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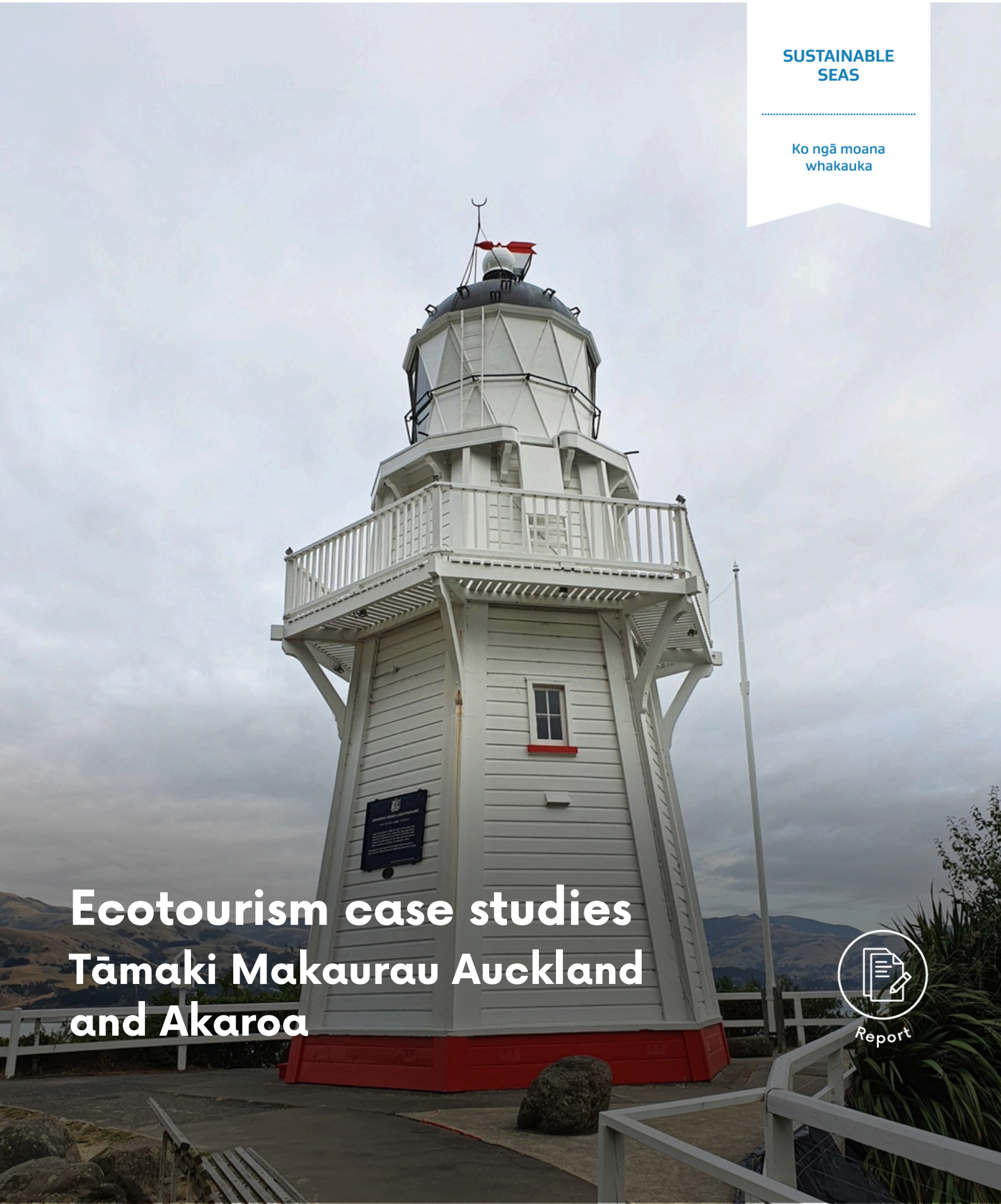
Ko ngā moana whakauka



Ecotourism case studies

Tāmaki Makaurau Auckland and Akaroa

Report

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

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For more information on this project, visit: www.sustainableseaschallenge.co.nz/our-research/growing-marine-ecotourism

About Sustainable Seas Challenge

Our vision is for Aotearoa New Zealand to have healthy marine ecosystems that provide value for all New Zealanders. We have 60+ 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 Ministry of Business, Innovation & Employment.

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Cover image: Akaroa Lighthouse on Cemetery Point. Credit: Michael Lück

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Executive Summary

Aotearoa New Zealand's moana is vast and represents a vital resource for various industries, while New Zealand's largest export earner is in turn heavily dependent on coastal and marine environments. Coastal and marine tourism is currently the largest sector in New Zealand's marine economy. Within the sector there is a growing ecotourism subsector which is more firmly focused on environmental and community principles and goals. Marine and coastal ecotourism (MCET) offer significant opportunities for non-extractive, culturally rich and environmentally sensitive community and place-based economic development. Māori enterprises at scales from whānau to iwi are increasingly taking a lead within MCET and within the wider coastal and marine tourism sector MCET has the potential to play an even bigger part in its future development. It is important to better understand the current nature and structure of the MCET, including its actual and potential costs and benefits.

This report draws on a variety of stakeholder interviews and surveys, using Tamaki Makaurau Auckland and Akaroa as case study sites. It discusses the opportunities and barriers to MCET and the ways in which it addresses the opportunities and threats to tourism more generally, the environment, local culture and host communities. Finally, this report revisits the measurement framework introduced in the previous report (see Lück et al., 2023) and applies it to the context of the case study locations.

It is acknowledged that the findings in this report are case specific, and do not always reflect the opinions of all stakeholders, nor are they universally applicable. However, they may be regarded as indicators and points of discussion for the sustainable development of the coastal and marine tourism industry across the country.

Introduction

Tourism is reliant on healthy environments and communities (PCE, 2021a; Higgins-Desbiolles, 2020). To support participants in the New Zealand tourism system to create pathways to more sustainable forms of tourism, it is vital to emphasise approaches that focus on the visitor industry's contribution to the host community and ecosystem in which the tourism milieu is embedded (Milne, Deuchar, Histen & Thorburn, 2020; Cave & Dredge 2020; UNWTO, 2020;).

As tourism destinations attempt to 'reset' in the wake of COVID-led closures, it is important to acknowledge and understand the role that the private sector plays in this process, including its relationship with the Department of Conservation, and to address the challenges businesses face. Tourism activities occur at the local level, and it is at this 'coalface' that we can gain deeper insights into the aspirations of Marine and Coastal Ecotourism (MCET) operators for safeguarding a sustainable marine resource for the future and the challenges they face.

This report presents the findings of two case studies that dovetail with the *nationally* focused Stage One of the project. The focus of the case studies in Stage Two, one in the North and one in the South Island, is at the *local* level. The aim is to understand the processes and challenges of establishing an MCET business and of maintaining or growing it in a vulnerable marine ecosystem that needs to be protected.

The report begins with a summary of the key themes to emerge from the first phase of this work (Milne et al., 2021a, 2021b). This national perspective provides a broader context for the case studies and highlights where potential opportunities exist to scale findings that emerge from the cases. This introduction leads into the case study research, responding to two key questions/themes: *How can MCET add value to the moana?* and *How can we work together to contribute to a thriving moana?* In answering these questions, the focus is on understanding the challenges and opportunities small and medium sized tourism enterprises face as they navigate their way through establishing and running their MCET business.

On the North Island, Tīkapa Moana/Hauraki Gulf is the setting for case study activities. The case study design was co-developed in partnership with Māori experts, whānau, hapū, marine ecotourism operators, local government, and public agencies. The two selected cases are a new Māori whānau-led MCET development on Waiheke Island and an existing marine tourism business transitioning from a charter fishing model to an marine ecotourism operation.

The South Island case study focuses on Akaroa Harbour, and in particular, on the collaborative ongoing efforts between the Department of Conservation (DOC), marine mammal tourism operators and mana whenua to manage the vulnerable population of Hector's dolphins that live in and around the harbour, in the context of a ten-year moratorium on marine mammal permits, and longitudinal scientific research into the changing behaviour patterns of the dolphins as tourism activity has increased.

Stage One: The National Context

As the tourism sector recovers from the dramatic closures that marked the acute phase of the COVID-19 pandemic, it is crucial that lessons are learnt from the past and that steps are taken to embed inclusion, sustainability, and resilience into the sector (Parliamentary Council Office, 2021; Higgins-Desbiolles, 2020). Tourism development must emphasise a deeper, place-based human connection to the natural world – the product value and its environmental, community and cultural responsibilities dictate this, as do various supply chain partners. In Aotearoa New Zealand this requires an alignment with indigenous people's knowledge and practice (Gibbons, 2020). If this can be achieved, tourism can deliver on its promises to be a driver of global connectivity and economic, social and environmental progress (World Economic Forum, 2022; UNWTO, 2019). All this aligns closely with the Sustainable Seas definition of a *blue economy* and Blue Economy Principles for guiding a blue economy development.

A key challenge to achieving these promises is ensuring tourism enterprises operate in a sustainable, inclusive, and nature-positive way. The burning questions remain though: How does a business introduce more sustainable models of tourism? What challenges are faced by a business in this process? And what support is needed to aid operators as they attempt to evolve or transform their business models?

Stage One research in this project confirmed that the concept of 'giving back' to people and place is a core value of MCET operators and is seen as essential to the future success of MCET activities in Aotearoa New Zealand (Milne et al., 2021a, 2021b). Te Taiao [the environment] is critical for MCET in Aotearoa, and survey and interview participants emphasised a need to work together on shared aspirations for the protection of the moana. This places *Te Taiao: a thriving moana* at the core of Stage Two activities. The idea of 'giving back' aligns with the principles of intergenerationality, inclusivity and Te Mana o te Moana, which are key elements of the Sustainable Seas Blue Economy Principles.

This research also highlighted the importance of mātauranga Māori in achieving successful marine ecotourism in Aotearoa. The moana is a natural interconnected system; decisions made about the use and protection of ocean resources affect the marine ecosystem, the blue economies that rely on them, and the communities that surround them. The feedback from Māori and some other operators reflected the need for a definition of MCET in Aotearoa that embraces mana moana and the Māori world view, including whakapapa, and whakawhanaungatanga connections to the marine world. Again, the principle of *Te Mana o te Moana* and the other Sustainable Seas Blue Economy Principles represents an important starting point. Indigenous values and mātauranga Māori have a strong role to play in planning and management of MCET and requires a focus on the local scale, as mātauranga is always place based and context specific.

While operators recognise the importance of mātauranga Māori, they struggle to know how – and with whom – to engage. There is a desire to understand forms of, and protocols for, engagement that are appropriate; what knowledge, information, stories, and resources could be shared by Māori, and what non-Māori could also share that would benefit all without compromising cultural integrity. Opportunities have been highlighted for mana moana and the sector to work together on shared environmental aspirations, and to improve cultural competence within the sector.

This research also emphasised opportunities for a more coherent, joined-up and better resourced policy and regulatory environment, and for operators to be included in decision-making processes. The findings reinforce work elsewhere in the Challenge that emphasises the value of place-based and participatory forms of resource management and economic development (Le Heron et al. 2019; Lewis et al. 2020, 2024; NZIER 2024). To stimulate this kind of blue economy development, collaboration is important but currently weak across the MCET sector in large part due to it being diverse and relatively fragmented. A strong call for improved communication and collaboration among all participants in MCET and in marine governance reflects the underlying importance of EBM models being embedded in local places. Enabling and supporting collaborations amongst those involved in coastal and marine governance at the local level can strengthen existing initiatives and raise standards in the sector and enable responsible marine and coastal ecotourism across Aotearoa New Zealand.

Case Studies 1 & 2: Tamaki Makaurau Auckland, North Island

Tīkapa Moana/Hauraki Gulf

Tīkapa Moana/Hauraki Gulf covers 1.2 million hectares of ocean and is situated on the east coast of the North Island between the Auckland Region (including Waiheke Island), the Hauraki Plains, Coromandel Peninsula, and Great Barrier Island (Figure 1). Tīkapa Moana/Hauraki Gulf has significant social, economic, and cultural value to those who live near the Gulf, as well as to New Zealanders more broadly (Hauraki Gulf Forum, 2009). The Gulf supports important tourism, commercial fishing and aquaculture industries as well as being used extensively for boating, recreational fishing and water sports. In 2000, the national significance of the Gulf was recognised with the establishment of the Hauraki Gulf Marine Park/Ko te Pataka kai o Tikapa Moana Te Moananui a Toi to integrate the management of the natural, historic, and physical resources of the Gulf, its islands, and catchments. In addition to protecting the natural environment, the purpose of the Hauraki Gulf Marine Park Act 2000 (Parliamentary Counsel Office, 2021) is to also "recognise the historic, traditional, cultural and spiritual relationship of the tangata whenua with the Hauraki Gulf and its islands" (section 3(d)). In this way, the Act seeks to provide better recognition of the deeply rooted relationships which exist between tangata whenua and the Gulf (Hauraki Gulf Forum, 2009).

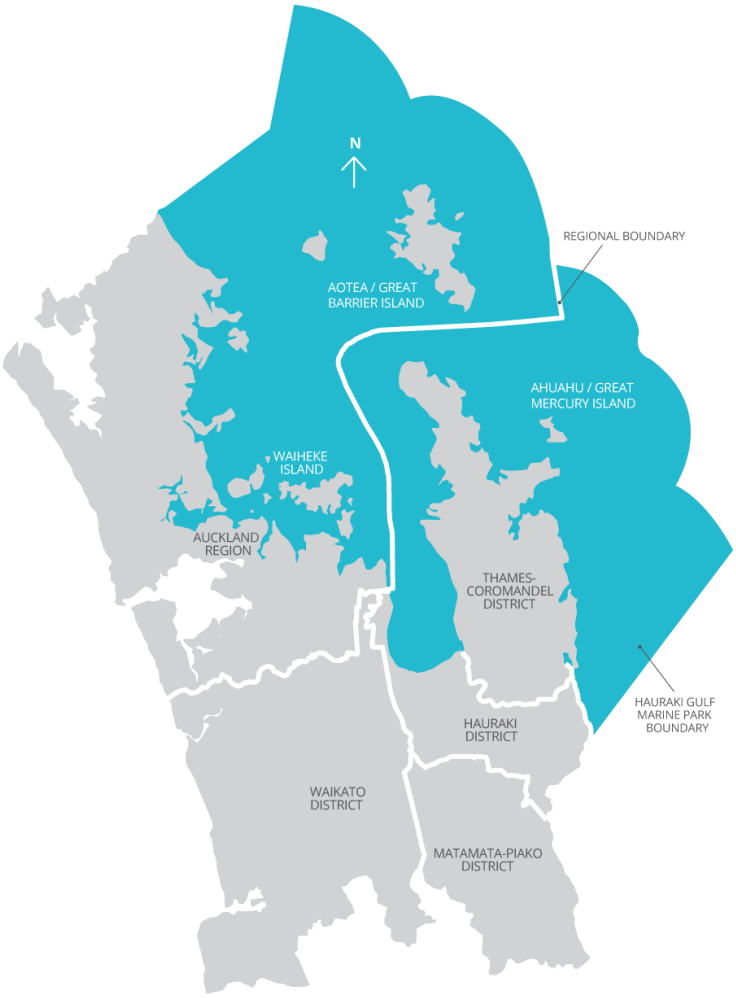

Figure 1: The Hauraki Gulf Marine Park
Source: Hauraki Gulf Forum - https://gulfjournal.org.nz/the-hauraki-gulf-marine-park/

Co-development and Identification of Cases

During Stage One research activities, advice was sought from Māori experts to co-develop the case study phase. An initial meeting introduced the kaupapa and goals of the project to the attendees. The group then met as a Māori caucus, sought confirmations from their respective iwi, identified their potential contributions, and responded to the project team confirming the expert group membership. The expert group consisted of five Māori from four iwi of Tīkapa Moana and represented a range of expertise from environmental agencies, researchers of mātauranga Māori, MCET operators and iwi representation.

Drawing upon Stage One findings, the Māori expert group framed the case study design around centring Te Taiao at the core of local cases and ways in which the project could 'listen to the moana' through a mātauranga Māori lens. It was evident across all participants that the driving kaupapa is

the need for a strong te ao Māori perspective to inform and acknowledge the interconnectedness and interrelationships of MCET to all living and non-living things in, on and around the moana.

The Māori expert group also advised that 'cases' should be at a small or micro local level that can be expanded in scale (sub-regional, regional, or national) to understand how the sector can be informed by local mātauranga Māori and connect to mana moana aspirations for the marine environment.

Tourism and Tīkapa Moana/Hauraki Gulf

Tīkapa Moana / Hauraki Gulf has an important role to play in tourism, with the natural environment considered the Auckland region's greatest collective asset (Barbera, 2012). While no specific study has been undertaken of the economic contribution of tourism activities that take place in the marine and coastal areas of the Gulf, Thompson (n.d.) did a stocktake of activities and the value added to the economy (*emphases added*):

> Ports of Auckland: value added $257m
> **Cruise ship industry: value added $69m**
> **Marine recreation: value added $550m**
> **Recreational fishing: value added $81m**
> Sand mining: value added $10m

While the figures are 10 to 12 years old, they confirm that tourism and recreational activities in the Gulf generate significant income for Tamaki Makaurau Auckland and Aotearoa New Zealand.

Case Study 1: Waiheke Whale and Dolphin Watch

Introduction

Case Study 1 is written in the form of a narrative that reflects the human experience of establishing a new kaitiaki-centred whānau-led Māori MCET enterprise focused on Waiheke Island. This story draws on multiple unstructured interviews and discussions with the principals of Waiheke Whale and Dolphin Watch Ltd. (WWDW), and publicly available secondary data sources including relevant academic literature, reports, and documents from government and public agencies, tourism enterprises, media reports and industry associations. It is presented in three parts:

- a *beginning*: briefly, the story of Ngāti Paoa (iwi) and more specifically Te Uri Karaka (hapū) and the disconnection of people from their tribal estate. This serves as background to understand the motivations of WWDW to re-connect whānau/hapū

to each other and to their taonga/the moana “within the canvas of tourism, to get back to the water”, and share cultural narratives about the moana with visitors.

- a substantive and descriptive *middle:* introduces the challenges and opportunities encountered in the first steps of the journey to establish this MCET business. These are mainly concerned with governance in the public sector (the regulatory environment) and can be encapsulated within two themes: public sector administration and bureaucratic processes, and hapū rangatiratanga - maintaining mana (power, authority, and dignity).
- An *end*: a reflection on case study findings in light of current literature, and barriers to entering the MCET sector that face Māori entrepreneurs in terms of governance and mana-enhancing practices. The research team acknowledges the valuable guidance of the principals of WWDW who provided their thoughts on where this story should begin, and how it should be told.

This case study begins with the story of the tīpuna (ancestors) and the history of Paoa, the ancestor of Ngāti Paoa (iwi) and more specifically Te Uri Karaka (hapū) and the disconnection of their people from their tribal estate.

Beginning (*Ancestors*)

The story of Ngāti Paoa has its origins in Tainui history. When the Te Arawa chief Pikiao came to Pirongia and married Rereiao from Waikato they had a son called Hekemaru who later married Heke i te rangi. The issue of the Hekemaru and Heke i te rangi were a girl Paretahuri, and two boys Mahuta and Paoa.

About the 1600s Paoa left his wife Tauhakari and their children Koura, Toawhana and Toapoto at his village at Kaitotehe, on the west bank of the Waikato River near Taupiri. He went to Hauraki and married Tukutuku the great grand-daughter of Marutuahu. Over time the descendants of Paoa formed numerous subtribes that dominated the western shores of Tikapa Moana o Hauraki, the Hauraki Plains and Piako River area from Kerepehi to Tahuna, Te Hoe o Tainui, Patetonga, Waitakaruru. Pukorokoro, Hauarahi, Kaiaua, Whakatiwai, Hunua, Orere and Clevedon.

