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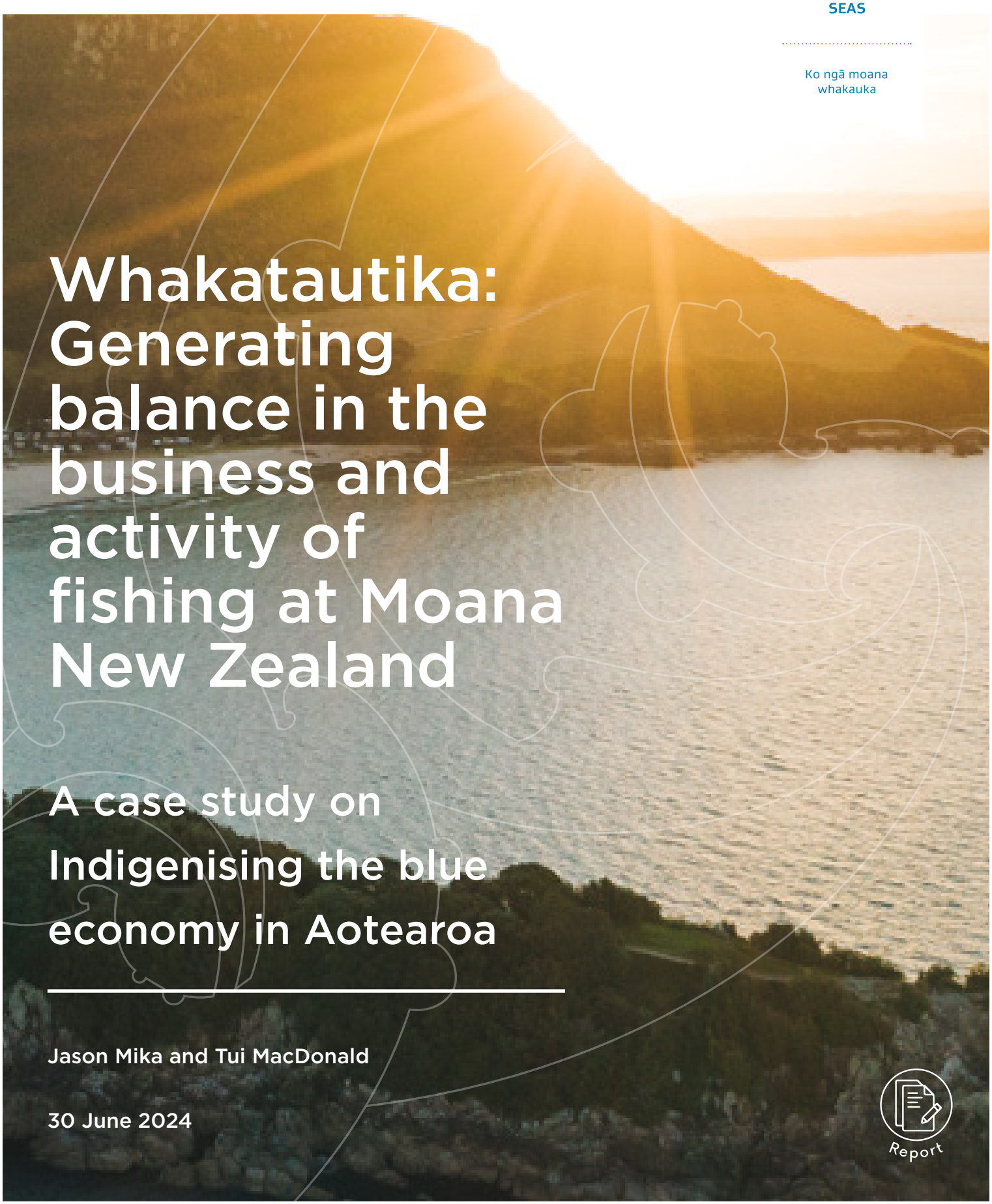

Whakatautika: Generating balance in the business and activity of fishing at Moana New Zealand

A case study on Indigenising the blue economy in Aotearoa

Jason Mika and Tui MacDonald

30 June 2024

Report

This document was prepared by Jason Paul Mika (Tūhoe, Ngāti Awa, Whakatōhea, Ngāti Kahungunu – University of Waikato), and Tui MacDonald, for Michelle Cherrington, Ko Ngā Moana Whakauka Sustainable Seas National Science Challenge.

