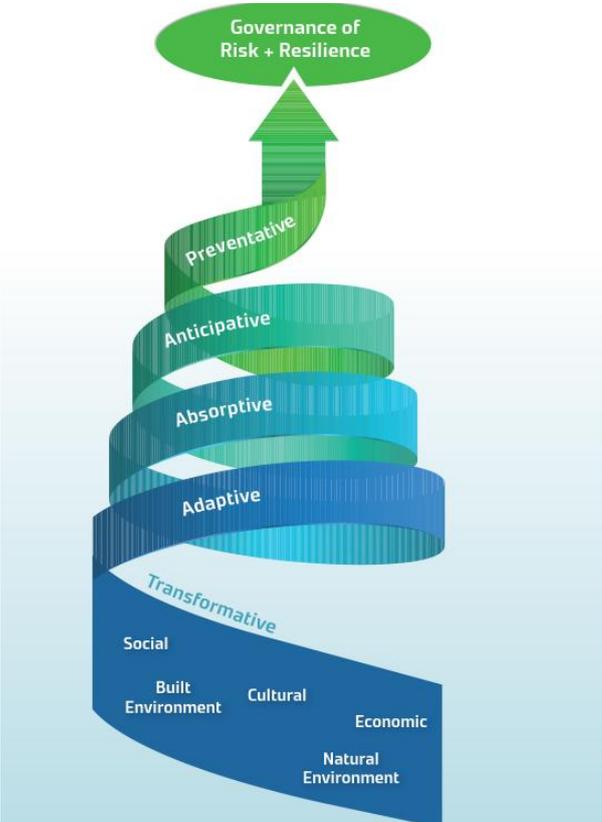


Resilience Fund Application Form

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

Project title	Coastal Community Resilience Guide
Date of application	28/01/2021
Details on application	
Applicant <i>[CDEM Group must endorse/sponsor all applications]</i>	Chatham Islands Council (Appendix A: Endorsement letter)
Sponsoring CDEM Group	Chatham Islands Council
Other local authorities, Groups or organisations supporting this proposal	Auckland Council, Tonkin + Taylor. A webinar hosted by IPWEA for stakeholders on 28 October 2021 Local Government (Appendix B)
Project description	
Executive summary [200 words maximum]	
<p>Coastal communities are highly vulnerable and exposed to many hazards. To be resilient, communities must prepare and plan for, absorb, recover from or more successfully adapt to actual or potential adverse events.</p> <p>Enabling, empowering, and supporting community resilience is one of the priorities for the National Disaster Resilience Strategy of New Zealand (2019). Resilience involves identifying and monitoring risks to wellbeing, taking action to reduce risk, and ensuring informative tools are available to assist decisions about resilience. But turning the theory of resilience into action has, until recently, been challenging, as the resilience element often focuses on five capitals (social, built environment, cultural, economic, natural environment), but often ignores the process (preventive, anticipative, absorptive, adaptive, transformative) of resilience building.</p> <p>Tonkin + Taylor has developed the Coastal Community Resilience Guide (CCRG), for building coastal community resilience in Aotearoa. We propose to test this guide with the Chatham Islands Council under the CDEM Resilience Fund. The guide integrates the five capitals and the processes of resilience and assists the coastal communities to develop a customized framework to evaluate their existing frameworks for improving resilience.</p>	

Governance is at the top of the approach as effective resilience building activities of the five capitals require governance throughout the process.

Challenge/opportunity [200 words maximum]

There is currently inadequate information to support communities and authorities to make informed decisions on protecting against possible future changes to coastlines due to climate change. Building resilience and understanding climate and disaster related risks can be very challenging, particularly due to the unpredictable nature of hazards, and complex community socioeconomic and technical systems. Moreover, the impact varies from community to community as each has its livelihoods, identities, characteristics, and coping mechanisms.

Many frameworks and plans for measures to enhance resilience of coastal communities fail to comprehensively cover all of the critical aspects, as the practitioners tend to value different aspects of resilience differently. The lack of a standard could lead to a situation where no definite solutions can be applied across the communities to solve climate change and disaster issues.