As hapu of Ngati Paoa took shape they built huge waka taua and extended their footprint to the Tamaki River – Te Wai o Taiki, Kohimarama, Waitemata, Te Haukapua and Kiritai on the North Shore. From their many pa, Ngati Paoa moved throughout the islands of Waiheke, Ponui, Rataroa, Pakatoa and the wider Gulf Islands of Tikapa Moana o Hauraki to Mahurangi - "Nga Poito o te Kupenga a Taramainuku", the floats of the net of Taramainuku.

From the late 1700's Ngāti Paoa exercised their rangatiratanga over a substantial corridor of land and coastal margins, from Mahurangi in the north to Te Hoe-o-Tainui in the south. Early European visitors described the people of Ngāti Paoa as "a powerful and wealthy tribe" and "the finest race seen in New Zealand."

Having once occupied some of the most strategic land holdings in the Auckland, northern and eastern Waikato and western Hauraki regions, Ngāti Paoa were forced to seek refuge amongst kinsmen in the Waikato hinterland following the invasion by northern tribes in 1821. This warfare, combined with successive waves of epidemics and the land confiscations of the 1860s, conspired to seriously deplete the tribe's influence over its former estate.

Proximity to the European settlement in Auckland during the 1850s initially gave the tribe a commercial advantage in trade; however, this same proximity brought the tribe under enormous pressure to sell land. Consequently, by 1900, the tribe had been significantly impoverished.

However, Ngāti Paoa began to rally themselves to assert their existence as an independent iwi. The Waitangi Tribunal case marked the beginning of a lengthy struggle to reassert the mana of the iwi throughout its historical domain. Today the tribal centres are based around three marae; Wharekawa Marae at Kaiaua by the western shores of Tikapa Moana; Makomako Marae at Pukorokoro near Miranda and inland at Waiti Marae, Tahuna.

From Ngāti Paoa, 2024

Middle: Building the business model

WWDW is a whānau based initiative that draws experience from tourism activities elsewhere and motivation from Te Ao Māori and whakapapa relationships to Tīkapa Moana o Hauraki Te Moananui-a-Toi (Hauraki Gulf). The founding director of WWDW (D1) has whakapapa ties to the Islands and surrounding waters of Tīkapa Moana o Hauraki Te Moananui-a-Toi (Hauraki Gulf). He has strong connections to Waiheke through his hapū of Te Uri Karaka. His great grandfather was born on Waiheke and moved off the Island in 1898 due to land sales and settled in Kaiaua. He is a Trustee of the Ngāti Pāoa Iwi Trust (NPIT) and has been working in the Māori tourism space.

The second WWDW director (D2) is of Ngāti Manu, Ngāti Kahungungu and Ngāti Raukawa descent. Her whānau were the first tourism operators in the Bay of Islands to offer marine mammal watching and heritage tours in the 1990's. She has a background in education, tourism and business development, her research interests include ecotourism, indigenous tourism, and consumer behaviour. The couple is also involved with the Hawaiki Project - a social initiative that connects indigenous tribes globally through cultural exchanges for taiohi (youth). Together, the directors, with the support of their whānau, are developing the concept of a whānau-led MCET venture on Waiheke. It is very important to them to help "bring whānau home" by reconnecting the hapū of Te Uri Karaka to Waiheke and the surrounding area.

Aspirations: Tikanga, Cultural Values and Tourism opportunities

For WWDW, this MCET enterprise must support whānau aspirations. The vision is to develop a business that can support iwi development by encouraging whānau, hapū, iwi to return to their Tūrangawaewae, get on the water and learn their whakapapa and connection to their moana and whenua - to reignite their kaitiaki obligations of care of the moana. WWDW's intention is to establish an MCET business that will build cultural knowledge, enhance employability, and strengthen business acumen within the whānau.

In 2020, the directors recognised that the COVID-19 pandemic presented an opportunity; a gap for small-scale MCET operations to enter the market. As many larger operators were scaling back due to the pandemic and the lack of international visitors, there was now space for them to learn the trade and get the product ready for when borders open. As D1 recalls:

> *We started two and a half years ago. We were sitting in the garage, when D2's father* ..[who has 20 years of experience with Whale Watch Bay of Islands].. *asked 'hey, what are the iwi doing here? You know up in the Bay, we were the first ones and I thought - hold on, why can't we do this?' So, I started investigating, asking around and [identity*

> *withheld] at the time was able to ask one of the DOC people 'what's this process about?' and then we discovered there was an opportunity. I thought we could probably do it and the expert tests they brought included me being able to whakapapa directly to the area. I took it to my whānau and asked what they thought of it and they said, 'go for it'.*

WWDW intends to develop a marine ecotourism product/experience that tells of the whānau's history and links with Tīkapa/Hauraki Gulf, draws on whānau pūrākau (storytelling), and is informed by local mātauranga and te ao Māori. Mātauranga-ā-whānau centres knowledge and practices that are embedded within whānau and focusses upon ways of knowing and being that are transmitted intergenerationally (Lipsham, 2020). The mātauranga of the local whānau, hapū, and iwi, incorporate factors such as ancestral knowledge about care and protection of moana and its species, landmarks of cultural significance, place names, and other cultural competencies that offer significant assets to the sector.

The Business Concept

The proposed venture involves marine mammal watching (Common dolphins [*Delphinus delphis*], Bryde's whales [*Balaenoptera brydei*], and NZ fur seals [*Arctocephalus forsteri*] as examples) from a sea vessel as a marine ecotourism activity. WWDW intends to operate year-round, making approximately two 4.5-hour trips per day (up to 730 hours per annum), operating one vessel at any one time with up to 200 passengers. At the time of writing, lease and purchase options for the vessel are still being considered. The proposed tour route includes the Auckland viaduct, Waiheke Island (Te Motu no Kahu), Rangitoto Island, Motutapu Island, Rakino Island, Motuihe Island, Rotoroa Island, Ponui Island, Pakihi Island, Pakatoa Island, Tiritiri Matangi Island, Aotea/Great Barrier Island, Hauturu and Kawau.

As well as a business proposition, WWDW cites as key purposes: education around the protection and well-being of marine mammals in Aotearoa New Zealand and data collection for research purposes, which will be made available to DOC, iwi, and research bodies (Waiheke Whale and Dolphin Watch, 2021). The business is also designed to strengthen the customary relationship between moana, marine mammals, and iwi in Tīkapa Moana/Hauraki Gulf, including sharing of cultural narratives of the sights of cultural significance to mana whenua/mana moana. This is important for the next generation and those that follow but will also inform conservation efforts locally and nationally and be built into the tourism experience itself through the production of factsheets/booklets will be provided to passengers prior to departure.

Education is a core feature of whale and dolphin watching, and indeed other forms of nature-based and ecotourism (Lück, 2003a). The idea of educating the public works on the assumption that the more people who know about the behaviour of a species or ecosystem, the more likely they are to support measures to conserve it. For WWDW, this means that whale and dolphin watching will provide a platform for advocacy to improve global marine management (Waiheke Whale and Dolphin Watch, 2021).

After developing the initial business concept, the directors embarked on the first step in this process and in November 2020 applied to DOC for a permit to view marine mammals by motorised vessel in the Hauraki Gulf. After nearly three years, WWDW still has not received a decision from DOC on their application for a permit to operate on Tīkapa Moana/Hauraki Gulf. The enterprise express considerable frustration with respect to the concession/permit application process. With borders opening to international and domestic visitors in 2022, the window of opportunity presented by the pandemic has slowly diminished. WWDW see their frustrations as encapsulated within two key themes: administrative burden and delay, and hapū rangatiratanga - maintaining mana (power, authority, and dignity).

Obstacles and frustrations

Regulatory frustrations: Bureaucracy and Mana Whenua

Regulatory approval and associated administrative requirements are always a challenge when it comes to this kind of MCET business, especially when it involves impacts on established coastal communities as well environments. Gaining regulatory approval can be a significant barrier to entry, especially for small enterprises.

Looking back, WWDW regards its initial consultation with the Department of Conservation (DOC), who hold responsibility for approving mammal tourism, as positive and supportive. In November 2020, WWDW applied for a permit for vessel-based viewing activities involving marine mammals in Tīkapa Moana. The application was endorsed by the Ngāti Pāoa Iwi Trust which exercises mana whenua/mana moana in the proposed area of operation. WWDW was aware of one existing permit issued by DOC for a marine mammal tourism operation in the Hauraki Gulf and two other pending applications, including an application by Te Haerenga o Ngāi Tai ki Tāmaki Limited to view marine mammals by motorised vessel in the Hauraki Gulf. Submitted after the WWDW application in December 2020, Te Haerenga o Ngāi Tai ki Tāmaki's application) was subsequently approved in 2021.

Part of the consenting process is to seek submissions from the public on any new marine permit applications. The consultation process for WWDW's application closed on 15 March 2021 with DOC receiving over thirty submissions from Waiheke residents. This included extensive opposition from those who associated the application with a highly contentious contemporaneous marina development. The submissions initiated an analysis of submissions, which involved delays to the consenting decision and unexpected cots for WWDW. The approval of Ngāi Tai ki Tāmaki's application for a whale and dolphin watch concession in Tīkapa Moana in 2021 gave WWDW the signal that DOC was approving licenses. However, DOC had meanwhile adopted the policy position that it needed to consider the cumulative effects of tourism on marine mammals, which came with an obligation to consider and protect the interests of incumbent concessionaires (now including Ngāi Tai's venture). For WWDW this seemed unfair as it would limit competition for incumbent concessionaires. In particular, it failed to distinguish between types of enterprise and in so doing to recognise the special character and Te Tiriti rights of an innovative *whānau*-led MCET venture.

From WWDW's perspective, they had become caught in a bureaucratic morass. An expert report on the potential impacts of tourism on marine mammals in the Hauraki Gulf was commissioned, causing further delays. Its results provided no resolution. By 2022, WWDW began to feel stuck in the DOC process and attributed this to the administrative burden and delays of unnecessary and fraying red tape. WWDW began to feel "powerless" and "not heard in this process", they attempted to get support but did not know who they could turn to for advocacy on their behalf and this left them feeling somewhat frustrated. To help clarify their position WWDW requested an urgent meeting with all parties within DOC involved in the application process.

At that meeting, DOC advised that the ongoing delay in processing the application meant that another letter of support from Ngāti Pāoa Iwi Trust was required to reaffirm their support for the venture. WWDW approached the Trust Board but were advised that it was no longer in a position to write a letter of support. The reasons given were that Ngāti Pāoa Iwi Trust did not have a policy in place about whom they should support and what criteria were required for supportt. The two main issues raised were around the 'ownership of the business' (the Board could not give support to a business when they did not have ownership in that business), and secondly, around 'controlling the narrative' (or for WWDW "what am I saying in regard to my connection with Tīkapa and Waiheke"). The Ngāti Pāoa Iwi Trust Board is also stretched and lacks the capacity to process such requests.

For WWDW they were caught in the double bind of an on-going colonial regulatory regime that did not properly recognise Te Tiriti and a set of iwi-based processes that meant that their mana whenua could not be exercised effectively anyway. They feel that their rights have been trampled upon: as a business applicant under resource management law, a Māori enterprise under Te Tiriti, and a *whānau*-led enterprise as opposed to an *iwi*-based initiative.

These concerns are compounded by resource issues, for DoC and for whānau and hapū. Neither whānau and hapū have access to the same resources (such as funding and legal representation) as some of the larger iwi who applicants who apply to operate a tourism business in a conservation area. Furthermore, they lack the standing of an iwi widely recognised by government agencies. Nonetheless, they believe they have the right to operate and that their application may have received more favourable attention from DOC if it was an iwi-led as opposed to whānau-led application. They feel marginalised from a concessionary process that is supposed to uphold mana whenua rights, restricting their ability to leverage opportunities for their whānau, hapū, and iwi while exercising their rights and fulfilling their kaitiaki obligations to protect and care for taonga in and around Tīkapa Moana. While their application remains in limbo, they are preparing a whānau/hapū letter of support for their application.

> *We want to create opportunities for iwi and whānau who don't have the resources to take advantage of these opportunities… How do we compete? … Myself and my family whakapapa to Tīkapa and Waiheke and the surrounding islands. That's what our application and our story are about. The iwi trust is the support letter… Ngāti Pāoa is not fighting for this, the whānau are.*

All this is further compounded by communication issues – the full nature of which the research team is unable to judge but are attested by WWDW's sense of confusion. From a WWDW perspective, this also means a lack of transparency. They feel that by paying for their application they are entitled to a greater level of transparency, especially as fees have escalated. They are also unclear as to how DOC are judging mana whenua, which has left then feeling that that they must 'prove their Māoriness'. They claim that other applicants have been treated differently with respect to support from iwi and the way that DOC treats that question. Again, we are unable to make definitive judgements, but the point for our research is that these questions confuse the field of opportunity for MCET, especially that faced by hapū and whanau-based applicants. Their experience has led them to advocate for three improvements to the permit application process:

Moving Forward: Hapū Rangatiranga at the Core

The case illustrates some of the challenges faced by small Māori MCET operators. WWDW remain committed to developing a Māori whānau-owned and operated business that will provide a culturally centred ecotourism experience on Tīkapa Moana and Te Moana Nui o Toi te Huatahi. AS they argue: "Sustainable ecotourism aligns with our intrinsic core value of kaitiakitanga". This means that "our operation is guided by whakapapa and tīkanga of our tīpuna" and "developed on fundamental principles of ecotourism (natural area focus, interpretation and education, environmental sustainability practice, and contribution to conservation)".

Experimenting, Pivoting

WWDW have looked at ways to move forward – with or without the DOC concession. Their bottom line is that any MCET business worth developing must align with their values and be evaluated first and foremost through a te ao Māori lens rather than market trends. They have sought to test their business model before committing to costly implementation and to co-create the value proposition with others.

A strong desire to participate in Matariki celebrations led WWDW to form a working relationship with a large tour operator already active in the Hauraki Gulf to test other cultural product ideas. WWDW worked with iwi and the tour operator to host an event as part of Matariki celebrations: the 'Star gazing with Ngāti Paoa' cruise in June 2022. The event provided a great opportunity for WWDW to test its ideas for a cultural tourism product at scale with a large group of 250 people and investigate how to incorporate cultural aspects into an MCET venture. Members of the whānau found it very empowering to be able to tell their stories. Feedback from the operator as well as passengers on the cruise revealed a high level of satisfaction with this added cultural perspective.

Hosting the event has also helped to cement relationships between the tour operator, WWDW, and Ngāti Pāoa returning reciprocal benefits for all. For example, the Matariki cruise highlighted an opportunity for WWDW to add value to its relationship with the tour operator by developing cultural competency within the organisation. This has led WWDW to consider other value propositions and revenue streams as they fine-tune their business model (e.g. as a Māori business, to provide services to build cultural capacity within other MCET organisations).

Upholding Hapū Rangatiratanga

WWDW is also exploring other business opportunities beyond Tīkapa/Hauraki Gulf which include developing new products/experiences via their whānau, hapū, and iwi links to Kaiaua. Increasingly, their focus is on creating a hapū-centric lens through which to realise the aspirations for their MCET business. WWDW assembled the whānau and hapū and sought their support.

> *Te Uri Karaka as a hapū - we will come and get ourselves together … get ourselves in order … because we are one of the three hapū of that area … So, the hapū stood up and said, right we will back you. Te Uri Karaka is one of the main hapū of Waiheke so there is that strong connection to Waiheke.*

Re-energised by this support, the lessons he has learned from the application process about dealing with bureaucracy as well as the history of his own hapū, and his participation in this SSNSC research project, D1 has subsequently developed a thirst to enhance his own capacity to conduct research. To do this he has called on resources within his whānau.

> *I'm now asking D2, how do I research? I really want to do it, and I'm seeing who else in my family is doing it. I'm signing up to everything … I've been studying who we are, how we are, and how we got here. My Uncle* [name] *is a real repository of our whakapapa … I've been researching and putting all this korero together – what can symbolise us and our whakapapa and then he* [uncle] *goes and we want to move ahead. We have five or six kaumatua or kuia that we want to bring on board. We are going to go for it, just us. See how we go, how we fare – if we don't get it* [DOC approval] *then we come back and realign ourselves with Ngāti Pāoa Iwi Trust*.

D1 then speaks of "older whānau who have recently passed" and acknowledges there was a chance to capture their stories, and these opportunities are now lost. To strengthen his research skills, he has enrolled in a programme of study related to research methodologies:

> *My uncle has come back to me now because* [name] *for our wharekauhau and our whānau from Kaiaua is training us over the next 12 months, in methodologies of how to do research. I signed up straight away. It's about our identity and now we're just trying to map that out. Claiming who we are. I've known some things about Te Uri Karaka, but I now know more about our tūpuna, who we were named after, and his sons and how they went from Wharekauhau Kaiaua and expanded Ngāti Pāoa's footprint right into Tamaki. It's really empowering. We are just understanding the deeds and the merits of these tūpuna and how they dominated the area in their time. I know my immediate family have no clue about this. This is important knowledge for tamariki. So, there's Pāoa* [iwi]*, but there's also Urikaraka* [hapū] *and it's given us a bit of juice behind it. I was like right … I'm still for the iwi but I also want to drive the two wakas, in parallel.*

To WWDW it is important to uphold their rights and meet their obligations as mana whenua for the benefit of whanau, hapū and iwi. However, to them, there is an inference from both DOC and the Iwi Trust Board that their rights are open to questioning. D1 argues that, "as urban Māori, one of the challenges is to get the mana to speak [for moana], and for WWDW to tell these stories on behalf of their whānau. In reiterating his commitment to pursuing the MECT project, he observed:

> *Some of our whānau are wanting to come home. Kaiaua is where it all started, as I read more, these people came from this wharekauhau Kaiaua and then they moved into Tamaki into the islands and dominated a lot of that area. How significant is that? Living in south Auckland, going through a generation of that, two generations later we're starting to realise we're missing something. Tīkapa is right there, she was always there when something was ailing us. My Nan used to always say, go to the water. My brothers and sisters still do that, we're not sure of the tikanga behind it because my grandmother had that, but we've always known to go to the wai, that's something that would heal us. My parents are there, my family are there or want to move back, we need housing, we need Papakāinga* [housing on Māori ancestral land]*, and we see that this* [the whānau-led business] *is one of the ways we can support that. Get some ventures up and running so we can develop ourselves rather than being dependent on Housing New Zealand or the iwi or whoever, we've been waiting for 20-something years for Treaty settlements.*

WWDW refer to the Crown's obligation to protect their ability as tangata whenua to maintain their whanaungatanga relationships and their right to make their own decisions. The experience of their application process has impelled them to seek ways to move forward that support whānau to choose for themselves where they stand in terms of support for the MCET venture, and to activate hapū rangatiratanga that is appropriate to their whakapapa. The directors are acutely aware that this comes with a duty to manage inter-tribal relationships and uphold the right of hapū and iwi to act collectively in a way that is appropriate to their aspirations and circumstances. They acknowledge Hapū rangatiratanga involves recognition that individuals within the whanau can also belong to different iwi and hapū and wish to move forward in a collaborative and constructive way while 'wearing a number of hats', for example, as a Trustee of the Iwi Board.

As a closing message, WWDW urged us to raise the theme of whānau rangatiratanga and hapū rangatiratanga as an issue that needs to be addressed within governance structures related to MCET and applications to DOC for concessions. They want to know where hapū rangatiratanga comes into relations between DOC and the Crown and for established understandings of these relations to be revisited - and "we want the licence to give us license."