About the Sustainable Seas National Science Challenge

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

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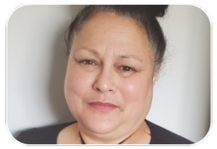
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Summary

This report sets out the results of a case study on Moana New Zealand, an iwi (tribal) owned fishing company formed out of the Treaty of Waitangi fisheries settlement and a whānau (family) owned inshore fishing enterprise known as The Rawlinson Group (TRG). The research is part of an *Indigenising the blue economy* project funded by Ngā Moana Whakauka Sustainable Seas National Science Challenge. This case study draws on the knowledge and experience of Moana New Zealand and TRG to understand relationships between iwi and whānau scale enterprises in the Māori marine economy (MME). TRG is a Māori-owned family inshore fishing business which has been operating for 30 years. As first-generation fishers, the Rawlinson whānau have prioritised both strategic and family decisions that have established their business and assured their role in Aotearoa New Zealand's commercial fishing industry. The case study sought to learn how Māori marine-based enterprises apply mātauranga Māori to achieve multidimensional wellbeing, human potential, and relational balance with Tangaroa.

Investigating the opportunities for marine activities that create economic value and contribute positively to ecological, cultural and social wellbeing in Aotearoa New Zealand is important when indigenising the blue economy. This research focuses on three themes: pāhekoheko (integration), auahatanga (differentiation), and whakatautika (balance) that derive from constraints affecting the MME. Moana New Zealand and TRG are demonstrating how they already operate within an Indigenised blue economy. Moana New Zealand examples include:

- Supporting Māori fishers to upgrade their fishing fleets
- Partnering with Māori fishers and contract growers in long-term agreements
- Innovations in aquaculture and taking a long-term view of the fishing industry and Māori shareholder views through the recent Sanford deal
- A commitment to strengthening mātauranga and tikanga within the company
- Meeting the ambitious target to be carbon neutral by 2040; and
- Moana New Zealand's new oyster hatchery, Kirikiritātangi, and their farming techniques to produce a high-quality product.

TRG examples include:

- Strategic fleet renewal to future-proof their business and the industry
- Establishing a strategic intergenerational business relationship with Moana New Zealand and succession planning as a multi-generational long-term business

- Owning fish quota as a pragmatic approach to assuring competitive advantage
- Dedicated intergenerational mātauranga of the ocean and industry to ensure sustainably managed fishing operations
- Recognition and a willingness to work with hapū to protect oceans and taonga, and supporting the rights and interests of Māori to customary harvest
- An ongoing commitment to relationships and customary fishing
- Employing innovative approaches and technology to minimise impacts on the environment and taonga species
- Maintaining data sovereignty with sophisticated technology that collects and curates their own ocean and business data
- Responsiveness to climate variation, future-proofing against extreme weather events and climatic conditions which may otherwise interrupt fishing
- Actively seeking to be a voice for commercial fishers in policy, industry decisions, and strategy development
- Valuing people in their business, and encouraging whānau to be part of their growth and development
- Remunerating crew and staff well, with investment in safety and staff capability a priority; and
- Possessing a crew who are able to rotate across any TRG vessel assuring business continuity and contractor and employee security.

Contents

Tables

Figures

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Introduction

Purpose

The purpose of this report is to share findings of a case study of Moana New Zealand and its approach to indigenising the blue economy and support for whānau-scale enterprise to engage in the business and activity of fishing.

Background

Ko Ngā Moana Whakauka or Sustainable Seas National Science Challenge (Ngā Moana Whakauka, Sustainable Seas Challenge) is one of 11 National Science Challenges that have been running since 2014. With $680 million in public funding over 10 years, the goal of the Science Challenges is to investigate in collaborative ways solutions to the most significant science-based issues and opportunities facing New Zealand. The vision for Ngā Moana Whakauka is for New Zealand to have healthy marine ecosystems that provide value for all New Zealanders (Sustainable Seas National Science Challenge, 2018). In pursuing this vision, Ngā Moana Whakauka has two main goals: (1) improving marine resource decision-making and the health of our seas through holistic, ecosystem-based management (EBM); and (2) transforming New Zealand's ability to enhance our marine economy into a blue economy. It is important to understand the Māori marine economy from a historical and contemporary basis so concepts like EBM can be seen in the context of te Tiriti o Waitangi and Māori knowledge (Reid & Rout, 2020).

This case study is part of the *Indigenising the blue economy* project Ngā Moana Whakauka funded during the Sustainable Seas Challenge's second phase (Sustainable Seas National Science Challenge, 2023). The research builds on a first phase project called *Whai rawa, whai mana, whai oranga: Creating a world-leading Indigenous blue economy*, which set out to map the Māori marine economy, both its institutions and enterprises and the business models they employ (Mika, Rout, et al., 2022).