To achieve consistent risk reduction, a comprehensive guide or a standard that concentrates on key “must-haves” that are applicable across varying scales or community sizes is critical to represent resilience as process-oriented and achievable. The Coastal Community Resilience Guide is an integrated approach, where the process and capitals of resilience-building are looked at together to develop a tailored framework or evaluate the existing frameworks. Applying the CCRG to the Chatham Island community, will support improved resilience of the Chatham Island coastal communities.



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

The CCRG is an integrated approach where the process and elements of resilience are examined and implemented together. It is aligned with the priorities and objectives of the NDRS. It mainly addresses the third priority i.e., “Enabling, Empowering, and Supporting Community Resilience” of the NDRS. For instance, the indicators of the CCRG cover prioritising and supporting vulnerable groups, promote social connectedness, consider various aspects of the community for resilience building, suggest build back approaches, and emphasize the importance of culture. These elements directly or indirectly represent the objectives of the third priority. However, some elements of the CCRG also cover a few objectives of two other priorities i.e., Priority 1- “Managing Risk”, and Priority 2- “Effective Response to and Recovery from Emergencies”. For example, developing hazard maps, capacity building activities, business continuity, economic recovery, creating partnerships, defining roles and responsibilities, and maintaining data and information are presented in the CCRG, which directly or indirectly represents the objectives of priorities 1 and 2.

Alignment with Principles and Allocation Preferences [200 words maximum]

This project will ensure that there is alignment with the principles and allocation preference of CDEM, as follows:

Principles:

- NEMA provides leadership – *this project is aligned with the goals of NEMA*
- A fair and transparent applications-based process, with allocation decided by NEMA – *noted*
- The Fund is available to CDEM Groups, other organisations and individuals – *noted (Chatham Islands CDEM Group)*
- CDEM Groups monitor projects – *noted*
- A local/regional focus (not complex, multi-region / national) – *this project can be customised to either local, regional, or national level*
- Values the role of Māori in the emergency management system – *cultural values and community involvement aspects are highly emphasised in the CCRG*
- Applications allow for NEMA involvement if it is required –*noted*

Allocation Preferences:

- Aligns with National Disaster Resilience Strategy (NDRS) – *carefully considered*
- Achieves equity of outcomes for Māori communities, marae, hapū, iwi and Māori organisations – *noted*
- Outcome focused (will make a material difference) – *the outcomes of this project are described in the following section*
- Applicable in other regions / CDEM Groups – *CCRG is a non-prescriptive, straightforward guide. It can be tailored based on location and context*
- Supports national consistency –*CCRG can be tailored based on location and context and scaled at a national level*
- Wider funding / resource commitment (co-funding, ongoing funding committed) – *the assessment would enable CDEM to identify strategic funding for community resilience*
- Builds on existing work – *yes (CCRG does not replace any existing works, rather it assists in enhancing the works)*
- Operational expenditure (Opex) is preferred but Capital expenditure (Capex) is not excluded – *noted.*

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

The following presents some major outcomes/benefits of the CCRG:

- By undertaking CCRG, implementing the key ingredients of resilience can be effectively and efficiently achieved for the communities in New Zealand as it is in line with the four capitals (i.e. natural, social, human, and financial/physical) of the Living Standard Framework; six sectors (social, cultural, governance, natural environment, built environment and governance) of the National Disaster Resilience Strategy; six resilience areas (social, cultural, economic, built environment, natural environment, governance of risk and resilience) of EQC Resilience Strategy for Natural Hazards Risk Reduction; and guiding principles (core values, goals and objectives, management intervention, strategies, and actions, decision-making process and desired outcomes) of Mātauranga Māori and Modelling Interface.
- It can be used as a guide or a standard for developing the activities under Governance, Social Capital, Natural Capital, Cultural Capital, Built Environment, and Economic Capital dimensions.
- A similar assessment tool to the Flood Resilience Alliance could be developed where indicators can be customized and tailored according to the needs of the stakeholders and results of the assessment can be generated instantly.