Upholding Hapū Rangatiratanga

Finally, WWDW offered some practical measure to guide authorities through MCET development processes:

1. Integrating kaupapa Māori into engagement processes

They see mātauranga Māori as not yet properly or fully incorporated into decision making processes, especially with respect to practices informed by *kaitiakitanga. As D1 argued 'protectionist ideals are more around standing-off, and removing themselves from the environment, these don't work with us. We are part of the environment; it's how we learn*.

2. An improved and streamlined application pathway for whānau-led, and hapū-led applications

Upholding whānau rangatiratanga requires concession application pathways designed for all Māori applicants not just iwi-led or preferred applications. Agency fears over growing iwi powers has meant that hapū and whānau applications have been negatively affected.

> *They tread carefully when dealing with Māori, especially after the Ngāi Tai case … so they are careful now. In doing that, it's made it harder for us. It's not easy for Māori to enter this [MCET] space.*

From WWDW's perspective, a new approach needs to be designed that reflects a true partnership between the Crown (DOC) and Māori at different levels (whānau, hapū, iwi), one that ensures communication, and resources are "funnelled through to whānau"

3. A Māori advocate within the application process

One suggestion is to have a kaitiaki organisation and work within a kaitiaki framework that looks after licences, alongside DOC but not within DOC. At the very least, having a Māori advocate WWDW could go to, would provide much-needed support.

> *It would be awesome to have an advocate, a Māori advocate within that [application] process that we can go to, who understands who we are, and what our aspirations are, and can then advocate for us. It's a partnership then isn't it if you have mana moana looking after that? Then all organisations that are applying have to go through kaitiaki rather than not having to do it because they're not Māori. Why is it easier for non-Māori organisations to get through those processes because they have a letter [of iwi support], than it is for you because you are Māori? You have a true relationship because you are mana moana.*

Case Study 2: Whakarua Tours

Case Study 2 follows the initial journey of an existing commercial fishing charter's attempts to transition to an MCET operation (*Whakarua Tours*) that aims to draw on and incorporate Māori cultural and spiritual perspectives of sustainability into the visitor experience. This story draws on multiple unstructured discussions with principals of Whakarua Tours (WT), and publicly available secondary data sources.

The case study is again presented in three parts. First, we present the background of the business owners examine their rationale for transitioning from a fishing charter to an MCET operation. We outline the vision for the new venture. Second, we highlight challenges encountered in the initial establishment of the MCET business and how WT have negotiated them. These are mainly concerned with difficulties in navigating the complex web of relationships and countervailing forces that exist across a broad range of organisations that regulate, plan for, and support the sector, and opportunities to overcome them. Finally, we explore opportunities to enhance the definition of MCET to reflect the everyday realities and needs of operators entering the sector are highlighted.

The proposed MCET experience

The owner of Whakarua Tours (WT) also owns 2XS Charters Tāmaki Makaurau Auckland (2XS). Their commercial vessel and business were purchased in early 2016. At that time the charter business was based mainly on selling individual tickets for day fishing trips on the Hauraki Gulf. While busy, the charter operation found it difficult to be profitable as it tried to compete at the lower end of the 'discount deal' fishing trip market. The business model shifted over the next two years towards the corporate, SME, and family group markets. This came about after observing a change in customer behaviour from a focus on 'filling the bin' to more of a fun day out on the water while appreciating marine life.

By late 2018, 2XS Charters began exploring other ways to reposition its services and place in the customer market among charter operations in Hauraki Gulf. Prior to the onset of COVID-19, the business was looking to add further dimensions to its offerings to include environmental, heritage, and cultural elements in the visitor experience. Drawing on Sir Peter Blake's legacy, the owner comments that there is a desire to use the business to *"*restart people caring about the environment, through adventure, through participation, through education, and through enjoyment*"*.

One of the first steps in the transition from a fishing charter operation to the MCET sector was the rebranding of the business to *Whakarua* which means *warm wind from the North/NNE*. The owner likens the homeward journey in such a wind with the sea running with the boat, to a feeling of "warm embrace and easy motion", which is what he wants to create for their customers and themselves.

At the time we conducted our research, the transition to an ecotourism operation was expected to take place over two seasons, beginning with creating a new website to promote the purpose and vision of WT. It will involve catching fish to be consumed on the vessel. This is part of the 'gift' from the ocean and the broader experience will involve the taste and smell of what the sea offers. The use of seafood and its preparation is an important part of the story that will be told to give clients an authentic nature-based ecotourism experience with an opportunity to learn about fragile marine environments and providing more information about the fish they catch.

> *Importantly, the experience includes enjoying kaimoana – but they don't take the fish off the boat. They want to know where the fish comes from and learn more about the moana. Food is gathered, prepared cooked, and served on the boat – this is the change*.

WT links to culinary tourism, maximise the use of the whole fish, and cook food based on Māori recipes and ingredients while talking about kaimoana and its broader role in the marine environment. The experience is built around the senses, including taste, and that "warm, sustaining feeling of beautifully prepared fresh food." The underlying message to share with those onboard is: "you can revitalise the Hauraki Gulf, you can enjoy the Hauraki Gulf without destroying it if you say this is a sustainable experience for you on the boat, on the day".

WT will operate on a seasonal basis from October to May offering a variety of tours varying in duration and places visited to suit the needs of the client. It aims to cater for small groups of people who want to spend quality time on the water enjoying Tīkapa Moana/Hauraki Gulf. Potential markets include international free independent travellers (FIT), cruise passengers, domestic visitors, and the Auckland market (for example, family and friends celebrating a special occasion or corporate groups). Proposed tours include *the koutu* (dip), a 4-hour trip covering the harbour and inner Gulf, and the extended 10-hour *whakahauora* (to revive, refresh) trip to Kawau via Mahurangi or Motuoura or over to the inner islands of the Coromandel via Waiheke.

Passengers will be welcomed on board by the Whakarua team with an explanation of the different kaimoana ecosystems that make up the Gulf and the importance of each (from the kelp, the kina, and the mussel beds to the snapper, kahawai, and sea birds). Depending on weather and sea conditions passengers on the trip on Tīkapa Moana/Hauraki Gulf will be offered a snorkelling experience to view examples of kaimoana ecosystems, including those in healthy, and threatened environments. The korero shared about the Gulf will be supplemented by educational videos that can be viewed on board during the trip, or on the Whakarua Tours website.

Transitioning to MCET: Motivations and aspirations

Te Taiao is at the centre of WT's aspirations for the business and this is one of the main catalysts of their journey from a fishing charter operation to MCET. The vision is to enhance the customers' experience on Tīkapa Moana/Hauraki Gulf by sharing with them an understanding of the ecological, cultural, historical, and spiritual dimensions of the Gulf. This will be enhanced by only taking enough kaimoana for that day - "draw deeply but take only a little".

In this way, the existing business is being reimagined to be less demanding of the Gulf's natural resources. The transition is driven by the owner's own observations of the health of the Gulf's ecosystem and by reading resources such as the State of the Gulf reports, Ahu Moana Sea Change, and 'The Story of the Hauraki Gulf' by Raewyn Peart (Policy Director of the Environmental Defence Society).

The owner also attributes a good deal of the inspiration to move to an MCET operation to Employee 1 (E1). E1 is a highly experienced commercial diver who has comprehensive knowledge of the marine ecosystems of the Hauraki Gulf from a commercial, ecological and Māori spiritual perspective. He has lived and worked in Tāmaki Makaurau Auckland for over 30 years. E1's iwi is Te Roroa from the Waipoua forest and Patuwai from Motiti Island. While the owner himself does not whakapapa to iwi of the Gulf, he has deep knowledge of the ocean and the Gulf, strong networks, and connections to Tīkapa Moana. One contact is a carver who is helping with new branding for WT to be used on the boat, website and in marketing material. The opportunity to work alongside E1 inspires the owner as he sees E1's role as a business partner who is integral to the MCET venture.

Both the owner and E1 regard the Gulf as "an amazing place for adventure, discovery, relaxation and restoration, and a place that provides beautiful fresh kaimoana for the table." They and their families have had a long connection to Tāmaki Makaurau Auckland, and to Tīkapa Moana/Hauraki

Gulf. The family legacy is built on a foundation of values, a set of beliefs that transcend the family and exist for a cause greater than themselves. The owner's great, great grandfather was Auckland's first city engineer who helped to build the city, including helping to design and build the iconic Bean Rock lighthouse in the Waitematā Harbour. Each time the owner passes Bean Rock by boat he acknowledges this as a 'family touchstone'. His father was the original secretary of the Hauraki Park Board in 1968, so he feels an obligation to do something to continue and honour this as "it's a family thing".

Those involved with WT want to share their broader and deeper experience of Tīkapa Moana/Hauraki Gulf with people who are looking for something more than just "fishing for the bin". Their top priority is to do this in culturally appropriate ways informed by mātauranga Māori. The move to an MCET operation is one way to honour and continue his family's legacy and connection to the Gulf, to ensure the sustainability of the Hauraki Gulf fishery.

To achieve this, WT must become a successful business The proposed MCET model offers a more commercially viable business model than fishing charters and one with a lower risk profile. Fishing charters are hard on the boat in terms of high running costs, including rising fuel prices, extra hours on the engines, and increased maintenance costs due to having to travel long distances to locate the fish, often in rough conditions. With the number of marine protected areas in the Gulf set to increase, fishing charter operations will need to travel even further to find fish and are likely to face increased competition from other charter operators forced to do the same.

In contrast, as an MCET business, WT will operate in more sheltered waters protected by the islands of the Gulf and actively supported by the presence of the marine reserves. There will be less stress on the boat, crew, and passengers, lower fuel consumption, and importantly, the tours will be less extractive in nature.

Changing the customer base to those seeking an MCET experience also reduces the risk profile in terms of health and safety with the type of people who go out on fishing trips described by the owner as usually being "young men, fit, they think they're bulletproof, and they drink". The owner is very aware of its obligations under the New Zealand Health & Safety at Work Act and potential consequences of any accidents that may occur. "Maritime New Zealand has the power to fine or imprison you if you do something that leads to injury or loss of life. Operators are vulnerable to

passengers making unwise choices, it's not all about the failure of the boat or the failure of the skipper."

Negotiating the challenges in transitioning to MCET

As they attempt to enter the MCET sub-sector, WT actively searches for information and people who can help with the transition. The owner has sought to establish good working relationships with a broad range of third-sector organisations, industry associations, other tourism businesses, public agencies, and with Māori.

Industry Associations, other Businesses and Third Sector Organisations

Industry associations and third sector organisations offer the strongest support to WT, as well as own contacts and networks. When discussing connections with other organisations, the role they play in business development and who WT seek support from, the first link mentioned is to the New Zealand Marine Transport Association. This organisation represents the maritime passenger sector, including marine tourism, charter, and transport and the owner appreciates their support in terms of industry advocacy. This industry association also provides help to connect with others, such as the Ministry of Primary Industries, the National Institute of Water and Atmospheric Research (NIWA), and sometimes Auckland Council on behalf of charter boat operators.

Driven by a passion for the ocean and a strong commitment to improving the health of the Hauraki Gulf, WT has a keen interest in the work of the Hauraki Gulf Forum (HGF), a statutory body, which promotes and facilitates integrated management and the protection and enhancement of the Gulf. The owner sees the role of HGF as focused on both advocacy and conservation and he refers to the HGF CEO as his "main 'clearing house' for information", as the CEO has the interpersonal skills needed (communication, diplomacy), and knowledge of the issues at play in the Gulf.

There is a challenge, however, in convincing an organisation with an environmental mandate that charter operators are not necessarily 'fish at all costs' businesses. He emphasises the need for an approach that recognises the diversity of those involved and the range of skills and knowledge they have from spending years, often decades, on the water. There are opportunities for the HGF, environmental groups, and other authorities to learn from "the people who really know the Hauraki Gulf". While commercial charter operators are not always natural communicators and can often have poor relationships with regulatory bodies, there is much to be gained from a more open and concerted dialogue.

As they establish a new business model, the owner also recognises the opportunities to broaden existing networks and interact with segments of the tourism sector that have not been a part of its networks in the past. One example is a recently formed link with a luxury tour operator that is focused on land and sea excursions and is "mad keen" to sell the new WT MCET product as part of their package offerings.

The move from a fishing charter to MCET requires a significant leap in terms of marketing channels and connections and this is a highly risk transition that may disconnect an enterprise like WT from its existing fishing charter customers. Building new relationships and connections is an important initial investment.

Navigating Public Agencies and the Regulatory Environment

When discussing the regulatory environment, the owner often refers to navigating various public sector organisations as "time-consuming, frustrating, complex, and challenging" with relevant information and the right organisations and people to go to as difficult to find. For a fishing charter moving into MCET, the owner comments that compliance is "huge, hard, and frightening".

> *There's a lot of compliance, you must work with DOC to get near an island and Auckland Council, for example, to serve alcohol. But the big one is Maritime New Zealand. You need the Marine Transport Operating Plan, and Marine Transport Operating Certificate (a bit like an exam) with Maritime New Zealand. Then your survey to make sure you have a vessel (like a Warrant of Fitness) through Maritime NZ.*

The owner comments that there are substantial opportunities for MCET in the Hauraki Gulf, but there are also significant Maritime New Zealand restrictions that impact the sector. WT already holds relevant Maritime NZ certification, and the business can expand to more vessels (up to nine) but does not have to own them, in fact, the owner does not want to. "The desire is to do it right in terms of the people, the website, the promotion, and the experience, and hopefully, demand will outstrip supply".

However, understanding the tourism economy and its regulatory regime is "just hard", especially for operators at start-up or in transition. It is hard in terms of compliance, doing things correctly in a cultural sense, and achieving commercial Success (especially with rising diesel prices). Tenacity and a variety of skills and knowledge are needed. The owner is a highly capable operator with strong information gathering/filtering skills, business acumen and knowledge. He is a complex thinker with advanced critical thinking and problem-solving skills and is creative and innovative. He can deal with

complexity and thinks deeply about complex problems. Even with this skillset and his strong commitment to improving the state of the HG, the transition has been challenging - "it's hard, many would give up". And many several charter boat operators have "got out".

Dealing with Auckland Council can be "extremely challenging with so many different heads and countervailing forces" within the organisation. In an applied sense, it is difficult to know where the jurisdictional boundaries lie between Auckland Council and the Department of Conservation. These difficulties can be compounded by communication issues and staff turnover in overstretched organisations.

> *In some cases, this is because some people either don't have time, they can't see the benefit in getting back to you, or some organisations are just seriously disorganised. One example of this is Auckland Council's 'Pest Free Campaign'… I approached them, but they never got back to me.*

Other public agencies WT links to include Tātaki Auckland Unlimited (T]AU), the region's economic development agency and an Auckland Council organisation. AU is also the regional tourism organisation for Auckland. One of the main challenges for WT is to create a commercially viable operation. Improving the way the HG is promoted would be helpful as currently the Gulf is promoted as "two islands to visit and not as a destination". Operators working collectively with AU to create a cohesive destination story for the Gulf, combined with exceptional experiences and told to the right markets would go a long way to addressing the marketing concerns of this new MCET venture. The owner is very willing to work with AU to be an advocate for 'on the water' tourism experiences to optimise significant opportunities that exist for MCET in the Gulf. One example of the challenges in navigating the tourism system for MCET is when he approached and met with AU. The purpose of the meeting was threefold: to enquire about funding opportunities available to tourism operators, to gather information about marketing support as the MCET venture evolves, and to discuss his proposal for Whakarua tours and get feedback. AU advised there were development grants available, but this funding is now divested to the Auckland Chamber of Commerce. The owner likened navigating these agencies to playing "a game of snakes and ladders".

> *… it's very hard to find your way around. If you look for assistance for tourism operators, it's hard to find until you stumble across someone who may be able to help you*.

In terms of central government, when discussing the Blue Economy project generally, the owner perceives MBIE as being somewhat disconnected from the realities of what they are trying to

achieve and finds it difficult to imagine success in their hands. For him, a sign of success would be if the outcome of this project encourages MBIE to focus on how to reduce these challenges.

Engagement with Māori

The owner expresses a strong desire to link to and work with local Māori and engage in ways that are appropriate for mana moana. Understanding forms of and protocols for engagement is important for business development that aligns with the organisation's values and aspirations. Despite having the strong support of a Māori cultural advisor, the shift from 2XS to Whakarua is described as "a journey into the unknown", especially as the cultural authenticity of the WT MCET product is a crucial factor.

Historically Tāmaki Makaurau (Auckland) has been home to several iwi, with six currently in the region: Ngāti Pāoa, Ngāi Tai, Te Wai-o-Hua, Ngāti Whātua-o-Ōrākei, Ngāti Te Ata and Te Kawerau-a-Maki. One of the challenges for the owner is therefore to know who has the right to 'sign off' on the cultural aspects of the tour as mana moana of Tīkapa Moana. It is even more difficult as a Pākehā business partner entering this space as questions arise such as "how will you be seen?" and "are the partnerships you have actually the right partnerships to have?".

The owner comments that he endeavours to build genuine, enduring relationships with mana moana and earn the support of iwi to operate the venture have been challenging, "'seeking the blessing' is a lovely saying but who gives the blessing?" He is critically aware that "[we are] a bunch of white guys doing it" and concerned they will get it wrong. With a genuine desire to engage with mana moana and to proceed in a way that is culturally correct, the owner is also aware of the complexity of their situation within the notion of Māori and Pākehā and broader tribal relations. The 2012 settlement of the Treaty has given Ngāti Manuhiri the resources, money, and dominion over Tiritiri Matangi, Aotea, Kawau, and Motuihe Islands and the wards around them, "so they have an amazing influence. Ngāti Whātua is land-based, but this tribe is island-based". However, initial discussions have proved challenging:

> *It's hard because there is no such thing as a single Māori…* [identity, entity] *… for a Pākehā with all the best intentions you can feel you are on a hiding for nothing… It's not co-governance, it's multi-party governance with incredible historical complexity. The fallacy is that it's not just two parties. It consumes a lot of time and energy.*

For the owner it is vital that all staff involved in the activity have the capacity to deliver an experience that aligns with the vision and values that underpin the new venture. This requires a shift

in attitude and skill sets for both the skipper and crew to move from a fishing charter operation to a more client focussed product. It is essential to find the right skipper "who is in tune with both the boat and the moana - being in the water/part of the water rather than 'against the water'". However, it is acknowledged that this is not an easy vision to achieve.

Robust Research is Needed for Decision Making

The owner is highly research capable and of the opinion that current studies about the health and sustainability of the Tīkapa Moana/Hauraki Gulf ecosystem are not rigorous enough for effective decision making. He would like to see more robust research in this area, particularly in terms of the continuity and consistency of the data collected. In his opinion, the current data being collected are more to support a pre-existing narrative, instead of informing what the narrative should be. He believes that the current system of knowledge building for decision-making is going backward because of "generational failure in numeracy". Hence 'storytelling' is now being elevated as the "only way on which decisions are based."

In the owner's view, a lot of knowledge about the Gulf is driven by social media posts and largely accepted as 'the new truth' to underpin pre-existing narratives, which disappoints him. He would like to see more robust research and data to improve accuracy with actual trends rather than "a ripple, based on number forecasting". His concern is also about the capacity of leaders of different organisations to understand and interpret sometimes complex research findings and move beyond their own agendas. Authorities can often make decisions on the basis:

> *…the most recent story, or they will remember the story they were part of. However, the reality is way more complex. For example, the solution for the Hauraki Gulf is way more complex than saying we are going to have 15 no-take MPAs – a recipe for disappointment.*

The owner worries that a paucity of robust data to inform policy and decision making, combined with a lack of capacity to be found with some policymakers, implementers, or practitioners to use research evidence (research uptake) will have a flow-on effect to MCET operators. He predicts that this is likely to manifest in the way Tīkapa Moana/Hauraki Gulf is managed and will effectively "see the closure of the Gulf" with the potential for civil disobedience by recreational fishers. He believes presently "we don't know enough and that's why policies have unintended consequences".

