# Enabling ecosystem-based management in Aotearoa New Zealand's marine law and policy

Aotearoa New Zealand's large coastal marine environment is of immense economic, cultural, social, and ecological value. But our marine resources, environments, species, and communities are facing serious threats because of cumulative, competing human uses and the impacts of climate change and ocean warming.

Research shows ecosystem-based marine management (EBM) could halt this decline and help restore the marine ecosystem. But to do EBM well, we must improve the integration, coordination, and efficiency of our marine law and policy.

### **About this document**

This document summarises Sustainable Seas National Science Challenge research into law and policy to support ecosystem-based management. This summary:

- recommends a course towards ecosystem-based management within current legislation
- recommends longer-term ways to embed ecosystembased management that's flexible and adaptable
- explains why ecosystem-based management is needed.

For more detailed information, see our guidance document on *Enabling ecosystem-based management* in Aotearoa New Zealand's marine law and policy<sup>1</sup>.



## **Recommendations**

To ensure healthy outcomes for Aotearoa New Zealand's ocean and people, we recommend the following:

- >>> Ecosystem-based management approaches are implemented now, within existing marine law and policy frameworks. An implementation pathway (Figure 1) sets out opportunities to implement EBM within existing law and policy in the short term, as well as longer-term opportunities for their uptake through marine legislative and policy reform.
- >> The Government establishes a dedicated legal entity for the ocean, which could take the administrative form of a ministry, an independent commission, both, or a transitional entity arrangement. Key objectives and functions of this legal entity for the ocean would be to:
  - » protect and enhance the life-supporting capacity of marine ecosystems, and ensure thriving related communities and economies
  - » facilitate the development of fundamental marine principles
  - » oversee the implementation of fundamental marine principles, through:
    - a whole-of-government approach to leadership, oversight, coordination and alignment of marine policy
    - ensuring implementation is driven and managed by those with expertise and knowledge
  - » ensure whole of government approaches and implementation of fundamental marine principles is achieved in ways that provide for partnership with tangata whenua and aligns to te ao Māori principles.

- The Government, through the legal entity for ocean, work with tangata whenua on developing fundamental marine principles to establish clear objectives for the marine environment and help ensure consistent and integrated governance arrangements, rules and regulation across sectors and scales these principles:
  - » may initially be expressed in policy guidance, but for long-term effectiveness should be enshrined in primary legislation
  - » could draw from first principles developed by Sustainable Seas, including ecosystem-based management, the blue economy, and te ao Māori principles.
- The Government supports and resources the enabling conditions necessary for ecosystem-based management to be implemented. These conditions include sufficient human and financial resourcing, strong governance processes and institutions, and effective compliance mechanisms.
- The Government partners with tangata whenua as its Tiriti o Waitangi partner in ways that are appropriate to the scale of decision-making, including devolution and power-sharing with tangata whenua, especially with hapū and iwi, see also our guidance document Empowering Māori knowledge in marine decision-making².

# Current marine management approaches are not enough

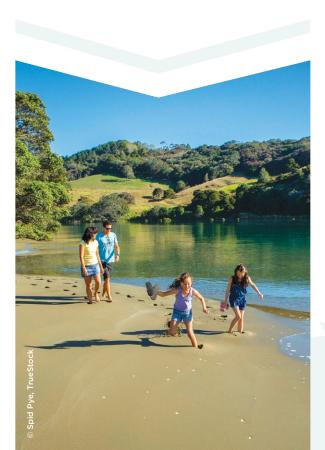
Current approaches to implementing marine and coastal law and policy in Aotearoa New Zealand will not ensure a healthy and productive marine environment into the future. Implementation of marine governance is fragmented and poorly aligned across sector legislation and policy (including fisheries, environmental planning, conservation, and Māori) and across scales (including local to global, and present to future generations).

A critical need also exists for marine law and policy development and implementation processes to honour and uphold Te Tiriti o Waitangi, our founding constitutional document.

Ten years of research by the Sustainable Seas National Science Challenge has revealed how an ecosystem-based management approach could improve the integration, coordination, and efficiency of marine law and policy, and ultimately deliver improved outcomes for Aotearoa New Zealand's ocean and people.

