Marine governance – sustaining ocean outcomes for future generations

When the health of our coastal marine ecosystems is in serious decline (MfE 2022), with continued losses in biodiversity and the valuable ecosystem services and functions they provide, we need improved marine governance systems.

Effective and appropriate marine governance is critical to ensuring Aotearoa New Zealand can continue to benefit from its connections and interactions with our oceans for generations to come. To move forward, we must ensure our marine governance models and approaches are fit for purpose and produce sound decisions for the long-term benefit and health of the ocean, our communities, and economy.

About this document

This guidance document aims to inform marine governors and decision-makers at all levels about the critical ingredients necessary to ensure effective and appropriate marine governance that will fulfil the needs of future generations. The advice is based on research findings and insights from the Sustainable Seas National Science Challenge.

This document:

- explores the existing challenges faced by marine governance
- outlines the different forms of existing marine governance
- recommends a set of critical ingredients necessary to support marine governance decision-making that enhances benefits to people and the ocean
- looks at how the principles of ecosystem-based management, blue economy and te ao Māori can provide valuable signposts for marine governors.

Recommendations

National

SCIENCE

Challenges

Based on our research, we recommend the following set of critical ingredients for effective and appropriate marine governance is used to guide the establishment, maintenance, and improvement of marine governance models and functions in Aotearoa New Zealand.

- Establish a national marine governance framework that provides for a holistic approach with a clear vision and objectives for the marine environment.
- Empower courageous leadership that prioritises the achievement of long-term outcomes.
- Ensure inclusive capability that reflects our multiple and diverse connections, values and interests associated with the marine environment.
- Enable enduring capacity, acknowledging that effective governance requires longterm planning, commitment, knowledge and resourcing.



Ko ngā moana whakauka

Current challenges for marine governance

Governance-focused research draws attention to the processes involved in managing, controlling, and organising activities, people, resources, and spaces, and considers 'environmental governance' as relating to decision-making and higher-order planning. Environmental management, in contrast, refers to the measures taken to achieve governance goals and particular outcomes (Fisher et al 2022, Le Heron et al 2020, Joseph et al 2020, Joseph et al 2022, Maxwell et al 2020, Urlich et al 2022).

The challenges associated with navigating different worldviews, knowledge systems, values, and conceptions of the relationship between people and marine environments have been foregrounded, and possible solutions identified (Fisher et al 2022, Davies et al 2018, Hyslop et al 2023, Kainamu & Rolleston-Gabel 2023, Maxwell et al 2020, Rout et al 2024).

In Aotearoa, a multitude of different people and organisations are responsible for some aspect of governance, decision-making, and steering actions about the coastal and marine environment. Some of these are codified in laws or policies and some through tikanga and place-based approaches determined at iwi/hapū/whānau and community levels. This results in considerable challenges for marine governance with existing arrangements often characterised as spatially and temporally fragmented, (Davies et al 2018, Peart et al 2019, Macpherson et al 2021, Urlich et al 2022). Added to this is a largely unresolved set of highly contested Tiriti o Waitangi rights and interests (Macpherson et al 2021).

The range of statutory, non-statutory, and tikangaled approaches to governance has led to overlaps of jurisdiction, inconsistency of approaches, and conflicts and tensions between the governance and decision-making of governors operating under different frameworks or models. What is also clear from our research is that there is currently no single perfect institutional arrangement capable of realising diverse goals or accommodating diverse values held in relation to the moana. An obvious tension exists between needing cohesive leadership, coordination and oversight across sectors and scales, whilst supporting the goals, aspirations and needs of existing marine users, rights and interests' holders, and those with responsibilities at specific scales of focus. For these reasons we are not suggesting a singular governance model, but rather an approach to governance that can support and enhance governance arrangements tailored to specific people, place and scale.



Existing governance arrangements

Our research has focused on innovations within statutory, non-statutory, and tikanga-based governance arrangements, along with the emergence of new and hybrid forms of governance involving state and non-state people and organisations. Research also considered the difficulties associated with negotiating diverse values, including regarding different conceptions of rights and responsibilities. Below, we outline the focus of research before identifying key recommendations to enhance governance of the marine environment. These recommendations are relevant regardless of governance model or scale, and apply both to the decisions and actions of people in relation to governance, but also to the inherent authority of the ocean itself.

Statutory governance arrangements

These are arrangements formalised in law and policy (e.g. under the Resource Management Act 1991 and the Fisheries Act 1996). Statutory governance arrangements also arise from bespoke legislation, (for example, Ngā Rohe Moana o Ngā Hapū o Ngāti Porou Act 2019, Kaikōura (Te Tai o Marokura) Marine Management Act 2014) and in the case of Treaty settlements (eg Māori Fisheries Act 2004, Te Awa Tupua Whanganui River Claims Settlement Act 2017) (Fisher et al 2022, Urlich et al 2022). These arrangements provide a clear purpose and mandate of authority to act under the legislation and identify processes to achieve the purpose of the respective legislation. These arrangements and overarching legislation are primarily (legal) rights-based, with an emphasis on duties, responsibilities, and accountabilities.

