

# Local Adaptation Planning for Climate Change Resilience – a Nepal /New Zealand comparison

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# Section 1

## Climate Change - Nepal



# 1





## International drivers

Climate science and increasing disasters

2010 UNFCCC Cancun declaration led to focus on National Adaptation Programmes of Action (NAPA) and associated Local Adaptation Plans for Action (LAPA) for less developed countries.

2015 focus turned to developed countries through SDG and UNFCCC Paris Agreement and Sendai Framework for Disaster Risk Reduction





## Nepal

National Adaptation Programme of  
Action 2010

National Framework for LAPA 2011

Local Adaptation Plans for Action

Seven steps;

- sensitization,
- vulnerability and adaptation assessment,
- prioritization of adaptation options,
- formulation of the adaptation plan,
- integration of the adaptation plan into regular planning processes,
- implementation of the adaptation plan.
- progress assessment

## Standard Nepal approach

Largely Donor funded but funding may be direct to a domestic NGO or via a Government Department

Structure driven by NAPA and a national guiding framework

Government level (recent political restructuring) essentially LAPA are prepared at:

District Level

Village level

Community Level (Ward)

Community User Group Level (eg Community Forestry User Group – CFUG)

Process

NGO trains facilitators

NGO facilitates

Gain permission from relevant powerbrokers (eg Village committee or leader)

Undertake Vulnerability Assessment at individual household level for entire community/village

Invite people to attend LAPA workshop in community where knowledge is shared, people are 'sensitised to climate change, and a LAPA prepared through PRA processes