Marine governance arrangements, rules and regulations must be adaptive and flexible because marine ecosystem relationships change over time (eg with climate change or the development of new technology). Our research found that this flexibility is best achieved by:

- ensuring the rules and regulations work across scales
- supporting the devolution of governance arrangements, decision-making and resources to local (no greater than regional) scale.



# EBM implementation pathways

Figure 1 on the following page sets out the opportunities for central and local government to implement EBM approaches in current marine law and policy (short term), under current marine law reform proposals (medium term), and new initiatives and legal reforms (medium-long term).

#### Figure 1 Implementation pathways for ecosystem-based management for central and local government

- High level policy objectives and arrangements
  Rules, regulation and governance arrangements
  Enabling conditions and processes

#### Short-term (<3 years) Implement existing marine law and policy

- Central government to establish a Legal Entity for the Ocean for whole-of government leadership and oversight on marine law and policy - key objective to protect and enhance the life supporting capacity of marine ecosystems while ensuring thriving related communities and economies.
- Legal Entity for the Ocean to facilitate drafting Fundamental Marine Principles - key objective to integrate and holistically manage human relationships with the ocean across sectors and scales.
- Central and local government to ensure that marine law and policy development and implementation upholds Māori rights and interests (eg Te Tiriti o Waitangi, Treaty settlements, Māori commercial and customary fisheries, MACA Act) and is consistent with international law (UNDRIP, CBD, UNCLOS).
- Central government to develop collaborative, cross-sector fisheries planning and governance in partnership with tangata whenua, especially inshore areas where fishing industry, iwi and hapū, and stakeholders could come together to develop fisheries plans and strategies (Fisheries Act, Māori commercial and customary fisheries, RMA, EEZ Act, Conservation Act, MACA Act).
- Central government to resource and implement multi-species fisheries plans (Fisheries Act) across all relevant fisheries and Fisheries Management Areas.
- Central government to finalise habitats of particular significance for fisheries (Fisheries Act), working with local government to integrate these with local scale marine protection initiatives.
- Central government to strengthen bycatch management planning (Fisheries Act).
- Central government to adopt collaborative, inclusive and integrated policy development approaches to emerging blue industries including open ocean aquaculture, offshore wind, and seabed minerals
- Central government to prioritise and resource settlement of MACA Act claims.
- Central and local government to resource and implement place-based, integrated marine protected area governance, including powersharing and devolved governance to iwi and hapū (RMA transfers of powers, customary fisheries, rāhui, wāhi tapu, UNDRIP).
- Local government to include integrated, crossscale (terrestrial/freshwater/coastal) objectives, outcomes and approaches in regional plans and policies. To be guided by a ki uta ki tai (mountain-to-sea) approach that reflects the living and interconnected nature of marine ecosystems and contemplates interconnected relationships across marine spaces and timescales (NZCPS, Te Mana o Te Wai, Te Mana o Te Taiao, Marine and Coastal Protection and Management Principles).
- Central and local government to ensure that consenting processes for managing environmental effects of development and use of the marine environment prioritise the health of, living, integrated marine ecosystems, via a precautionary approach (NZCPS, Te Mana o Te Wai, Te Mana o Te Taiao, Marine and Coastal Protection and Management Principles, CBD, UNCLOS).
- Central and local government to resource the implementation of flexible, multi-sector, biocultural, and mixed-use area-based marine planning/protection (eg Hauraki Gulf, Kaikōura, Fiordland).
- Central and local government to commit resourcing (budget and human resources) to implement existing marine law and policy that support EBM across fisheries, environment/ planning, conservation and Māori legislation.

- Central and local government to resource and utilise mātauranga-based monitoring and assessment methods, localised socialecological risk assessments (eg Bayesian Networks and Risk/Consequence approaches), and restoration approaches in marine planning and decision-making.
- Central and local government to prioritise and resource Tiriti-led approaches including powersharing with iwi and hapu when developing plans and policies (i.e. RMA transfers of power. mana whakahono ā rohe, customary fisheries, rāhui, MACA Act wāhi tapu, Ahu Moana).
- Central and local government to treat tikanga and mātauranga as a valid source of law and knowledge in decisions about use and development of the marine environment (eq RMA consenting, fisheries allocation and management).
- Central and local government to facilitate local-scale implementation of marine rules, regulation and governance arrangements by investing in building relationships across temporal and spatial scales.
- Central and local government to increase community and industry buy-in to governance and decision-making processes and outcomes through collaboration and partnerships (eg Fisheries Act, cross-sectoral fisheries committees, multispecies fisheries plans, resource management plan advisory groups).