To counter this, he suggests charter operators should be better incorporated into planning and management activities, as they are important resources for the management of the Gulf. This

includes the local knowledge they hold, and as a mechanism for the collection and reporting of data. The owner notes that charter boat operators, some with decades of experience, not only regularly observe the cycles of the Gulf, but also keep detailed logs of their catch, creating a continuous and consistent data source.

Compounding this issue, the current process of submitting any data that operators do collect is antiquated with reporting/corrections sent via the postal system using carbon (hard) copies. This raises the need for an automated system to centralise data collection and strengthen decision making. As a collective voice they are presently excluded from decision-making processes and there is no platform to speak. While there are sometimes opportunities to provide 'public feedback' on various proposals, there is no specific channel for charter or marine tourism operators to have a stronger voice and be more formally 'at the table' when matters are being discussed and decided upon.

At a local governance level, the owner suggests that Auckland Council and the Hauraki Gulf Forum need to answer the question "why has the Waitematā Harbour almost become a dead zone?". To answer this, he suggests they should not be looking at the Gulf but to 'look behind them' to the land and factor in the accelerated run-off of sediment from commercial, industrial, and residential sites, which is one of the most significant negative impacts on the health of the Gulf, "the very thing we're trying to protect is under threat from different arms of Auckland Council". He highlights there is no single scientific organisation that has kept up with the impact of accelerated run-off on the Gulf's ecosystem.

As a charter operator with years of experience on the Gulf, the owner would like to see a stronger focus on the collapse of the crayfish population, the management of large commercial operators, and requirements around catch and release to be amended to add anything over 60cm as needing to be returned to the sea. This will allow large snapper to continue to be a natural predator of kina. He would also like to see a priority on increasing the number and capacity of mussel farms, and a far stronger investigation of the sediment run-off from housing and infrastructure development into the Gulf, which is destroying the food sources and shelter that fish require.

Definitions of Sustainability are Problematic and Restrictive

The owner's definition of sustainable marine ecotourism is "to take and experience all that you need for the day and no more". He feels comfortable in saying this because according to the science

reports he reads on the HG, the health of the species of fish WT wishes to take is strong. For the charter operation, he is already reading and following the science, which informs the take.

> *Have a good hard look at what sustainable means. Sustainability does not mean 'no take'. There needs to be a more intelligent approach taken to management. The narrative is that the HG is on the verge of collapse. It doesn't account for the fact that since uncontrolled bottom trawling was banned fish stocks have recovered* [here he cites reports from NIWA and Peart]. *The idea that the HG is a disaster or catastrophe generates the notion that the only way to save things is to lock it up. We need to realise that snapper is still abundant, but it has moved from previous grounds due to things like sediment – the fish aren't the issue – it's the feed for the fish.*

The financial aspect of sustainability also needs to be factored into definitions of MCET. A major challenge is to create a commercially viable operation and the owner rues the fact that "financial sustainability and viability are not talked about". He is yet to see the word 'financial' commonly used in literature around sustainability. "People do this [operate ecotourism businesses] with the best of intentions, but they can lose their house and they can fail."

The current tourism industry rhetoric on regenerative tourism across the sector is something the owner refers to as a "lot of wishful thinking". To explain, he mentions that as part of his proposal for Whakarua Tours the focus is not just on sea-bound trips, but a combination sea and land-based activities. A genuinely ecosystem-wide approach is required in which land-based uses and resource management decisions are part of the equation and the efforts of MCET operators to heal and regenerate the ocean cannot be undone in mere minutes by bad decisions on land.

> *Regenerative tourism? You could have 100 charter boat operators being 'regenerative', but it wouldn't make a bit of difference to the stronger countervailing forces that are affecting this beautiful ecosystem. You could drop 100kg of mussels every time you go out – but would that be enough to filter out the sediment caused, for example, by the decision to poison and cause the drop of trees along the cliff face ..* [o*f Motutapu Island to support coastal erosion initiatives*] *..?*

As with WWDW, the owner commented that the interviews for this Sustainable Seas National Science Challenge project have in some ways been "like therapy sessions" for dealing with the frustrations of engaging with regulatory authorities. The ability to tell his story and have someone listen was very important to him.

Key findings from the Case of Tīkapa Moana/Hauraki Gulf

The two questions that this case study research responds to are: *How can MCET add value to the moana?* and *How can we work together to contribute to a thriving moana*? Drawing on local cases situated around Tīkapa Moana/Hauraki Gulf, the stories of two new MCET operators and their values-based motivations for entering the sector were presented. However, both stories are dominated by the regulatory challenges and uncertainties faced by these new ventures. These challenges present significant barriers to entry, even for values-based enterprises.

For the two MCET operators, business is about much more than financial returns. It includes the 'joy' associated with taking visitors onto the ocean and sharing knowledge, cultural understandings, and passion for the moana. However, the difficulties encountered in the process of entering or transitioning into MCET is eroding the potential for generating these values and the excitement that drives any start-up business venture. For the WT principal.

> *Sustainability must also be thought of in terms of energy. When you have a good day – you are on top of the world. Sustainability is not just* [about what happens] *environmentally, but economically and personally. You must have spiritual and emotional value. That's what gets you out each morning. It's what makes it special for the customers. Otherwise, it's just a hard slog out to the 45m mark… If you look at the clear and present dangers of climate change, the mind-numbing complexity of working in partnership with various Māori agents and the labyrinth of government regulations you have to comply with, it's like a scene out of Catch 22. Only the mad would proceed.*

The report concludes that the challenge of navigating a complex web of relationships and often contradictory responsibilities across multiple authorities is a major obstacle to realising the potential of MCET in Aotearoa New Zealand. These challenges undermine the potential of EBM - holistic ways of working together to improve place-based ocean literacy and global ocean awareness, as well as returning economic, environmental, and social/cultural value to their local area, the Auckland region, and to Aotearoa New Zealand through MCET activities. The following points represent the main findings of this case study.

Governance, Public administration, and Human Resource Management

Good governance can be characterised by trust in the actions of public sector authorities, transparency in processing administrative requirements and subsequent decision-making, accountability, and the ease of using public services (Mäenpää, 2020). The COVID-19 pandemic offered a unique opportunity to shape, rebuild and revitalise the New Zealand tourism industry to strengthen its contribution to Aotearoa New Zealand and deliver real benefits for New Zealanders.

However, two years later, the insights presented in this report highlight that little has changed and that opportunities presented by the pandemic have diminished. Consequently, the two case study operators have been significantly hampered in their ability to return economic, environmental, and social/cultural value to their local area, or to the Auckland region, through MCET activities.

While it is acknowledged that the New Zealand government is undertaking a comprehensive reform of conservation legislation, it is argued that there is still a long way to go to address issues in the public administration of legislation affecting MCET in New Zealand and the inequities that exist for new Māori marine and coastal ecotourism entrepreneurs.

Public administration and HRM require a skill set that includes soft skills, recruitment, induction, etc. at the coalface. There appears to be a new public passion in Aotearoa New Zealand where intrinsic motivation really matters. There is indeed a willingness to collaborate, reflecting on EBM's 'holistic' and 'whole system' requirements.

In practice, regulatory and administrative processes involved in implementing policy and strategies hinder holistic management and joined up governance. Steps must be taken to improve public sector administration and communication at the coalface and to support decolonisation initiatives (reinstitutionalise mana, dignity and individual wellbeing). It is a poor outcome that WWDW have learnt to become submissive (again).

There is a need for better administration, training, empathy, transparency, and communication. Participants feel that there is a lack of respect, loss of dignity, and individual mana and rights questioned. They also feel that large and existing operations are being favoured, and when you are big enough (or "Māori enough") 'it doesn't matter - you get what you want', i.e. have carte blanche.

A better Application Pathway for Whānau-led, and Hapū-led Applications

WWDW remain committed and responsive to opportunities for their whānau, hapū, and iwi while exercising their right to fulfil their kaitiaki obligations to protect and care for taonga in and around Tīkapa Moana/Hauraki Gulf. This highlights the collective strengths that are often galvanised within whānau when faced with adversity (Rolleston et al., 2022). Whakapapa (ancestry, genealogy) "binds Māori society by connecting people to the environment, the atua [ancestor with continuing influence, gods, supernatural beings], their ancestors, and future generations" (Newton, 2019, p. 25). Whakapapa *is* mātauranga, often lost through colonisation processes, intermarriage, and

pepper potting (scattering and integrating individual Māori speaking people and families, among non-speaking te reo Māori - predominantly Pākehā – neighbours).

Sharing cultural narratives is essential to improve ocean literacy. The intention of this venture (WWDW) is to support visitors to understand their influence on the ocean and the ocean's influence on them. This includes sharing cultural narratives about moana, and the sites of cultural significance to mana whenua/mana moana. However, Newton (2019, p. 28) asserts that "under tikanga Māori, any violation of an individual's mana is also an attack on the mana of the wider iwi or hapū."

One issue in urgent need of address is the apparent disconnect between iwi rangatiratanga and whānau/hapū rangatiratanga, inhibiting the establishment of smaller, whānau/hapū based operators (see Rout et al. 2024). There are steps that can be taken to address this issue (see above). Another is resourcing properly whatever levels of engagement and communication are required to conduct and administer consenting processes – at whatever level of complexity these might eventually be settled. This means resourcing all sides of any negotiation table, and it refers to capability building as well as financial support.

Lengthy and complicated application processes take a toll on the wellbeing of the operators, in particular Māori operators. Rangatiratanga needs to be implemented at all levels, including hapū and whanau.

> *Consider emotional wellbeing of applicants, be honest and communicative. Learn some people skills. Stop with the power trip. Hire people who love people and not just animals and plants.*

Robust Research

Robust research is vital to inform decision-making for the management of Tīkapa Moana/Hauraki Gulf (and other places in Aotearoa New Zealand). Not all research capacity and knowledge is fully valued or mobilised, whether it be the citizen science of charter operators or mātauranga Māori. Research needs to tap into local knowledge in all forms. Evidence based decision making must then be transparent to avoid any sense of "predetermined outcomes".

The example of *Encounter Kaikoura* highlights the various contributions an operator can make to the understanding of marine wildlife through longitudinal and year-round data collection (Cooper, 2022;

Porter & Lück, 2022). Again this needs to include training and resourcing for MCET operators and support for building it into product development (Outhwaite & Stockin, 2022).

Case Study 3: Akaroa, South Island

Introduction

> *But it's from the harbour … the sea … that the place is at its finest. To appreciate Akaroa … you really need to see it from the water…. Out on the harbour, it's a different world. You'll be unlucky not to see Hector's dolphins– performing, playing around the bow of your boat, or diving through the wake…. Then when you get to the Heads … the end of the harbour … things really start to get dramatic. You turn a corner to see the peninsula coastline open out, and it's a coast line which could have come straight out of Robert Louis Stevenson's Kidnapped. Disney could have made this. Cliffs which must be a thousand feet high. Caves big enough to sail boat through. Volcanic rock pillars, towering out of the sea like lighthouses. Sheer faces with holes like cathedrals in them. Reefs and rocks and tiny beaches– and more dolphins…* (Gadsby, 1994, p. 14–15; cited in Fountain, 2002, p. 273).

This is a case study of marine and coastal ecotourism in the peripheral location of Akaroa Harbour, on Banks Peninsula (Te Pataka o Rakaihautū / Horomaka), which attracts thousands of international

and domestic visitors every year. As in many rural communities, an economy previously sustained by farming and fishing is now considerably dependent on tourism. Akaroa township is located 75 kilometres (or a 90-minute drive) from Christchurch city. The township has many qualities to attract visitors, including its colonial heritage (British and a 'French Connection'), boutique accommodation and award-winning gardens, and community events and festivals. However, arguably the most notable element of Akaroa's appeal is its spectacular inlet-harbour setting in Akaroa Harbour. This marine environment has been a playground for residents, recreationists and domestic visitors for more than a century, but has, since the 1990s, become more appealing to international tourists. A particular drawcard is the rare and endangered Hector's dolphins (*Cephalorhynchus hectori*). During the late 1980s and 1990s, scientific research and media reports revealed the vulnerable status of this smallest of dolphins (e.g., Slooten et al., 1992; see also Fountain, 2002). Today marine mammal tourism is an important drawcard, particularly for international tourists, who can view, swim with, and kayak alongside creatures with a number of tourism operators. Operations are managed by a permit system.

Whilst commercial fishing has diminished considerably, aquaculture and seafood gathering remain important activities. Over the last 30 years, marine protection measures have been implemented in Akaroa Harbour, the local community and mana whenua significantly involved in their establishment and management, including a Marine Mammal Sanctuary (established 1988), two marine reserves (1999 and 2014) and a taiāpure (a community-based fishery management model that regulates fisheries through co-management with local Māori) (2006). In 2016, and in response to considerable scientific research (Martinez et al., 2010), the Department of Conservation (DOC) and local marine tourism operators agreed to place a moratorium on the issuing of new permits for marine mammal activities, including dolphin cruises and swimming with dolphins while further research was conducted into the impact of marine mammal tourism on the dolphins, funded through a levy on ticket sales by permitted tour operators (Carome, 2021). Regular meetings between DOC, mana moana, permitted operators and the scientists involved in the research are held to present research results, report operator observations, and to discuss future management options in light of emerging scientific findings.

Drawing on community engagement and semi-structured interviews with key marine tourism stakeholders – including tourism operators and Department of Conservation officers – coupled with the researchers' decades of research engagement in the community, this case study explores the practical implications of calls for a more resilient and regenerative tourism in the context of marine

mammal tourism in Akaroa, and critically discusses the barriers and enablers to achieving this outcome.

Introduction to the case study

Akaroa moana (known as Akaroa Harbour) is located on the southern side of Banks Peninsula (Horomaka, or Te Pataka o Rakaihautū), a volcanic peninsula located to the southeast of Christchurch city, and under the legislative jurisdiction of Christchurch City Council. Akaroa Harbour is a location of significant marine tourism, particularly centred around marine mammals, and a resource with substantial social, cultural, ecological and economic value for the local community, including mana whenua, permanent residents, second homeowners and regular holidaymakers and recreationists. The harbour is also the subject of significant marine protection, including a marine reserve, marine mammal sanctuary and taiapure sites.

Ōnuku marae, located five kilometres from the township, is the marae of Ōnuku Rūnanga and home of the hapū of Ngāi Tarewa and Ngāti Irakēhu of the iwi Ngāi Tahu. Ōnuku Rūnanga is one of five Papatipu Rūnanga of Te Rūnanga o Ngāi Tahu located on Horomaka. The takiwā of Ōnuku Rūnanga includes the hills and coastal areas surrounding the harbour, as well asAkaroa- moana. It adjoins the takiwā of Te Rūnanga o Koukourarata (Port Levy) and Wairewa Rūnanga (Little River). Whilst the Ōnuku settlement has a small resident population, over the past decade the rūnanga has proactively redeveloped their marae spaces and engaged with their rangitahi in a range of economic activities, including tourism. Beyond their role as kaitiaki of the moana, their marine interests include possession of a marine mammal permit, recently returned to rūnunga control, and acquisition in 2022 of the Akaroa Salmon Farm on the harbour in partnership with Ngati Porou (Trafford, 2022)

The permanent population of Akaroa, which numbers less than 700, has had a complex relationship with tourism. Over the past decade, peak summer periods have seen the population of tourists day trippers and cruise ship passengers swell to over 10,000, overwhelming Akaroa's village atmosphere. While the economic benefits of cruise ship visitation for Akaroa is widely acknowledged (Wilson et al., 2015; Cropp, 2018), dissatisfaction with the impact of tourism on community wellbeing and the environmental and ecological health of Akaroa Harbour arguably had reached a tipping point before the global pandemic caused a global reset for the tourism industry (Lück et al., 2021)

The broader social-ecological context of Akaroa moana includes a broad range of human activities of a commercial and non-commercial nature in the marine environment, including fishing, aquaculture,

seafood gathering, and other recreational uses. Since the 1890s, Akaroa has been an important tourist destination, with marine activities always important. Beginning in the 1980s, marine-based tourism has expanded to incorporate a range of activities centred around the rare and protected Hector's dolphins, including harbour cruises, and opportunities to swim and kayak with the dolphins, although a number of other marine ecotourism activities – and opportunities – exist. Current commercial activities include a number of well-established tourism enterprises, differing in size, ownership structure and target markets. There are also plans for new tourism activities that will utilise marine resources on both land and water.

In addition, Akaroa moana is central to other Sustainable Seas research activities, including collaboration with the Ōnuku Rūnanga in the Indigenising the Blue Economy project. While the initial intention was for the current case study to complement the Indigenising the Blue Economy project this has not occurred, due primarily to the local rūnunga informing the researchers that marine tourism was not their current priority.

Over the last 30 years, a number of marine protection measures have been implemented in Akaroa with members of the local community – both Māori and non-Māori – significantly involved in their establishment and management. The four main measures are (Figures 2 & 3):

(a) the Banks Peninsula Marine Mammal Sanctuary, established in 1988;

(b) the Pōhatu Marine Reserve – a "no-take" reserve on the outer coast, established in 1999;

(c) the Akaroa Harbour Taiāpure, a community-based fishery management model that regulates fisheries through co-management with local Māori, established in 2006;

(d) the Akaroa Marine Reserve, established in 2014 (Rose et al., 2014).

The development of marine reserves, and publicity over the plight of the Hector's dolphins, added to the appeal of the destination (e.g. Slooten et al., 1992), particularly for international tourists, who were seeking locations 'off the beaten track', and tourism enterprises have been quick to capitalise on this interest (Fountain, 2002).