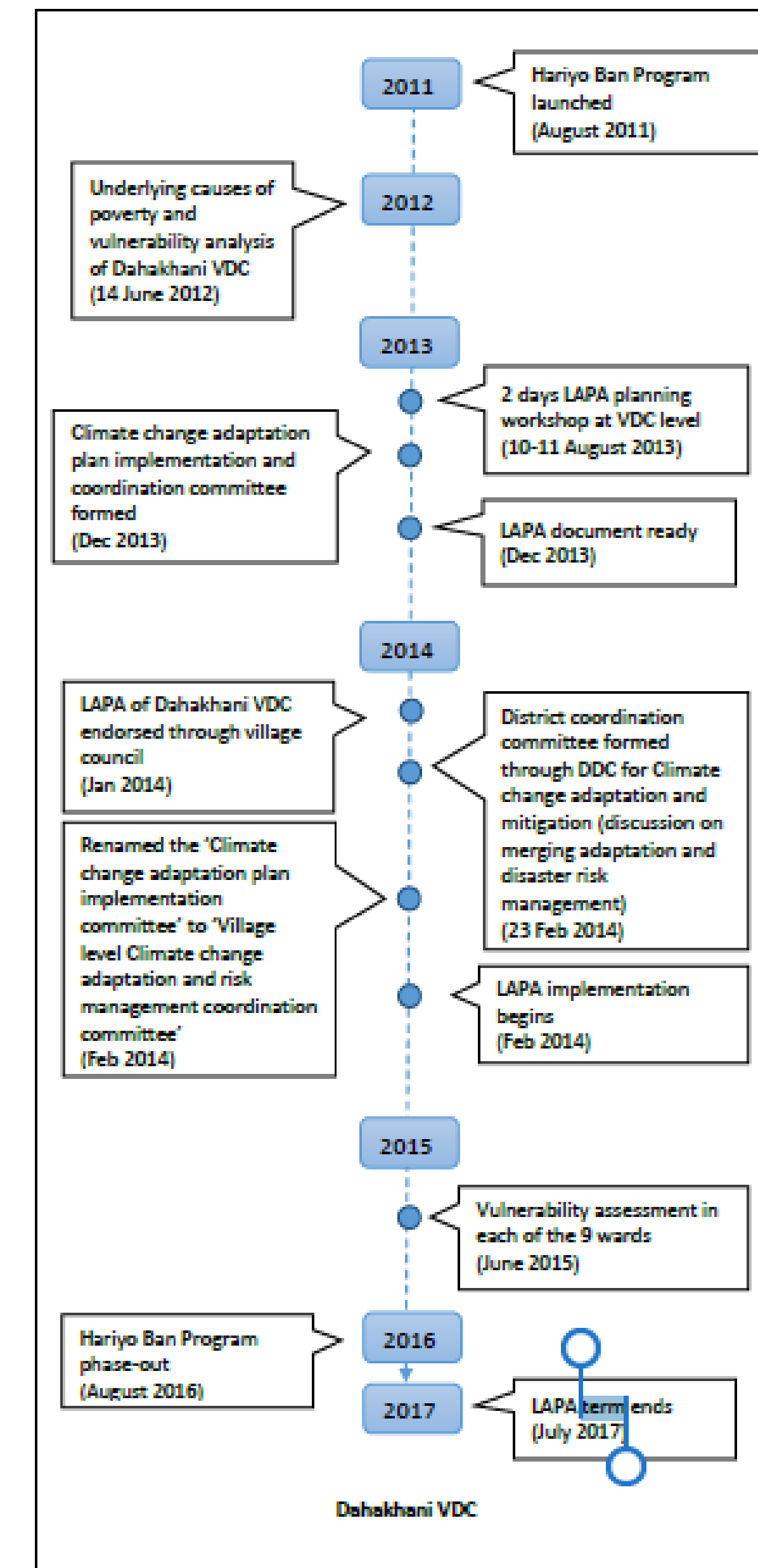
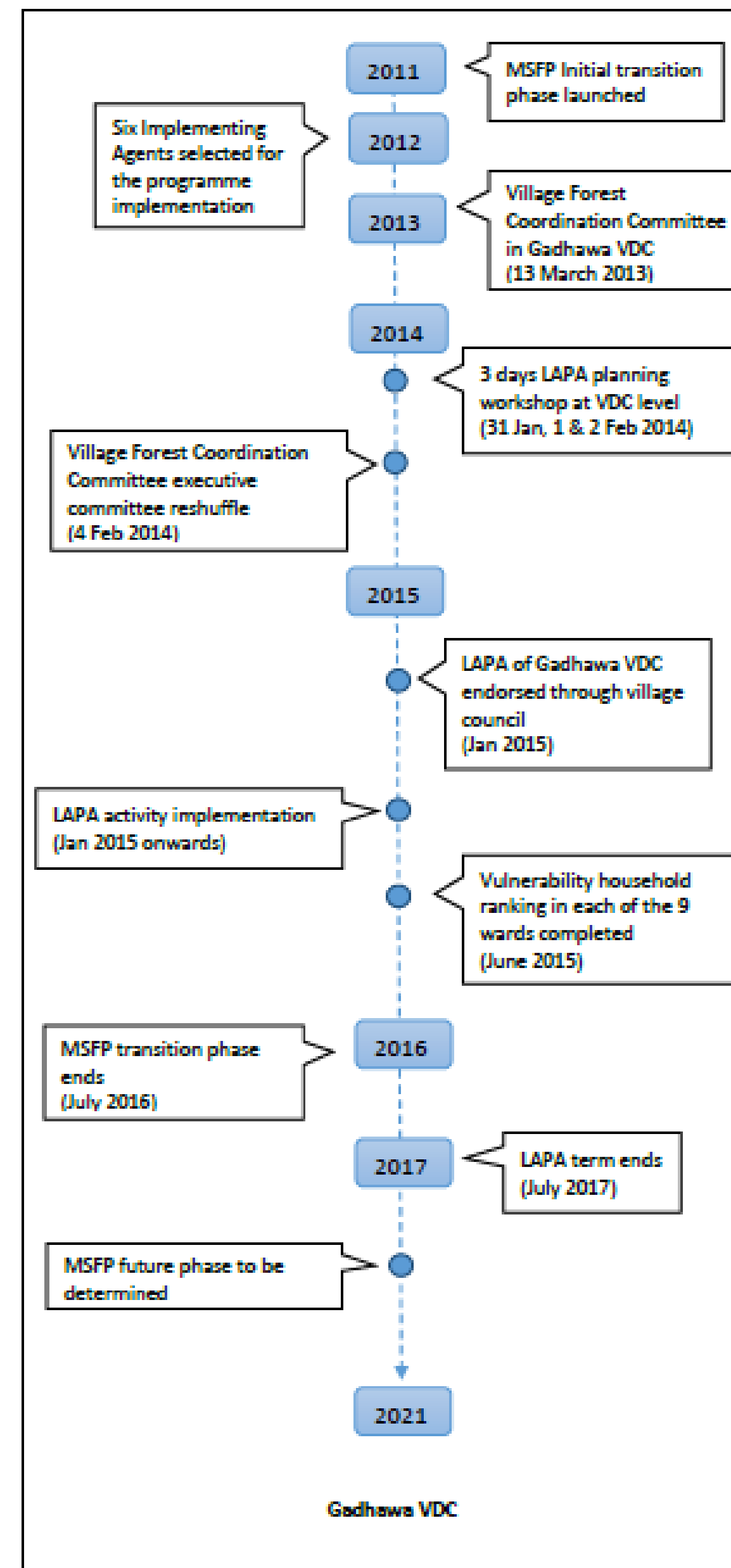
