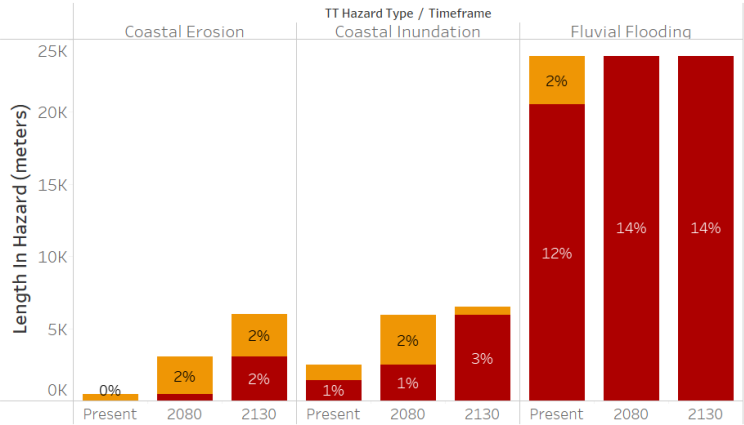


TRANSPORT RISK ASSESSMENT RESULTS DISPLAYED BY LINE AND POINT TYPE ASSETS

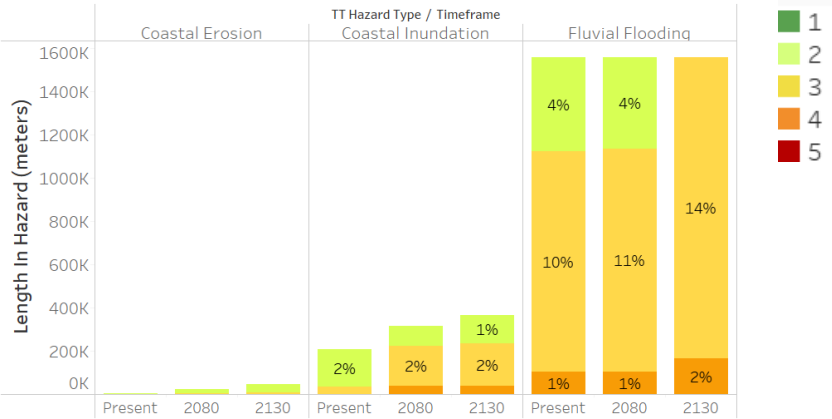


# APPENDIX B - ENERGY RESULTS

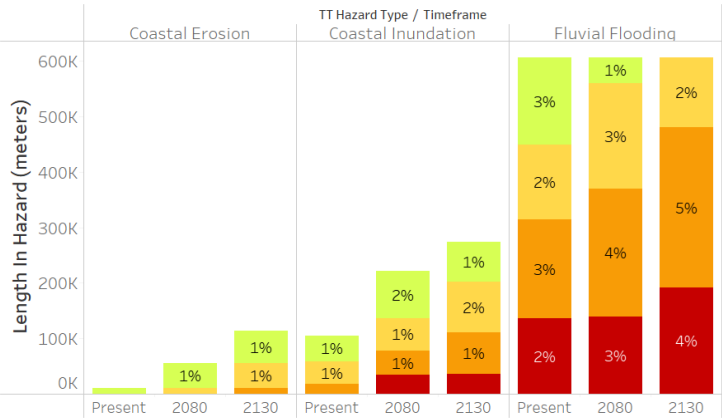
Energy Pipes



Conductors (Overhead)