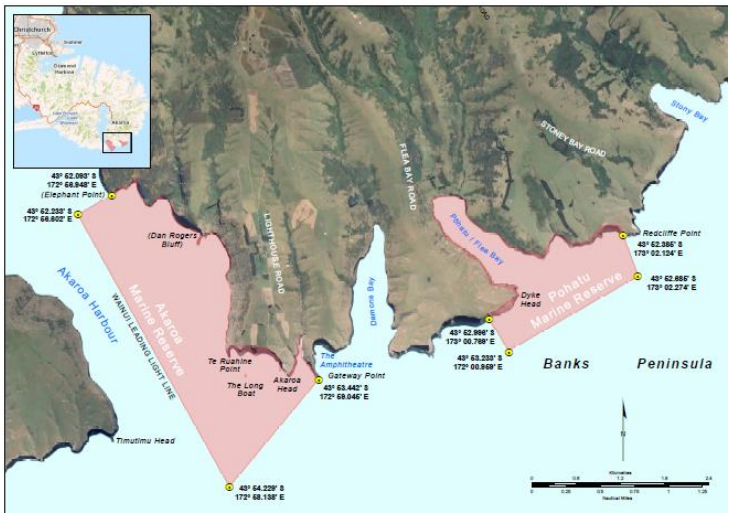

Figure 2: Bank Peninsula Marine Protected Areas

Source: Department of Conservation - https://www.doc.govt.nz/parks-and-recreation/places-to-go/canterbury/places/banks-peninsula-area/akaroa-marine-reserve/?tab-id=Bird-and-wildlife-watching

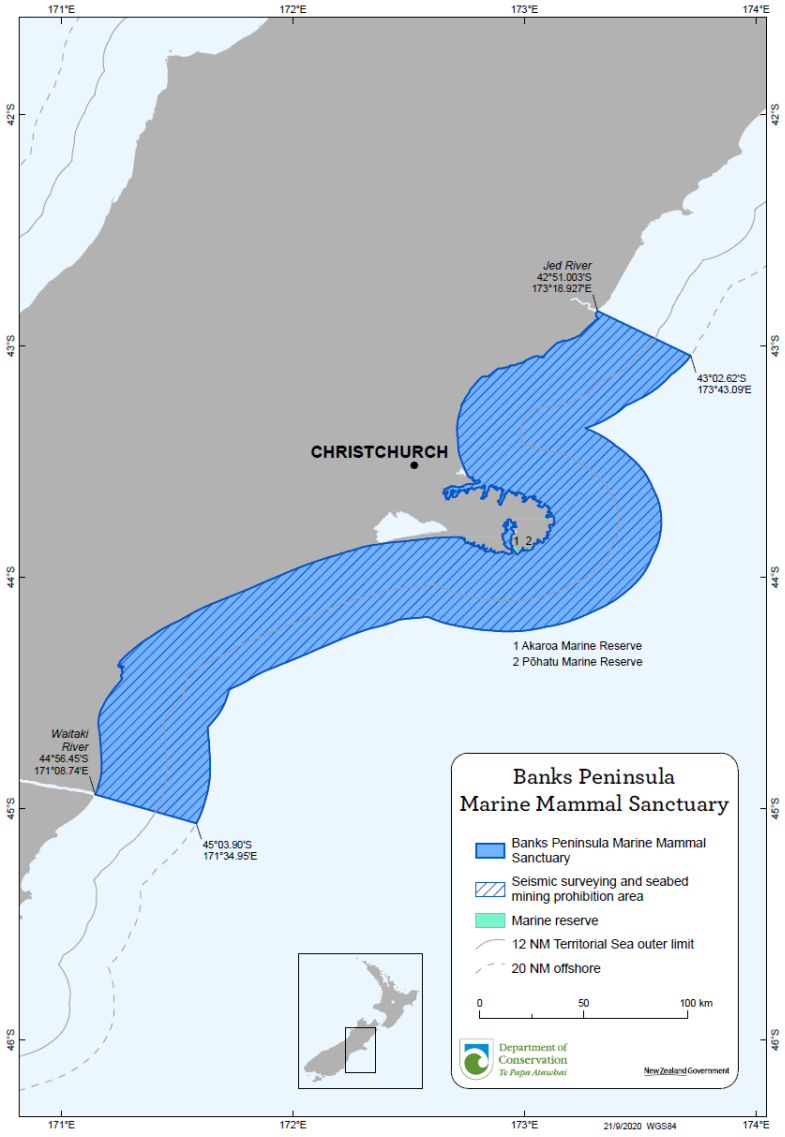

Figure 3: Banks Peninsula Marine Mammal Sanctuary
Source: Department of Conservation

https://www.doc.govt.nz/globalassets/documents/conservation/marine-and-coastal/marine-protected-areas/mms-banks-peninsula-map.pdf

Following the 2010/2011 Christchurch earthquakes, the loss of port facilities in Lyttelton meant Akaroa became the main port for cruise ships in the Canterbury region resulting in a rapid increase in cruise ship arrivals to Akaroa from 16 in the 2010/11 season to 86 in the 2011/12 season, before growth tapered off. In the most recent summer season not impacted by COVID related restrictions (2019/20), 93 ships were scheduled to visit—sometimes with two or even three ships scheduled in port on a single day. Beyond the pressure the arrival of 2,000 to 4,000 cruise ship visitors can place on the town's infrastructure and atmosphere, there have been concerns also about the environmental impacts of visiting cruise ships on wildlife, including the Hector's dolphins, with emissions and waste disposal, and potential seabed disturbance of concern (Carome et al., 2021; Lück et al., 2021). Despite these negative social and environmental impacts, in the first few years after the rapid increase in cruise ship visits it was widely acknowledged that the economic benefits of cruise ship visitation on the community have been immense (Fulton, 2014; Wilson et al., 2015). Part of this support was due to assurance thathosting so many cruise ships was a temporary measure while the Port of Lyttelton was redeveloped, but as the years dragged on, frustrations in the community grew. For example, during the 2018/2019 summer season approximately 90 cruise ships would bring more than 200,000 visitors to the town (Williscroft, 2018). While this equated to an estimated $34.7m of spending in the town, for many residents it came at too high a price (Cropp, 2018). The COVID-19 pandemic and the cessation of all cruise ship visits provided an opportunity to reassess the situation. This resulted in Environment Canterbury announcing that from 1 November 2021, stricter controls would be placed on cruise ships in the harbour, with the number of available berths reduced (ECan, 2021). When borders finally reopened to cruise ship visitation, the majority of large ships returned to the refurbished Port of Lyttleton.

In many ways the operation and management of marine and coastal tourism in Akaroa Harbour and surrounds seems to avoid some of the criticisms of the sector highlighted in the nationwide survey of MCET operators (see Milne et al., 2021b). This survey found many operators concerned about the relatively fragmented nature of the sector, with limited opportunities for collaboration between operators, or with wider stakeholders, including mana whenua. Many operators also felt that there was a lack of MCET-specific planning and management and a lack of engagement by operators in the decision-making process. By contrast, permitted marine mammal operators in Akaroa work closely with the regulators (DOC), the scientists undertaking research into the resource, and with mana moana in decision-making. The role of DOC, empowered by the marine mammal permit system and the MMPR (1992), is central to ecosystem-based management in this area. Table 1 provides a more detailed assessment of the rationale for selecting Akaroa moana as a primary case study site.

Table 1: Selection Criteria for the Akaroa Case Study

Consideration	Details
Extent of marine and coastal ecotourism (MCET) activity	At the time this study commenced, Akaroa Harbour was the site of at least ten marine tourism operations. Two operators were interviewed during initial stocktake and the research team maintains ongoing contact with many operators and other community stakeholders. The impacts of the global pandemic on the local community, and in particular, the absence of international visitors and cruise ships, means the township is at an important juncture in rethinking its tourism future, and there are interesting plans emerging on ways in which the blue economy could be enhanced.
Māori owned MCET activity	There is existing activity that incorporates kai moana within a cultural experience. This has, however, been largely dependent on Chinese tourists and there is interest in broadening the participant base. This operator uses the marine mammal viewing permit owned by the rūnanga.
Management of MCET activity	Permitted marine mammal operators in Akaroa work closely with the regulators – the Department of Conservation – the scientists undertaking research into the resource, and with mana moana, who are part of all discussions. The role of DOC, empowered by the marine mammal permit system and 1992 MMPR, is central to ecosystem-based management in this area.
Degree of tourism dependence	The extent of Akaroa's dependence on tourism is difficult to ascertain, as are overall visitation numbers, but there is no doubt that with more than half of all ratepayers not based in Akaroa, and the town of approximately 700 people receiving up to a peak of 10,000 visitors a day in summer months, the economic, social and environmental impact of tourism on the community is large.
Existing tourism and related data	There has been a range of tourism research and data collection activities over the past three decades (see Appendix A). There are also four decades of continuous scientific data on the Hector's dolphin, giving a critical longitudinal insight into the impact of harbour activities on their wellbeing and behaviour.
Links to other Sustainable Seas projects	Indigenising the Blue Economy project (John Reid and Jason Mika) has involved engagement with the Ōnuku rūnanga, along with other rūnunga partners.
Existing relationships between community & research team	Associate Professor Joanna Fountain (LU) has more than thirty years research experience in Akaroa Harbour and has established relationships with tourism stakeholders. Professor Michael Lück has also completed research projects in the harbour.
Engagement with mana whenua	During the period of case study development we consulted with a nominated representative of Ōnuku Rūnunga and two other rūnunga members who have specific and long-standing interests in tourism and hospitality in Akaroa. During the case study we met with the chair of the Onuku rūnunga outlining our planned project, which was supported.

Methodology

Before commencing fieldwork, the researchers consulted a nominated representative of Ōnuku Rūnanga. This was followed by a broad consultation process with community stakeholders with diverse interests in Akaroa moana. An open invitation to a meeting on 23 November 2021 was made to all MCET operators, other tourism stakeholders, representatives of aquaculture operations and fishermen (commercial and recreational), recreational boating clubs, members of territorial and

marine environmental protection societies and heritage preservation organisations. The purpose of this consultation was threefold:

1. To identify priority issues for Akaroa Harbour as a social, economic, cultural and environmental asset
2. To identify additional stakeholders and their perspectives on these issues
3. To investigate different pathways for creatively addressing priority issues.

The first meeting attracted over twenty interested parties, and there were free-ranging discussions of the values that community stakeholders associated with Akaroa Harbour and surrounds, as well as priorities for maintaining, or enhancing these values. From this initial consultation, the researchers synthesised the issues and priorities raised, and shared these with the community stakeholders in December 2021, asking for any additional input. A further online meeting was organised for March, 2022. While a limited number of stakeholders were able to attend this meeting, others expressed their interest in continued engagement. During the meeting it became clear that the principal concern of attendees was how to manage existing marine tourism operators in the harbour. Larger operators reported that they had good access to the marine research being conducted in the harbour, and to the scientists and experts themselves, and expressed concern about the increasingly crowded marine tourism environment in Akaroa Harbour. They also questioned some of the practices and knowledge of smaller operators, particularly those who did not have marine mammal permits.

On the basis of this, issues around the permit system and the science surrounding it became central to the case study research. From this point, engagement was focused on marine mammal tourism operators and local representatives of the Department of Conservation (DOC), as key stakeholders for the permit system. Extensive reading of scientific reporting, strategy documents and industry guidelines was undertaken, before interviews were conducted with DOC staff (three interviews, with one representative interviewed twice), and MCET operators in the case study region, supplementing the interviews already conducted with two operators as part of the national survey. In total, interviews were conducted with 13 marine mammal stakeholders, with other more informal feedback also incorporated into this report.

While initially considered beyond the scope of this project, there was a strong desire expressed by MCET operators and other tourism stakeholders to know more about the visitors who come to Akaroa and participate in marine activities; from the perspective of the researchers, the stated

importance of education in the Marine Mammal Protection Regulations (MMPR) 1992 as a justification for marine mammal tourism meant it was valuable to gain a greater understanding of the extent to which the marine tourism experiences offered in Akaroa was providing a meaningful and educative experience. These results are presented below to support other insights.

The origins of Marine Mammal Tourism and Marine Protection in Akaroa Harbour

Hector's dolphins are one of the world's smallest marine dolphins and are endemic to New Zealand. Their presence in Akaroa Harbour has been a source of amusement for tourists for more than a century; in 1920 a visitor wrote that on a launch trip she had seen '*numbers of Pauposes [sic] out towards the heads, they follow the boats*' (postcard written 1 March, 1920) and the presence of 'porpoises' was an interesting diversion on the launch trips offered on the harbour by the boat *Miss Akaroa* during the early 1980s, as the local newspaper, the *Akaroa Mail,* reported:

> *Nearer the Heads another lively sight are porpoises in pairs or singly which swim close to the boat and leap out of the water, which if a photographer is quick enough, makes a good picture* (22 January 1982, p. 1)

Until the 1980s, few local residents appreciated the significance of the dolphins, which were described by the Department of Conservation in 1988 during local community meetings as "a rare and endangered species of global importance" (cited in Fountain, 2002, p. 283). At this same meeting it was reported that little attempt was made locally to promote the dolphin as a tourist attraction before this time, and until the late 1970s the dolphins were sometimes taken by hand harpoon and used as crayfish bait (Department of Conversation, 1988).

A survey of the distribution pattern and threats faced by the Hector's dolphins around Banks Peninsula precipitated a rapid change in status for the marine mammal. In April 1988, marine biologists Liz Slooten and Steve Dawson released their findings of a four-year investigation of the Hector's dolphins in the region. Their research highlighted the precarious predicament of these creatures due largely to the threat posed by set net fishing. Slooten and Dawson estimated that approximately twenty percent of the 3,000 to 4,000 Hectors dolphins in existence lived in the waters off Akaroa, representing the biggest breeding population in New Zealand. In light of this fact, the researchers expressed concern that by their estimation the population of dolphins in the area from Lyttelton Harbour to Birdlings Flat just south of Banks Peninsula had dropped from 526 in 1984 to 301 in 1986, representing a 43% percent decline in just two years. During the summer of 1985–86, the marine biologists had confirmed reports of 91 of the mammals drowning in the waters off Banks Peninsula and in Pegasus Bay (North Canterbury) due to set net fishing. They concluded that if these

trends continued, the Hectors dolphin faced a very real threat of extinction (*Akaroa Mail*, 22 April 1988, pp. 4–5, cited in Fountain, 2002, p. 283). The protection of this species was also gaining worldwide exposure, with the United States Marine Mammal Commission identifying the preservation of the Hectors dolphins in the Banks Peninsula area as one of the most pressing issues in international marine mammal conservation (*Akaroa Mail,* 22 April 1988, p. 5, cited in Fountain, 2002, p. 284).

In response to the marine biologists' findings and widespread publicity, the New Zealand Department of Conservation resolved to work towards introducing measures to protect the Hectors dolphins. The protection options identified ranged from various forms of bans on set net fishing off the Banks Peninsula coast to the establishment of a year-round marine mammal sanctuary, which was the Department's preferred choice (*Akaroa Mail,* 6 May 1988, p. 1, cited in Fountain, 2002, p. 284). After consultation with interested parties, a sanctuary was declared and a seasonal restriction on set-net fishing enforced, with a total ban on set nets from November to February each year. During the remainder of the year set net usage would be restricted; nets would have to be less than thirty metres in length, tied from boats, and not left unattended or overnight.

The emergence of the Hector's dolphins as a tourist attraction developed rapidly after this time, following trends globally; a trend the Minister of Conservation acknowledged:

> *Overseas marine mammal populations draw a large number of visitors.... In some areas such as Hawaii and Boston, whalewatching has become a multimillion-dollar industry* (*Akaroa Mail,* 30 December 1988, p. 1, cited in Fountain, 2002, pp. 287-8).

The tourist potential of whalewatching was already reaping benefits in the North Canterbury town of Kaikōura, after a whalewatching operation had been established in the town earlier the same year. A second whale watching venture, Kaikoura Tours, began in 1989 and this operation, which was owned and operated by Takahanga Marae, bought out the first operator during 1990. In the first 15 months of operations, Kaikoura Tours reported that 80% of clientele on their whalewatching tours were overseas visitors (Clements, 1991). By 1991, the company employed 20 people and had a turnover of over $1m per year (Clements, 1991).

In January 1989, the *Canterbury Cat*, a company offering cruises on Akaroa Harbour, was running newspaper advertisements that read "Catch the Cat and see the dolphins"' (*Akaroa Mail,* 27 January 1989, p. 2, cited in Fountain, 2002, p. 288). Within a year the dolphins were described as 'one of the Peninsula's better known tourist attractions' and Akaroa was becoming known as 'The Home of the

Hector's Dolphin'. This view was supported by the *Canterbury Cat* operator, who acknowledged that the dolphins' presence and publicity surrounding them had resulted in a substantial increase in custom:

> *People are going out to see whales at Kaikoura [sic] and the chances of seeing whales are not nearly as good as seeing our dolphins. When we see dolphins from the boat the passengers just come alive. That's the sort of experience they came out for* (*Akaroa Mail,* 3 November 1989, p. 1, cited in Fountain, 2002, p. 288).

By the end of 1991, visitors could swim with the dolphins (*Akaroa Mail,* 13 December 1991, p. 4, cited in Fountain, 2002, p. 291) and a sea kayak business which began operating in 1992 immediately attracted tourists wishing to get close to the dolphins without getting wet. The operator of this venture claimed that the minimal environmental impact of the kayaks appealed in particular to the environmentally conscious tourist: "[they] are as eco-friendly as you can get. No noise, no pollution, no excessive speed" (*Akaroa Mail,* 26 December 1997, p. 13; cited in Fountain, 2002, p. 291). Reference to the dolphins were apparent on land too; images of the mammal proliferated in the township and on promotional material and postcards (see Figure 4), and the 'Dolphin Café' and 'The Dolphin Experience' shop were open by the mid-1990s (see Figure 5).

By 1994, the operator of the sea kayaking business was suggesting that the marine mammal sanctuary had been worth 'millions' to the district (cited in White 1994, p. 36), while a former Information Officer for Akaroa claimed that the presence of Hector's dolphins was instrumental in attracting most international visitors to Akaroa (White 1994, p. 32). A survey of two hundred international and domestic visitors to Akaroa in 1996 found that the activity most frequently associated with the district was a cruise on the *Canterbury Cat* (57%), while 21.5% mentioned swimming with dolphins (Colebourne 1996, p. 42). When plans to relax set net restrictions on flounder fishing in Akaroa Harbour were overturned in 1996, the local Member of Parliament welcomed the decision, stressing the importance of maintaining the status quo in order to preserve Akaroa's unique tourist profile:

> *Everyone now associates Akaroa with the Hector's dolphin, and I don't believe any reasonable person would want to see dolphins threatened by any relaxation of the set net ban*. (*Akaroa Mail* 12 July 1996, p. 1, cited in Fountain, 2002, p. 293).

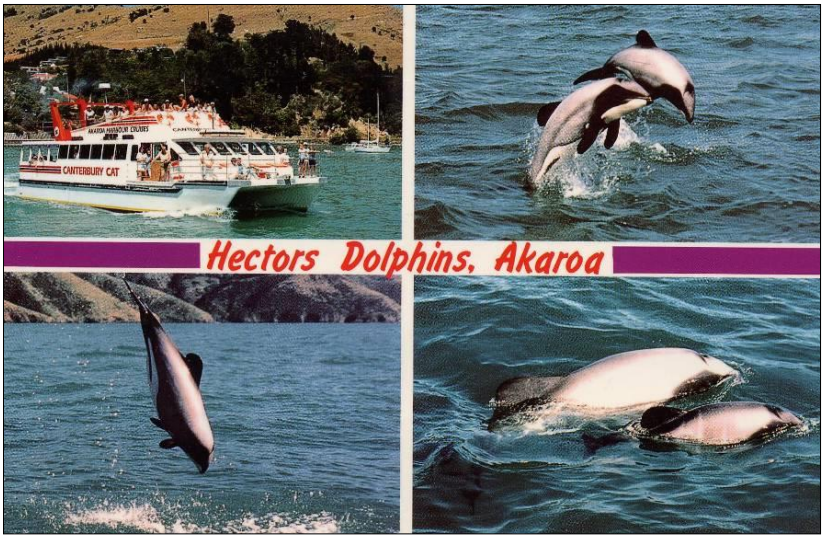

Figure 4: The Hectors Dolphin and the *Canterbury Cat*
Source: Postcard purchased 1998

Figure 5: Dolphins everywhere: The Dolphin Experience Shop 1998
Source: Joanna Fountain

By this time, the commercial fishing fleet had all but disappeared from the district. The 1996 census recorded only four commercial fishermen residing in Akaroa District (Statistics New Zealand 1997), although the Akaroa Salmon farm had recently been established in the harbour. Applications for another eleven marine farms to be situated around Akaroa Harbour were lodged with Environment Canterbury during 2000 but faced significant community opposition. While the mussel farms would have resulted in twelve full time jobs and was expected to generate $2.2 million a year, the aesthetic

and cultural values of the harbour which took priority over the economic potential of the venture in the decision-making process. The Commissioners for Environment Canterbury announced their decision to reject all these applications in July 2001, with the rationale for their decision reported in the *Akaroa Mail*:

> *[T]hey found that Akaroa Harbour is a significant contributor to the wellbeing of the people of Canterbury, both as a recreational resource and as a focus for tourist related activities' and was 'in essence the principle maritime recreational playground for Christchurch and Canterbury'* (*Akaroa Mail,* 13 July 2001, p. 5, cited in Fountain, 2002, p. 310).