Indigenising the Blue Economy

Indigenising the blue economy is a research project that falls within the blue economy theme of Ngā Moana Whakauka. The purpose of the project is to partner with Māori authorities (iwi, pan-iwi, and Māori enterprises) to explore and support Māori who aspire to a blue economy. A preliminary definition of the blue economy was the marine activities that generate economic value and contribute positively to social, cultural and ecological wellbeing (Lewis, 2018). An expected outcome is to understand how Māori marine-based enterprises apply mātauranga Māori to achieve multidimensional wellbeing, human potential, and relational balance with Tangaroa.

This case study explores how Moana New Zealand works with and supports whānau to engage in the business and activity of fishing and other marine-based activity. We share the experience of a Māori-owned and operated fishing business—The Rawlinson Group (TRG)—with one of the main companies they operate being RMD Marine Limited. TRG has been an inshore fisher for some 30 years. Members of the family explain how, as first-generation fishers, they entered and have maintained a presence in the industry.

This research investigates opportunities for marine activities that create economic value, contribute positively to ecological, cultural and social wellbeing, and apply mātauranga Māori and treaty principles (Joseph, 2022; Joseph et al., 2019).

Research themes

Indigenising the blue economy focuses on three key themes: (1) pāhekoheko (integration)—supporting Māori-led multi-generational integrated planning across economic sectors in their marine districts to maintain te mauri o ngā taonga katoa and enhance the efficiency of asset holding and resource utilisation; (2) auahatanga (differentiation)—differentiating kaitiaki generated products from commodities and diversify Māori activity in the marine economy; and (3) whakatautika (balance)—creating employment, enterprise, and other economic opportunities for whānau and hapū in coastal communities, leveraging the assets of iwi.

Case study research

This case study is one of five within the Indigenising the blue economy research project (see Table 1).

Case Studies

Organisation	Description	Themes
Moana New Zealand	Moana New Zealand is a large New Zealand seafood company owned by iwi. Research focused on overcoming centralisation by generating balance between iwi fishing enterprise and whānau (family) enterprise.	Whakatautika
Iwi Collective Partnership (ICP)	ICP is a collaboration of 19 iwi fisheries companies, pooling their quota. Working with them to integrate tikanga (customary practices) and mātauranga into operations was the focus along with research on overcoming fragmentation with added value.	Pāhekoheko
Moriori	Moriori are the quota holding Indigenous people of Rēkohu (the Chatham Islands). The focus is on enabling uniquely Moriori-led fisheries and overcoming fragmentation, with potential for additional value.	Pāhekoheko Whakatautika Auahatanga
Ngāti Mutunga o Wharekauri	A Chatham Islands quota holding iwi who are concerned about cultural input whilst optimising economic outcomes. Research focuses on overcoming fragmentation and assessing the condition of the marine reserves.	Pāhekoheko Whakatautika Auahatanga
Ōnuku Rūnanga	Akaroa Salmon is an aquaculture company purchased by two Māori organisations, Ōnuku and Ngāti Porou. Akaroa Salmon are looking to add value to their products through marketing and overcoming reliance on a few markets.	Auahatanga

Table 1. *Case studies*

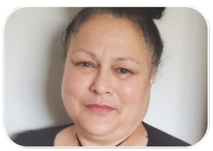
Project team

The *Indigenising the blue economy* project team comprises:

- Jason Mika, Co-lead
- John Reid, Co-lead
- Matthew Rout, Synthesis team
- Jay Whitehead, Synthesis team and senior Māori researcher
- Annemarie Gillies, Senior Māori researcher
- Fiona Wiremu, Senior Māori researcher
- Georgia McLellan, Senior Māori researcher
- Tui MacDonald, Senior Māori researcher
- Corey Ruha, Project Manager

Senior Māori researchers collaborated with community researchers on the case studies. The community researcher was primarily responsible for fieldwork and community-oriented communication while the senior Māori researcher guided research processes, analysed data, and developed case study reports. The synthesis team, consisting of Māori and non-Māori researchers, generated research and practice-based outputs.


Annemarie Gillies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Literature Review

Māori marine economy

Traditionally, the Māori marine economy was centred around whānau and hapū occupation, use, and management of fishing grounds of coastal Aotearoa New Zealand (Rout, Reid, et al., 2019). This economy was governed by rangatira in accordance with tikanga Māori practices of management, sharing and reciprocity (Mika, Rout, et al., 2022). When seen in the light of a Māori world view, the marine economy takes on a different character. A Māori world view acknowledges the interconnectivity between humans and the environment from which kaupapa and tikanga principles have evolved to emphasise sustainable use and management (Mika, Rout, et al., 2022). Practically, this includes kaitiakitanga (an ethic of intergenerational care), rangatiratanga (an ethic of authority and interdependence), whanaungatanga (an ethic of communal growth), and manaakitanga (an ethic of generosity) (Rout, Reid, et al., 2019). Accordingly, these operating principles and practices provide a template for profitable and sustainable resource management and use. Generations of experience as tangata whenua have guided and refined mātauranga pertaining to the management, protection, and use of the marine environment and its resources. However, this knowledge has been diminished through the experience of colonisation (Mika, Rout, et al., 2022).