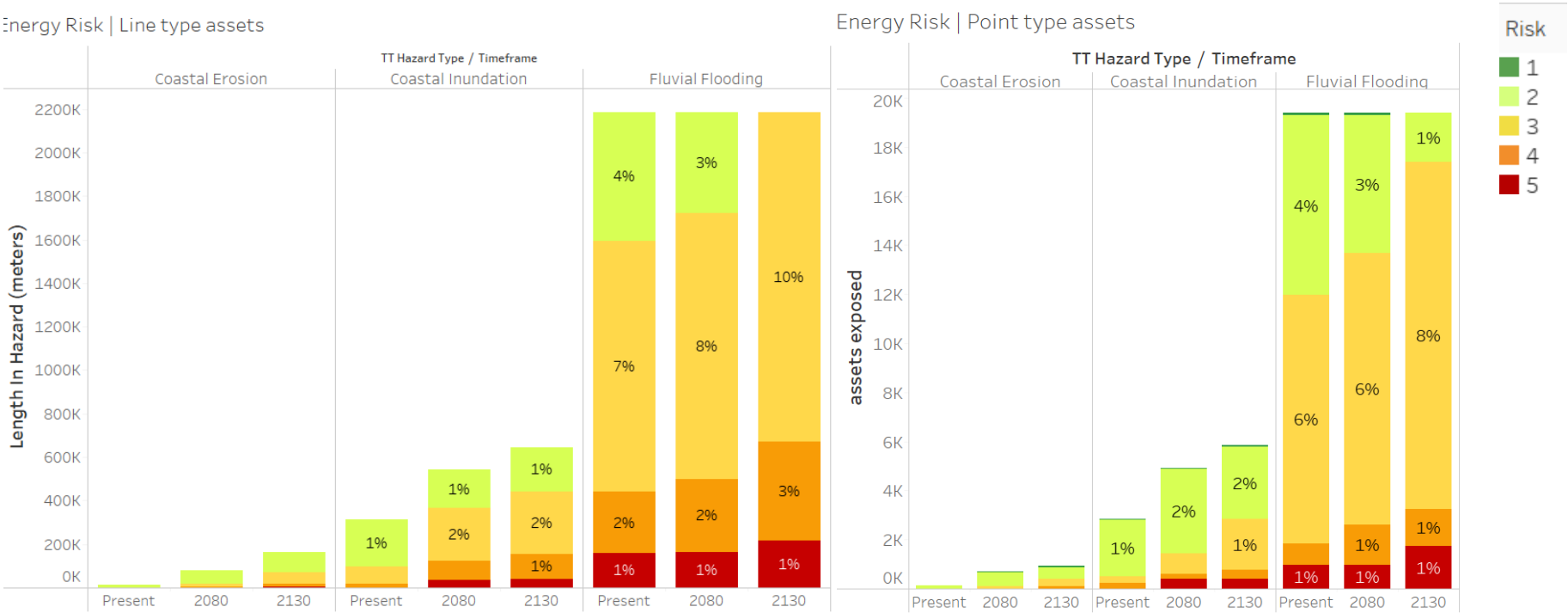


Conductors (Underground)



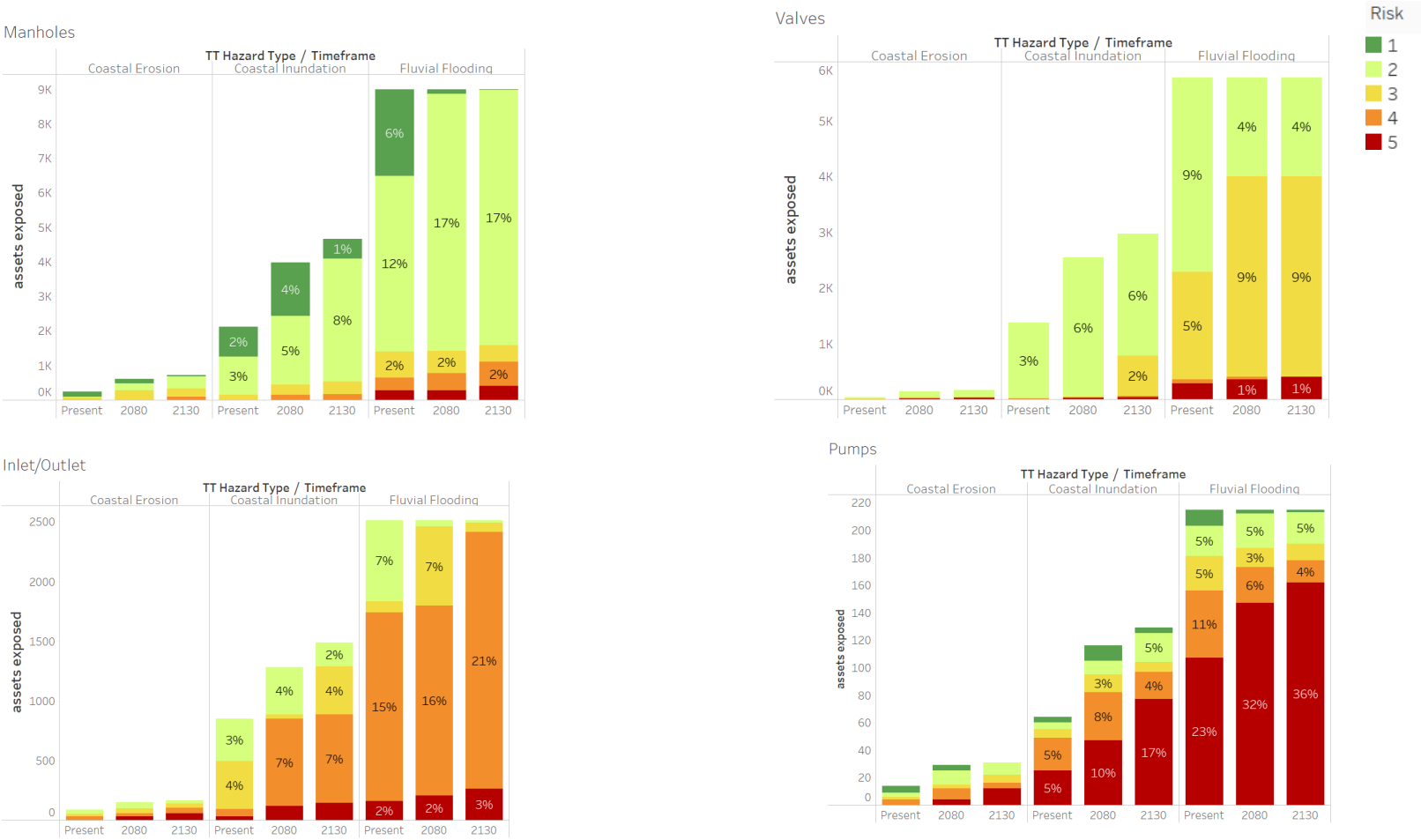
Note risk relates to access rather than damage

