

SUSTAINABLE
SEAS

Ko ngā moana
whakauka

Developing marine and coastal ecotourism

Recommendations for tourism operators and policy makers



Report

Report for Sustainable Seas National Science Challenge project *Developing marine ecotourism (Project code 2.4)*

Authors

Michael Lück, Joanna Fountain, Christopher Rosin

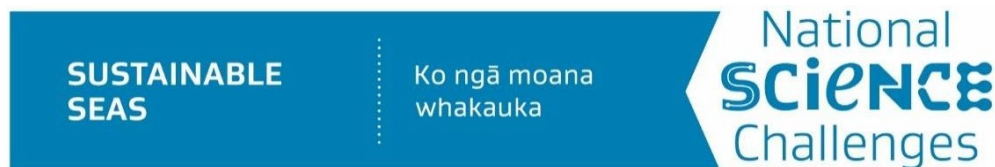
Date of publication

June 2024

For more information on this project, visit:

www.sustainableseaschallenge.co.nz/our-research/growing-marine-ecotourism/

Cover image: Auckland Whale & Dolphin Safari. Credit: Michael Lück



About the Sustainable Seas National Science Challenge

Our vision is for Aotearoa New Zealand to have healthy marine ecosystems that provide value for all New Zealanders. We have 75 research projects that bring together around 250 scientists, social scientists, economists, and experts in mātauranga Māori and policy from across Aotearoa New Zealand. We are one of 11 National Science Challenges, funded by the Ministry of Business, Innovation & Employment.

www.sustainableseaschallenge.co.nz

Acknowledgements

The authors would like to acknowledge the foundation work of the New Zealand Tourism Research Institute (NZTRI) at Auckland University of Technology, Simon Milne, Carolyn Deuchar, Keri-Anne Whikitera, Suzanne Histen, Eilidh Thorburn, and Helen Fitt.

Overview and context – blue economy principles can support the sector

This document recommends ways to support marine and coastal ecotourism (MCET) in Aotearoa New Zealand so the sector can be sustainable, regenerative and part of a flourishing blue economy. The recommendations are based on research with the Sustainable Seas National Science Challenge (the Challenge).

The Challenge defines a blue economy through a uniquely Aotearoa New Zealand lens, centring on the moana, and its relationship with people.

Marine activities that generate economic value and contribute positively to ecological, cultural, and social well-being.

The declining health of our marine environment demands improved care for, and management of, the oceans. Sustainable Seas has developed a condensed set of seven principles for marine environments in the Aotearoa New Zealand context (sustainableseaschallenge.co.nz/beprinciples).

These blue economy principles incorporate requirements and expectations within aspirations for healthy oceans with society's requirements and expectations, employing ecosystem-based management (EBM) principles for the use of natural resources. These EBM principles place ecological dynamics, sustainability, adaptability, the diverse interests of stakeholders, and the emergent nature of systems at multiple scales within a framework of ecosystem connections and relations. The complexity of these relations requires the input of scientific and Indigenous knowledge and evidence as a foundation for the appropriate management of marine environments.

Qualitative and quantitative research supports the recommendations

We have conducted a marine wildlife focused Marine and Coastal Ecotourism (MCET) project informed by these Aotearoa New Zealand-specific ecosystem-based management (EBM) principles. The project, which ran between 2020 and 2023, included qualitative (interviews) and quantitative (surveys) methods, conducted with stakeholder groups across Aotearoa New Zealand. Key findings, discussed in more detail in previous reports, include:

- MCET is a values-based low impact sector – many operators actively pursue low-impact business models.
- The MCET sector is diverse and has been heavily impacted by COVID-19. The sector is dominated by SMEs and is relatively fragmented.
- Enabling and supporting collaboration between operators and among wider stakeholders involved in coastal and marine governance can strengthen the sector.
- Sustainable development of MCET relies on strong marine protection and many operators play an active role in initiatives that support conservation. Some operators are actively involved in marine and coastal research.
- The MCET sector has education at its core, and many operators are actively involved in community education. However, scope exists to improve education of the operators (“educating the educator”).
- Indigenous values and mātauranga Māori have a strong role to play in planning, management, and operation of MCET.
- Stakeholders believe that the current regulatory framework is no longer fit for purpose. Opportunities exist for a more coherent, joined-up, and better resourced policy and regulatory environment.
- MCET-specific planning and management needs to improve and MCET operators need to be included in decision making processes.

The whole tourism sector and the blue economy are connected

Marine and coastal ecotourism is an important part of Aotearoa New Zealand’s tourism system and is itself interconnected with other sectors of the blue economy. MCET is a sub-set of nature-based tourism, using natural resources for not only economic imperatives, but to achieve environmental, social, and cultural goals that will deliver quadruple-bottom-line benefits.