#### Medium-term (<5 years) Develop marine law and policy

- Legal Entity for the Ocean to oversee the implementation of Fundamental Marine Principles, ensuring Tiriti-led implementation is being driven and managed by those with expertise and knowledge.
- Central and local government to ensure that marine law and policy development and implementation upholds Māori rights and interests (eg Te Tiriti o Waitangi, Treaty settlements, Māori commercial and customary fisheries, MACA Act) and is consistent with international law (UNDRIP, CBD, UNCLOS).
- Central government to commence a marine reform programme to align objectives across all marine legislation and related policy to Fundamental Marine Principles (including fisheries, planning, conservation and Māori).
- Central government to develop and implement a national fisheries policy framework
- Central government to ensure any RMA reform programme gives adequate attention to the marine environment, including adopting a ki uta ki tai (mountain-to-sea) management approach that contemplates interconnected relationships across marine spaces and timescales.
- Central Government to commence marine protection/conservation reform programme (eg Conservation Act, Wildlife Act, Marine Protected Areas reform) giving sufficient attention to the marine environment; and recognising ecosystem linkages between species and habitats. Include adaptive/flexible corridor/habitat bioregional marine protections (including species interactions and seasonal dynamics).
- Central government to develop marinebased climate adaptation law and policy that reflects the value of the ocean as a naturebased solution to climate change (eg Climate Adaptation Act, blue carbon)
- Central government to continue to prioritise and resource settlement of MACA Act claims.
- Central and local government to continue to resource and implement cross-sector and cross-scale governance arrangements, including partnering with tangata whenua at appropriate scales.

- Central and local government to continue to resource and utilise mātauranga-based monitoring and assessment methods, localised social-ecological risk assessments (eg Bayesian Networks and Risk/Consequence approaches), and restoration approaches as an aid to marine planning and decision-making.
- Central and local government to continue to prioritise and resource Tiriti-led approaches including power-sharing with iwi and  $\text{hap}\bar{\textbf{u}}$ when developing plans and policies (i.e. RMA transfers of power, mana whakahono ā rohe, customary fisheries, rāhui, MACA Act wāhi
- Central and local government to continue to treat tikanga and mātauranga as a valid and independent source of law and knowledge in decisions about use and development of the marine environment (eg RMA consenting).
- Central and local government to continue to facilitate local-scale implementation of marine rules, regulation and governance arrangements by investing in building relationships across temporal and spatial scales.
- Central and local government to continue to build community and industry buy-in to marine governance and decision-making processes through collaboration and partnerships (eg Fisheries Act, cross-sectoral fisheries committees, multispecies fisheries plans).

#### Long-term (>5 years) Embed, review and adapt

- Legal Entity for the Ocean to continue to oversee the marine management across sectors and scales in line with Fundamental Marine Principles.
- Central government to continue to prioritise and resource settlement of MACA Act claims.
- Central government to introduce processes to review and adapt marine laws and policies on an ongoing basis to reflect changes in ecosystem, community and industry dynamics (eg climate change and technological advances), as guided by western knowledge and mātauranga.
- Central and local government to continue to resource and implement cross-sector and cross-scale governance arrangements, including partnering with tangata whenua at appropriate scales.
- Central and local government to continue to resource and utilise mātauranga-based monitoring and assessment methods, localised social-ecological risk assessments (eg Bayesian Networks and Risk/Consequence approaches), and restoration approaches as an aid to marine planning and decision-making
- Central and local government to continue to prioritise and resource Tiriti-led approaches including power-sharing with iwi and hapū when developing plans and policies (i.e. RMA transfers of power, mana whakahono ā rohe, customary fisheries, rāhui, Ahu Moana),
- Central and local government to continue to treat tikanga and mātauranga as a valid and independent source of law and knowledge in decisions about use and development of the marine environment (eg RMA consenting).
- Central and local government to continue to facilitate and local-scale implementation of marine rules, regulation and governance arrangements by investing in building relationships across temporal and spatial scales.
- Central and local government to continue to build community and industry buy-in to marine governance and decision-making processes through collaboration and partnerships (eg Fisheries Act, cross-sectoral fisheries committees, multispecies fisheries plans).