The contemporary MME encompasses small whānau-scale enterprises that use relatively traditional inshore fishing methods through to large trawling fleets operating as far out as New Zealand's Exclusive Economic Zone (EEZ) (Joseph et al., 2019). The EEZ is defined within Exclusive Economic Zone and Continental Shelf (Environmental Effects) Act 2012 as "the marine space from 12 to 200 nautical miles from the coast of New Zealand. The continental shelf is included within the EEZ as the area that extends beyond 12 nautical miles from the coast to the outer edge of the continental margin" (Joseph et al., 2019, p. 99). Within these enterprises are operators who work inside and outside the EEZ. They include Māori enterprises, whānau and iwi businesses, units within hapū or iwi, and pan-iwi entities. Fisheries dominate the MME in income and environmental impact (Rout, Reid, et al., 2019).

The MME is guided by principles and practices that support Māori identity; intergenerational wealth; restoring and growing mauri; and flourishing whānau, hapū and iwi wellbeing. Rout et al. (2017) highlight the need for a systemic change to balance short-term gains with long-term resilience by interlinking the social and natural capital, with financial capital. Rout, Reid, et al. (2019) argue implementing transformational change in oceans management is complex, and as a result, this has led to the integrated ecosystem approach (EA), and ecosystem-based management (EBM) and the value metrics of ecosystem services (ES). In these approaches, Indigenous values and world views are lacking. Yet, EBM and EA appear to have an affiliation with mātauranga Māori because they view humans as an important and interconnected part of marine ecosystems. With growing attention on oceans, Western appreciation of the interconnectivity between natural and non-natural spheres is starting to align with long-held Indigenous views, which have the potential to influence organisations and institutions with stakeholder involvement (Rout, Reid, et al., 2019).

Māori ownership and control of the marine economy, its fishing grounds, and other resources was transferred to non-Māori ownership and control through broken promises under te Tiriti o Waitangi, legislative changes and government depriving Māori of the opportunity to sustain themselves economically, socially, and culturally through the marine economy (Mika, Rout, et al., 2022). In 1983, a quota management system (QMS) was introduced which was criticised as the regime did not recognise Māori rights and interests under the Treaty of Waitangi. An investigation showed how Māori failed to receive quota through the individual transferable quota (ITQ) system. As a result, Māori challenged the Crown's ownership of New Zealand's marine resources with the court's finding in favour of Māori. Subsequent treaty claims negotiations with the Crown led to the Treaty of Waitangi fisheries settlements (Bargh, 2016; Moon, 1998).

Rout, Reid, et al. (2019) highlight three problems with the QMS and fisheries settlements. First, the fragmentation of quota across iwi meant a small number of iwi held quota to operate commercial fishing operations. Second, the erosion of the traditional Māori economy at the whānau and hapū scale due to the consolidated ownership of quota at an iwi level. Third, the creation of customary rights limiting the ability of whānau and hapū to trade fish. Rout, Reid, et al. (2019) acknowledge some iwi entities are creating strategies to transfer ownership and control of commercial fisheries to whānau and hapū. Māori ownership of quota is concentrated within iwi and pan-iwi ownership of Moana New Zealand and a 50% stake in Sealord. Māori marine-based enterprises are, nonetheless, investing in recreating and applying kaitiaki business models that embed Māori commercial activity within sustainable ecosystem processes (Rout,Lythberg, et al., 2019). These models can be applied at whānau, hapū, and iwi scale to provide for the wellbeing and wealth of their communities. An institutional map shows the Māori marine economy has much potential, but its possibilities are constrained by regulatory institutions that sit outside direct Māori control and influence.

Rout, Reid, et al. (2019) provide a number of commercial advantages to Māori businesses that assert a Māori worldview and approach to managing the marine ecosystem and economy. The development of premium products for markets using sustainable means and a social conscience is explored. These products include crayfish, snapper, oysters, pāua and other seafood harvested and sold in line with Māori principles, practices and mātauranga which, therefore, provide a platform to sell products to environmentally conscious consumers. Rout, Reid, et al. (2019) also suggests strengthening whānau, hapū and iwi structures to participate in the development of integrated value chains that enable authentic connections between Māori and consumers of kaupapa Māori

Blue economy

The Western world view has considered oceans an infinite resource that can be exploited for human benefit. This assumption is unsustainable with oceans becoming an important focus for different groups (Rout, Reid, et al., 2019). Blue economy is defined by the World Bank (2017) as sustainably using the ocean's resources for economic growth which will aid in the improvement of livelihoods and jobs while also retaining the health of the ocean's ecosystem. The blue economy encompasses different perspectives and captures the growing interest in the coasts and oceans as sites for economic development, with consideration of the ecological and environmental consequences of exploitation (Lewis, 2018). Rout, Reid, et al. (2019) describe the blue economy as encompassing the environmental, social and economic pillars of sustainability, and incorporates ocean values and services into economic modelling and decision-making processes to "practically connect socioeconomic development with long-term environmental sustainability" (p. 12).