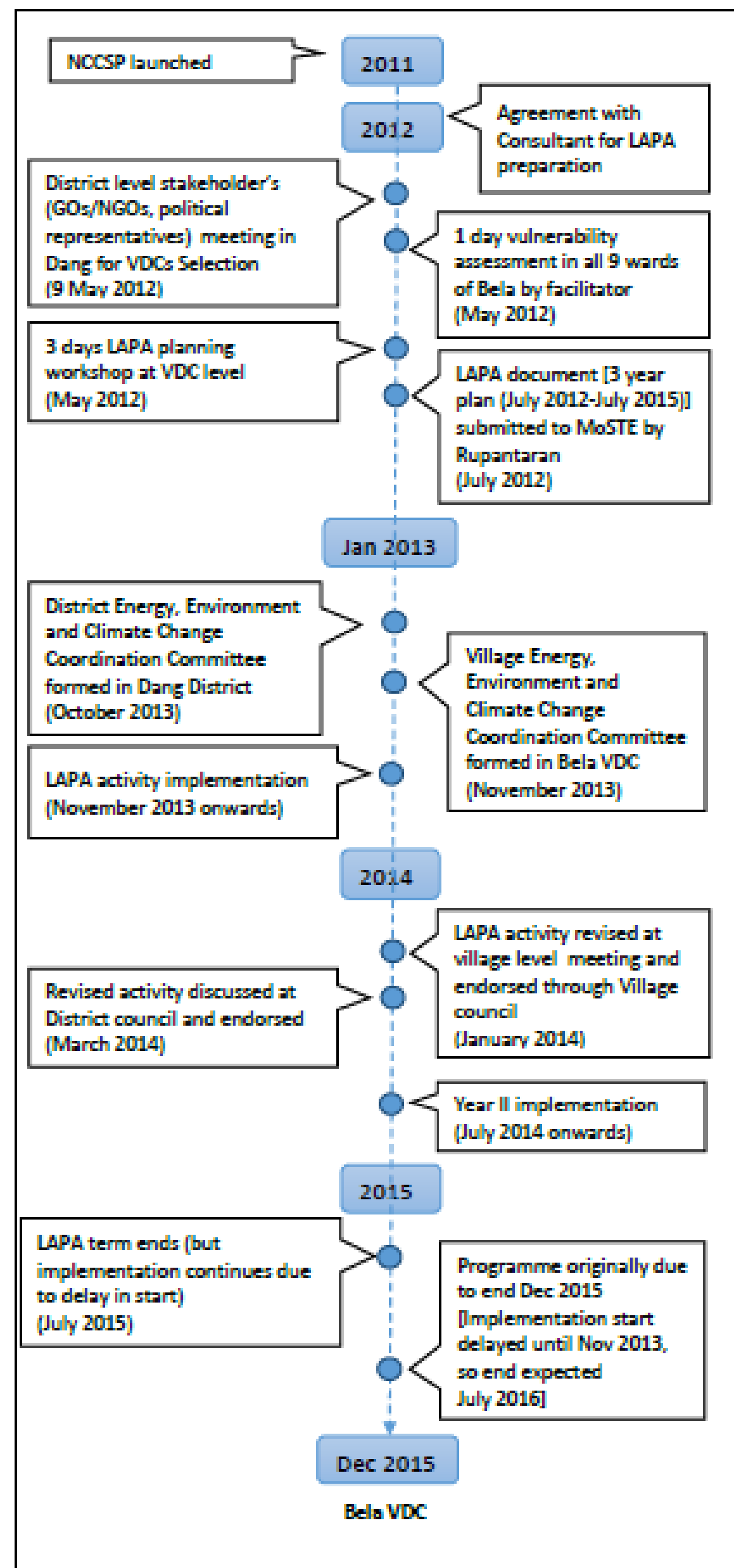


