

Sustainable Seas National Science Challenge

# TE AO MĀORI PERSPECTIVES OF MARINE SCALES

Insights into te ao Māori perspectives of scales in Ecosystem-  
Based Management

2024

# HE MIHI

Papaki ana ngā tai o mihi ki ngā hapū, ki ngā iwi o Te Ika a Māui me Te Waka o Aoraki, koutou e kawea nei ngā kōrero tuku iho, koutou hoki e whakapau kaha ana kia ora ai tō tātou ao, mō tātou, ā mō ngā uri whakaheke.

We thank our Pou Whakarae Dr. Erica Williams (Te Kūwaha, NIWA), for her guidance in navigating the intricacies of this kaupapa to meaningfully contribute to the Sustainable Seas National Science Challenge.

We also want to acknowledge our whanaunga Dr. David Garcia for gifting use of the beautiful cartography included in this report to better represent the many islands across Te Moana-nui-a-Kiwa. For more information about please visit [www.mapmakerdavid.com](http://www.mapmakerdavid.com) or follow @mapmakerdavid.

# TABLE OF CONTENTS

NŌ HEA TĒNEI KAUPAPA?	4
HE TAI AO TĀTOU	6
MANA WHENUA, MANA MOANA	8
KI UTA KI TAI, MA UTA KI TAI	10
HAWAIIKI ME TE MOANA-NUI-A-KIWA	13
TE AO MĀORI SCALES	15
HONOURING TE TIRITI O WAITANGI	
HE TUKITUKI	17
HE PITOMATA	17
REFERENCES	19

# NŌ HEA TĒNEI KAUPAPA?

Research across the Sustainable Seas National Science Challenge agrees that what we observe, how we predict ecosystem responses and address unintended environmental consequences is dependent on 'scale'. However, the choice of scale is not politically neutral and may intentionally or unintentionally privilege certain groups.

Scale is inherent within te ao Māori perspectives of our ecosystems. However, tangata whenua must currently work within the constraints of Western science and policy systems, which has minimised their ability to enact kaitiakitanga in marine and freshwater environments. This review supports the idea that honouring Te Tiriti o Waitangi is central to realising marine wellbeing in Aotearoa. Therefore it's important to understand what scale might look like from a te ao Māori perspective. This summary has been drawn from a literature review and explores four te ao Māori concepts of scale:

## HE TAUIRA

There is no 'one' perspective or mātauranga within te ao Māori. The concepts in this review aim to establish and reinforce whānau, hapū and iwi identity, and notions of scale. They also seek to highlight the rights and responsibilities of whānau, hapū, and iwi in the management and use of marine environments.

Reimagining the Aotearoa marine management systems will still require further discussions with whānau, hapū and iwi in order to better understand the concepts discussed in this report. This is imperative to stay true to the place-based context of mātauranga ā-hapū and mātauranga ā-iwi.

- **He taiao tātou** – reflects that tangata whenua are indivisible from their ecosystem
- **Mana whenua, mana moana** – reflects whānau and hapū authority and relationships with their local rohe/takiwā are inherent and inherited
- **Ki uta ki tai, ma uta ki tai** – reflects the connectivity of ecosystems, including the flow of water from the sky, across the land and out to sea, including the local people
- **Hawaiki me Te Moana-nui-a-Kiwa** – reflects the connectivity of Indigenous Peoples and ecosystems across Te Moana-nui-a-Kiwa