Nevertheless, there have been some issues with this concept. The World Wildlife Fund (WWF) International (2015) believes there is uncertainty in the blue economy as the concept uses the sea and its resources for sustainable economic development and links the blue economy to any economic activity in the marine sector. Like the green economy, the blue economy has been criticised for its capitalist grounding rather than recognising its contradictions and inequalities (Silver et al., 2015). Rout, Reid, et al. (2019) warn that the blue economy should be carefully applied in Indigenous contexts as it will either colonise Indigenous approaches or 'bluewash' unsustainable activities.

In January 2023, the Sustainable Seas Challenge released a report, Developing blue economy principles for Aotearoa New Zealand, setting out principles for a blue economy in Aotearoa (Short et al., 2023). The principles were formulated to support New Zealand's marine businesses while improving the health of the marine environment and human wellbeing. Short et al. (2023) reviewed the state of international blue economy principles to support the development of principles that reflected New Zealand's unique context (see Table 2).

Proposed Aotearoa New Zealand blue economy principles

Principle	Description
Intergenerational	Empowering holistic and long-term governance and management that support the moana (the ocean) to provide for economic, social, cultural, and environmental wellbeing.
Treaty-led	Providing for the application of te Tiriti o Waitangi, the Treaty of Waitangi principles, tikanga (protocols to do what is right), and mātauranga Māori (Māori knowledge).
Sustainable	Adopting approaches to resource management that improve marine ecosystem health.
Prosperous	Generating economic success and actively transitioning towards resource use that is productive, resilient and enhances ocean-dependent livelihoods and coastal communities.
Inclusive	Engaging communities to realise benefit from marine resources to align with, deliver upon and balance multiple values and uses (both commercial and non-commercial).
Accountable	Making transparent decisions that reflect the value of and impact upon the ocean's natural, social, and cultural capital.

Table 2. *Proposed Aotearoa New Zealand blue economy principles*
Source: Short et al. (2023).

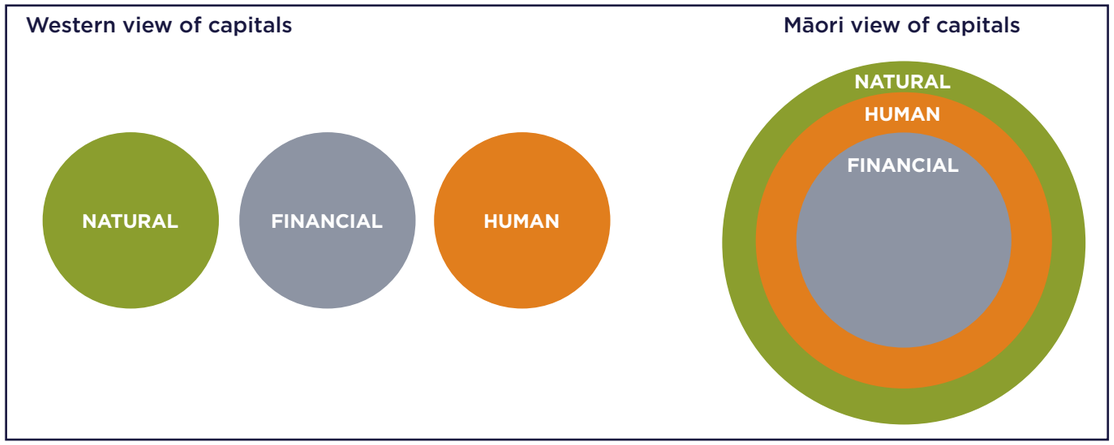


Figure 1. *Western and Māori view of capitals*
Source: (Rout, Reid et al., 2019)..

An Indigenous blue economy

Rout, Reid, et al. (2019) describe the blue economy as a good conceptual start but acknowledge that the blue economy must consider not just financial and natural capital but also human capital. From an Indigenous perspective, the financial, human, and natural capital are interacting spheres with natural capital encompassing all. This differs from the Western view where capitals are "separate, distinct and equivalent, while Māori see the natural (with humanity as part of this) as more important" (Rout, Reid, et al., 2019, p. 13). For the purposes of this report, EBM will be used to integrate mātauranga Māori by analysing mātauranga-inspired innovations which enable Māori to partner and lead in marine management and decision-making. This will enable the Māori marine economy to operate long-term within both profitable and sustainable paradigms (Rout, Reid, et al., 2019).