Table 2 Schedule of the LAPA workshop conducted in the study area, showing tools used in each stage (PRA = Participatory Rural Appraisal)

Session	Day 1	Tools used	Day 2	Tools used
1	Introduction and welcome speech		Short welcome speech	
2	Presentation on climate change	Six posters	Introduction to livelihood analysis table and discussion of the table	PRA for Livelihood mapping
3	Introduction and use of seasonal calendar	PRA to develop a seasonal calendar	Discussion on vulnerability assessment per household	PRA for Vulnerability assessment
Break				
4	Introduction and use of historical timeline	PRA to develop historical timeline	Discussion on adaptation options and <u>prioritisation of adaptation options</u>	PRA for adaptation identification and <u>prioritisation</u>
5	Conclusion of the day shared		Workshop closed by workshop chair with vote of thanks	
6	End of sessions		End of sessions and <u>programme</u> Snacks	

# Outcomes

## Positive

- Community LAPA that combined become village LAPA
- Increased shared knowledge and understanding
- Projects get funding (hopefully)
- Set of actions that contribute to development of the community

## Negative

- A lack of knowledge of ;local climate changes projections and robust data
- Projects are generally simply development as usual wearing a different fashionable perfume
- There is a lack of novel ideas or transformative approaches
- A lack of transformative knowledge generation
- Those who participate may not be fully representative and even if participating barriers of gender and literacy are significant.