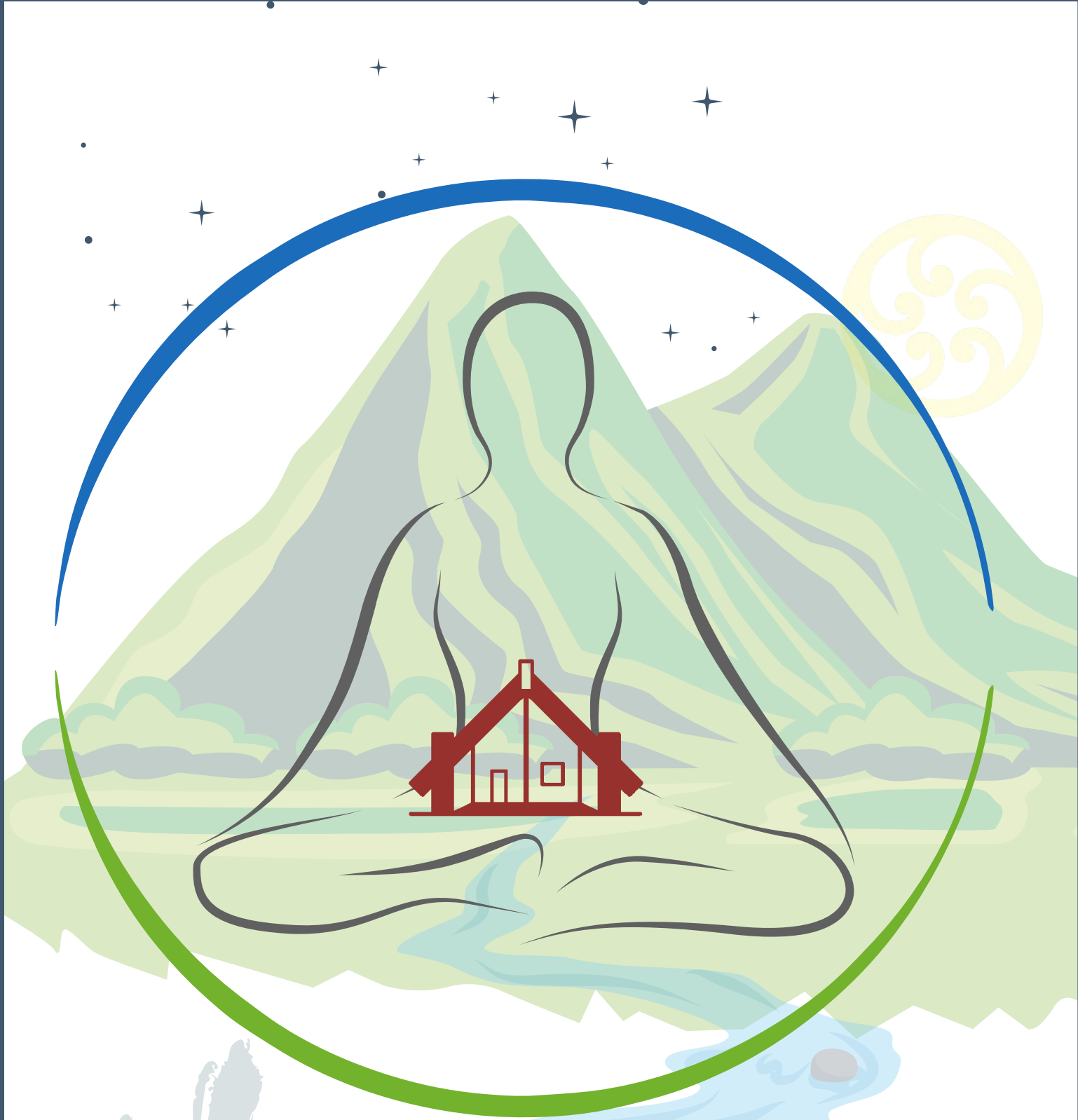


# HE TAIAO TĀTOU

It is through whakapapa that tangata whenua are inherently connected to their whenua and moana. With these connections comes obligations to these ancestral and tribal landscapes that act as a repository of mātauranga and tikanga across generations. We are intimately intertwined with our environment.

He taiao tātou reminds us how intimate these relational dependencies are on each other, where the health and well-being of tangata whenua is directly related to the health and well-being of the natural environment. This is also why local whānau and hapū are best placed to be tasked with decision-making responsibilities, because they are the ones who will be most impacted.





Ko au te awa, ko te awa ko au,  
Ko au te whenua, ko te whenua ko au,  
Kana e tū wewehē i te taiao, he taiao tātou <sup>[1]</sup>

- Rereata Makihā, 2020



# MANA WHENUA, MANA MOANA

Mana whenua often refers to the territorial authority or jurisdiction usually held by the whānau and hapū of an area. More specifically it refers to the whānau and hapū who have the closest physical and genealogical association with specific areas. Mana can be passed down intergenerationally, through whakapapa, and maintained by occupation and contribution to those specific areas. Mana moana is the equivalent to mana whenua as it applies to the sea and its associated environments.