- The CCRG could be used for identifying the shortfalls and challenges in the existing framework/strategy.
- It could be used to either modify the existing framework/strategy or to develop a new framework that covers majority of the critical aspects for resilience building.

Ongoing costs (post-project) and how it will be funded [200 words maximum]

There are no ongoing costs for this project. The outcome of the project can assist the council in developing a strategic plan along with an action plan for improving the resilience of the community.

Project design

Project manager	Rana Solomon, Chatham Islands Council
Other project members	
External providers/contractors	Dr. Bapon Fakhruddin, Dr Katherine Cowper-Heays
NEMA resource (if needed)	Advisory support

Deliverables [Note: payments will be made after successful completion of milestones identified]

Key milestones	Date for completion	Cost (invoice amount, ex GST)
1. Gap analysis: Working with existing literature and reports to identify shortfalls and challenges in the existing framework or strategy	Within 1 month of project approval	\$10,000
2. Online Questionnaire: Developing online questionnaire either on survey monkey or Qualtrics platform to validate the identified gaps with the relevant stakeholders of the Chatham Islands	Within 2 months of project approval	\$5,000
3. Stakeholder Consultations: Stakeholders such as authorities, decision makers, community leaders, etc., will be consulted either online or physically to understand their needs and demands for improving the resilience	Within 2.5 months of project approval	\$10,000

3. Modifying existing strategy/framework or developing new strategy/framework: Based on the gap analysis and online questionnaire the existing framework will either be enhanced through modifications or will be changed	Within 3.5 months of project approval	\$10,000
4. Final Report: Submission of final report	Within 4.5 months of project approval	\$5,000
5. Workshop: Conducting a one-day workshop to present the either the modified framework or a new framework	Within 4.5 months of project approval	\$15,000
Identified risks		
Risks	Suggested mitigation / management	
Risk of travel due to Covid-19 for conducting one-day workshop	Organising and conducting online workshop	
Budget overrun	Project manager will be assigned to this project to closely monitor the costs	
Lack of stakeholder participation	Project manager will make efforts to identify, approach, and engage relevant stakeholders. Previously established connections will be approached to ensure stakeholders are participated.	
Time overrun	Project manager will be assigned to this project to closely monitor the schedule of the project. In the events where project is expected to get delayed, NEMA will be advised to amend the milestones	
Funding request and use		
CDEM Resilience Fund contribution	\$ 55,000	
Local authority / organisation contribution	\$ 5,000 (in kind, staff time)	
Other sources of funding or support	\$ NA	
Budget <i>[please supply spreadsheet]</i>	\$55,000	
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)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Application confirmation		
Is this application from an individual or other organisation	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Does the CDEM Group support this application? <i>[sign off below confirms support]</i>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Approval of Chief Executive [Chief Executive or Head of the organisation receiving the funding]		
	Name: Penny Kneebone	
Approval of CEG Chair		
	Name: Owen Pickles	
All communications regarding the application, including approval decisions will be addressed to the Chief Executive and CEG Chair		
CDEM Group comment		

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

NEMA Assessment [internal use only]		
Principles	Yes	No
Local / regional focus	<input type="checkbox"/>	<input type="checkbox"/>
Values the role of Māori in the Emergency Management System	<input type="checkbox"/>	<input type="checkbox"/>
NEMA involvement required	<input type="checkbox"/>	<input type="checkbox"/>
Allocation Preferences		
Alignment with NDRS	<input type="checkbox"/>	<input type="checkbox"/>
Achieves equity of outcomes for Māori communities, marae, hapū, iwi and Māori organisations	<input type="checkbox"/>	<input type="checkbox"/>
Outcome focused	<input type="checkbox"/>	<input type="checkbox"/>
Applicable in other regions / CDEM Groups	<input type="checkbox"/>	<input type="checkbox"/>
Supports national consistency	<input type="checkbox"/>	<input type="checkbox"/>
Wider funding / resource commitment	<input type="checkbox"/>	<input type="checkbox"/>

