

SUSTAINABLE
SEAS

Ko ngā moana
whakauka

Improved decision-making for the moana

Karen Fisher

Beth Tupara-Katene

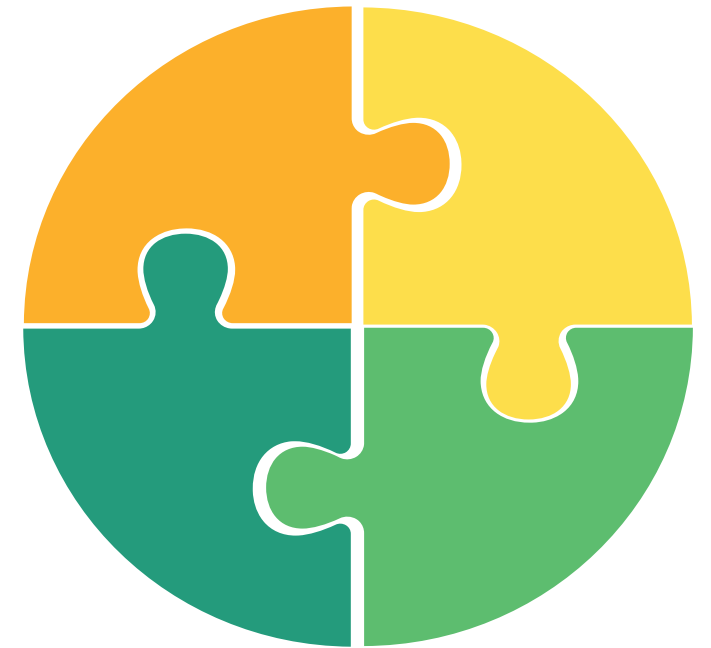
Elizabeth Macpherson

Dan Hikuroa

Joanne Ellis

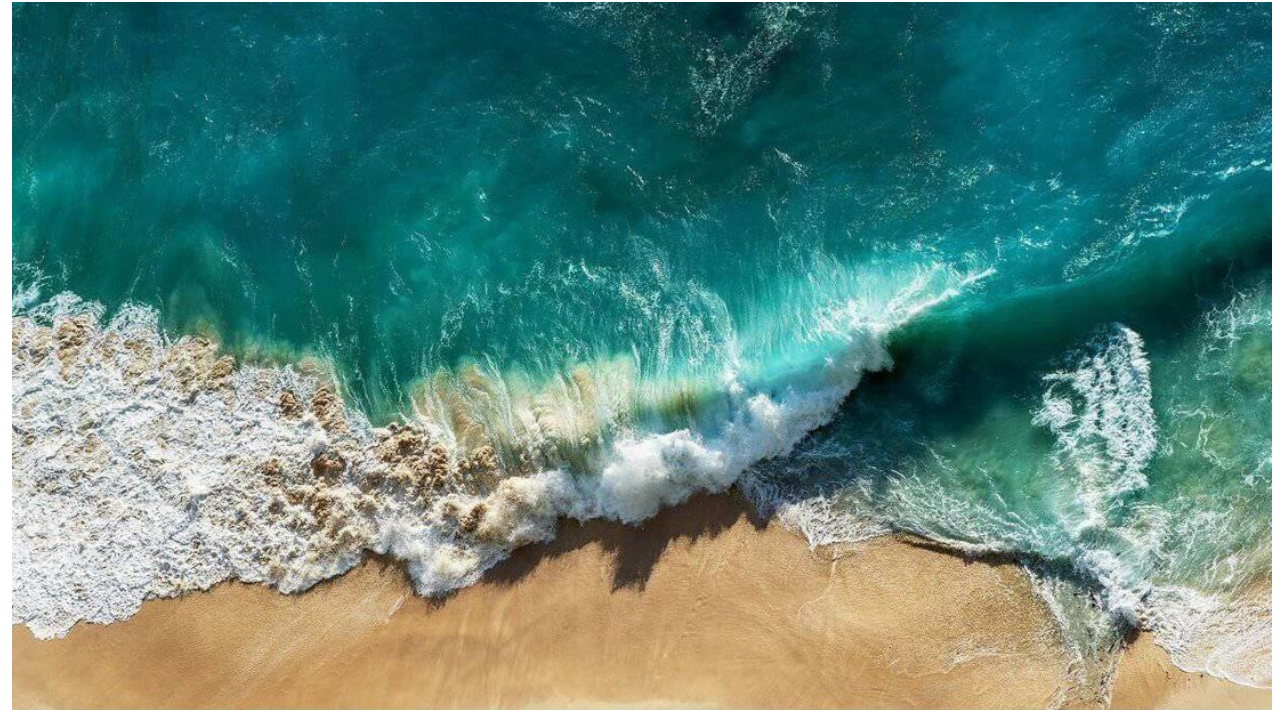
Putting the moana at the centre of decision-making

- *Enhancing EBM practices*: exploring structures that enable (or don't) different kinds of practices and policies to emerge
 - Operationalising EBM – from theory into practice
 - Governance frameworks, policies, laws, practices across multiple scales
 - Worldviews, values and knowledges