Western legislation does not remove this authority. As Professor Margaret Mutu [2] states:

*Vesting Western legal title in another person does not remove mana whenua from a whānau and the responsibilities of the whānau and hapū to uphold mana whenua and prevent the desecration and despoliation of their land remains.*

Mana whenua and mana moana have a unique obligation to contribute to and uphold the health and wellbeing of their environments, within their rohe/takiwā, and this has never been lost.





# He mana tuku iho, e kore e memeha

*“Whānau and hapū of Ngāti Porou recognise and respect the boundaries and territories of each kin group and therefore their rangatira rights over these regions. In spite of legislation and the raupatu of our lands over successive governments and generations, for Ngāti Porou, mana tuku iho never dies but it endures forever. The same applies to te takutai moana. E kore te mana iwi e memeha”*

-Dr Apirana Mahuika [3]

# KI UTA KI TAI, MA UTA KI TAI



In Aotearoa and Te Waipounamu, whānau, hapū and iwi have been calling for more holistic considerations of ecosystem health and connectivity in environmental management in line with their perspectives of scale for many years.

Kia uta ki tai (for some ma uta ki tai) acknowledges the connectivity of ecosystems, on all scales and in particular follows the water cycle, from 'inland to the sea'. It includes waters found above and below landscapes, and the people who are part of those places.

Within a contemporary context, ki uta ki tai has been described by Te Rūnanga o Ngāi Tahu [4] as involving:

*“the creation of a number of tools, such as natural resource management plans, monitoring and reporting processes and resource inventories and their associated strategies to address the continuing challenges and threats faced by all aspects of the natural environment from the mountains to the sea.”*





*It acknowledges the connectivity of scales  
of earthly elements... as well as the  
reciprocal relationships between people and  
their ancestral environments <sup>[5]</sup>*

*- Te Ao Mārama Incorporated, 2008*

*Ehara i te mea poka hou mai,  
nō Hawaiiki mai anō [6]*

*- Mead & Cyrove 2003*



*mapmaker*

@mapmakerdavid

RASTER DATA: SRTM30\_PLUS  
ORIGINAL RELIEF SHADING METHOD BY DANIEL HUFFMAN  
MAP INSPIRED BY WORK OF MARIE THARP  
MADE WITH QGIS AND BLENDER

# HAWAIKI ME TE MOANA-NUI-A-KIWA

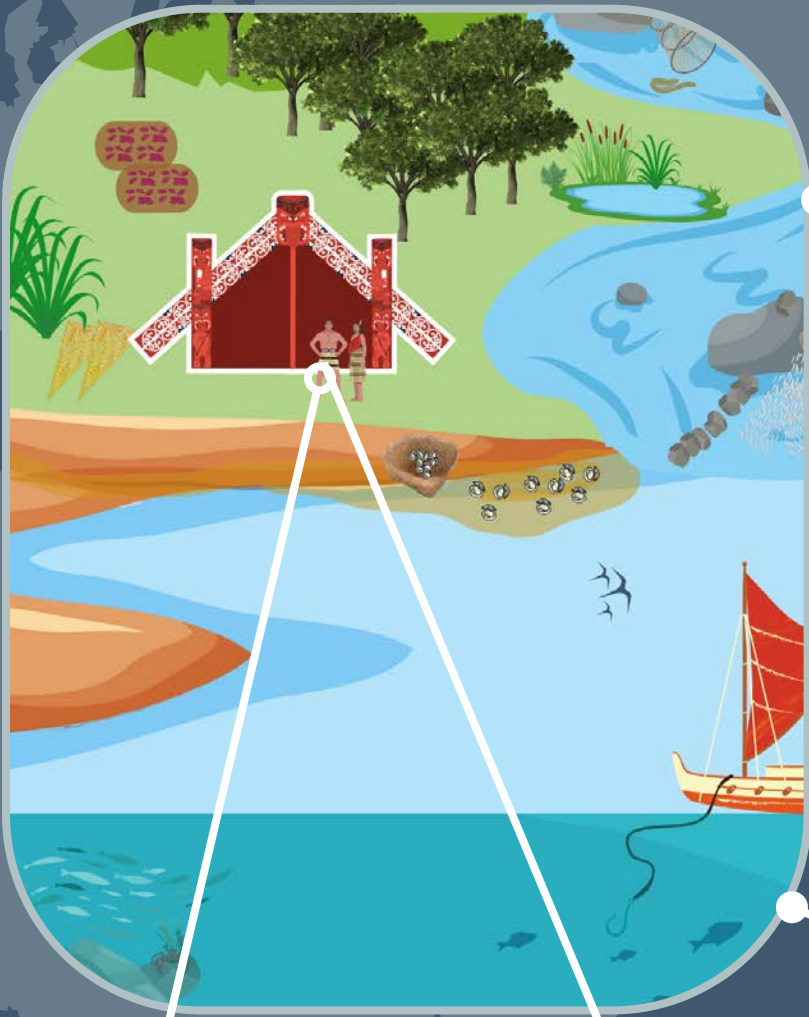
Hawaiki and Te Moana-nui-a-Kiwa are integral to te ao Māori and relate to a scale beyond the shores of Aotearoa. This connectivity is important to many of our taonga, inclusive of te reo Māori, mātauranga Māori, and Indigenous flora and fauna.