Build on existing work	<input type="checkbox"/>	<input type="checkbox"/>
Operational expenditure (Opex)	<input type="checkbox"/>	<input type="checkbox"/>
Capital expenditure (Capex)	<input type="checkbox"/>	<input type="checkbox"/>
Other		
Application from individuals or other organisations endorsed/sponsored by CDEM Group		
NEMA Subject Matter Expert Comment	Supported <input type="checkbox"/>	Not supported <input type="checkbox"/>
NEMA Regional Emergency Management Advisor Comment	Supported <input type="checkbox"/>	Not supported <input type="checkbox"/>
NEMA Review Panel Comment	Supported <input type="checkbox"/>	Not supported <input type="checkbox"/>

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NEMA Director Decision Sign-off	Approved <input type="checkbox"/>	Declined <input type="checkbox"/>
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Director of Civil Defence Emergency Management

Appendix A Endorsement Chatham Island Council

Bapon Fakhruddin

From: Rana Solomon <rana@emcic.onmicrosoft.com>
Sent: Thursday, 27 January 2022 9:18 AM
To: Bapon Fakhruddin
Subject: Re: The Coastal Community Resilience Guidebook/is this ok?



To whom it may concern,

This letter is in support of the project Coastal community resilience guidebook, presented by Tonkin & Taylor Ltd in their application to test the framework to ensure the priority of National Disaster Resilience Strategy of New Zealand including the Chatham Islands.

Coastal community resilience sets out to achieve consistent risk reduction, and a comprehensive standard that focuses on key points that can apply to communities of varying sizes.

This project will enable, empower and support coastal community resilience like New Zealand and the Chathams alike.

Me rongō/Ngā mihi

Rana Solomon

Emergency Manager/ Controller
Chatham Islands Council
PO Box 24 Waitangi
Chatham Islands 8942

Ph: 03 3050 033 DD: 03 3050 506

rana@cic.govt.nz

Website: www.cic.govt.nz

FaceBook: [//www.facebook.com/CICemergencymanagement](https://www.facebook.com/CICemergencymanagement)



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ENVIRONMENT



Disaster and risk modelling expertise

Councils invited to 'test' a coastal community resilience guidebook.

Dr Bapon Fakhruddin is Tonkin + Taylor's international disaster risk and hazard modelling expert with 20 years of experience that has seen him work across many of the world's most 'climate vulnerable' countries.

He is considered one of the world's leading experts on climate resilience and responsiveness at community, government and inter agency level.

Growing up in flood-prone Bangladesh, Bapon, the son of an academic, recalls his family talking about the 1970s cyclone that ravaged his country and took some 500,000 lives.

In 1998 Bangladesh suffered one of its worst floods in recent times, inundating two thirds of the country for an unprecedented 11 weeks. Thirty million people were affected and more than 1000 died. Bapon and his father made many trips into rural areas, delivering clean water to struggling villagers.

These acts instilled in Bapon the

knowledge that he was fortunate to have escaped the poverty and devastation experienced by millions of other Bangladeshi people and his early experiences have remained a driving force throughout his career. Bapon has never forgotten the death and destruction that can come when natural forces are unleashed and how communities that lack resilience become trapped in a cycle of poverty and disease. Nor has he forgotten the importance of community.

Having seen the utter devastation wreaked by the 2004 Boxing Day tsunami on Indian Ocean countries, Bapon committed himself to the ongoing development of early warning systems, climate change assessments and modelling. To date, he has undertaken this work in more than 30 countries across the Pacific, Asia, Africa and the Caribbean, and the results have been transformational.

In 2007, severe monsoon flooding

again struck Bangladesh, also ravaging India, Nepal, Bhutan and Pakistan. But, by then Bapon had been instrumental in establishing an early warning system and his home country was prepared. Local government organisations, NGOs, and community based organisations planned for and mobilised resources for emergency response. People stored food and drinking water for 15 days, secured cooking stoves and firewood, moved livestock to higher ground and stored animal fodder, abandoned paddy transplanting and secured additional seeds for use after the floods.