ENERGY RISK ASSESSMENT RESULTS DISPLAYED BY LINE AND POINT TYPE ASSETS

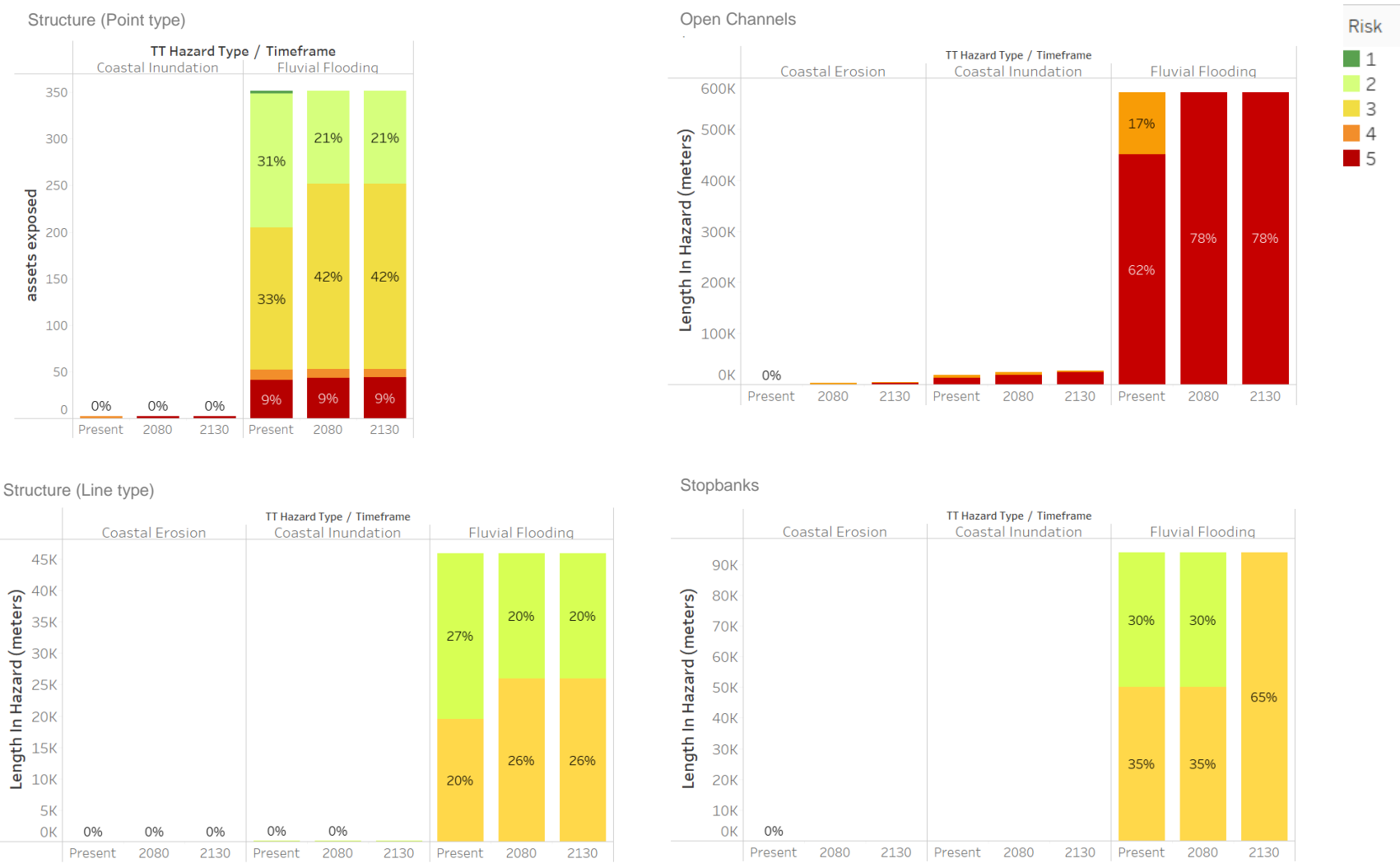




# APPENDIX C - WATER RESULTS

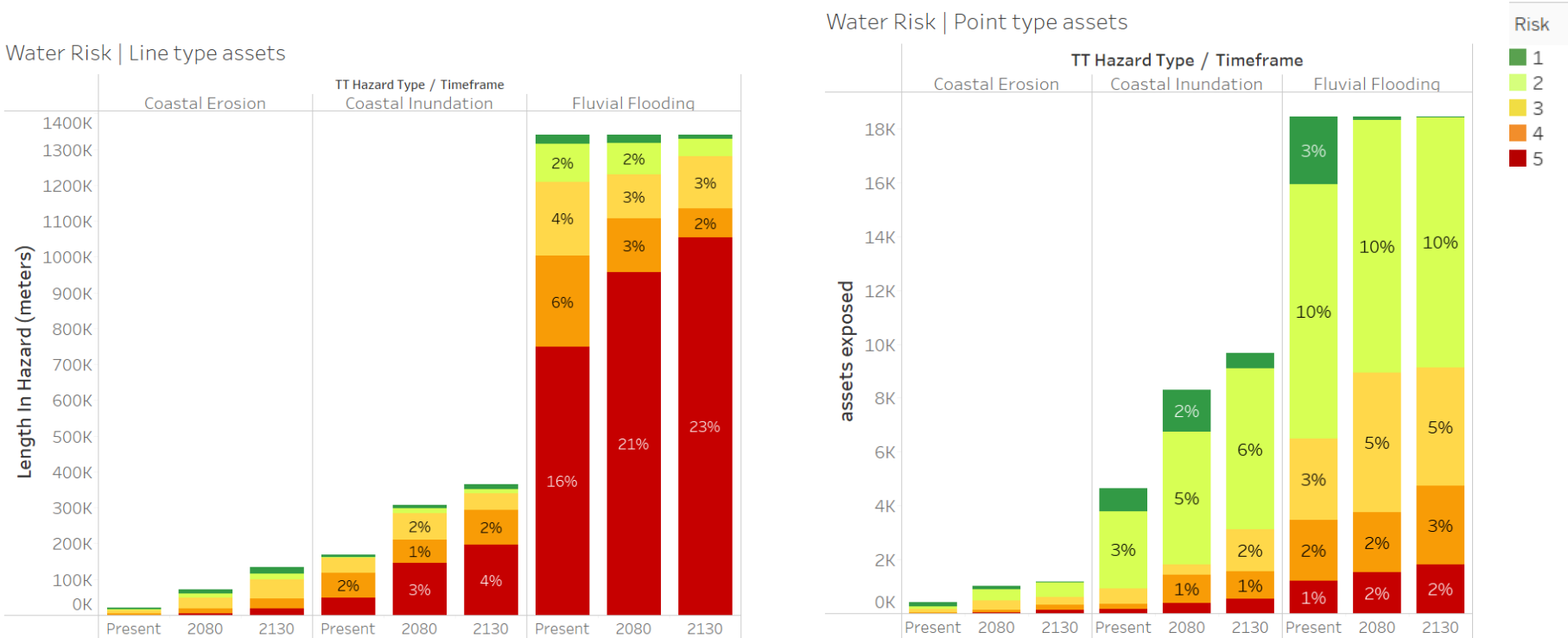


Structures include floodgates, spillways, detention dams, floodwalls, and dams. The division of point and line type assets is based on the data received from Northland Lifeline Utilities.