Non-statutory governance arrangements

These tend to be bottom-up collaborative initiatives deeply embedded in place, which emerge in response to a collective desire to improve or enhance economic, social, cultural, and environmental outcomes (Makey & Awatere 2018). While these arrangements may encounter limitations in terms of direct authority to make decisions, the strength in these kinds of arrangements is the way they centre the collective values and aspirations of communities. In this way, a collaborative forum or governing entity can provide clear messaging to those with legislative responsibility and exert influence over decision-making processes.

In the case of the Kaipara Moana, the Integrated Kaipara Harbour Management Group emerged as an iwi-led initiative following a Treaty settlement to implement obligations between Kaipara iwi/hapū and various co-management partners (such as government agencies) arising from settlement legislation (Makey & Awatere 2018). This is a useful example for exploring how collaboration between iwi/hapū, government agencies and local communities can be leveraged to manage the marine environment, how Maori values and principles can be brought to bear on decision-making processes, and how science and matauranga can be applied alongside ecosystem-based management to enhance coastal and marine environments (Fisher et al 2022, Makey & Awatere 2018). In Ōhiwa Harbour, the Ōhiwa Harbour Implementation Forum, comprised of representatives from local government, iwi and agencies, oversees and monitors the implementation of the Ōhiwa Harbour Strategy. In addition to promoting collaboration among diverse interests, and like the Kaipara Harbour, kaupapa Māori research and mātauranga Māori have been utilised alongside science to address environmental, social, and cultural concerns associated with the decline of Ōhiwa Harbour, and to identify new economic opportunities (Fisher et al 2022, Paul-Burke et al 2018, Paul-Burke et al 2022).





Tikanga-based governance arrangements

These approaches exhibit similar characteristics to non-statutory arrangements as they are place-based and values-driven. Indeed, collaborative arrangements that include tangata whenua, and which seek to enhance the agency and ability of indigenous peoples to participate in decision-making, can adopt values and principles that reflect te ao Māori worldviews, and which are founded upon mātauranga and tikanga Māori (Makey & Awatere 2018, Tiakiwai et al 2017). This is evident in the Integrated Kaipara Harbour Management Group, which was an iwi-led, place-based collaborative arrangement underpinned by an ecosystem-based management approach as well as the Ōhiwa Harbour Implementation Forum, which encompasses iwi/hapū, local government, and community representatives (Fisher et al 2022, Makey & Awatere 2018).

What distinguishes tikanga-based governance arrangements is that these are based on whakapapa obligations and responsibilities handed down from tūpuna rather than being based on (legal) rights. As a result of Treaty of Waitangi settlements in recent years, there are governance arrangements founded in tikanga and then codified into settlement legislation. This codification of tikanga in legislation seeks to recognise the inherent mana, authority and agency of the environment as exemplified in Te Urewa Act 2014 and Te Awa Tupua (Whanganui River Claims Settlement) Act 2017. A more recent example of the establishment and application of such an arrangement (though not in law) is the recognition by traditional Maori and Pacific leaders of whales as 'legal persons' in accordance with tikanga through an agreement called He Whakaputanga Moana². Like the Urewera and Whanganui River examples, He Whakaputanga Moana recognises people as descendants of the legal personality with responsibilities and obligations to ensure they are protected.

2. An initiative lead by *Hinemoana Halo Ocean* (https://www.conservation.org/aotearoa/hinemoana-halo).

Critical marine governance ingredients

Research shows there are opportunities to enable the implementation of a more holistic approach to governance (such as that advocated through ecosystem-based management) within existing legislative and policy contexts in both the short and long-term (Macpherson et al 2021, Macpherson et al 2023, Peart et al 2019, Urlich et al 2022). Moreover, there are also opportunities to strengthen marine governance by focusing on people and processes constituting marine governance arrangements at multiple scales (Fisher et al 2022). In the short-term, this could be achieved by:

- enhancing coordination among agencies and fostering integration through collaborative and inclusive policy development
- committing resources at central and local government levels to support a more holistic governance approach across fisheries, coastal and marine planning, conservation, and Māori legislation (see also our guidance document *Enabling ecosystem-based management in Aotearoa New Zealand's marine law and policy*¹)
- broadening fisheries management decision-making by, for example, partnering with tangata whenua (Macpherson et al 2023; Peart et al 2019).