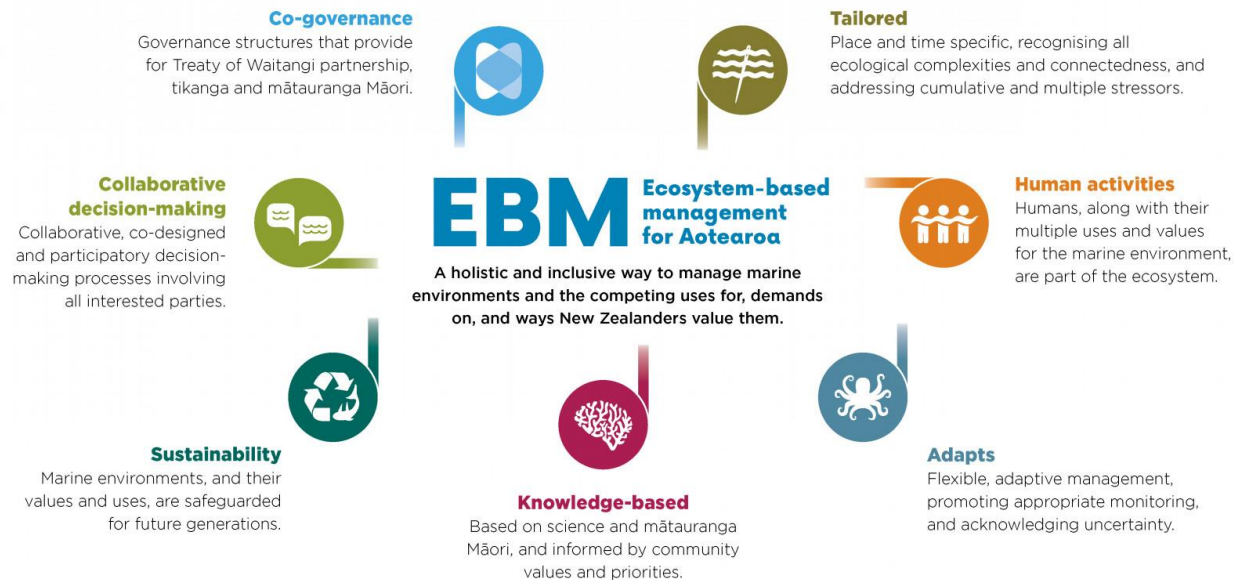
Putting the moana at the centre of decision-making

- Investigating practices to positively transform the marine environment, and people's relationship with it



Putting the moana at the centre of decision-making

We have developed – with input from stakeholders and Māori partners – a definition and principles for EBM for Aotearoa. These are a work in progress, and will continue to evolve.



TANGAROA ARARAU

Te Tiriti o Waitangi, Tikanga Māori
and the Marine Environment

BETH TUPARA-KATENE

Context

- Tensions and stressors afflicting our marine environment.
- Mounting momentum towards sustainability, sensitivity to non-financial factors, social licence to operate.
- Exploring a more holistic approach – something that indigenous peoples have been doing for centuries.
- Traditional management concepts defined by tikanga Māori and guaranteed under Article II of Te Tiriti.
- The way forward lies in our whakapapa, governance and management practices.

Our Research

- Identify barriers to giving effect to Te Tiriti and tikanga Māori.
- Develop modern governance model options, based on tikanga Māori and Te Tiriti.
- 4 Phases
 - Develop a tikanga –based framework to guide our research
 - Investigate 5 Focus Areas
 - Design governance options
 - Develop transitional pathways

Our Team

- **Beth Tupara-Katene** – Kairangahau matua
- **Horiana Irwin-Easthope** - Kairangahau
- **Te Puoho Katene** - Kairangahau
- **Toni Love** - Kairangahau
- **Nicki Douglas** - Kairangahau
- **Josie Te Rata** - Kairangahau
- **Moana Kennedy** - Kaiawhina

Success Factors

- Practical ways to give effect to Te Tiriti within the marine environment.
- Activities and outputs contribute to Māori participation in governance of the marine area.
- Tikanga Māori and mātauranga Māori acknowledged and recognised.
- The ability to disseminate research outputs to a wide audience, underpinned by tikanga-based communication methods.

Tangaroa Ararau

Ka hikimata te tapuae o Tangaroa,
Ka whaimata te tapuae o Tangaroa.
Tangaroa! Ka haruru!

The trails of Tangaroa rise and flow, the trails of
Tangaroa resound!

Designing marine law and policy for the health and resilience of ocean and coastal ecosystems