While some of the waters in Akaroa Harbour have been turned over to private enterprises, the peninsula became the site of a marine reserve in 1998, gazetted for Flea Bay and called the Pohatu Marine Reserve. The environmental organisation, Friends of Banks Peninsula (FBP) had first raised the possibility of a marine reserve in 1990, and in 1994 the Akaroa Harbour Marine Protection Society, an offshoot of the FBP, developed a discussion document that outlined a number of potential sites for such a reserve. This document resulted in 2,415 submissions, the second largest in Canterbury to that date (*Akaroa Mail,* 15 July 1994, p. 1, cited in Fountain, 2002, p. 118). The eventual choice of the site at Flea Bay was the option favoured by the district's recreational fishers and mana whenua, while the Marine Protection Society had hoped for a larger and more accessible site within Akaroa Harbour (*Akaroa Mail,* 1 January 1999, p. 2, cited in Fountain, 2002, p. 118). After twenty years of campaigning the Society got its wish when in June 2014 the Akaroa Marine Reserve was established.

While the primary rationale for the reserve's establishment was to ensure the preservation of the natural environment for the enjoyment of future generations, supporters of the plan acknowledged the benefits the reserve might have for the tourism industry (White, 1994). The number of visitors to the Pohatu Marine Reserve has always been limited by its isolated location; while the Department of Conservation 'encourages' picnicking, swimming, boating, diving and photography, the access road is described as a '4WD road [which is] steep and unsealed' (Hosted, 1999, p. 9) and the journey by sea is no less treacherous (*Akaroa Mail,* 2 July 1999, p. 7, cited in Fountain, 2002, p. 119). However, by 2001 day and evening tours to the Pohatu Marine Reserve were being advertised (Akaroa District Promotions, 2001).

Managing Marine Tourism Operations

Marine mammal tourism is managed by the Department of Conservation under the Marine Mammal Protection Act (1978) and the Marine Mammal Protection Regulations (1992). These regulations were designed to manage human interactions with marine mammals with the goal of ensuring their protection from harassment, disturbance, injury or death. The development of the 1992 MMPR were a direct response to manage the increasing marine mammal tourism occurring around New Zealand, including in Akaroa Harbour, and introduced the marine mammal permit system which remains largely unchanged today. This system made it illegal for any commercial operation to view or swim with marine mammals without a permit. At the time, there was limited scientific understanding of the impact of tourism activities on marine mammal behaviour and on the whole this activity was seen to be 'benign' at worst, with potential positive benefits (see discussion below). This is apparent in the wording of the 1992 Marine Mammal Protection Regulations, whereby to receive a marine mammal viewing permit the Director-General (DOC) must be satisfied that:

> c) the commercial operation should not have any significant adverse effect on the behavioural patterns of the marine mammals
>
> d) it should be in the interests of the conservation, management, or protection of the marine mammals that a permit be issued; and:
>
> h) the commercial operation should have sufficient educational value to participants or to the public (MMPR, 1992, Section 6).

Under these regulations there is also the requirement that no person disturb or "harass any marine mammal" (Section 18), with the concept of harassment defined to include any act that "causes or is likely to cause injury or distress to any marine mammal" or which "disrupts significantly or is likely to disrupt significantly the normal behavioural patterns of any marine mammal" (MMPR, 1992, Section 2). The issuing of permits provided funding also for ongoing scientific research into marine mammal behaviour, and in particular, the impact of tourism activities on this behaviour.

In Akaroa Harbour there were four permitted tour operators in the period 1998 to 2007 and a maximum of 25 trips per day permitted; seven permits for marine mammal viewing and 18 permits to swim with dolphins (Carome, 2021). The maximum number of allowed passengers on watching trips ranged from 12 to 92 per trip. For the swimming tour, the permits allowed from 12 to 30 passengers per trip, with a maximum of 10 swimmers in the water at any one time (Lück, 2003b). The operators Black Cat and Akaroa Dolphins held the majority of these permits. A decision was made to impose the first five-year moratorium on permits in the harbour from 2008-2012 by which

time there were seven permitted operators, and 35 permits allowing dolphin watching, swimming with dolphins, and kayaking operations (Carome, 2021).

In 2016 a ten-year moratorium was put in place to protect the dolphins from over exposure to humans. This action was a direct result of the research of Martinez and colleagues (2010), which clearly indicated that the dolphins in the harbour were being over-exposed to visitor activity, and their behaviour was changing as a result. This decision was made with the support of the local Onuku rūnunga and tourism operators, and a levy from operators, taken as a percentage of ticket sales, was set aside for further scientific research. The pause in the need to process permit applications also freed up more time and resources for DOC to monitor existing operators. In making this decision, the importance of the dolphins and marine tourism to the local economy was acknowledged, with the moratorium supporting "the ongoing sustainability of Akaroa's nature-based tourism ventures".

The moratorium agreement included an accepted series of goals for research activity over the ten-year period. Regular meetings were established between DOC, scientists, and the permitted tourism operators to discuss emerging issues and collaborate on the research. Late in 2023, this research is coming to its conclusion, with the final research report currently being peer-reviewed. These results – and the scientists' recommendations for change – have been shared with the permitted operators, and many preliminary papers have been published (see for example, Brough et al., 2023; Carome et al., 2023. 2022; Fumagalli et al., 2021). The operation and management of marine and coastal tourism in Akaroa Harbour and surrounds is likely to be facing some significant regulatory changes in the relatively near future.

This is the context in which the following case study is produced. When this research commenced, there were ten identified marine tourism operators in and around Akaroa Harbour. This included seven permitted operators, and three that were operating cruises or kayaking operations without DOC marine mammal permits. During the course of the study, the permit which had been leased from Ngāi Tahu since 2011 was reclaimed for use by the iwi. At the current time the seven permitted operators are permitted to run up to 18 dolphin watching trips and 16 swim-with-dolphin trips each day between November and March (Carome, 2021). A study commissioned by one of the tour operators estimated that at the time of the study, approximately 60,000 passengers participated in marine mammal tourism each year, creating a direct annual income of more than $6 million, and employing between 40 and 60 staff (Yeoman, Rodriguez & Fairgray, 2018).

Key findings

During meetings with the community, the high value placed on the ecological health of the moana was a primary focus of discussion and a shared concern for all stakeholders. There is also concern within the community that the moana and the community as a whole face tourism pressures that must be managed (see also Williscroft, 2018), while also acknowledging the centrality of Akaroa Harbour as the 'jewel in the crown' of the touristic appeal. The marine operators interviewed – whether permitted or not permitted – saw their role as educators and protectors of the marine environment as critically important, with many operators measuring success in terms of the extent to which they could achieve this, as the following quotations illustrate:

> *Well, I think for me being sustainable and just keep continuing to give back to the environment and community. We've always been doing that but just looking at other projects and just doing more and more all the time and being able to communicate that back because I think people are really looking …* [at] *how they can have a lighter footprint or give back to the environment themselves so I think that's an opportunity we can have. (tourism operator #4)*

> *We are a tourism business, it's about taking people out to have an enjoyable experience. So for us it's about getting them out on the water, letting them see some of the fantastic scenery we have and going away from that experience with a smile on their face and some good stories to then share … but then also the eco part and that is minimising our impact as much as possible and you know, we put a lot of time and resource to lobbying on behalf of the dolphins … so for us that's about being able to educate* [the tourists] *and tell the story and in some ways you know, just develop the knowledge around them and hopefully create better awareness which will then in turn help them be protected better. (tourism operator #5)*

> *We are happy to carry on doing what we do, we consider ourselves to be educators of the general public. So how to interact with Hector's dolphins is important that other people learn. (tourism operator #3)*

Many of the permitted tourism operators are involved in environmental education, particularly with local or visiting school children, which includes taking school groups on harbour cruises, or running conservation clubs and holiday programmes. The operators are also involved in other environmental groups, such as Friends of Banks Peninsula, and advocacy for causes such as the establishment of the Akaroa Marine Reserve, lobbying in support of a Threat Management Plan for Hector's dolphins, or working to make Banks Peninsula predator free. In this way they are 'walking the talk'. These operators are also looking at ways to reduce the environmental impact of their tourism activities, including investing in new technology on their vessels to reduce noise and emissions, or voluntarily reducing the time they spend interacting with dolphin pods. Operators talked positively about their work and that of other operators, but also acknowledged they were not always good at sharing

stories of what they are doing "*These guys do a lot of conservation things we don't hear, I don't hear about it… we're pretty bad at sharing things*" (tourism operator #2).

The permitted operators also talked very positively about the 'great relationship' established between themselves, the DOC staff and the scientists, whose work they fund and support. As one operator admitted:

> *I think all of the marine tourism businesses we sort of communicate with and work with all work on a pretty similar sort of ethos of education really being at the core of I guess a lot of what we're doing. So, bringing people out to share and educate them and then that in turn has flow on benefits for all the communities… Yeah I'd say that they were all pretty similar in what they sort of say and do to what we do. (tourism operator #5)*

Another operator supported this positive view of the relationship:

> *So, on probably four occasions a year we have a general get together with other marine mammal operators and we have a sit down where DOC provide us with the various scientists to lecture to us on what their findings…we've got great DOC staff who are only very happy to share with us their underwater research and the different species of research. So, it's probably one area that we'll continue to work with and develop those strong relationships. (tourism operator #3)*

This operator also explained their relationship with DOC and mana moana:

> *We consider ourselves to be partners with Department of Conservation and partners with the local Ngāi Tahu rūnanga, Ōnuku Rūnanga. They're … basically our landlords so we've got to do more work with them. We've got to keep allowing researching and allow our boat to be used as a platform for research to be carried out. (tourism operator #3)*

The perspective of DOC officers about this relationship was similar, particularly around the importance of mana whenua at the table as partners. Whilst acknowledging that in the past DOC had not necessarily respected the position and opinion of mana moana in their decision making – even in the context of Akaroa Harbour – they felt this has now changed:

> *The culture in DOC has shifted a lot over the years and we're at the point where with every decision I we make here in Akaroa Harbour we are asking the question of* [Te Tiriti] *partner, you know? How does this align with views and values? You can assume with everything we do, we work side by side as close as we can…If we're making any big decisions they are the first people we talk to. And any decision that will impact the harbour.*

The permitted marine tourism operators were also at pains to highlight their compliance with their permit requirements:

> *We have a DOC permit so we have to follow all their rules and regulations. Obviously with how many cruises per day we can go out, how long we can spend with them, how we approach them, if they're feeding, if they've got babies. (tourism operator #4)*

For another operator, their rationale for adhering to permitting requirements went beyond the need to follow the rules:

> *We've always been one to kind of play by the rules, but just kind of do what needs to be done as well … for the benefit of the wildlife. And, you know… anything that we're doing, we need to do it for the wildlife. You know? And yeah, a lot of the operators kind of understand that. (tourism operator #1)*

There was general support from operators regarding the permit system, however there were also recognised limitations with the system. As one operator acknowledged:

> *That's what that permit system is there for, to manage what's going on and these days in Akaroa at the moment there's a moratorium so that no further permits can be issued which I think is also a good thing, while they're carrying out some research as to the impacts of tourism operations on the marine environment in Akaroa so then they can make some better decisions next time the permits come up for renewal. And yeah look for us it's about working in partnership with DOC on that front. At the end of the day it's the marine environment that we benefit from so we've got to all make sure we look after it. (tourism operator #5)*

An essential aspect of EBM is the engagement with diverse sets of expertise involving the social and ecological relationships that comprise the ecosystem. The importance of making informed decisions and utilising best practice was identified by those participating in the community meetings, and in individual interviews. Their awareness of the relevance of expert knowledge involves both the stated desire for marine tourism to occur in a sustainable manner as well as some anxiety regarding the use of such knowledge to justify regulation of, and constraints on, tourism activities. A number of operators acknowledged the importance of science, with one operator stating that "we only ever rely on the pure hard science" (tourism operator #3). Another operator explained this in greater detail:

> *I'm a very data driven person so for me, you know, I think you can't do much unless you actually know what's going on. So DOC have got a marine reserve in Akaroa now where they are actually doing some monitoring …dropping some pots in there each year and doing some video monitoring to sort of see how, within that marine reserve things might be changing. (tourism operator, # 5)*

The local DOC officer also stressed the organisation's goal to "share knowledge as much as we can":

> *Giving people the best evidence and the knowledge we have so they have time to think about some of the things they care so much about. These things are collective problems, they are not individual problems and if we think we can solve them just*

individually then we will fail every time, eh? so we need to continue to think collectively when we can, within the realms of our responsibilities.

In many ways, then, the operation of marine mammal tourism in Akaroa Harbour might appear as a case study of best practice, but underlying this impression of collaboration and science-led decision making were a range of disagreements and concerns.

A primary concern identified by all informants is the bureaucracy within the Department of Conservation, which they acknowledge is exacerbated by a lack of funds. As one tourism operator explained:

> *DOC is a big organisation* [and] *they are a bit too administrative at times. I want to believe that they do what they can with what they have. They should be doing much more, but…they have no money (tourism operator, #1)*

Related to this bureaucracy is a belief amongst operators that DOC has no 'teeth' when it comes to enforcing regulations, particularly in relation to non-permitted tour operators and recreational boaties:

> *We are very closely managed by DOC, the permit holders, and at times that seems unfair, as illegal operators seem to get away with it, because they know DOC has no teeth to enforce the rules. We are secret shopped, to make sure we obey the rules, and watched from the hillside – now there is a camera. (tourism operator #3)*

There is also a belief amongst the non-permitted operators, that the system is flawed:

> *The permit system is broken; there is no need for permits if you just get everyone obeying the rules: Do not chase dolphins. Do not divert your path to view them. This should apply to all harbour users – recreational users, fishermen etc. – it is the same for everyone (tourism operator #6)*

The local DOC official acknowledged the complaints and agreed that in an ideal world, things might be done differently, but given limitations the organisation had to 'stick to its knitting'. He explained:

> *It would be great, for example, if marine mammal management was high enough on the government's agenda at some point in time that some serious thought was given to what the regulations looked like but what we're dealing with at the moment is what we have, and then we have, essentially, a list of priorities and some things are more urgent and controllable than others, and therefore more likely to have a positive, enduring impact. We're focusing on these things first, rather than running off and making a whole lot of changes or trying to … but our hope is that we eventually get to the point where we're controlling the controllables and then as a collective we can actually start to expand our thinking to innovate…*

This informant also acknowledged the complexity of the system in which decisions need to be made:

> *The reality is that we have a community with history, we have a government with legislation that was written in the past, we have the opinions of the government of the day – national and local – we have different agencies with different responsibilities that to varying degrees do or do not have a role... so I think it's easy - because we all do it - it's easy to be on the outside when you've only got your own interest to think about, and to tell everyone else that they've got it wrong. It's more challenging to then have to consider all of those competing interests, and also consider the outcomes possible amongst all of that.*

As a result of the rigour required, the process also takes more time:

> *Whenever you view value as economic gain there is pressure to expand and do more and more... and when that pressure is there and that pressure is strong, then regulating it requires a really really high level of rigor and evidential basis, which costs a lot and takes time, which in turn probably affects our ability to make fast decisions.*

As alluded to in some of the comments above, there are clearly tensions between permit holders and non-permitted operators; a group some interviewees describe as 'illegal' operators. These non-permitted operators are not allowed to advertise dolphin watching in their promotional material, or on their tours, nor are they allowed to change course to view dolphins, however the reality is they are likely to find dolphins during their voyages, as one permitted operator complains:

> *It seems unfair, when there is so much that we need to do to manage our operations... While a couple of illegal operators have removed mention now of marine mammals from their websites, you only have to look at the comments of Trip Advisor to see people saying 'it was great how they took us to look at the dolphins which we watched for ages'. They are stopping their boats, and changing their course (tourism operator #4)*

While operator frustration is understandable, DOC informants were also frustrated by the difficulty in enforcing existing regulations, and the time-consuming and often unsuccessful attempts at bringing prosecutions against operators. This is not a local issue; the difficulty in enforcing regulations is highlighted by Mulcahy and Peart (2012) and Fumagalli et al. (2021), each of whom showcase examples of situations where time-consuming and expensive prosecutions against operators have failed, leaving DOC hesitant to commit resources to such actions in the future.

Generally, it was relatively difficult to gain an interview with non-permitted operators, however those who were spoken to – informally and formally – expressed their concerns with the current system which they viewed as inflexible. One interviewee also expressed the opinion that in some

cases, their non-permitted activities would have less impact on the marine mammals than permitted operators, due to the size and nature of the vessel or the type of operation they offered. This operator agreed that the system was 'unfair' but for very different reasons, stating: "Those with the permits pay DOC large amounts of money, so it is in DOC's interest to ensure that the big operators continue to do well." This operator gave the example of DOC's SMART Operator programme. While non-permitted operators can attend SMART workshops, they are unable to get accredited or receive certification for their efforts, which they felt would give them an added boost when advertising their offerings. The fact that these operators are not involved in the scientific research and do not hear first hand about the findings of this research was another bone of contention.

The local DOC representative acknowledged the existence of an 'insider – outsider' status, but stated it was inevitable:

> *What we've got at the moment is a scenario whereby outsiders to the tribe emerge through time, you know, the tribe's established, the limits are established, and then … "where did that person come from?" And it would also be naïve to assume that they didn't know that those limits existed when they were starting out, you know? Some of them might have some of them might not have, I think both scenarios exist, but I've seen it in Lyttelton, I've seen it in Akaroa.*

He concluded:

> *I think the challenge* [is that]*... there are some very special values here and we all depend on them and if we don't recognise that they are interconnected, and if we push them too far then we lose them for everyone. I think that makes Akaroa an interesting place for people to have to confront what it means for there to be environmental limits. The social side is important, and communities are important, and a lot of the people in these communities regardless of whether they are permitted or non-permitted are actually great people. The reality is that there ARE limits to these things. The permit as it stands is probably not perfect, but it is our best chance at the moment to try and establish those limits in conservation's corner... I guess my challenge would be to those who question that system, would be show another model that effectively allows us to recognise and place limits.*

This tension was not only apparent between permitted and non-permitted operators; between the latter there was evidence of competition, with comments about marketing techniques and practices. For example, one of the operators highlights on their website: "To protect the long-term health and wellbeing of these beautiful creatures, we do not allow guests to swim with the Hector's dolphins" which could be read as a criticism of the swim with dolphin operators. Other informants accepted that they were pleased with the moratorium at least in part for 'the selfish view' that it stopped any new competitors entering the market. There were informants who admitted that some operators

felt a sense of 'ownership' of their permits, despite the ability of DOC to regularly assess permit conditions, including the right to withdraw them (*cf*. Mulcahy & Peart, 2012).

Another critical of tension in the Akaroa marine mammal context is the fact that some operators do not accept the latest scientific research, which is critical to the future of marine mammal tourism in the vicinity. The local DOC officer acknowledged the importance of a strong evidential base for any decision to be made about permit levels in Akaroa Harbour at the conclusion of the current moratorium. He also highlighted the unique position researchers found themselves in, by having decades of scientific research to draw on:

> *One of the ways we absolutely benefitted here, you really cannot answer those questions* [about long term changes in dolphin behaviours, distribution, survivability and reproductive rates] *without a really long term data set, you know? As dolphins live for 20 plus years or something. You can't even begin to imagine you can address long term questions unless you have long term data. We have data from around late 1980s. There's no question that that's helped us a lot. And there's no question that that is world class and unique, in itself. Not many places have that sort of data to draw in. So we were lucky to have that.*

He also stressed the importance of getting the science right, given the nature of the decisions to be made:

> *When there is a lot on the line ... in terms of the uniqueness of the species, in terms of the culture, and in terms of people's livelihoods and money, then when there is uncertainty then you need to go closer and closer towards building a strong evidential basis and you need to remove that uncertainty from your decisions.... To summarise we are learning more and more both internationally and locally and that is driven by the fact that there are high stakes here, you know? Which is that people's livelihoods are connected to this stuff and people are looking for ways to make money and to make a living and that can result in societal benefits that may be positive for local people and place.*

The two DOC officials interviewed expressed strong faith in the rigour of the science that has been conducted in Akaroa Harbour since the implementation of the moratorium in 2016, which has addressed key questions around long term changes in dolphin activity that may be linked to tourism pressures, as one explained:

> *What does it mean for their distribution? Some of those population level factors; is it changing where they spend their time? Is it changing their ability to reproduce, their ability to survive? As well as keeping tabs and building our understanding of short term impacts where we could, so I think at that time we did a pretty good job of working on getting to that point together.*

This research is now completed, and the report is being peer reviewed before release, but it is clear from discussions with operators who have seen a draft report that a reduction in permit levels, including limiting vessel numbers, will be a key recommendation.