# Section 2

## New Zealand

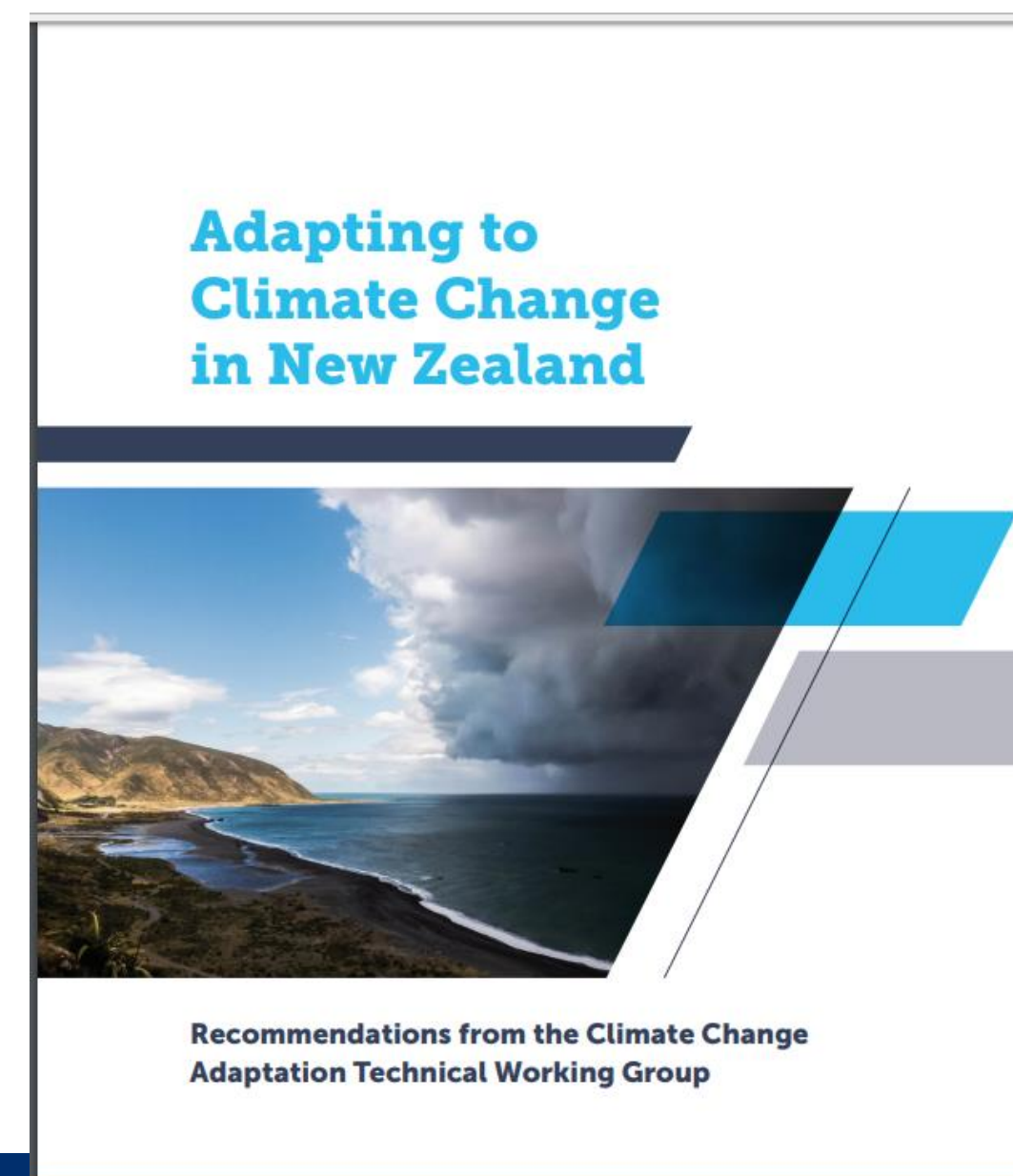
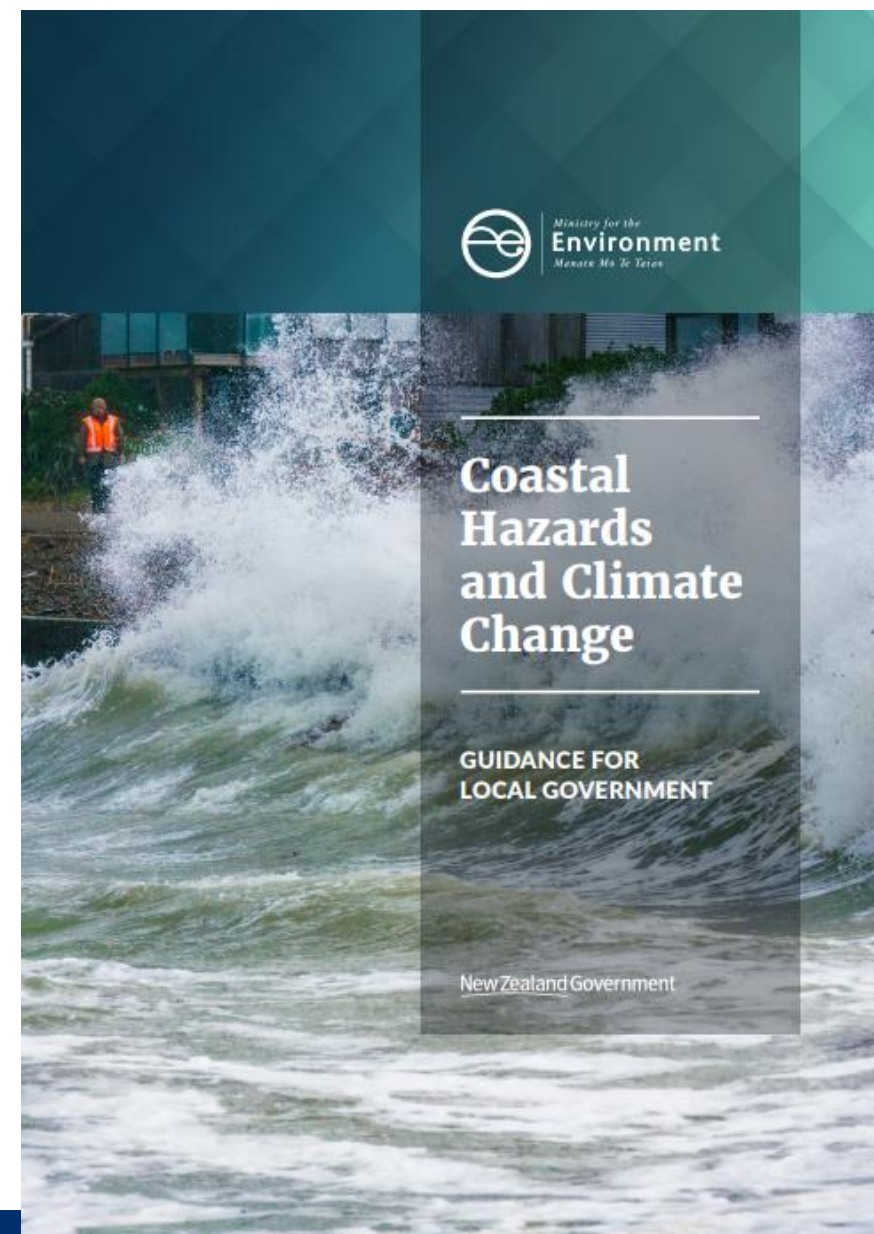




March 2017 NIWA scoping report for a NZ NAP based on looking at USA, Canada, Australia, United Kingdom, Ireland, Germany, Poland, Denmark, and Finland.