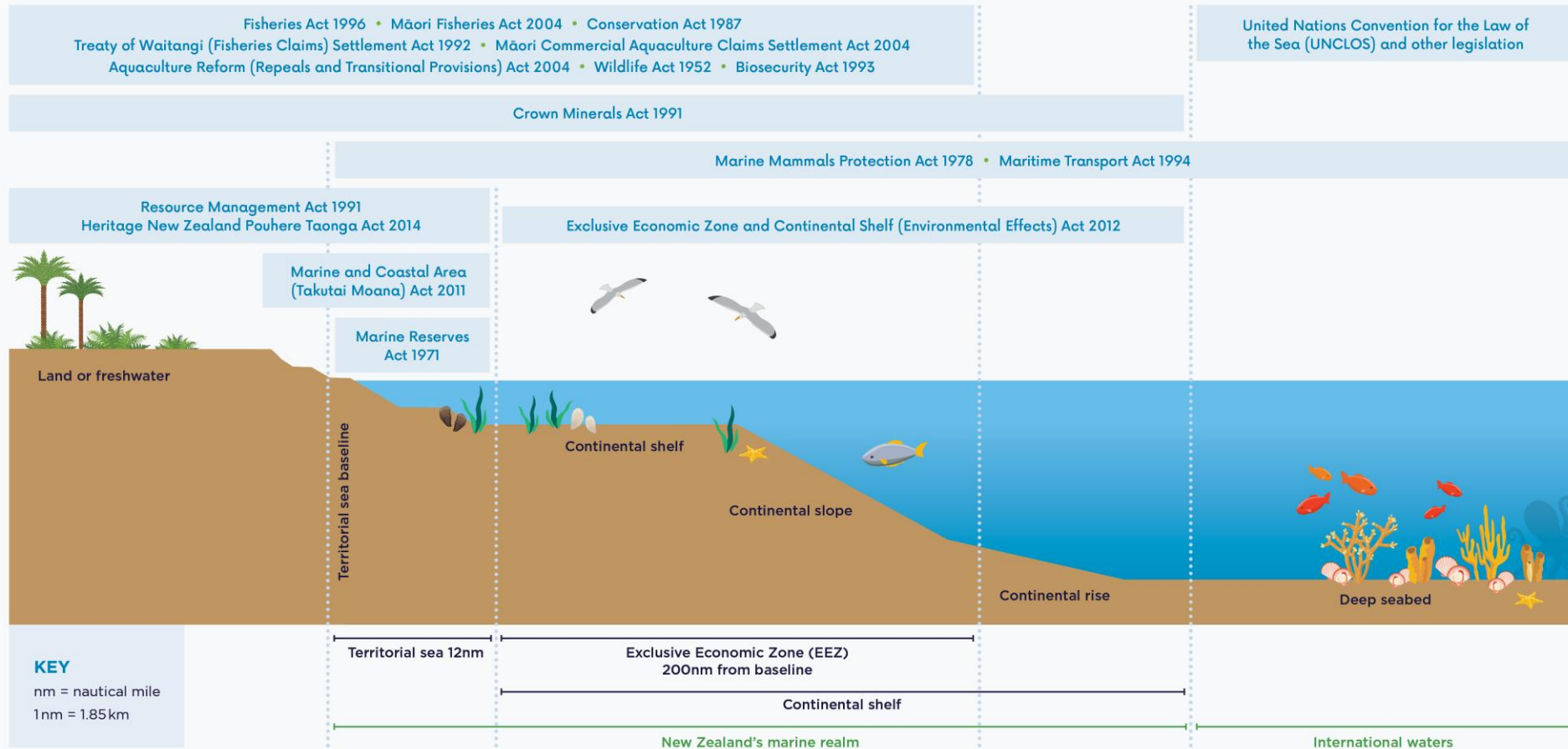
Project 4.2 Law and Policy for EBM

Dr Elizabeth Macpherson and Eric Jorgensen

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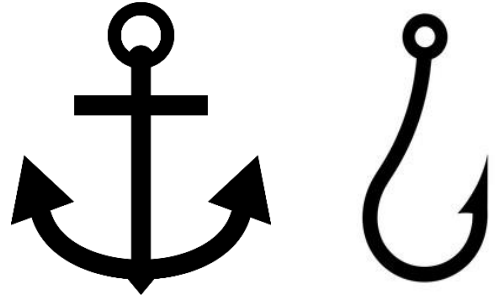
Aotearoa New Zealand's key marine legislation

This graphic shows key pieces of legislation for protecting the marine environment and managing its resources. It is not an exhaustive list of all national and international legislation in the marine space, nor does it depict the numerous rules and regulations in the legislation.



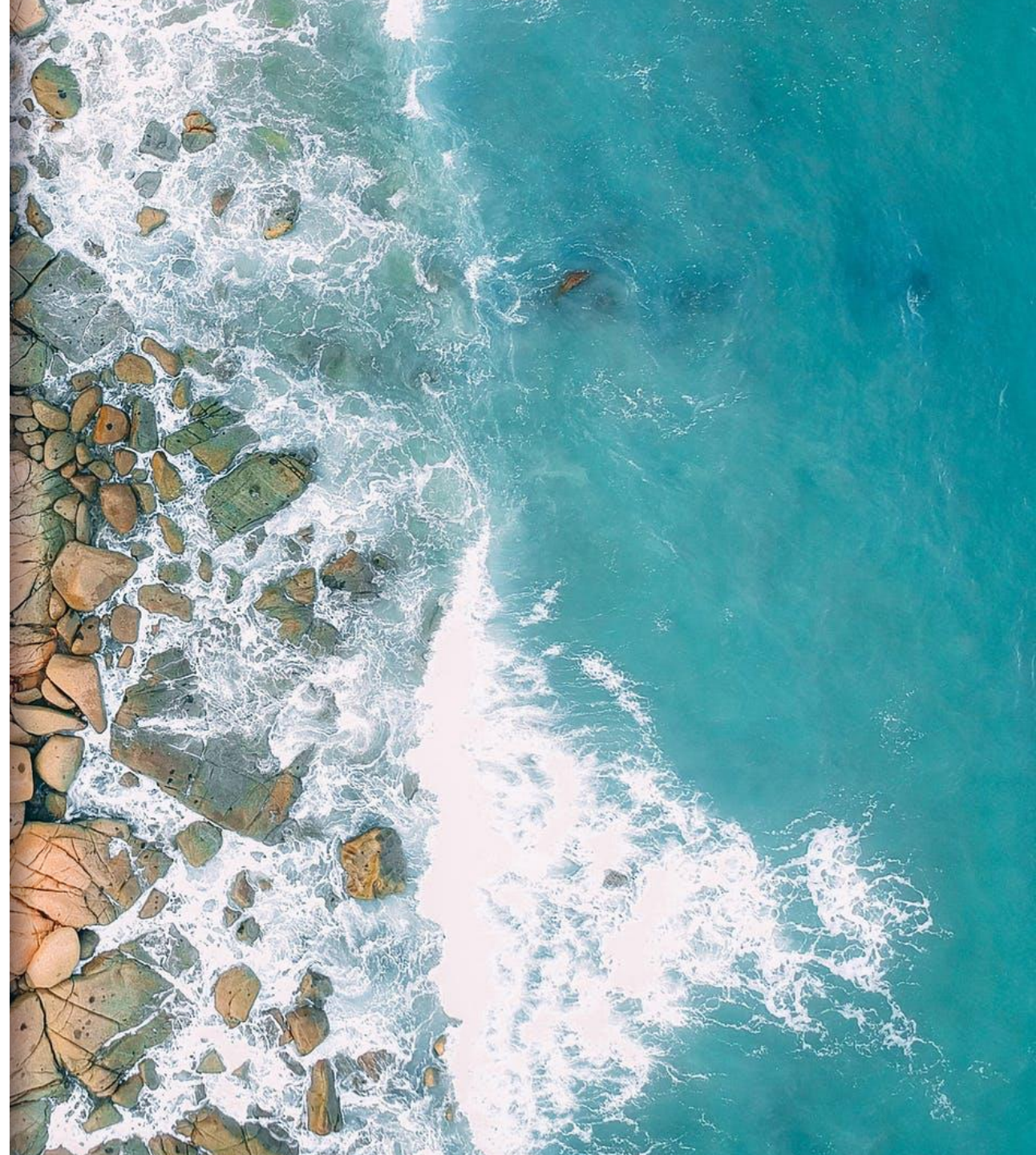
How can law and policy reflect the living and interconnected nature of ocean ecosystems?