Whānau, hapū and iwi throughout Aotearoa acknowledge the connectivity of ecosystems, from their rohe to Te Moana-nui-a-Kiwa through the migration pathways of both their ancestors and taonga species.

Many native taonga species such as various fish (e.g., tuna, mangō), mammals (e.g., tohorā) and birds (e.g., tītī, amokura, kuaka) migrate great distances as part of their life cycle. These taonga species migrations were utilised as markers to help our ancestors to navigate throughout Te Moana-nui-a-Kiwa.

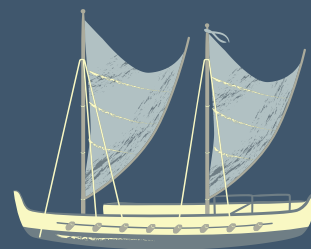
Intimate relationships with these taonga are woven into pepeha that are unique to hapū and iwi, and also connect us to a much broader network of indigenous peoples across Te Moana-nui-a-Kiwa.





# TE AO MĀORI SCALES

Te ao Māori perspectives of scale do not operate in isolation, rather multiple scales interact with each other and reflect shared principles and approaches. More recent progress to centre hapū and iwi approaches are evidence of the efforts by mana whenua and mana moana in partnerships across Aotearoa. For example, co-management agreements were reported to lead to better working relationships and apparent success in the embedding of indigenous values in marine management. One of the key commonalities for success identified was legislative or legal backing to enforce these arrangements.



# HONOURING TE TIRITI O WAITANGI

...ki ngā Rangatira, ki ngā hapū, ki ngā tangata  
katoa o Nu Tirani te tino rangatiratanga o o rāton  
whenua, o rāton kāinga me, o rāton taonga katoa...

- Te Tiriti o Waitangi 1840



# HE TUKITUKI

## Impediments to kaitiakitanga

Te Tiriti o Waitangi ensures that the Crown has a duty to actively protect whenua Māori, including fisheries and other taonga and enables Māori to protect these taonga. Despite this, Māori rights and interests have been dismantled and redefined overtime through various processes which have often restricted customary practices and undermined tribal economies, the impacts of which are still being widely felt today.

The arbitrary lines of contemporary management have limited the effectiveness of responding to ecosystem connectivity and functioning, and have also interrupted kaitiakitanga (and consequently mātauranga) in practice through limiting and in some cases severing the physical connection of tāngata with whenua and moana.