Thousands of lives and livelihoods were saved, while communities and their economies were able to recover more quickly. A later evaluation of the economic benefit of the flood early warning system revealed a return of US\$59 for each dollar of investment.

Closer to home, Bapon recently developed a coastal inundation early warning system for Fiji. This work, too,

"Even the most sophisticated system will fail if the community isn't engaged and its needs identified and addressed."



Dr Bapon Fakhruddin, Tonkin + Taylor's international disaster risk reduction and hazard modelling expert. He is also an Advisor to the United Nations on Natural Hazards and Climate Change and chief Technical Advisor to UNDP Samoa.

highlights the importance of working from the ground up. Rather than starting with technologies, systems and a purely academic engineering overview, Bapon worked from grass roots level, beginning at the heart of at risk communities.

"Even the most sophisticated system will fail if the community isn't engaged and its needs identified and addressed," says Bapon.

In recent months, New Zealand's coastal communities and their economies have been badly affected by a number of severe weather events. Auckland, Marlborough, Wellington, Gisborne, Napier and Westport have been left with land damage, irreparable homes and infrastructure, massive clean ups, severed communities and displaced people.

"We can enjoy a safer, more resilient future," says Bapon.

"We encourage Councils to come forward so that we can begin that

journey towards sustainability by working hand in hand with communities, to build that strength from the ground up."

National coastal community resilience strategy guidebook

Achieving community resilience requires the identification and monitoring of risks in our communities, acting to reduce that risk and ensuring that informative tools are available to help in decision making. However, transforming resilience theory into practical action has, until recently, been a tough nut to crack.

Climate change and natural hazards are considered a wicked threat due to the sheer complexity of their actions and impacts. Coastal communities are particularly vulnerable to a range of hazards including tsunamis, storms,

storm surges, floods, coastal erosion, landslides and volcanic activity.

Many councils need help to navigate the complexities of achieving resilient, sustainable coastal communities. Dr Bapon Fakhruddin, and his co-author Neeraj Shankar, say they recognised that local government needs simple, understandable guidance and are looking for councils to test a new publication, *The Coastal Community Resilience Guidebook*.

This guidebook simplifies the resilience building landscape by providing guidance in a uniquely New Zealand context. It offers an integrated approach embracing the five capitals model aligned with other existing frameworks - social, built environment, cultural, economic and natural environment. **LG**

If your council would like to be part of the trial, contact Dr Bapon Fakhruddin bfakhruddin@tonkinintaylor.co.nz.

Communication Deliberation Involvement



ENVIRONMENT

Coastal Community Resilience Guide		Deliverables	Budget (excl. GST)	Schedule (in months)										
Code	Activity			0.5	1	1.5	2	2.5	3	3.5	4	4.5		
A1	Gap Analysis	Gap Analysis Report	\$10,000.00	■	■									
A1.1	Literature review			■										
A1.2	Developing a report				■									
A2	Online Questionnaire	Publishing and Analysing Online Questionnaire	\$ 5,000.00			■	■							
A2.1	Developing questions for online survey					■								
A2.2	Publishing in Survey Monkey or Qualtrics					■								
A2.3	Analysing the survey results						■							
A3	Stakeholder Consultations	Stakeholder Consultations	\$10,000.00					■						
A3.1	Developing questions for stakeholder consultations							■						
A3.2	Identifying relevant stakeholders							■						
A3.3	Conducting consultations							■						
A4	Modification/Development of existing/new strategy/framework	Modified existing strategy/framework or developed new strategy/framework	\$10,000.00							■	■			
A4.1	Analysing the survey and consultation results									■				
A4.2	Modifying existing strategy/framework or developing new strategy/framework										■			
A5	Final Report	Developed final report	\$ 5,000.00									■	■	
A5.1	Developing final report												■	■
A6	Workshop	One-day workshop	\$15,000.00										■	
A6.1	Organising one-day workshop												■	
A6.2	Conducting one-day workshop												■	

Total \$55,000.00