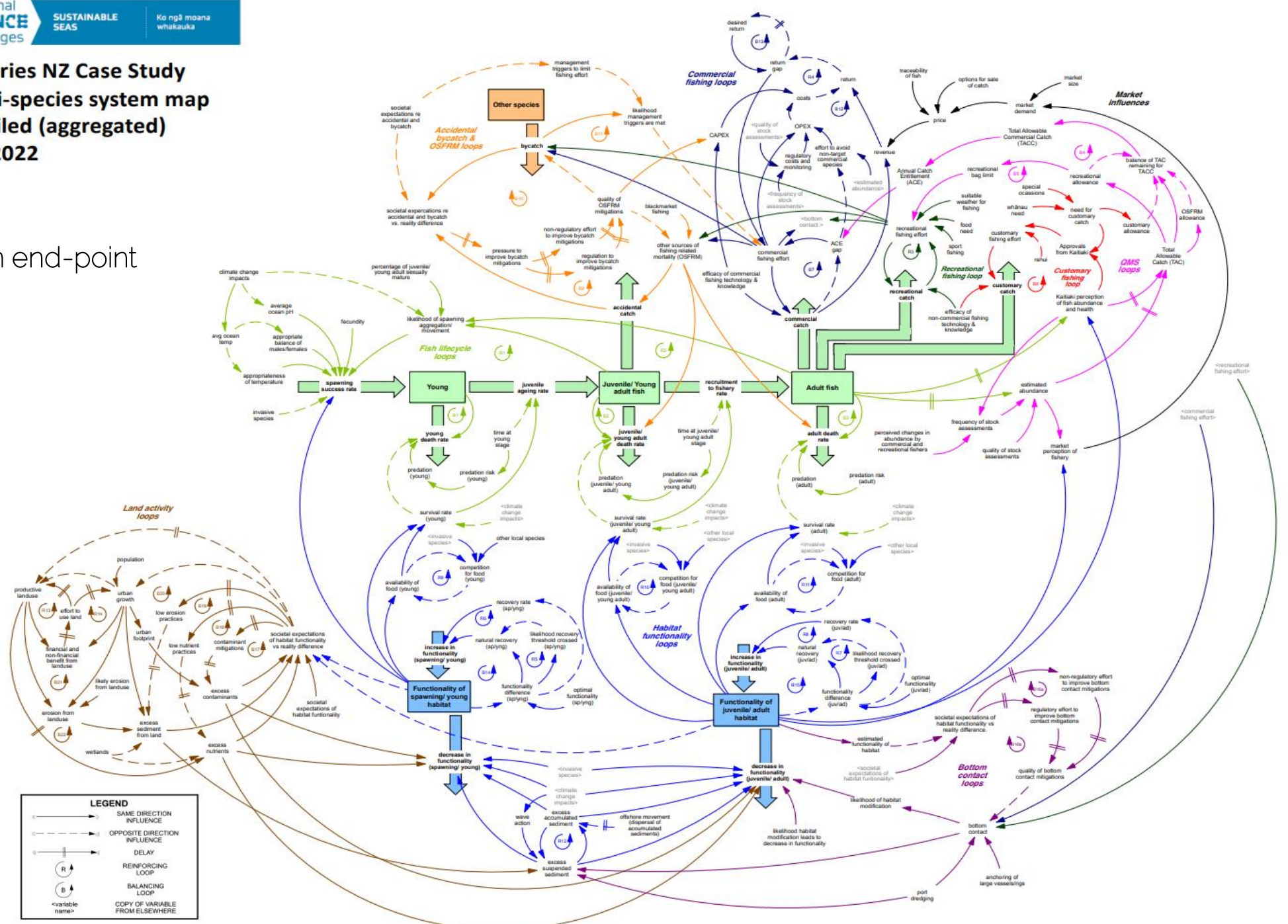
high-level norm-setting
(anchors)
+
Consistent rule and
institution-making
(hooks)

Elizabeth Macpherson et al, “Hooks” and “Anchors” for Relational
Ecosystem-Based Marine Management’ (2021) 130 Marine Policy 104561, 3



Fisheries NZ Case Study
Multi-species system map
Detailed (aggregated)
Feb 2022

EBM is a process not an end-point
 It's about people...
 and relationships...