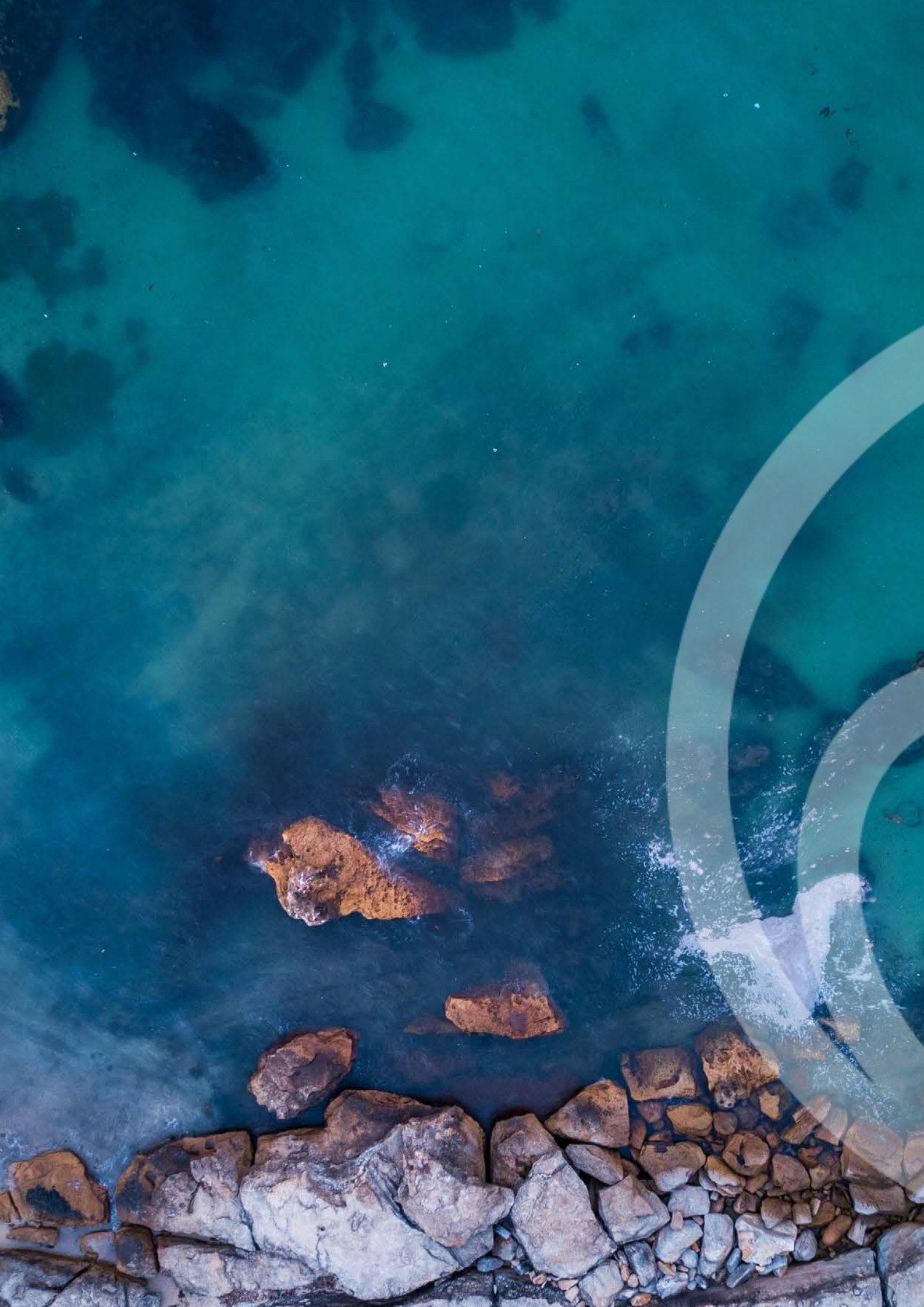
# HE PITOMATA

## Potential solutions

Understanding scale from te ao Māori perspectives is a significant step towards a more inclusive and holistic approach to management of marine ecosystems and addressing the multitude of pressures our ecosystems are facing. Māori have long emphasised the importance of connectivity and the necessity of considering the environment in its entirety, with people as part of the ecosystem.

This review has highlighted four different te ao Māori scales that inherently acknowledge this connectivity. With these concepts in mind, our review recommends engaging with whānau, hapū and iwi, to better support a grounded-approach to Ecosystem Based Management that considers these scales, honours Te Tiriti o Waitangi, and continue to grow mātauranga Māori in Aotearoa.

Utilising these Te ao Māori approaches to scale and working to honour Te Tiriti o Waitangi has the potential to address some of the deficiencies in the current marine management approaches not only for the benefit of our environment, but for tangata whenua and all future generations.



For the full report and reference please follow this link:  
<https://www.sustainableseaschallenge.co.nz/assets/dms/Reports/te-ao-Maori-perspectives-of-marine-scales/Te-ao-Maori-perspectives-of-marine-scales.pdf>

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