‘Build back better’ could be better

The COVID-19 pandemic devastated international tourism globally, with lengthy border closures severely impacting tourist arrivals to Aotearoa New Zealand for more than three years. However, this enforced ‘down-time’ also enabled the tourism industry to reflect on how their industry could be ‘built back better’ and contribute positively to the well-being of

the country's people and places, setting the industry on a more resilient and regenerative path. Unfortunately, with international borders reopened, and visitor numbers quickly approaching pre-pandemic levels, it is clear that the rhetoric of regenerative tourism is not matching reality and special places and taonga of Aotearoa New Zealand are again facing the risk of being 'loved to death'.

Recommendations for a sustainable, regenerative, flourishing sector

Based on the principles of ecosystem-based management and informed by other research funded through the Sustainable Seas Challenge this research project provides insights to inform and support MCET to be truly sustainable and regenerative at not only the business level, but at the destination level, influencing other elements of the tourism system.

Six policy recommendations are outlined below to achieve these aims, centring on marine mammal tourism. The urgency of the need for these actions cannot be overstated and we strongly recommend building on the momentum created by the Sustainable Seas Challenge to achieve these aims.

Recommendation 1

Review and update the regulatory regime, including the Marine Mammal Protection Act (1978) and Marine Mammal Protection Regulations (1992)

Since the beginning of marine mammal tourism in Kaikōura in the late 1980s, MCET has grown significantly. In response to initial MCET activities, it was recognised that the Marine Mammal Protection Act (1978) could not effectively regulate this burgeoning industry, and in 1992 the Marine Mammal Protection Regulations were introduced. At the time, these regulations were heralded as successfully protecting marine environments and securing a thriving and globally recognised, small-scale marine tourism industry.

Approximately 100 permits have been granted to view and swim with a variety of species of cetaceans and pinnipeds, held by more than 80 operators. Over the same period there has been a vast number of scientific projects assessing the effects of human activities on various marine mammal species. While marine mammal tourism was initially regarded as benign, recent research – including that conducted as part of the Sustainable Seas Challenge research programme – has highlighted increasing pressures on marine mammals and their environments (e.g., Lohrer, 2019, Pilditch, 2020). It's now clear that the plethora of viewing and swimming activities (both commercial and non-commercial) are likely to be having detrimental impacts on the behaviour of marine mammals.

Participants at both case study locations (Akaroa and Tamaki Makaurau Auckland) in this project questioned whether the Marine Mammal Protection Regulations (MMPR 1992) remain fit for purpose.

Given the increased pressure on resources and increasing concerns with sustainability across tourism, we recommend that the regulatory framework for marine mammal tourism be reviewed, including the MMPR (1992), with the blue economy and ecosystem-based management principles developed by Sustainable Seas used to guide efforts to strike a balance between competing values and interests.

Recommendation 2

Improve access to educational resources for all MCET stakeholders

Knowledge of the marine and coastal environment is an important requirement of MCET operators and sharing that knowledge should be central to MCET experiences. In fact, operators must have an educational component to their tours as a requirement for obtaining a marine mammal permit (MMPA, 6(h)). Many MCET operators regard education as a key part of their mission, with fees from tourist activities helping to fund community and school education initiatives. However, there is more limited information and educational opportunities for the operators and their staff (“educating the educators”). While operators with marine mammal permits can participate in the Department of Conservation’s SMART Operator programme, those without permits have educational opportunities and may rely on in-house staff training.

We recommend that all commercial tourism operators on the moana (permitted and non-permitted) be required to obtain a ‘license’, which includes the completion of an educational and awareness programme, before any application for a marine mammal permit is made. We also recommend the establishment of a central portal, which is freely accessible, with educational resources and links to external resources.

Recommendation 3

Strengthen the involvement of iwi and mana whenua in the planning and management of marine and coastal ecotourism (MCET)

Māori have significant rights and interests in coastal and marine environments in Aotearoa New Zealand, and marine spaces and marine mammals are of critical cultural and historic importance to many iwi. Our research shows that whānau, hapū, and iwi enterprises have been pioneers and leaders in MCET. A long history exists of Māori-owned MCET businesses across the country, ranging from the far north to the very south of Aotearoa New Zealand. These businesses include, for example, cultural waka experiences, cultural and scenic coastal walks and drives, cultural performances, and whale watching.