What's next? Barriers and Opportunities for EBM in Aotearoa

Key Management Foci

Key Inputs

Existing law and policy

- Fisheries Act, RMA, Conservation Act, Takutai Moana Act, NZCPS, Te Mana o te Taiao,

Law reform and new research/reports

- NBA, Fisheries reform, MPA reform, PCE reports, PMCSA report, EDS reports

Case law developments

- TTR
- Northland regional planning appeals
- BOP MACA determinations

Co-development input

- Central Govt Agencies
- SIG Network
- Industry Groups

Case Studies

- FNZ (Multi-species complexes)
- Ngāti Whakahemo/Motunau Island
- Te Patuwai/Motiti

Other Sustainable Seas Projects

- Phase I and early Phase II outputs
- Theme 4 projects; Tangaroa Ararau, Enabling Kaitiakitanga and EBM & Understanding and communicating implications of scales for EBM

Research and Analysis Foci

Producing evidence-based findings and identifying opportunities for law and policy

Discuss and evaluate findings:

- 7 Principles of EBM (spirit)
- Hooks and Anchors
- Relationships between ocean, people and institutions
- Treaty rights and interests
- Scale challenges

subsequent research output focus

Just Transitions in EBM Design and Implementation

Marine & Coastal Area Rights

Regional Planning & Environmental Effects

Fisheries Management

Marine Protection



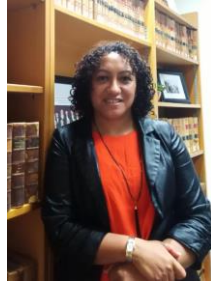
Eric Jorgensen



Liz Macpherson



Karen Fisher



Adrienne Paul



Judi Hewitt



Andrew Alison



Hamish Rennie



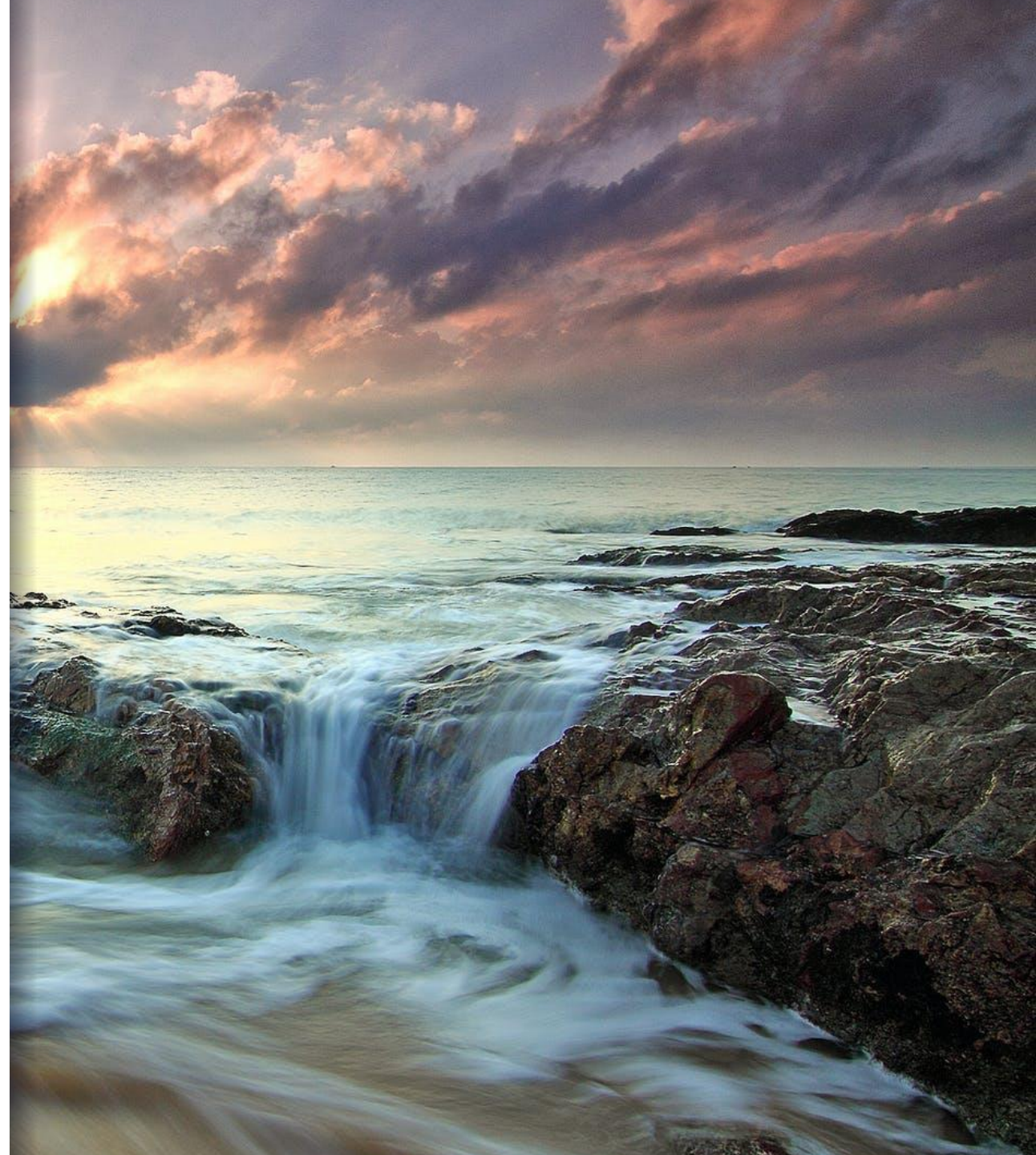
Julia Talbot-Jones

<https://www.sustainableseaschallenge.co.nz/our-research/policy-and-legislation-for-ebm/>

