

CDEM Resilience Fund project application form

This form provides the minimum of information for the application; a detailed project plan should be developed to inform this application and may be attached.

Project title	Climate change preparedness, Lifelines Infrastructure
Date of application	14 June 2021
Details on application	
Applicant (Note: CDEM Group must endorse/sponsor all applications)	Northland CDEM Group on behalf of the Northland Lifelines Utility Group
Sponsoring CDEM Group	Northland CDEM Group
Other local authorities, Groups or organisations supporting this proposal	

Project description

Executive summary [200 words maximum description]

It is internationally accepted that the climate is changing due to increasing quantities of anthropogenic greenhouse gases in the atmosphere. These changes have been observed in both global and regional climates, with warming being now agreed as unequivocal. Climate change poses a significant level of risk to New Zealand's natural and built environment, with far reaching impacts that will require both adaptive and resilient responses.

Much of New Zealand's population is located on the coast, and with coastal urbanisation expanding disproportionally to that of human population growth globally, this is set to increase. While natural variations have always been present for New Zealand's climate, climate change is projected to shift these natural variations, both in size and intensity. The Intergovernmental Panel on Climate Change (IPCC) identified key climate hazards to New Zealand as continual sea level rise, temperature changes, increases in frequency and intensity of floods, and extreme rainfall and weather events. The effects of these climate change hazards are predictable with some level of certainty over the coming decades.

At this stage, a region-wide understanding of the implications of these changes for the Northland region does not exist. Similarly, an understanding of climate risk to *Lifelines infrastructure* does not exist at a regional or local level. While there is various work being undertaken by the TLAs in the region, they are focussed on impacts on communities and Council-owned infrastructure leaving a gap in relation to the wider lifelines infrastructure sector (energy, telecommunications).

The Northland Lifelines Utility Group has identified through its work programme development for the coming year a significant gap in the understanding of Lifelines Utility Groups of the impacts of Climate Change over time on key assets and infrastructure in the region.

The group has identified an opportunity to carry out a broad scale regional infrastructure Climate Change Risk Assessment.

The objectives are to use the Northland Regional Council climate change hazard assessment work to understand Northland's climate and how it may change in the future and:

- Understand the risks to the various Lifelines Utilities' infrastructure and networks and how these risks may vary over time.
- Establish a risk assessment framework / methodology to identify, quantify and prioritise climate related risks to allow prioritisation of adaptation initiatives.
- Provide a broad strategy for the implementation of these recommended adaptation measures.

The proposal is to engage the current Northland Lifelines Utility Group Programme Manager to undertake this study in the 2021/22 financial year. At an initial meeting to discuss the proposal in June the group members were unanimous in their support to undertake the study.

Challenge/opportunity [200 words maximum description]

Climate change impacts could be wide-reaching across the Northland, affecting all sectors across both urban, rural and marine environments. Specific climate-related hazards relevant to the Northland region include increased flooding and landslides, increased temperature, drought and coastal hazards. Fundamentally, the climate is changing and there will be a need to adapt to future climate constraints. The Northland Lifelines Infrastructure Climate Change Risk Assessment will look at what climate change may mean for Lifelines in terms of impacts to assets and networks.

With the introduction of the Climate Change Response (Zero Carbon) Amendment Act 2019, the Minister for Climate Change and the independent Climate Change Commission have the power to request information from organisations that provide essential public services in New Zealand (including Lifeline Utilities).

There are currently over 600 organisations (including Lifeline Utilities) in New Zealand that could be asked to respond to requests for information. Requests are likely to focus on how organisations are adapting to climate change-related hazards. There is an opportunity through this project to assist individual lifeline utility organisations to understand their network vulnerabilities/ risks from climactic hazards and potential steps towards adaptation.

Alignment with priorities and objectives of the National Disaster Resilience Strategy (NDRS) [200 words maximum description]

The project aligns with the Vision and goals of the National Disaster Resilience Strategy and the similarly the goals and objects outlined in the Northland CDEM Group plan. The objectives of the project align with the national visions of a disaster resilient nation and strengthening resilience. Identifying and quantifying the impacts of climate change on the regions key infrastructure will enhance our regions resilience.

Alignment with Principles and Allocation Preferences [200 words maximum description]

Identifying and analysing risks to life and property from hazards, taking steps to eliminate those risks if practicable, and, if not, reducing the magnitude of their impact and the likelihood of their occurrence to an acceptable level is a requirement under the National Civil Defence Emergency Management Plan Order 2015.

Lifelines Utilities also have obligations under the current CDEM Act and Plan to assess vulnerability to hazards. This study is consistent with those requirements.