Despite their prominence within the industry as well as their customary and cultural uses of marine resources, participants in the research emphasised the need to sustain the mana of *all* *tohu moana* and *tāonga moana*. The blue economy and ecosystem-based management principles developed by the Sustainable Seas Challenge emphasise the role of *te ao Māori* and *mātauranga Māori* in resource allocation, management, and use, offering guidelines for incorporating Māori interests and *mana whenua* as genuine partners in decision-making and management of Aotearoa New Zealand's *moana*. One way of strengthening Māori input would be to build capability within both the Department of Conservation (DOC) and regional development agencies, for example establishing independent Māori MCET liaison officers.

Recommendation 4

Support capability-building among Māori MCET enterprises

Māori operators have been pioneers of MCET in Aotearoa New Zealand, and there is evidence that Māori business interests in the sector are growing. Māori operators offer both generic and culturally enhanced tourism experiences that are increasingly important to Aotearoa New Zealand's tourism offerings.

Respondents in this research confirm the findings from other Sustainable Seas research of increasing interest in a blue economy among *whānau*, *hapū*, and *iwi*, yet also capability gaps in business development skills among existing and prospective enterprises (e.g., Rout, Mika, et al., 2023; Rout, Lythberg, et al., 2019).

MCET often has relatively low financial barriers to entry and these capability gaps represent a lost opportunity for Māori and for local and regional development more generally. Targeted capability building for Māori enterprises, including targeted training and educational resources, will support Recommendations 2 and 3.

Recommendation 5

Improve the integration of science in MCET processes

Scientific knowledge (natural and social sciences) is continually expanding, and existing regulations do not necessarily reflect this new knowledge (particularly pertinent around marine mammal viewing – see recommendation 1). Due to constantly changing environments, and emerging knowledge, adaptive management approaches must be adopted, based on newly available scientific data.

Participants discussed a variety of approaches that may aid adaptation of scientific knowledge into daily operating procedures. These include the following.

- Involve *all* operators in the collection of data (and train and educate operators accordingly).
- Explore opportunities for citizen science.
- Improve dissemination of scientific findings, including outputs in non-science language.

We recommend that data be continuously collected to establish a long-term database, ensuring that the data collection methods and analyses are of high quality. We also recommend that these datasets are widely disseminated and made available to any interested party.

Recommendation 6

Improve communication and management approaches across stakeholder groups and capitalise on synergies across various stakeholders

The coastal and marine environment is of great significance to a variety of user groups, and the management must reflect the needs and concerns of these groups, who often conflict over actions and values. A joined-up approach is needed between the agencies who manage the marine space, such as harbour masters, the Ministry of Fisheries, DOC, mana whenua, tourism operators, other commercial ventures (such as fish farming), and the public. Some participants noted that an “uneven playing field” exists, with a lack of transparency, and an

unequal distribution of resources. It was noted that there are different needs within the community and that some management approaches and legislation (such as the MMPR) only apply to some stakeholders. Within an ecosystem-based management framework, MCET has the potential to not only benefit tourism operators, but also other businesses, communities, and individuals in the coastal and marine environment.

We recommend identifying synergies and values across stakeholder groups and communities and communicating and capitalising on these to strengthen the shared vision within destinations. For example, mussel and fish farms or energy providers may include visitor programmes. In the case of the fish and mussel farms, on-site farm shops, and farm-to-table initiatives could benefit local communities, tourists, and the industry alike.

References

- Fountain, J., & Lück, M. (2024). *Case Studies: Tamaki Makaurau Auckland and Akaroa*. Report for Sustainable Seas National Science Challenge project “Developing marine ecotourism” (Project 2.4). National Science Challenge, Aotearoa New Zealand.
- Lohrer, D. (2019). Measuring ecosystem services and assessing impacts. Sustainable Seas National Science Challenge project. National Science Challenge, Aotearoa New Zealand. <https://www.sustainableseaschallenge.co.nz/our-research/ecosystem-services/>
- Lück, M., Fountain, J., & Rosin, C. (2023). *Measurement Frameworks*. Report for Sustainable Seas National Science Challenge project “Developing marine ecotourism” (Project 2.4). National Science Challenge, Aotearoa New Zealand.
- Milne, S., Thorburn, E., Rosin, C., & Deuchar, C. (2021). *Developing marine and coastal ecotourism for a sustainable blue economy: A literature review*. Report for Sustainable Seas National Science Challenge project: Developing marine ecotourism (Project 2.4).
- Milne, S., Thorburn, E., Trinh, T., & Dobbin, N. (2021). *Marine and coastal ecotourism, national and regional picture: Baseline report 1: Operator database & map*. Report for Sustainable Seas National Science Challenge project: Developing marine ecotourism (Project 2.4).
- Milne, S., Thorburn, E., Wikitera, K., Deuchar, C., & Histen, S. (2021). *Marine and coastal ecotourism: Baseline report 2: Operator interviews and survey*. Summary Report for Sustainable Seas National Science Challenge project: Developing marine ecotourism (Project 2.4).
- Pilditch, C. (2020). *Prioritising cumulative effects as a critical national issue*. Sustainable Seas National Science Challenge project: Measuring ecosystem services and assessing impacts. <https://www.sustainableseaschallenge.co.nz/tools-and-resources/impact-case-study-prioritising-cumulative-effects/>