National
Science
Challenges

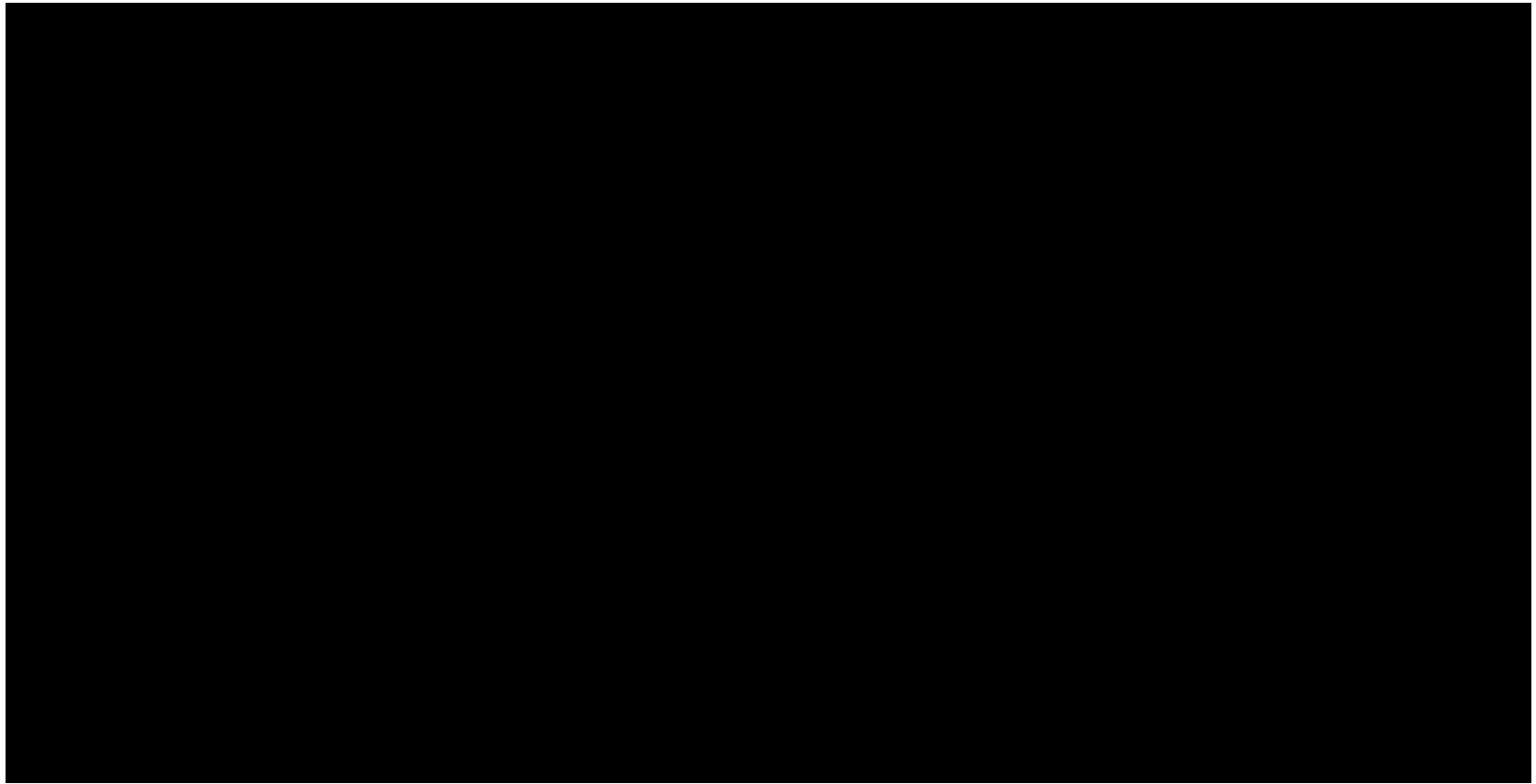
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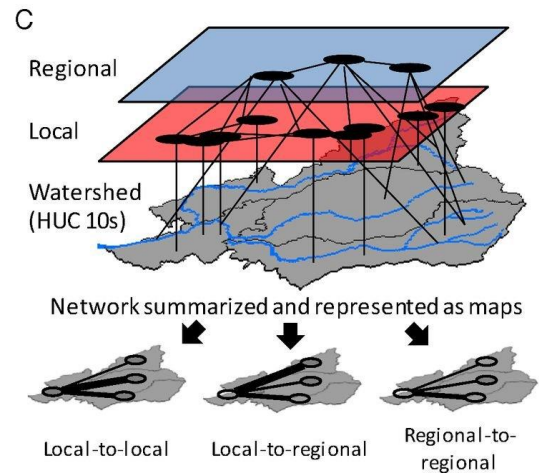
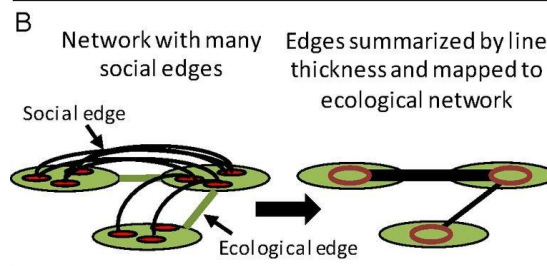
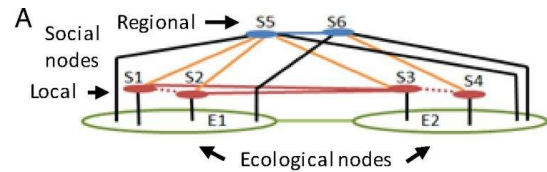