In making recommendations to strengthen governance approaches to enhance sustainable ocean outcomes, Sustainable Seas research emphasises the potential of innovative governance arrangements better able to accommodate the diverse goals held in relation to the moana, and the diverse values associated with the moana. In fact, the different governance examples observed during the life of our research highlights the necessity of having a system of governance for the marine environment that can accommodate diverse approaches tailored specifically to people and place.

This is why our recommendations highlight the need to pay greater attention to an overarching governance framework, leadership, capability and capacity. This matters because decisions carry uncertainty, and existing law and institutional arrangements have divided the moana amongst many scales and agencies, in many cases without Te Tiriti o Waitangi as the basis. Simply changing the model of governance will not change the behaviours needed at all levels in local and national organisations. As such, our recommendations can apply regardless of governance model or scale and requires application of a set of critical ingredients.



Establish a national marine governance framework

Ensuring marine governance that sustains ocean outcomes for future generations relies on a more holistic approach with a clear vision and objectives for the marine environment. Such outcomes would include improved wellbeing of the ocean and the communities and economies that rely on it.

Evidence of a shift to more inclusive decision-making processes – in terms of who is involved, and the kind of knowledge and evidence drawn upon to inform decisions and actions – promises more integrated and holistic approaches to governing the marine environment. For instance, policies and strategies arising out of national-level statutory arrangements – such as the National Policy Statement on Freshwater Management/Te Mana o Te Wai (RMA 1991) and New Zealand Biodiversity Strategy 2020/Te Mana o Te Taiao – increasingly emphasise the importance of collaboration and the weaving together of different knowledge systems in achieving policy objectives (Fisher et al 2022).

Longer-term opportunities lie in legal and policy reforms to identify and achieve national objectives as part of wider processes of review and reform, and to strengthen existing 'anchors' that underpin governance of the marine environment (Macpherson et al 2021; Macpherson et al 2023).

Building on this momentum, our research has noted the need to develop fundamental marine principles that establish objectives to help ensure consistent and coordinated governance arrangements, rules and regulations across sectors and scales (Macpherson et al 2023), *Enabling ecosystem-based management in Aotearoa New Zealand's marine law and policy*¹. The research suggests that such principles be co-developed by central government and tangata whenua in ways that align to te ao Māori. Based on examples we contest that two key concepts are critical for inclusion in such a framework:

- The increasing recognition of the inherent authority of the environment itself (represented through the existing and emerging approaches of legal personhood, Te Mana o Te Wai and Te Mana o Te Taiao). This concept needs to be central to the development of a national governance framework to ensure the moana is placed at the heart of the decisions and actions of people. This is critical if we are to achieve improved ocean outcomes that enable future generations to thrive.
- It is essential that marine governance structures in Aotearoa provide for Tiriti o Waitangi partnerships, tikanga and mātauranga Māori (Hewitt et al 2018, Reid & Rout 2020, Macpherson et al 2021, Joseph 2020). This also includes giving due consideration to the relationship between state and non-state entities - including market actors - as new blue economy opportunities emerge (Ferretti et al 2023, Rout et al 2024, Short et al 2023, Whitehead et al 2023). Moreover, effective governance requires decision-making based on science and matauranga Māori, which is informed by community values and priorities (Hewitt et al 2018, Clapcott et al 2018, Enabling a broad knowledge base for marine management decisions¹). The importance of diversifying knowledge in the implementation of ecosystem-based management and in pursuing more collaborative forms of engagement, knowledge production and implementation is acknowledged as important for ensuring sustainable and just ocean futures and for redressing past environmental injustices (Barrett et al 2022, Muhl et al 2023, Parsons et al 2021, Tiakiwai et al 2017).

A framework (figure 1) of this kind could apply regardless of organisation or decision-maker, though our research also suggests establishment of a dedicated legal entity for the ocean. More information about such a proposition can be found in our guidance document *Enabling ecosystem-based management in Aotearoa New Zealand's marine law and policy*².



Figure 1 The critical ingredients for establishing a national marine governance framework

Empower courageous leadership

Achieving long-term vision and outcomes for our marine environment requires steadfast and often courageous leadership.

Leaders come from communities, government agencies, iwi/hapū, and other organisations, may be of any age, and must hold knowledge or experience vital to achieving improved ocean outcomes. The leadership of people exists in many and various forms across multiple scales and worldviews, and recognising and supporting leaders is central to ensuring that decisions and actions taken to improve ocean outcomes are effective.

It is also important for leaders to recognise the inherent mauri or life-supporting capacity of the ocean – a capacity that must be central to governance approaches and decision-making. This is both relevant in terms of prioritising the restoration of mauri (either naturally by restricting activities or enhanced through active restoration). This may require either building the capability of those responsible for governance of marine spaces, or ensuring the make-up of any governance arrangement includes such knowledge and experience.