Despite acknowledging the importance of scientific research to protect the Hector's dolphins, there is a general disagreement between operators about both the scale of the impact of human activity on the dolphin's behaviour, and the cause of this impact. A couple of informants stated outright that they "didn't believe the science", with another expressing cynicism about the research and questioning the figures used in the research. One informant claimed "lots of things could be influencing [the dolphin's] behaviour", while another reflected: "The main arguments some have is that operators pay for the research, when we know the main issue is not their businesses, it's the … recreationists". These operators came to these conclusions based on their lived experiences, for example, questioning the number of dolphins seen and the number and activities of other harbour users. As one said: "We see a lot of things that recreational boaties are doing, and there's no way of controlling recreational boaties". At the same time, a number of operators outlined voluntary measures they had introduced to protect the wildlife, including making fewer trips, travelling more slowly, and spending more time with the dolphins. Operators were also investing in new technology for their vessels which would reduce emissions, including noise.

The two DOC representatives – who have no doubt about the validity of the research, or the evidence that marine mammal tourism is having impacts on dolphin behaviour – expressed frustration at this position but as one acknowledged, they understood the cause:

> *I don't want to diminish the lived experience, because we all rely on it, but it is also more likely to be and biased andto lack clarity we expect from scientific method: "This is how we did it, this is the model we followed; this is why we used this method; this is what we saw"... and I think sometimes that has been a failing of science, to take the time to communicate in a way that speaks the language of different groups of people, so that they understand it. But at the same time I think there is a human nature element to it as well, which is that inevitably when people are faced with uncomfortable things and change, the first thing they like to do is to infer that something was wrong with the research findings, it was someone else's fault, especially when there is a lot at stake. We all do it, it's human nature, right?*
>
> *There is general recognition that commercial operators and the tourism industry which is what we are charged through the permit system with managing, they have an impact, but at the same time we'd be silly to think that there's not a lot of other traffic – cruise ships, they were very apparent at the time the research began – but also general vessel traffic which the operators often feel really strongly about, that they also play a role and have an impact.*

Options for the future

Synthesising the perspectives of informants and research from Aotearoa and globally, this final section considers some of the options for the future of marine mammal tourism in Akaroa Harbour, with implications for other places around the country. There is no doubt that marine mammal tourism in Akaroa moana is a central source of appeal for many international and domestic visitors to the destination, and that the marine mammal tourism operators contribute a great deal to the local community, not just in terms of employment, but through their work as advocates for the environment in the local community. It is also true that as the body of scientific evidence on the changing behaviour of the Hector's dolphins in and around the harbour, and questions about how to manage this moana, including consideration of existing permit levels, are front of mind for many operators and the DOC representatives.

Regulations

A first issue acknowledged by the majority of informants was that the existing Marine Mammal Act and the Marine Mammal Protection Regulations were outdated, given advances in scientific knowledge and changing community attitudes. This position was most strongly stated by the DOC informants, who emphasised that their first priority is to the dolphins and a precautionary approach should be taking to every issue impacting their welfare:

> *If we think about the way we view environmental law and environmental management, how far it has come in terms of how seriously we take it as a country, a culture and a people, then I think we would say it is being taken more and more seriously all the time. So perhaps the culture around what would have happened around those things* [environmental law and environmental management*] twenty years ago might raise eyebrows if it were to happen today. And that's got to be a positive thing.... When [marine mammal tourism] began it was viewed as kind of a benign activity where there wasn't really much environmental impact, but there was environmental benefits, in that it was getting people out there, and the perception was that people would go out there, and they would learn about dolphins, and they would learn about the marine environment and they would therefore be more willing, more likely to care and make decisions in their life more generally that would benefit the environment or the animal they were seeing.... and that sentiment is captured in the concept of a permit [in the MMPR 1992*]... *Although I've no doubt that some of that is accurate, I've also got no doubt that what we understood then with respect to the impact of marine mammal tourism was very different to what we understand now, thirty years later.*

The DOC informants and at least some of the operators acknowledged that the scientific evidence is showing the negative impacts of marine mammal tourism on dolphin activities; as one operator

acknowledged: “Look I think the simple reality is that we have an impact, we just try and minimise it” (tourism operator #5). The local DOC ranger concurred:

> *We have a bit more of a grasp of an evidential basis for what the impact might be, and that’s hard to argue with really when we look at the* [recent local research] *... that quite clearly shows that dolphins that are exposed to tourism change their activity budgets and change their behaviours in a significant way... and that wider international data, and that scientific basis has been growing at the same time as it has been growing locally.*

As stated above, the basis of the MMPR was a belief that marine mammal tourism was a benign activity, and might even have positive benefits, based on the ability of marine mammal experiences to raise awareness amongst visitors of the plight of the dolphins and the wider marine ecosystem, with the following comment being typical:

> *We have to stress ... the educational value of what we are doing. We are educators. We are talking to people about why our behaviour around dolphins are as it is, making people more aware, and I think that is right across the board, across New Zealand. Tourists want to know that they are not having a negative effect, and they want to learn about stuff. (tourism operator #3)*

While new science seriously questions those assumptions about the activity being benign, there has been less research into the extent of the educational benefits for visitors gained through these experiences. When it comes to long-term behaviour change, Knapp (2007) cautions about expectations relating to the role of interpretation in facilitating this, mostly due to the short duration of most interpretation experiences, while Masberg and Savige (1996) argue that the content of interpretation is mostly management driven, and not matching the desires of tour participants. In fact, McArthur and Hall (1996) suggest that the interpretation objectives set by managers are in the opposite order of importance to those of the tourists.

Education

While operators in Akaroa spoke a lot about the educational component of their activities, the extent to which this was received by visitors was not immediately known. To address this, a survey was conducted with 390 domestic and international visitors to Akaroa over the summer of 2022/2023 to explore this issue, as well as wider perspectives on the importance of regenerative and sustainable tourism values to their tourist experiences in Akaroa and New Zealand more broadly.

Generally, most of the principles of sustainable and regenerative tourism were rated as important by respondents. For example, 69.2% of respondents felt it was important or very important for there to

be ‘an emphasis on environmental sustainability by tourism operators,’ and three-quarters of respondents (76.9%) thought it was important or very important that ‘tourism operators contribute to the conservation of a species or habitat’. In comparison, only 60.6% felt it was important or very important that ‘there are opportunities to learn about the natural marine environment and its conservation’ during a New Zealand tourism experience.

In terms of their engagement with marine and coastal ecotourism in Akaroa, 27.1% (n.= 102) of respondents had been on a harbour cruise during their visit, 7.4% (n=28) swam with dolphins and 6.4% engaged in a coastal ecotourism experience, viewing seals or penguins (n=24). International tourists were twice as likely than domestic tourists to participate in a harbour cruise (34.2% cf. 19.8%), and 83.3% of those on seal or penguin tours were international tourists, but there were no significant differences in the swim with dolphin figures. Focusing just on those who took a cruise, it is unsurprising that they were significantly more likely to agree that Akaroa provided opportunities to learn about the natural marine environment and its conservation (39.8% definitely does, 46.9% probably/possibly does) than those who did not take cruises (24.3%; 47.1%); to agree that there is an emphasis on environmental sustainability by tourism operators (definitely 23.7%, probably/possibly 44.3% cf. 14.2% and 33.1%, respectively). While those who went on a cruise were significantly more likely to report that they learnt about marine mammals and/or birdlife around Akaroa Harbour (32.4% compared to 6.9% p.<.001), there was no significant difference in the proportion who learnt about environmental practices underway to protect the land (9.8% vs 6.2%) or Akaroa Harbour (7.8% cf. 5.1%). Furthermore, given the importance of an educational component both to the rationale for permits, and the expressed motivation of some many of the operators, the fact that less than a third of visitors taking a harbour cruise felt they had learnt anything would suggest there is room for improvement.

Other recent research undertaken in Tamaki Makaurau Auckland and Kaikōura similarly found that tourists on whale and dolphin tours desired to learn about the targeted species, but also about the wider marine environment and threats to it (Figure 6). An important finding was that they also wanted to learn what they could do to help preserve the marine environment (Lück, 2015). However, this research did not explore the extent to which they felt they had achieved these learning outcomes.

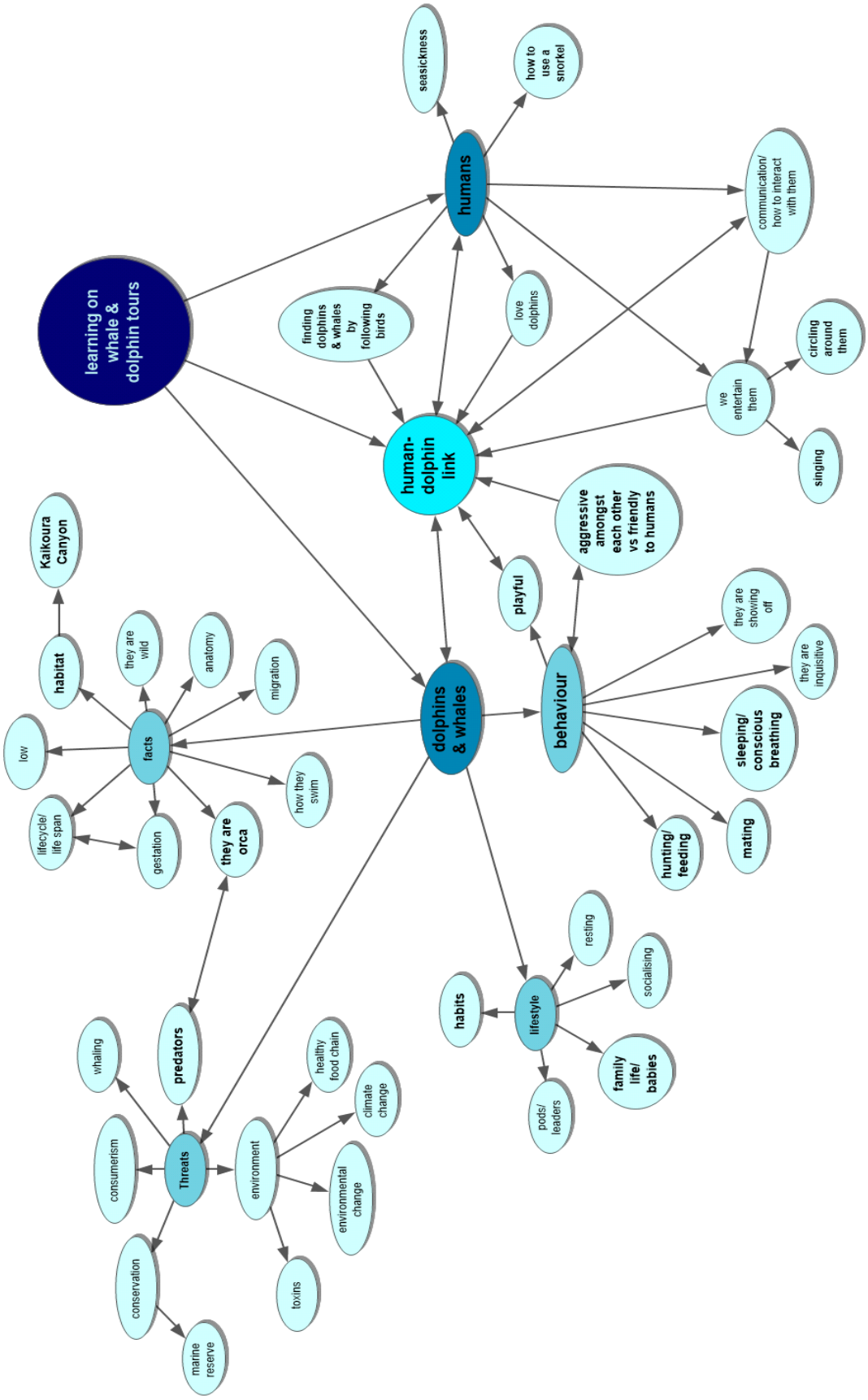

Figure 6: Themed results of desired content by whale and dolphin tour participants in Tamaki Makaurau and in Kaikōura
Source: Lück (2015)

Enforcing the Regulations

Another issue that was raised repeatedly by informants was the limited of resources available to DOC, and in some situations, a 'lack of teeth' to enforce regulations, as mentioned above (e.g., Fumagalli et al., 2021; Mulcahy & Peart, 2012). As one operator said: "I think that DOC just needs more tools in their toolbox to enforce the Marine Mammal Act; we keep asking for that" (tourism operator #3). The local DOC officer had a somewhat different view, stressing that the issues at stake require a high degree of rigour, which can also take more time:

> *Whenever you view value as economic gain there is pressure to expand and do more and more... and when that pressure is there and that pressure is strong, then regulating it requires a really really high level of rigor and evidential basis, which costs a lot and takes time, which in turn probably affects our ability to make fast decisions.*

There have been suggestions for scientists about the need for modification of regulations, which might see an exclusion of tour boats from certain high activity areas for the dolphins, or 'rest periods' during the day when no tour boats operated. All informants – both marine mammal tourism operators and DOC officers – agreed that increasing regulations was not necessarily an appropriate solution. Not only is it costly and time-consuming for DOC to enforce existing rules and regulations, but the local DOC officer questioned whether regulations are the most effective measures. He explained:

> *People don't like [lots of regulations] either. You know, people want some degree of freedom. They can tolerate a bit of regulation, but they don't want endless amounts of it. So the challenge of course, takes us back to the start where if you've got a tourism industry always looking for ways to grow and expand, then regulation inevitably starts to grow as we try and limit that environmental footprint.*

As outlined above, marine tourism operators spoke about voluntary measures they were taking to decrease pressure on the dolphins and harbour resources, including reducing the number of trips and modifying vessels. Regarding additional measures that could be implemented, the local DOC officer acknowledged there are other things he could do, but "we need to do our knitting first, and our knitting at this stage is with the permits that we've issued and the permitted boats". Both DOC informants acknowledged that pressure on resources has become even more acute in recent years as the impacts of climate change, and particularly extreme weather events, have taken their toll on Department of Conservation assets, such as walkways, resulting in expensive and time-consuming repairs (McMullin, 2023; RNZ, 2022).

Another related issue mentioned by informants was the challenges of having multiple agencies with regulatory roles on the harbour. While the Department of Conservation has responsibility for managing the marine reserves and marine mammal sanctuary, as well as the permitted operators, the Ministry of Fisheries regulates commercial fishing activities, and the Harbour Master's Office, operated by Environment Canterbury, is responsible for managing all marine-related activities that may affect vessel navigation safety in Akaroa Harbour and surrounds, including recreational boating activities (e.g., jetboating, stand-up paddleboarding, sailing and kayaking) and the operation of commercial ships and cruise ships – the latter being particularly important to marine mammal tourism in Akaroa Harbour. This also exacerbates the perception (and experience) of operators regarding the layers of 'red tape' and bureaucracy.

Informants raised a number of suggestions for ways marine mammal tourism in Akaroa Harbour could be better managed, with none of the tourism operators keen on seeing spatial (in terms of 'no go' zones) or temporal ('rest period') limits imposed, as one operator explained:

> *We don't want exclusive zones; we'd sooner manage what we are doing. There would be nothing more frustrating than quietly manouvering out to a pod of dolphins only to find that they are across the line and we can't go any closer. We don't want those restrictions put on us. (tourism operator #3)*

DOC informants also questioned whether that would be a suitable, or easily enforced, restriction, but stressed their current focus on establishing the scientific evidence on which any decision should be made. Alternative suggestions included reducing the speed limit in the harbour, with education of recreational boaties a preferred option over regulation; the local DOC officer summing it thus "we start the conversation… [and] … try and start through just education and knowledge sharing rather than regulation, which is a great first step right, if we start the conversation?"

A Fragmented Sector

In general, there was widespread recognition that protecting the Hector's dolphins should involve everyone, as their wellbeing affects everyone and not just the permitted operators. This point is summarised by the local DOC officer:

> *I think that is critical, with everything, whether it be management of the mammals or management of the wider marine environment; the idea that everyone is in the room and everyone understands each other is really about everybody having to pull in the same direction and work as a collective.*

As recognised in this project as a whole, the MCET sector in Aotearoa is substantial, but also diverse and relatively fragmented. MCET operators vary considerably by size and resourcing, in terms of finances, knowledge and experience. They also have differing access to knowledge to ensure their activities support Te Taiao on land and water. Many small operators are passionate about what they do and have unique skills and experiences to share with visitors but need better access to resources to enable innovation and successful, and sustainable, product development. Thus, facilitating the sharing of knowledge of best practices for using the moana within and beyond the ecotourism sector is critical.

This recognition of different needs and values within the community was paramount in the mind of the local DOC officer, who acknowledged that the task of aligning the recommendations of the research scientists which the needs of the community were also not straightforward:

> *There were some management recommendations that came with that research ... based on the science and their understanding from a science perspective... I'm sure they were thinking to a degree* [about wider implications] *when making management recommendations, but they did it from their science, from their corner... and there's some really valuable insights there. Our challenge now is to consider those insights and consider how they line up with the values and aspirations of the community and the operators, and how they line up with ... the interests of the government of the day, and with our decision making power and authority as an organisation.*

While any decisions regarding this issue are still in negotiation, one thing that is not negotiable is the role of mana whenua as genuine partners in any future decisions:

> *I like to think that there's a genuine commitment … to be an honourable treaty partner. And for any decision that is made now and in the past few years, the views of mana whenua have been fundamental. And I know they're always around the table around the permit discussions.*

Future decision-making might also include a reassessment of whether the current systems and processes, framed around a Western world view and way of doing things, is the most appropriate approach for the future:

> *I think what we can do is build our knowledge of how the Māori world view might view* [the permit system]*, and how a Māori process might work…. Maybe some of that stuff is less transactional, which is very Western way.*

A collective approach would require all harbour users sitting around the table and operating to the same standards, which is not occurring at the current time. One way to facilitate greater engagement between tour operators on the harbour might involve a reconsideration of the

relationship between the permit system and the SMART operator programme. Currently only permitted marine mammal tour operators are entitled to receive SMART accreditation. An alternative approach may be that all operators considering tour operations on the harbour would need a 'license' – which could take a form similar to the existing SMART operator programme – before applying for a permit, however, this would require a radical transformation of the current system and regulations, and the support of the government of the day to resource the Department of Conservation appropriately to implement and enforce it.

Synthesising the North Island and South Island case studies

An essential aspect of EBM is the engagement with diverse sets of expertise involving the social and ecological relationships that comprise the ecosystem. The importance of making informed, place-based decisions and utilising best practice was identified by those participating in the community meetings, and in individual interviews. Their awareness of the relevance of expert knowledge involves both the stated desire for marine tourism to occur in a sustainable manner as well as some anxiety regarding the use of such knowledge to justify regulation of, and constraints on, tourism activities. A number of operators acknowledged the importance of science, with one operator stating that "*we only ever rely on the pure hard science*."