Recommendations include:

- Ministries and local governments to develop their own separate implementation plans – following a defined framework or template, linked to the same overall goals and principles, but allowing for flexibility as necessary
- To have any adaptation strategy or plan developed be statutory
- No mention of ‘public participation’



MfE

December 2017 Coastal Hazards and Climate Change Guidance for Local Government

December 2017 Stocktake Report

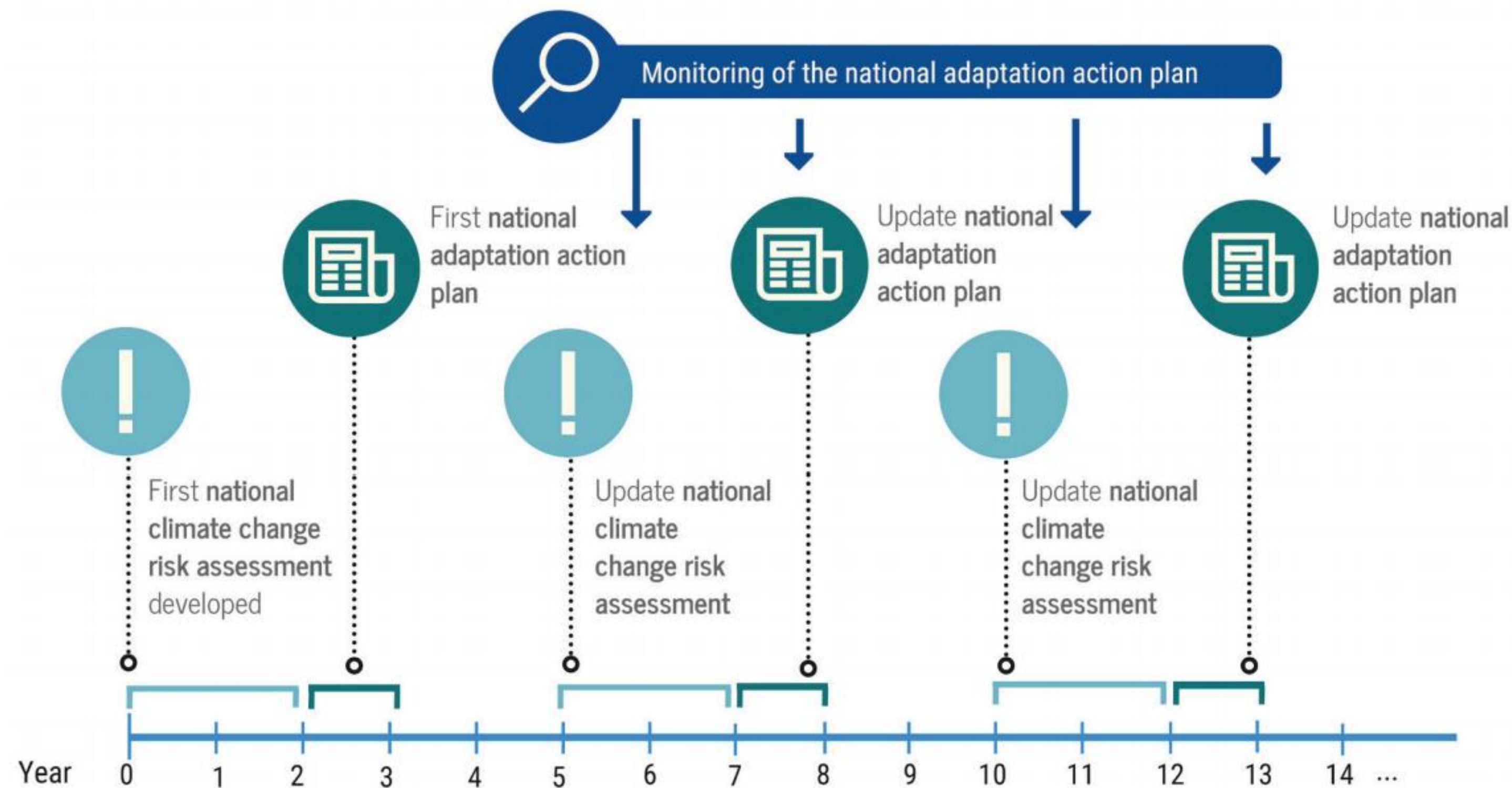
*May 2018 Recommendation of the TWG*

- NAP 100yr time frame with measurable objectives independent monitoring and reporting
- Climate Change Commission lead
- Funding implications, methods needed especially for local government
- “informed by experts working in a multidisciplinary way – in climate science, impacts and implications, adaptation, social behavioural science, engineering, health, environmental science, Te Ao Māori including Mātauranga Māori, finance, economics, and legal and public policy”
- developed through a process of public engagement and is publicly available
- allocates actions for central/local government, iwi/hapū, the private sector, and communities