From an Indigenous perspective the term 'economy' is problematic with Hēnare (2016) stating that Māori as an economy needs to be embedded in and considered within both the natural and social world. He refers to this as the 'Economy of Mana' and how this theory is driven by "four wellbeings – spiritual, environmental, kinship, and economic" (p. 135). Rout, Reid, et al. (2019) preface that to be Indigenous, the concept of the blue economy "needs to re-embed exchange and the flows of financial capital in the wider human and natural contexts in which the economy occurs, and it must also account for the flows of human and natural capital" (p. 14).

Kaitiaki-centred business models

Rout, Lythberg, et al. (2019) discuss the kaitiaki-centred business models using case studies of Māori marine-based enterprises in Aotearoa New Zealand. These models "embed Māori commercial and social activity within sustainable ecosystem processes to support the integrated management of marine ecosystems and economies'" (Rout, Lythberg, et al., 2019, p.10.). Kaitiakitanga (guardianship) according to the Crown as having an intensified environmental focus which is referenced in legislation. From a Māori world view, however, kaitiakitanga is more expansive. Kaitiakitanga encompassed care and guardianship for humanity, as humans are also part of the environment (Kawharu, 2000).

The concept of mauri and having relationships that connect humans and the environment is mutually beneficial (Rout, Lythberg, et al., 2019; Rout, Reid, et al., 2019).

A kaitiaki-centred business model ensures the long-term health and vitality of the ecosystem within which the business operates and widely distributes the businesses' benefits that are beneficial to both people and the planet. This model connects the environmental, economic and social pillars into mauri sustainment or wellbeing. The report acknowledges that for this model to be understood and effective, there needs to be governance and political authority for any kaitiakitanga objective to be met. And from these objectives, benefits can flow to the community through employment, food security and increased profitability (Rout, Reid, et al., 2019).

This model is guided by a framework that recognises Māori operating within a settler institutional framework, specifically, Māori operating in the fishing sector and the legislative constraints that cover Māori fisheries (Reid et al., 2019). These will be discussed further in this report. This research incorporates this business model into this case study.

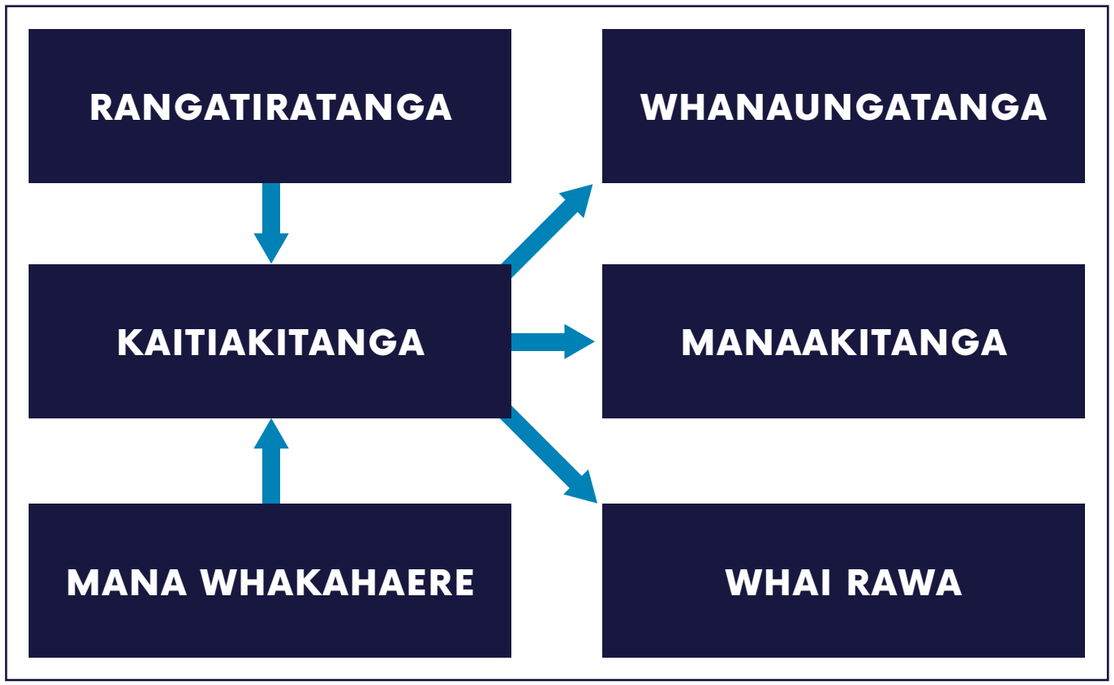


Figure 2. *Framework for kaitiaki-centred business models*
Source: Rout, Lythberg et al. (2019, p. 11).