Science and innovation are critical success factors for tourism operators at destinations that are competing for visitors and striving to respond to ever-changing market trends and social, technological, environmental, and economic conditions. Innovation depends on the flow of knowledge through formal and informal networks within destinations that connect organisations at different levels (the firm, with industry associations, public agencies, communities, and local government).

Effective network development in tourism requires a genuine commitment to collaboration on the part of all participants in the tourism system. The ability of small and medium-sized tourism enterprises to overcome institutional barriers is largely reliant on their capacity to create and leverage networks and on the quality of relationships between the various entities with whom they interact. While the importance of cooperation and inter-sectoral linkage formation is recognised as essential to successful ecotourism this is not always seen in practice (Fennell, 2020). This is usually due to the challenges in achieving a compromise between different agendas and jurisdictions involved in ecotourism.

A measurement framework for marine and coastal ecotourism

Globally, tourism operators and destinations have been striving to improve their sustainability over the past three decades. Part of this endeavour has been the advent of a plethora of accreditation schemes at international, national, regional and local levels. These accreditation schemes are based on a variety of measurement frameworks and are often applied to destinations as a whole rather than to tourism operators, and to separate human activity from the ecosystem in which they operate. To be useful these frameworks need to be locally relevant and include the perspectives of operators, mana whenua and the wider local community *in the context* of the environment in which they operate, with ecosystem-based management (EBM) being an appropriate lens to apply to this task.

Aotearoa New Zealand has jurisdiction over a vast coastal and marine environment, which has been increasingly under pressure from a range of sources. Marine and coastal ecotourism (MCET) has been a driving force behind the development of coastal and nearshore environments and provides work and income to local communities. This development, however, is not without its challenges. To manage MCET effectively and sustainably, it is necessary to carefully and accurately assess its resource use and impact, apply appropriate regulatory frameworks, and plan for sustainable and regenerative development. Consequently, a moana-centred Measurement Framework for MCET Operations is proposed (Figure 7, Table 2).

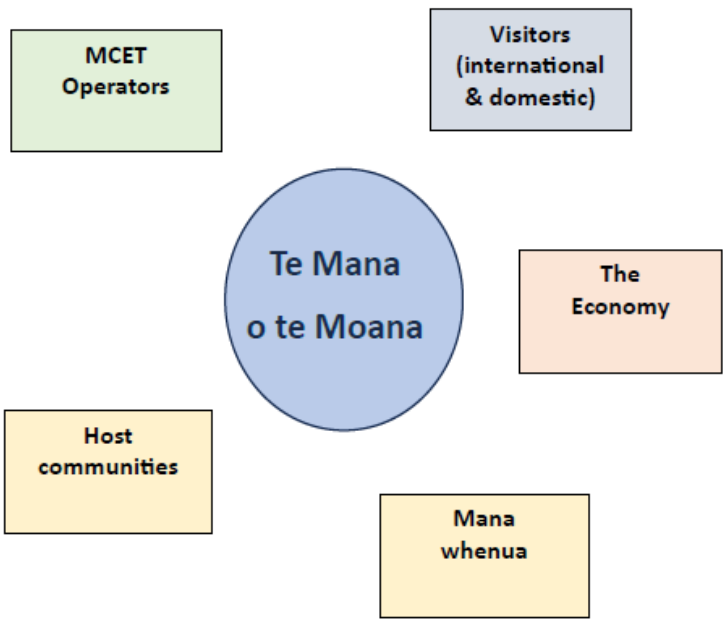

Figure 7: A Moana-centred Measurement Framework for MCET Operations

Applying any such model requires the selection and application of a range of qualitative and quantitative indicators to the many destinations with MCET operations around the country. The development of indicators requires an extensive and inclusive consultation process, where all stakeholders are given a voice, and have a fair input. Only once this is implemented can a set of appropriate indicators be identified to populate the overall measurement framework.

The current research project – including the nationwide survey of MCET stakeholders' opinions (Milne et al., 2021b), the overview of existing management frameworks (Lück et al., 2023) and the in-depth analysis at two case study locations – has provided a starting point for this process. This project has focused on MCET businesses, mana whenua and Te Taiao o te Moana. Thus, the first attempt to bring life to this measurement framework gives particular attention to the indicators relating to these components; it is left it to future researchers to add nuance to the other framework components of the economy, the host community, and the visitors. It is important to emphasise that a one-size-fits-all approach is not suitable for Aotearoa New Zealand's diverse communities, cultures and coastal and marine environment in general, and MCET in particular. Thus, it is suggested to create a nationwide framework and set of indicators, which can then be adapted to regional and local settings and requirements.

Table 2: Components of the Measurement Framework for MCET Operations

Components of the Framework for MCET Operations	**Indicative Questions**
Te Taiao/ Te Mana o te Moana	***Are healthy marine environments being safeguarded for future generations?***
	Are decisions regarding levels and types of MCET operations based on science and mātauranga Māori?
	Is robust research underpinning decision-making regarding MCET?
	Are decisions being made in a collaborative and participatory way, involving all interested parties?
	Are existing marine (and terrestrial) regulations fit for purpose, and for the environment in which they are being imposed?
	Are regulations being enforced, and are they enforceable?
Mana Whenua/Moana	***Are mana whenua and mana moana involved as genuine partners in MCET decision-making?***
	Is iwi rangatiratanga and whānau/hapū rangatiratanga being upheld?
	Are Māori values and rights upheld through all MCET endeavours?
	Are there authentic opportunities for operators and their guests to learn about Māori culture and values through MCET in the region?
	Are there pathways and support for mana whenua and mana moana to develop MCET opportunities, if they so wish?
MCET Businesses	***Are MCET operations thriving, sustainable and resilient?***
	Are operators able to operate profitably and sustainably?
	Are tourism operators contributing to environmental conservation efforts (through education, activities, funding)?
	Are there opportunities and resources available for operator capacity building for environmental sustainability and regulation compliance?
	Do MCET businesses have environmental plans to measure and reduce carbon use and ecological footprints?
	Are there strong and effective partnerships between operators, mana whenua and agencies?

The Economy	***Does MCET support a thriving and resilient region?*** Is MCET supporting a high-value economy through the employment opportunities provided? Are MCET businesses locally owned? Are locally sourced goods and services used by the tourism sector where possible?
Host Communities	***Is community wellbeing a core consideration in MCET decision-making?*** Are decisions regarding MCET informed by community values and priorities? Do local residents support the current levels of MCET development in their community? Do local residents believe that they personally benefit from MCET? Do local residents believe that the community benefits from MCET? Are the benefits and costs from MCET distributed equally within the community?
Visitors	***Are visitors enriched and better informed about New Zealand's natural and cultural heritage through their experience of MCET?*** Do visitors have opportunities to learn about the natural marine environment and its conservation through MCET experiences? Is the behaviour of MCET visitors appropriate to the sustainability of the natural marine environment? Are visitors satisfied with their MCET experience?

Te Taiao/ Te Mana o te Moana

A central component of EBM is that healthy marine environments are safeguarded for future generations. Therefore, this Measurement Framework for MCET Operations centres te mana o te Moana at its core. On the basis of this project's findings, it is clear that a fundamental principle regarding te taiao is that decision-making around MCET operations should be grounded in science *and* mātauranga Māori, and that robust and ongoing research is needed to ensure that the best scientific evidence available is used. The case study research revealed that Akaroa stakeholders were generally positive about the availability of scientific evidence, particularly around the impacts of

MCET on the Hector's dolphins, whereas stakeholders in Tīkapa Moana/Hauraki Gulf felt this was an area of weakness.

While robust scientific evidence and recognition of the wisdom of mātauranga Māori should be at the forefront of decision-making, it is generally recognised that if decision-making is undertaken in a way that is perceived as fair and inclusive there is a much better chance that all stakeholders will be supportive and work together in creating a healthy and sustainable coastal and marine tourism industry for their region. This was supported by stakeholders in each case study region, who stressed that all interested parties should collaborate in these decisions, and that science should be shared in a transparent and inclusive way. At the current time, at least some stakeholders in each region feel excluded from this process.

Another issue to emerge strongly in the case studies is the need for there to be appropriate marine and terrestrial regulations in place to protect the natural marine environment, including regulations that may limit MCET operations. All operators spoken to in this study – both in the nationwide survey and in interviews – were aware of potential negative environmental impacts caused by tourism and are generally supportive of regulations to protect the moana. However, they also raise a variety of concerns about current regulations, particularly as they relate to the Department of Conservation permit system. For example, participants noted that the Department of Conservation is underfunded, resulting in administrative delay. Some informants also feel the current permit system is 'broken', and that the current legislative framework governing conservation and tourism is failing. In particular, there is widespread recognition that the Marine Mammal Protection Act (1978) and Marine Mammal Protection Regulations (1992) are out of date and need an urgent review. Some informants also voiced frustration about the lack of enforcement of existing regulations. Most informants linked this back to the underfunding of DOC, but some felt that while permitted operators generally abided by the MMPA and MMPR, while non-permitted operators and private boat operators often would not, knowing that they were unlikely to face fines or prosecution.

Mana Whenua/Moana

A central finding from the survey of national stakeholders and the case study research was strong recognition of the need for input from mana whenua and mana moana in any decision-making regarding the moana, and that "indigenous values and mātauranga Māori have a strong role to play in planning and management of MCET" (Milne et al. 2021b, p. 8). As outlined in this report, it is recognised that this relationship between crown agencies and mana whenua has strengthened over

recent years, but there were still questions raised – particularly amongst Māori operators and iwi representatives – as to whether mana whenua's role yet represented a genuine partnership model which upheld iwi, hapū and whānau rangatiratanga as guaranteed by Te Tiriti o Waitangi.

There is a genuine interest amongst MCET operators and their customers to have opportunities to learn about Māori culture and values through MCET in the region. For example, Milne et al. (2021b) found that 74% of survey respondents would welcome the opportunity to collaborate with iwi in developing marine and/or coastal experiences (p. 12), and a survey of 390 visitors to Akaroa found 61% of them stated it was important or extremely important that opportunities existed to learn about Māori culture and values in the destination (Fountain, 2024). However, some Māori have raised concerns that the inclusion of Māori concepts and kupu in MCET operations could become little more than 'brownwashing' unless collaboration between mana whenua and MCET operators was established on the basis of trust and ongoing meaningful relationships that honour the place of iwi in safeguarding the marine environment. In the North Island case study, in particular, the need for clear pathways and support for mana whenua and mana moana to develop MCET opportunities were seen as an important step in upholding rangatiratanga.

MCET Operators

This research project has sought out the perspectives of MCET operators regarding their experiences in this sector and what the sector means to them. The research also explored the current and future business challenges and opportunities these largely small and medium sized tourism enterprises face as they navigate their way, in the context of the need to ensure a sustainable marine and coastal ecotourism sector that contributes to a thriving marine environment. Therefore, a fundamental question to ask is whether the MCET businesses in a region are thriving, sustainable and resilient. MCET businesses must be able to operate profitably and sustainably to enable them to fulfil other goals, such as contributing to environmental conservation efforts, whether that is through their educational programmes (for visitors and potentially the local community) or through their activities or funding for activities.

This research has found that many MCET operators are actively involved in local environmental groups, participate in scientific research, and help to communicate with visitors and their local community the need for environmental regulations and reduced impact on the marine environment. Many invest in modern technologies in order to reduce their impacts and are keen to learn more about what they can do to operate more sustainably. However, there is also evidence of frustration

amongst some operators about the complex and changing bureaucratic landscape they must negotiate to ensure regulation compliance.

To assist these operators, it is important that there are opportunities and resources available for them to build their capacity for environmental sustainability and resource compliance. Suggestions from informants that would help in this endeavour included expanding the remit of DOC's Smart Operator programme to include permitted and non-permitted operators for at least part of the programme, and having support available to help operators navigate this environment, including cultural advisors specifically for iwi, hapū or whānau enterprises. This support could also aid MCET operators in strengthening MCET business efforts to reduce carbon emissions and other negative environmental impacts. Coupled with the need for more resources for capacity building of MCET operators is a requirement for support to ensure strong and effective partnerships are developed and maintained between operators, mana whenua and regulatory agencies.

The Economy

The experience of COVID-19 in the past few years has highlighted the challenges for regions over-reliant on tourism and has led many academics to suggest the potential for the pandemic to act to 'reset' to the tourism industry (Prayag, 2020). In particular, this period has brought into sharp relief the impact of a growth mentality and over-tourism on natural environments and social licence to operate in many communities dependent on tourism, whilst also highlighting an over-dependence on tourism and a lack of diversity in some local economies (e.g., Cave & Dredge, 2020; Higgins-Desbiolles, 2020, Rastegar, Higgins-Desbiolles & Ruhanen, 2021). There has also been recognition that tourism must be "responsive and answerable to the society in which it occurs" (Higgins-Desbiolles 2020, p. 617). While it is beyond the scope of this project to explore these wider issues in any detail, it must be acknowledged that MCET, and tourism more generally, should exist as one component of a diversified regional economy. Therefore, a fundamental question to ask regarding the role of MCET in a destination's economy is whether this sector is supporting a thriving and resilient region.

As existing measurement frameworks suggest, it is not enough for the tourism sector to provide employment opportunities for local residents, but it should also contribute to a high-value economy by providing meaningful and non-seasonal employment opportunities, which pay a liveable wage and provide opportunities for career progression. The MCET sector can also best support a local

economy when businesses are locally owned, and where locally sourced goods and services are prioritised for use by the tourism sector where possible.

Host Communities

As outlined above, it is increasingly recognised that local residents have a very high stake in tourism development in their communities. However, host communities are not homogeneous, and will hold diverse views regarding the importance of MCET operations, and the tourism sector more generally, to their way of life. Some community members heavily rely on, and benefit from, tourism, while others feel they are not being heard and must bear the brunt of (too many) visitors, especially during the high season. By and large, community members accept tourism in their communities, even if they do not directly benefit from it. Tourism New Zealand's latest report (Angus & Associates, 2023, p.4) states: "Based on the Tourism Approval Rating (TAR score), resident sentiment towards tourism activity in New Zealand is at the highest since monitoring began in 2017, for both international and domestic tourism." However, some community members feel that tourism has reached its limits.

While the host communities in MCET destinations have not been a specific focus of this research project, we acknowledge the centrality of their interests in the sector's development. Therefore, community wellbeing should be a core consideration in MCET decision-making, and the Living Standards Framework offers a set of tools by which to assess and measure this diverse concept (Treasury, 2023). Other measures to assess this component of the framework include the extent to which decisions regarding MCET are informed by community values and priorities, and the support amongst local residents for current levels of MCET development in their community. This measure is likely closely correlated with two other measures which enquire about residents' belief in the benefits of tourism; both personally, and for the community as a whole. Finally, recognising the diversity and inequalities that exist within communities, it will be important to access whether the benefits (and costs) of MCET are distributed equally within the community, noting again that bespoke measures will be needed for individual communities to reflect their unique characteristics.

Visitors

The final component of this measurement framework are the visitors. Tourism does not exist without visitors. Consequently, it is important that a destination offers suitable and satisfactory experiences to those visiting the country. Over the past decades, tourists have become increasingly aware of the potential impacts of the industry (and their own travels) and are looking for sustainable and memorable experiences. Aotearoa New Zealand seeks to attract those travellers that are

conscious of their way of travelling, with these tourists often described with labels such as 'high value travellers' and 'sophisticated travellers', although the exact meaning of these terms remains undefined (Tourism New Zealand, n.d., New Zealand Tourism, 2021). The Tourism New Zealand website (https://www.newzealand.com/int/) promotes a wide range of activities, ranging from nature and adventure to food and wine experiences, to rich culture, indicating that it is these experiences that travellers to Aotearoa New Zealand are seeking, and the country endeavours to offer them. The pandemic highlighted the importance of the domestic tourists to many of Aotearoa New Zealand's regional destinations, leading to greater exploration of domestic market segments, and a prioritising of segments who are seeking similar experiences to their international counterparts (TourismNZ, 2023); that is, a memorable and enriching experience.

While there are many ways to measure a visitor's experience of MCET, a useful starting point is to consider a standard definition of what is expected of an ecotourism experience. A frequently cited and widely accepted definition of ecotourism is:

> *A sustainable form of natural resource-based tourism that focuses primarily on experiencing and learning about nature, and which is ethically managed to be low-impact, non-consumptive, and locally-oriented (control, benefits, and scale). It typically occurs in natural areas and should contribute to the conservation or preservation of such areas.* (Fennell, 1999, p. 43)

This definition highlights the importance of MCET operations providing an educative experience about the natural marine environment for visitors, including the actions needed for its conservation. While acknowledging the potential difficulty of translating this educative principle into practice (Lück & Higham, 2003), it is suggested that a central question to ask about the visitor experience could be: are visitor enriched and better informed about New Zealand's natural and cultural heritage through their MCET experiences? While it is not possible to force visitors to learn and may not be easy to measure such learning objectively, secondary questions could relate to the extent to which visitors have opportunities to learn about the marine environment and its conservation through their experiences, and whether their behaviour is appropriate to the sustainability of the natural marine environment. This could measure their casual behaviour or more deliberate pro-environmental activities which 'give back' to the natural environment and local community. A final question to ask would be: are visitors satisfied with their MCET experiences? After all, the sustainability of MCET businesses and destinations is as much dependent on satisfied visitors as it is to the support of mana whenua, local residents and te mana o te moana, thus bringing us full circle.

Conclusion

The case studies presented in this report shed light on a variety of opportunities for MCET to be at the forefront of coastal and marine tourism development. However, they also highlight the trials and tribulations operators must endure before they are even able to commence commercial operations. While there are regional and operator specific nuances in these cases, they have provided a variety of issues that are commonly found at most, if not all locations across the country.

Good governance can be characterised by trust in the actions of public sector authorities, transparency in processing administrative requirements and subsequent decision-making, accountability, and the ease of using public services (Mäenpää, 2020). Mäenpää contends that "the requirements of good governance must be fulfilled each time a civil servant makes an administrative decision" and this includes "providing good service, handling matters in an interactive way, openness, the realisation of legal rights and obligations, and flexible procedures" (para 2). Poor governance undermines the legitimacy of authorities, restricts transparency, and increases bureaucracy. Other effects of poor governance can be seen in the detrimental emotional responses of an individual to what is perceived as being dysfunctional red tape (Hattke et al., 2019). In some cases, the emotional consequences of bureaucratic procedures, administrative delay, and administrative burden in citizen-state interactions spark emotional reactions such as confusion, and frustration.

The COVID-19 pandemic offered a unique opportunity to shape, rebuild and revitalise the New Zealand tourism industry to strengthen its contribution to Aotearoa New Zealand and deliver real benefits for New Zealanders (Lück et al., 2021). In 2020, Tourism Aotearoa (the country's tourism industry association) made a submission to the government's Tourism Futures Taskforce "to take bold steps to address knotty issues that have been holding the industry back" and improve the sustainability of the industry (TIA, 2020). Their submission argued that "the conservation/tourism interface is becoming increasingly dysfunctional and that the current legislative framework governing conservation and tourism is failing" and called on the government to address issues in the tourism/conservation interface. Recommendations in the submission included reviewing DOC's management planning and concessions functions and requiring DOC to enable businesses to deliver conservation outcomes.

Research showed that relationships between stakeholders are complex and vary by location. A one-size-fits-all approach would be ill advised since the requirements and desires vary by each location in

Aotearoa New Zealand. The case studies of the small town of Akaroa and Aotearoa New Zealand's largest city, Tamaki Makaurau Auckland, underpin this. Consequently, a framework such as the proposed measurement framework above (Figure 7) can only serve as a guide and needs to be adapted to each individual location. That being said, based on existing research and literature, and particularly on the case studies of this report, a set of general policy recommendations was developed and will be presented in the following report.

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