Understanding and communicating the various implications of scale for EBM

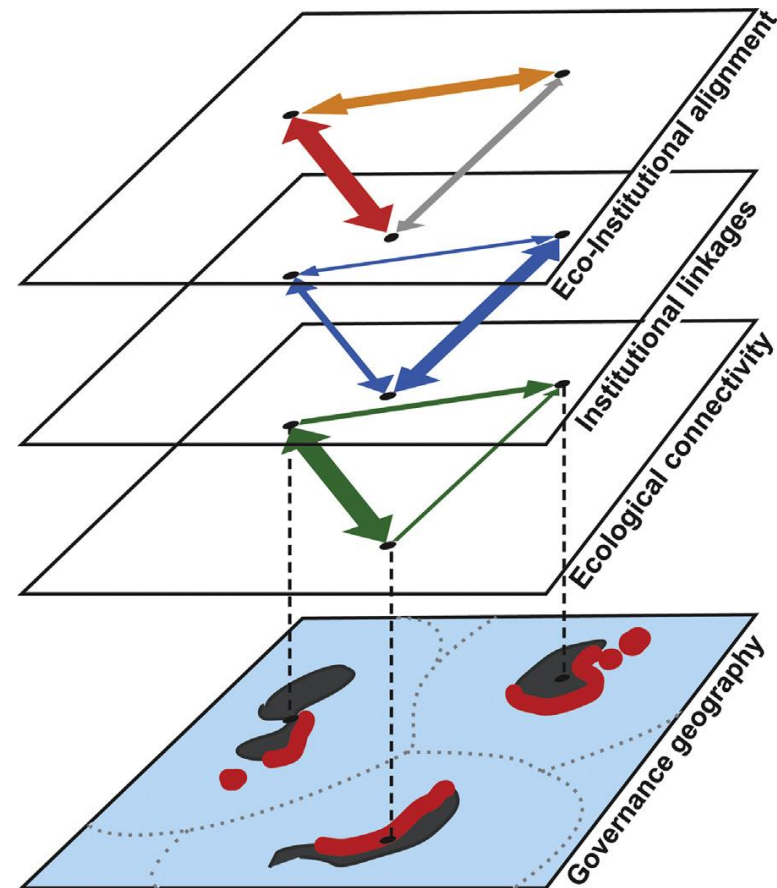
Joanne Ellis

Ani Kainamu
Erica Williams
Elizabeth MacPherson
Eric Jorgensen
Judi Hewitt
Karen Fisher
Simon Thrush
Taciano Milfont
Vera Rullens

Scale and EBM



From Sayles et al 2017



From Trembl et al 2015

Interpretations of scale

- Generally utilised space and time scales by whanau, hapū, communities, iwi, local and national government
- Scales of environmental variability and ecological responses to cumulative effects
- Shifts in cultural values and management practices with scale



Social



Cultural



Economic



Ecological

Analysis of scale dependencies

The use of mātauranga and tikanga to initiate marine recovery

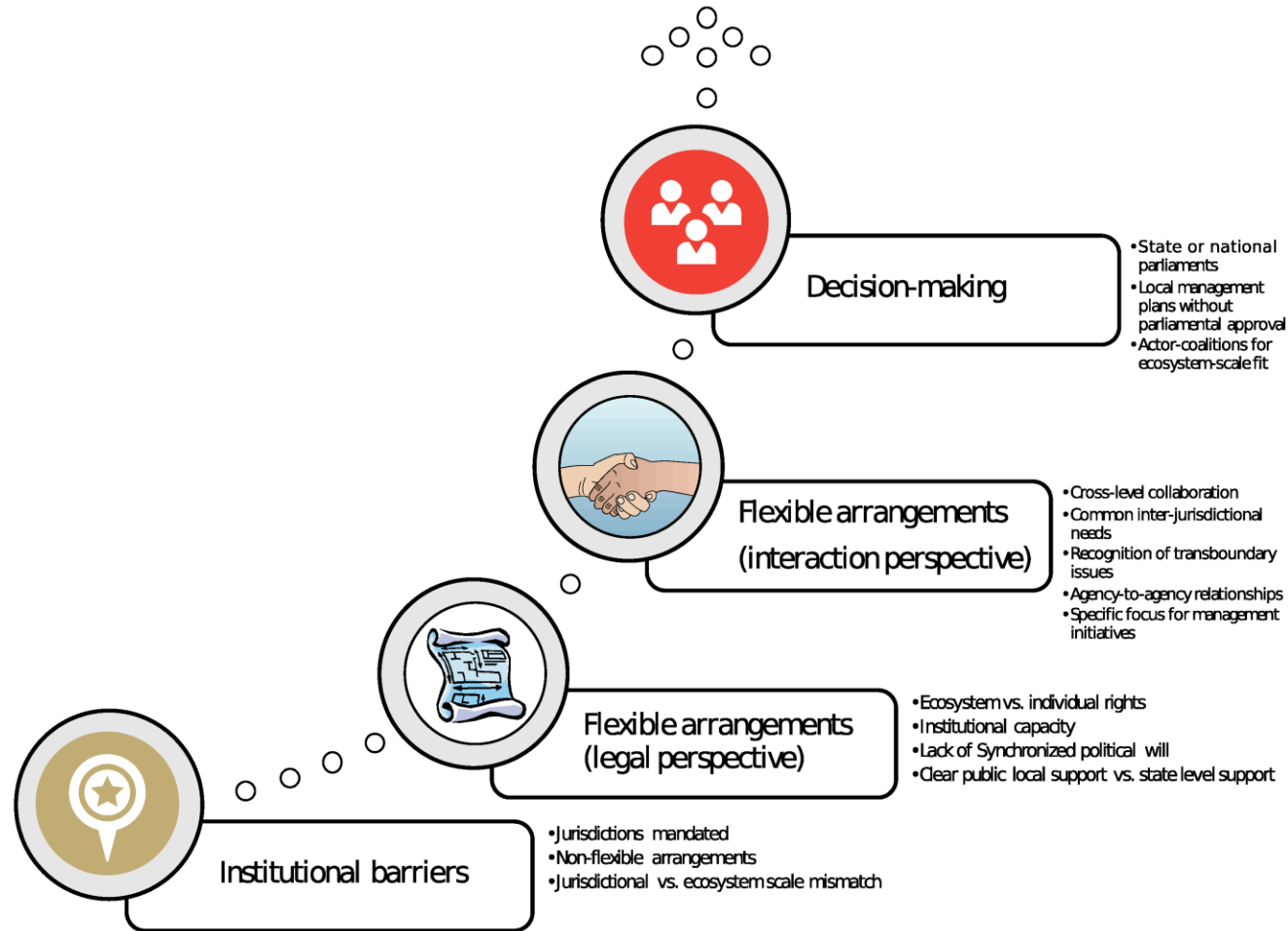
- Will explore the use of mātauranga and tikanga to initiate recovery of marine areas
- This review will also seek to identify where barriers to action occur and possible ways to navigate the restrictions