Methodology

Kaupapa Māori research

This research adheres to kaupapa Māori theory, research philosophy, and methods (Pihama, 2001; Smith et al., 2012; Smith, 1999). Kaupapa Māori research is reflected in some of the following principles and practices. The principles of te Tiriti o Waitangi are central to this research, as they are to EBM and the blue economy (Joseph, 2022; Mika, Dell, et al., 2022; Short et al., 2023). Consistent with kaupapa Māori and te Tiriti o Waitangi, this research engages Māori as partners rather than as participants (Edwards et al., 2019). Tino rangatiratanga is expressed through enabling Māori to retain ownership and control over their relationship with the Māori marine economy and their mātauranga. Reid and Rout (2020) use kaupapa Māori research to inform their analysis of the Māori marine economy. The principle of taonga tuku iho (inherited treasures, tangible and intangible) is acknowledged as well as respecting te ao Māori in all its dimensions—te reo, tikanga, kaupapa, and mātauranga (Hudson et al., 2021). The research team use te reo in interviews, hui and wānanga (Mahuika & Mahuika, 2020). Whakawhanaungatanga (relationality) was used as a method of case study partner selection and engagement, building on mātauranga from the first phase of research (Mika, Rout, et al., 2022). The principle of kia piki ake te kāinga me te kaupapa seeks positive effects on the wellbeing of whānau and Māori communities through responsive research. Beneficial outcomes is an intended outcome of this case study.

Research process

A research plan was co-developed with Moana New Zealand for this case study. The research plan identified the priorities for the organisation, the roles and responsibilities of the researchers and case study partner, and the research activity and outputs. The case study research involved five main steps: (1) a review of literature; (2) interviews with case study partner organisations; (3) wānanga with case study partners; (4) analysis of organisation, sector and industry; and (5) basic information about their organisation. As a part of this research, Michelle Cherrington (Ngāti Awa, Te Whānau ā Apanui) facilitated and arranged a site visit to the Moana New Zealand office in Mount Wellington, Auckland, in April 2023. Two interviews were conducted with members of the executive team, Mark Ngata (Ngāti Porou) and Fiona Wikaira (Te Hikutū, Ngāpuhi, Ngāti Kahu ki Whangaroa) as well as a tour of the factory and cool store.

Later in April 2023, we met in Tauranga with members of TRG: co-directors and business-owners Roger and Dan Rawlinson (Ngāti Awa), who were accompanied by Dan's wife Caryn (Te Arawa, Ngāti Paoa). The Rawlinson whānau shared their journey in the fishing industry and their relationship with Moana New Zealand. The Rawlinson whānau provided valuable insights into the industry from a business-owner and operator perspective, as quota owners, and through their lived experience and their mātauranga of the moana. We received participants' written and verbal consent for interviews to be conducted, which were transcribed, reviewed by the researchers, and incorporated into this case study along with other publicly available information.

Moana New Zealand

Structure

Aotearoa Fisheries Limited (AFL) trading as Moana New Zealand is the largest Māori-owned fisheries company in Aotearoa New Zealand. Moana New Zealand was established as a custodian of commercial fisheries assets returned to Māori through the Treaty of Waitangi Fisheries Settlement with the Crown, the allocation model for which is set out in the Māori Fisheries Act 2004.The nature of the settlement means that Māori will always be involved in fisheries and Moana New Zealand's activities and investments retain a long-term perspective. Moana New Zealand works with various species including tio, ika, pāua, pāua kahurangi, and kōura, and operate three divisions: inshore fisheries, aquaculture, and processed foods.

Moana New Zealand is owned by all Māori via 58 mandated iwi organisations. In 2004, the company took ownership of a number of Māori-owned fishing enterprises and assets through the Māori Fisheries Act 2004. For instance, Moana New Zealand owns a 50% share of Sealord Group Limited (Sealord), with the other 50% owned by Japanese seafood company, Nippon Suisan Kaisha Limited (Nissui) (Moana New Zealand, 2022a). Since 2016, Moana New Zealand has been a limited partner of Port Nicholson Fisheries Limited (PNF) Partnership, which is a pan-iwi partnership with around 30 quota owners (Moana New Zealand, 2020). PNF focuses on kōura supply chain and live export with over 90% of its kōura (lobster) exported overseas (PNF, 2023a).