As discussed elsewhere, there is a need for marine governors to recognise Te Mana o Te Moana (the authority of the ocean) by placing the interests of the ocean at the forefront of their decision-making and actions. Recognising Te Mana o te Moana will be critical to achieving long-term benefits, as opposed to shortterm gains achieved through decision-making that poses risks to the ability of the ocean to continue to support flourishing communities.

Ensure inclusive capability

The complexity of our marine environments and the multiple connections, values and interests attached to these environments, requires diverse capabilities to ensure effective governance.

Integrity, transparency, accountability, clarity and innovation are standard and fundamental capabilities necessary for effective governance leadership both as characteristics of good leaders, and as requirements for good leadership practice. However, given existing challenges noted elsewhere in this document, achieving long-term sustainable ocean outcomes requires an approach that includes a more inclusive range of capability.

As an island nation, surrounded by the world's fourth largest Exclusive Economic Zone and Extended Continental Shelf, it is unsurprising that our seascapes are varied and unique. Similarly, research has highlighted a multitude of values, interests, uses, connections, impacts and aspirations relating to our ocean spaces (Macpherson et al 2023, Maxwell et al 2020). This necessitates a governance approach, governors and leaders who can foster balanced and respectful partnerships, collaborations and engagement, and require multiple sources of knowledge and experience. Mātauranga Māori, tikanga, science, policy, economic and legal knowledge can all contribute to improved ocean outcomes, separately and in combination.

Expertise exists within and beyond scientific institutions and government bodies, and can for example, be found in communities and among people with a longstanding relationship and experience of specific places. Understanding how different knowledge and expertise can be used to inform decision making may require building capabilities within organisations or among individuals to ensure the integrity of the knowledge and expertise shared is upheld. Capability building may also be needed to ensure understanding of the opportunities, obligations, responsibilities and limitations imposed by the overarching statutory framework.

Enable enduring capacity

Having a clear vision, framework and objectives for the marine environment to achieve effective implementation requires long-term planning, commitment, knowledge and resourcing. Enabling enduring capacity will be critical to achieving sustainable ocean outcomes for future generations.

The existence of an overarching national marine governance framework, implemented through having the necessary leadership and capability, will only be successful if the necessary capacity is in place for the long-term. This means governance arrangements must be sufficient to withstand changing short-term political and economic priorities by ensuring an authorising environment that is stable and supportive. Having the necessary information to inform decision-making and the appropriate action to take, alongside addressing high levels of uncertainty, will also be critical. This decisionmaking will require prioritisation, long-term planning and resource. Knowledge, accessibility and time must be accounted for in decision-making processes to limit or address information deficits, conflicts and tensions, and the capacity of experts. Collaboration and cooperation involving individuals, organisations and entities can reduce the capacity burden by spreading the load but requires clarity around roles, responsibilities and the expectations of all involved.

Finally, there is the capacity of the ocean itself. Research has provided significant information, both based in science and mātauranga Māori, about the carrying capacity of the moana, mechanisms to improve the management of our interactions with the moana, and tools to support improved decision-making (see all our guidance documents in this series). Given the complexity of our marine spaces and interactions, prioritising ongoing research and collaboration to obtain more information, knowledge and tools will also help support good governance.

Signposts for marine governance

Research has established a set of ecosystem-based management, blue economy, and te ao Māori principles and approaches that have been tailored specifically to our unique context and environment. These principles and approaches serve as valuable signposts for marine governance and can provide a strong foundation to tackle problems associated with unsustainable practices and environmental decline, including cumulative effects. They offer strategic approaches to guiding and organising management decisions and actions at, and across, different spatial and temporal scales.

Because of its emphasis on recognising land and sea interactions and connectivity, **ecosystem-based management** offers a holistic strategy for the governance of marine environments, for considering the activities occurring on land and sea that affect the marine environment, for reconciling scale mismatches, and for supporting the inclusion of multiple knowledges and values (Hewitt et al 2018).

A **blue economy approach** combines aspirations for healthy oceans with society's requirements and expectations (including commercial), while placing the moana, and the relationship of people with the moana, at its heart (see guidance document on *Developing pathways to a flourishing blue economy*³).

Both approaches have an alignment with **te ao Māori approaches** founded in tikanga and mātauranga Māori. Case study research highlighting the reclamation, restoration and revitalisation of such knowledge and approaches spans commercial and customary activities, opportunities to indigenise the blue economy, and to support the application of kaitiakitanga across scales and sectors.

These signposts will both instruct and highlight what is possible in a governance context. Determining effective and appropriate marine governance requires tangata whenua leadership and must be considered and explored in partnership with tangata whenua. Doing this is important because that partnership will determine what each of the principles mean, and the most appropriate way to apply them.





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For more information and support with marine management decisions, please see our other synthesis project summaries and guidance documents in this series.