TWG 2018 “recommend the plan be a single document, developed by central government in collaboration with local government, iwi/hapū, the private sector, and the New Zealand public. Although we recommend this be undertaken at a national, economy-wide level, it does not preclude the development of supporting plans for regions, communities, or by the private sector”

Standard methodologies and shared data sets and adaptive over time





# New Zealand Resilience to Natural Disasters

## Barriers to resilience

We are only just starting to tackle some of the 'truly hard' issues around existing levels of risk, such as how to adapt to or retreat from the highest risk areas, **including to adapt to the impacts of climate change**. There is likely high cost around many of these options. (TWG 2018, National Disaster Resilience Strategy Draft for Consultation 2018 November p.43, emphasis added)

## Address gaps in risk reduction policy (particularly in the light of climate change adaptation)

- By 2030 we have had a national conversation – including with affected and potentially-affected communities – about how to approach high hazard areas, and we have a system level-response (including central and local government) with aligned regulatory and funding/financing policies in place.



# Clifton to Tangoio Coastal Hazards Strategy 2120 (published February 2018)



Clifton to Tangoio Coastal Hazards Strategy 2120

REPORT OF THE NORTHERN AND SOUTHERN CELL ASSESSMENT PANELS

FINAL REPORT  
14 February 2018

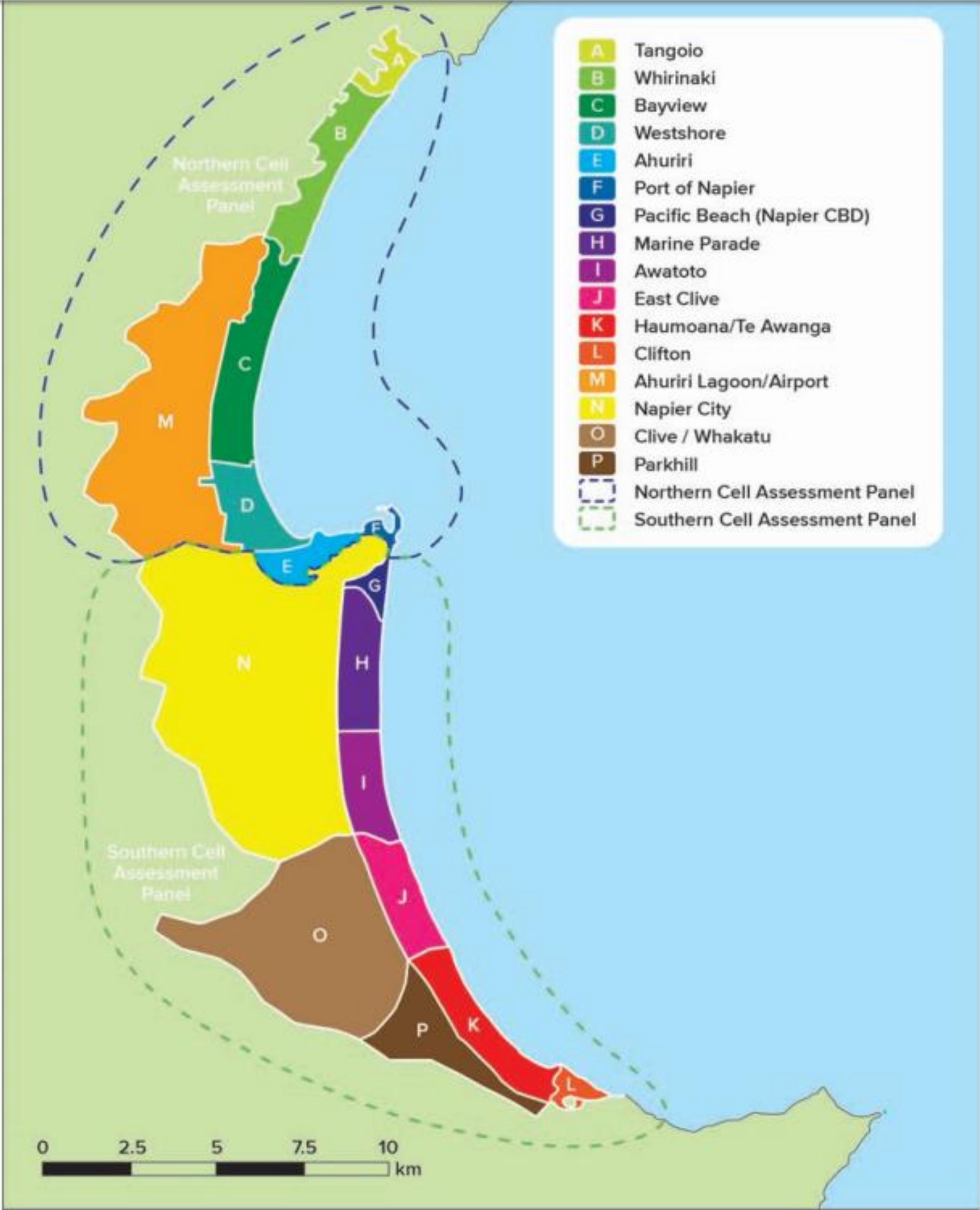


Figure 5. Assessment Cell Evaluation Panel areas and Coastal Units.





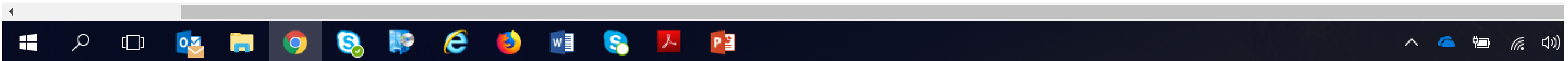
## Unit E2: Pandora

Pathway	Short term → Medium term → Long term	MCDA Score	MCDA Ranking	Cost + Loss <sup>1</sup> (\$m)	Cost + Loss <sup>1</sup> Ranking	VFM <sup>2</sup> (\$'000/point)	VFM <sup>2</sup> Ranking	Short Term build costs <sup>3</sup> (\$m)
<b>PW 1</b>	Status quo → Inundation Protection → Managed Retreat	51	<b>2</b>	12.36	<b>2</b>	193	<b>2</b>	0.00 (0.00 / yr)
<b>PW 2</b>	Inundation Protection → Inundation Protection → Managed Retreat	54	<b>1</b>	13.39	<b>3</b>	202	<b>3</b>	2.00 (0.16 / yr)