Analysis of scale dependencies

Importance of legal and policy frameworks

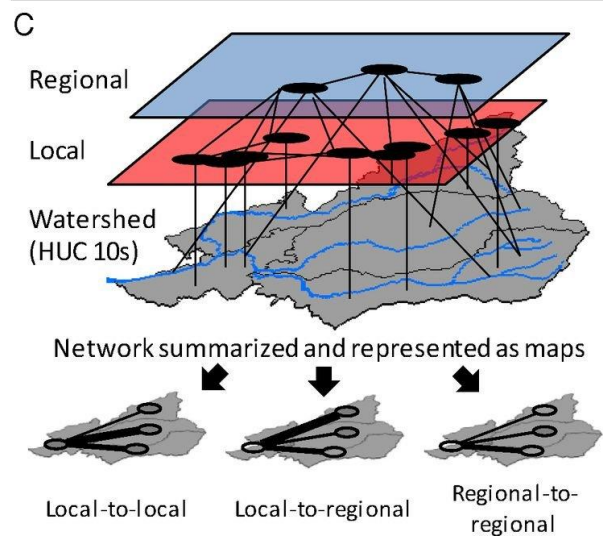
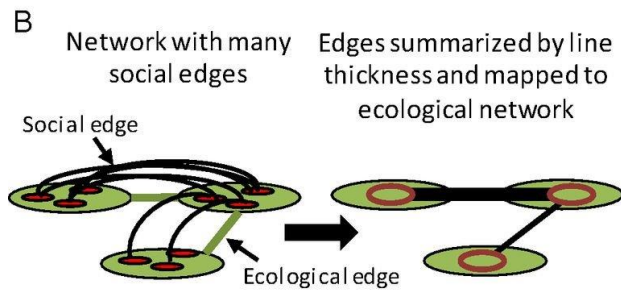
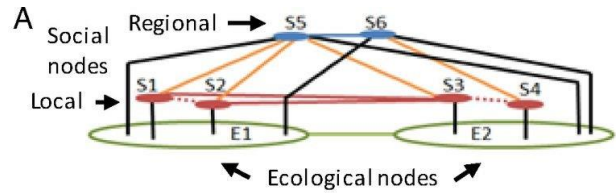


From Nanda et al 2018

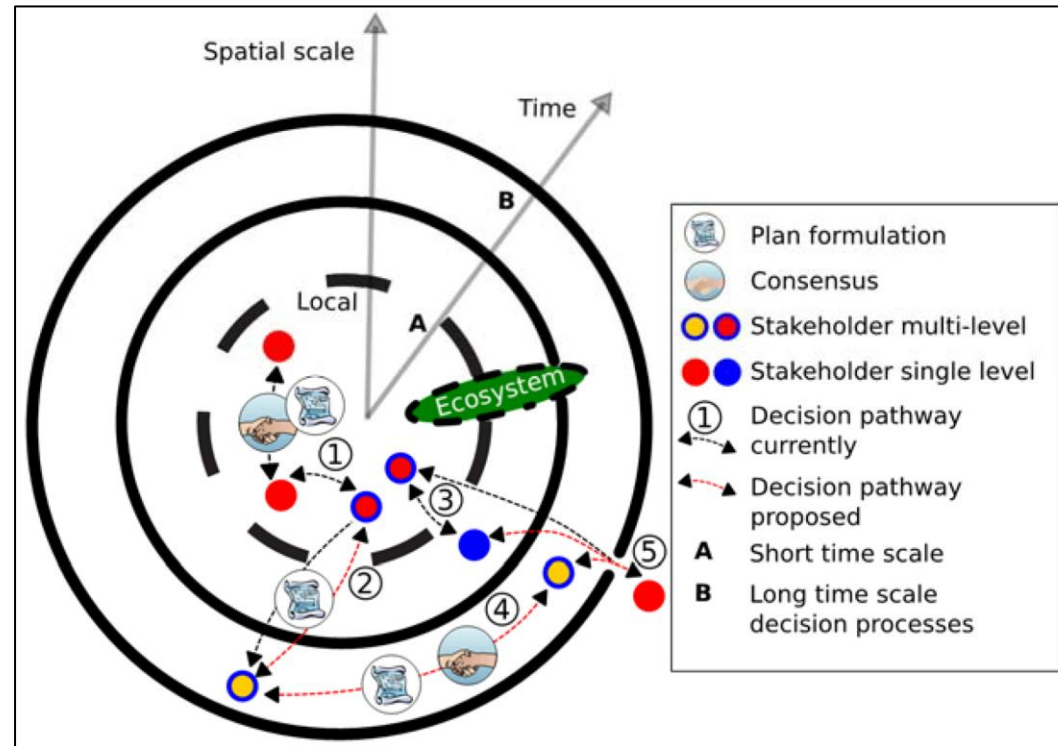


Analysis of scale dependencies

Scales at which end-users apply



Creating visual summaries



From Nanda et al 2018





<https://www.sustainableseaschallenge.co.nz/public/our-research/scale-ebm/>