Rout, M., Lythberg, B., Mika, J. P., Gillies, A., Bodwitch, H., Hikuroa, D., Awatere, S., Wiremu, F., Rakena, M., Reid, J. (2019). *Kaitiaki-centred business models: Case studies of Māori marine-based enterprises in Aotearoa New Zealand*. Report for Sustainable Seas National Science Challenge project: Whai Rawa, Whai Mana, Whai Oranga: Creating a world-leading indigenous blue economy.

Rout, M., Mika, J., Reid, J., Whitehead, J., Wiremu, F., Gillies, A., McLellan, G., & Ruha, C. (2023). *Indigenising the blue economy in Aotearoa: A literature review*. Sustainable Seas National Science Challenge project: Whai Rawa, Whai Mana, Whai Oranga: Creating a world-leading indigenous blue economy.

Appendix

Elmahdy, Y. M. S. H. (2022). *An assessment of the effectiveness of marine mammal tourism management: The case study of Aotearoa/New Zealand* [PhD Thesis, Auckland University of Technology]. Tuwhera Open Access.
<https://openrepository.aut.ac.nz/items/a76b2174-631f-4938-b74a-91599e9fedd9>

Abstract

New Zealand is viewed as a world leader in marine mammal conservation and its regime for managing marine mammal tourism has been touted as best practice. Despite its management framework, a variety of studies conducted in New Zealand (and elsewhere) have shown that the current patterns and rates of growth of marine tourism activities have adverse short-term and long-term effects on marine mammals. Moreover, various studies have demonstrated that the Marine Mammals Protection Regulations 1992 (MMPR) are frequently violated by marine mammal tour operators in various locations. Consequently, the sustainability of the industry is being questioned.

This exploratory qualitative study investigated and assessed the perspectives of four key stakeholder groups (Department of Conservation, permitted tour operators, indigenous Māori, and scientists) regarding the effectiveness of Aotearoa/New Zealand's current marine mammal tourism management regime in 1) protecting and conserving marine mammals, and 2) effectively managing and regulating the marine mammal tourism industry. The study adopted a single country (New Zealand) case study approach with data collected from 43 participants via 39 face-to-face interviews and one online interview.

According to the data, there are seven key themes that relate to the management of marine mammal tourism. These are: 1) indigenous Māori's connection with marine mammals; 2) environmental compliance; 3) the power of education and interpretation; 4) challenges to enforcement; 5) the regulatory regime; 6) stakeholder collaboration; and 7) the politics of (marine mammal) tourism. The key findings of the study suggest a strong connection between indigenous Māori and marine mammals. The findings also indicate a presence of high levels of awareness and understanding of the regulations among permitted and non-permitted commercial tour operators, compared to that of other user groups. Gaps in the regulations, non-compliance with regulations, and insufficient enforcement, are key challenges facing marine mammal tourism (MMT). The study identifies reasons for non-compliance, challenges to enforcement, and limitations in regulations, especially regarding its application.

This research offers an opportunity to learn more about the MMT industry and addresses the ongoing uncertainty about the relationship between stakeholder groups and the effectiveness of MMT management. Conceptual frameworks for effective management of marine mammal tourism were developed in the study, providing insights into the dynamics of MMT management. These frameworks highlight the main themes that emerged from the data analysis and illustrate the connection and interplay between them. They also display the socio-economic, cultural, environmental and political complexities surrounding the MMT industry.

The study also provides a set of recommendations to help improve MMT management, marine policy, decision-making, and practice. These include: 1) engagement of indigenous communities in nature conservation and MMT management; 2) improvement of compliance, monitoring, and enforcement of environmental regulations; 3) reviewing and updating legislation that forms the basis for the regulatory regime; 4) investment in environmental education and interpretation; 5) facilitating constructive stakeholder engagement and collaboration; and 6) promoting adaptive management approaches for MMT management. Management agencies responsible for MMT should take the lead in implementing these recommendations, and all stakeholder groups need to be engaged in this process. The findings, frameworks, and recommendations of this study should contribute to the development of policies and practices of MMT, not only in New Zealand, but also at the global level.