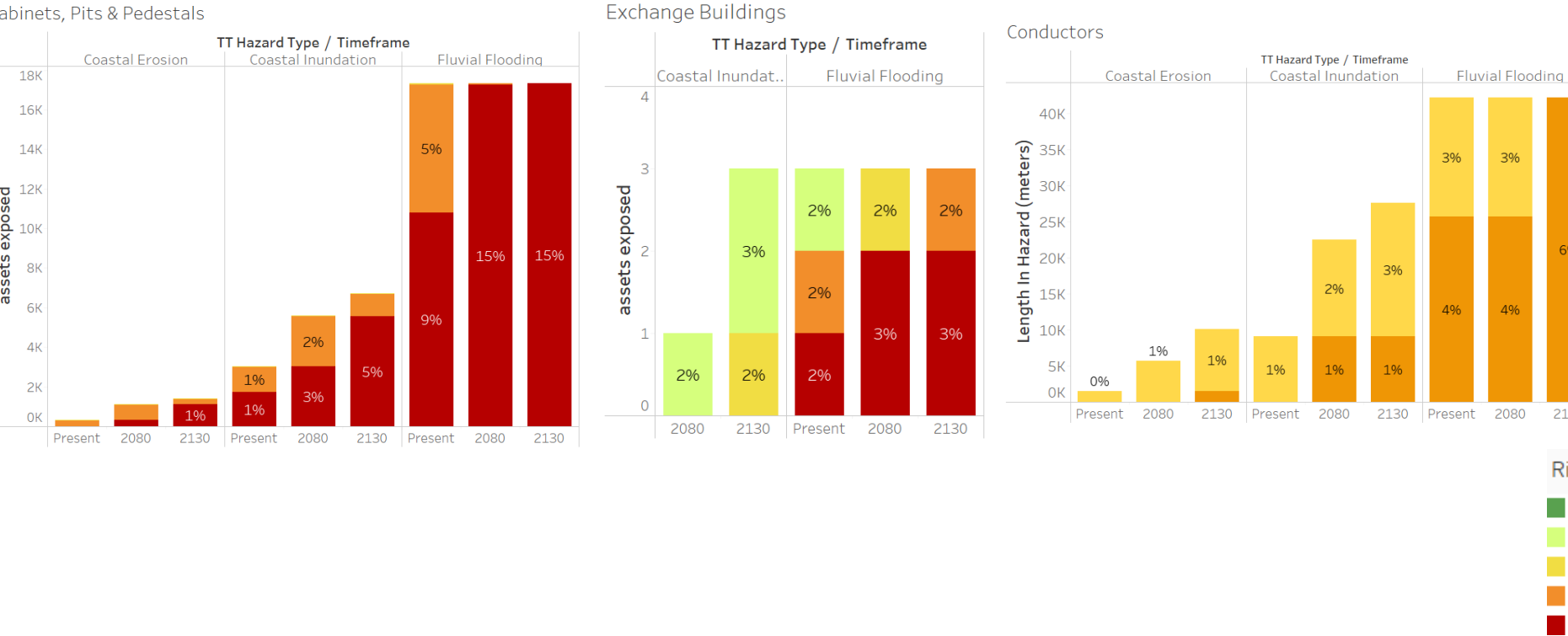


WATER RISK ASSESSMENT RESULTS DISPLAYED BY LINE AND POINT TYPE ASSETS

The line assets graph below includes pipes, stopbanks, open channels and line structures. The point assets graph below includes manholes, valves, inlet/outlets, pumps, structures (points), buildings/facilities, and treatment facilities.



# APPENDIX D - TELECOMMUNICATIONS RESULTS



TELECOMMUNICATIONS RISK ASSESSMENT RESULTS DISPLAYED BY LINE AND POINT TYPE ASSETS