Application of outcomes/benefits to sector [200 words maximum description]

This project has a number of benefits for lifeline utility organisations, as well as to the wider sector. As mentioned above, it will provide assistance to individual lifeline utility organisations to understand their network vulnerabilities/ risks from climactic hazards, identify adaptive planning pathways, and respond to requests from the Climate Change Commission.

Many of the members of the Northland Lifeline Utilities Group have a jurisdiction beyond Northland and will take their learnings into other parts of the country.

Equally important, the project will improve the collective understanding by the Northland CDEM Group and its members (includes Lifeline Utilities) of the climate change hazards faced by our communities. An improved understanding of infrastructure risks will provide an important input into local planning by TLAs and decision making around communities potentially impacted by sea level rise and other climate related risks.

Also, it is intended to leverage of the methodology that has been developed by the Bay of Plenty Lifelines Group (who are currently undertaking a regional infrastructure climate change risk project at a cost of \$120,000) and develop a streamlined methodology that can be used by lifelines groups with a smaller funding base.

Ongoing costs (post project) and how it will be funded [Please provide a summary of ongoing costs (if any) and how it will be funded/managed - 200 words maximum]

There will not be any on going cost associated with this Group.	study directly for the No	orthland Lifelines Utility	
Project design			
Project manager	Demi Exley - Northland CDEM Group LUC		
Other project members	Northland Lifelines Utility Group members		
External providers/contractors	Lisa Roberts, Northland Lifelines Utility Group Programme Manager		
NEMA Resource (if required)	Nil		
Deliverables [Note: payments will be made after successful comp	eletion of milestones identified	1	
Key Milestones	Date for completion	Cost (Invoice Amount)	
Scope, plan, develop review and deliver report.	1 July 2022	\$25,000	
Identified risks			
Risks	Suggested mitigation / management		
Insufficient resources to deliver on time	Monitor and review progress regularly by Project Manager and report on progress to CEG		
Timeline changes	Monitor and review progress regularly by Project Manager and report on progress to CEG		
Insufficient engagement with key partners/stakeholders	Monitor and review progress regularly by Project Manager and report on progress to CEG		
Over run of cost	Monitor and review progress regularly by Project Manager and report on progress to CEG		
Funding request and use			
CDEM Resilience Fund contribution	\$25,000		
Local authority/organisation contribution	Nil		
Other sources of funding or support	In kind contribution for time, from each of the Lifelines Utility Group members		
Budget [Please supply spreadsheet]	\$25,000		
Applies if application exceeds \$100,000 over the life of the project	Are you prepared to attend an interview in support of this application (if needed		
Application confirmation			
Is this application from an individual or other organisation (not CDEM Group)? Yes \square No \boxtimes			
Does the CDEM Group support this application? (Sign-off below confirms support)	Mary:	Yes 🛛 No 🗌	
Approval of Chief Executive (Chief Executive or Head of the organisation receiving the funding)	C-A/ /		
Approval of CEG Chair	FHI		
All communications regarding the application, including approval decisions will be a dressed to the Chief Executive and CEG Chair			
CDEM Group comment			
Northland CDEM Group supports this initiative and looks forward to the benefits from the report.			

Note: Only complete forms will be considered for assessment. All completed forms and supporting documents must be emailed to NEMA on Resilience.Fund@nema.govt.nz

NEMA Assessment (Internal Use Only)				
Principles	Yes	No		
Local/Regional Focus				
Valuing the role of Maori in Emergency Management System				
NEMA involvement required				
Allocation Preferences				
Alignment with NDRS				
Achieving equity of outcomes for Māori communities, marae, hapū, iwi, and Māori organisations.				
Outcome focused				
Applicable in other regions/CDEM Groups				
Enables national consistency				
Wider funding/resource commitment (i.e. co-funding, on-going funding, resource time committed)				
Builds on existing work				
Operational expenditure (Opex)				
Capital expenditure (Capex)				
Other				
Application from individuals or other organisations endorsed/sponsored by CDEM Group				
NEMA Subject Matter Expert Comment Supported ☐ Not supported ☐				
NEMA Regional Emergency management Advisor Comment Support	ed 🗌 Not su	pported		
Helma Regional Emergency management Advisor Comment	ou 🗀 Not ou	pportou _		
NEMA Review Panel Comment Supporte	ed 🗌 Not su	pported		
NEMA Director Decision Sign-off Ap	Director Decision Sign-off Approved ☐ Declined ☐			
Director of Civil Defence Emergency Management				