### References

- Clapcott J, Ataria J, Hepburn C, Hikuroa D, Jackson A M, Kirikiri R, & Williams E (2018). Mātauranga Māori: shaping marine and freshwater futures. New Zealand Journal of Marine and Freshwater Research 52:4.
- Davies K, Fisher K, Couzens G, Faulkner L, & Hewitt J (2019). Principles for cumulative effects management in Aotearoa New Zealand. Resource Management Journal special issue: cumulative effects in coastal and marine areas.
- Fisher K, Makey L, Macpherson E, Paul A, Rennie H, Talbot-Jones J & Jorgensen E (2022). Broadening environmental governance ontologies to enhance ecosystem-based management in Aotearoa New Zealand. Maritime Studies 21: 609-629.
- Hewitt J, Faulkner L, Greenaway A, & Lundquist C (2018). Proposed ecosystem-based management principles for New Zealand. Resource Management Journal November 2018.
- Joseph R, Rakena M, Te Kuini Jones M, Takuira J, Te Tai M, & Rakena C (2020). Stemming the Colonial Environmental Tide: shared Māori Governance Jurisdiction and Ecosystem-Based Management over the Marine and Coastal Seascape in Aotearoa New Zealand - Possible Ways Forward. Sustainable Seas National Science Challenge.
- Kainamu A, & Rolleston-Gabel T (2023). A review of te ao Māori perspectives of marine scales and where these are impeded by contemporary management.
   Sustainable Seas National Science Challenge.
- Macpherson E, Urlich S, Rennie H, Paul A, Fisher K, Braid L, Banwell L, Torres Ventura J, & Jorgensen E (2021). 'Hooks' and 'Anchors' for relational ecosystembased marine management. Marine Policy 130: 104561.
- Macpherson E, Jorgensen E, Paul A, Rennie H, Fisher K, Talbot-Jones J, Hewitt J, Allison A, Banwell B, & Parkinson A (2023). Designing law and policy for the health and resilience of marine and coastal ecosystems Lessons from (and for) Aotearoa New Zealand. Ocean Development & International Law 54:2.

- Ministry for the Environment & Stats NZ (2022).
  New Zealand's Environmental Reporting Series:
  Our marine environment 2022. Retrieved from environment.govt.nz.
- Parsons M, Taylor L, & Crease R (2021) Indigenous Environmental Justice within Marine Ecosystems: A Systematic Review of the Literature on Indigenous Peoples' Involvement in Marine Governance and Management. Sustainability. 13(8): 4217.
- Peart R, Greenaway A, & Taylor L (2019). Enabling Marine Ecosystem-Based Management: Is Aotearoa New Zealand's Legal Framework up to the Task.
   New Zealand Journal of Environmental Law 23.
- Reid J, & Rout M (2020). The implementation of ecosystem-based management in New Zealand – A Māori perspective. Marine Policy 117.
- Scobie M, Heyes A, Evans R, & Fukofuka P (2023).
  Resourcing rangatiratanga as part of constitutional transformation: taking equity and sovereignty seriously. Kōtuitui: New Zealand Journal of Social Sciences 18:4.
- Short K, Stancu C, Peacocke L, & Diplock J (2023)
  Developing blue economy principles for Aotearoa New
  Zealand. Sustainable Seas National Science Challenge.
- Sustainable Seas National Science Challenge (2024).
  Empowering Māori knowledge in marine decision-making¹. sustainableseaschallenge.co.nz/tools-and-resources/empowering-māori-knowledge-in-marine-decision-making
- Sustainable Seas National Science Challenge (2024).
  Marine governance sustaining ocean outcomes for future generations<sup>2</sup>. sustainableseaschallenge.co.nz/tools-and-resources/marine-governance-sustaining-ocean-outcomes-for-future-generations
- Urlich S, White F, & Rennie H (2022). Characterising the regulatory seascape in Aotearoa New Zealand: Bridging local, regional and national scales for marine ecosystem-based management. Ocean & Coastal Management 224.

# **Contact information**

Karen Fisher / k.fisher@auckland.ac.nz

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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.