<b>PW 3</b>	Inundation Protection → Inundation Protection → Inundation Protection	49	<b>3</b>	10.08	<b>1</b>	138	<b>1</b>	2.00 (0.16 / yr)
<b>PW 4</b>	Inundation Protection → Inundation Protection + Flood Gate → Inundation Protection + Flood Gate	45	<b>4</b>	19.05	<b>4</b>	349	<b>4</b>	2.00 (0.16 / yr)
<b>PW11</b>	Status quo → Inundation Protection → Inundation Protection	-	-	9.05	-	-	-	-

<sup>1</sup>Cost + loss is equal to the total cost estimate (operational + capital costs) for the full 100 year pathway + residual losses due to events that exceed a 1 in 100-year chance of occurrence.

<sup>2</sup>Value for Money measure – how much it costs to “purchase” each MCDA point based on the MCDA score and total cost estimate (operational + capital) of each 100 year pathway

<sup>3</sup>Mid-point cost scenario (including operational costs) for the first stage of each pathway (i.e the short term option). Numbers in brackets are the annual rating cost of the short term option over 20 years.





## Conclusion – the less-developed country leads the developed!

1. Nepal well advanced in developing national and local adaptation plans relative to NZ
2. NZ focus appears to be more top down and expert driven and moving to adaptive pathways approach, but lacks any standardisation as yet (eg Kaikoura has no plan)
3. Both lack useful local scale climate change data and projections (beyond disputed sea level rise in NZ)
4. Vulnerability assessments done at household (Nepal) v 'community' (NZ) level
5. Despite its pathways model and use of MCA the difference in outcome appears little different from BAU
6. Both lack innovative transformative solutions



# National Disaster Resilience Strategy

Rautaki Manawaroa  
Aituā ā-Motu

We all have a role in a disaster resilient nation  
He wāhanga tō tātau katoa i roto i te iwi manawaroa aituā

DRAFT FOR  
CONSULTATION



## MCDEM – Sendai context

- Strong on what, not so good on how
- Submissions invited from the Public and Close tomorrow – GET WRITING!

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