Strategy

Moana New Zealand (2022a) aim to be a guardian of Māori fishing assets who is dedicated to the wellbeing of future generations, with a vision to "connect the world to the true taste and rare magic of New Zealand's best kaimoana and kai ora" (p. 7). Creating long-term value for shareholders and stakeholders, including communities in which they operate is a desired outcome (Moana New Zealand, 2022a).

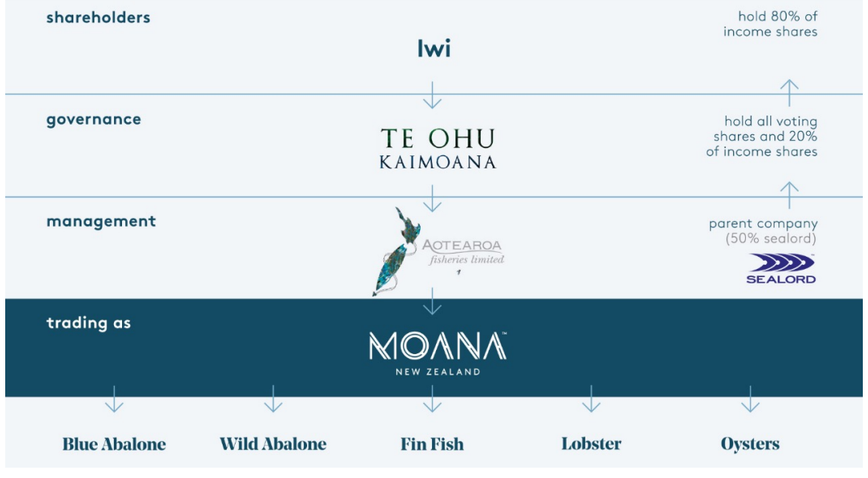


Figure 3. *Structure of Moana New Zealand*
Source: Moana New Zealand (2020)

Moana New Zealand values

Purpose
As guardians of Māori fishing assets, Moana New Zealand are dedicated to contributing to the wellbeing of future generations.

Value	Outputs
Whakatipuranga (prosperity for future generations) Financial, manufactured	• Annual dividend. • Maximising the use of assets. • A continuous improvement culture. • Investing in infrastructure to enable growth
Whakapapa (our genealogy) Intellectual, social and relationship	• Revitalisation of te reo Māori with its people. • Tailoring business models and opportunities for shareholders. • Strong partnerships with shareholders and industry.
Manaakitanga (looking after our people our way) Human, social and relationship	• A zero harm culture. • Hikoi ki te Ora – wellbeing programme. • Training and development programmes. • Free health insurance for all permanent employees • Development opportunities and scholarships for rangatahi
Kaitiakitanga (custodians for our future generations) Natural	• Collaborative fisheries management. • Environmental improvements from innovative farming and harvesting practices. • Carbon neutral by 2040. • Development of a decarbonisation roadmap

Table 3. *Moana New Zealand values*
Source: Adapted from Moana New Zealand (2022a, pp. 6-7).

Operations

At the time of the case study (October 2023), Moana New Zealand had 310 staff, plus an additional 80 contract inshore fishers and 37 divers. Te Ika Tū ki Uta is the inshore fisheries division of Moana New Zealand and ika (finfish) and kōura (lobster) (see Figure 5). The inshore division is the largest income earner for Moana New Zealand accounting for about 70% of the company's revenue. Mark Ngata manages 180 staff and an additional 33 contract inshore fishers. Māori contract fishers catch around 62% of Moana New Zealand's quota. See Appendix A for the New Zealand Commercial Fishing Intensity. This map shows the distribution of total commercial catch which is estimated from all reported fishing events from 1 October 2007 to 30 September 2019. Within the New Zealand Exclusive Economic Zone (EEZ), there are small and sporadic areas of high commercial fishing intensity, the remaining areas have low to no fishing activity (Fisheries New Zealand, 2021a).

Moana New Zealand catches 62% of its wild harvest volumes by bottom contact methods, also known as trawling, which is a process where a fishing net is towed by a boat either through the water column (mid-water trawl) or along the seafloor (bottom trawl) (Moana New Zealand, 2023d). According to the Ministry for Primary Industries (2023) about 31% of the EEZ is closed to bottom trawling. In addition to this, bottom trawling is prohibited in about 21% of the territorial sea. The trawl footprint has declined overtime and 11% of New Zealand's EEZ and territorial seas are trawled. See Appendix B for the New Zealand Commercial Trawl Fishing Intensity.

Inshore fishing is conducted as far out as about 12 nautical miles from the coast of New Zealand and tio (oyster) farming across nearly 400 hectares. This includes Moana-owned farms totalling 332.94 hectares, and contract grower farms of 67.32 hectares (Moana New Zealand, 2022d).

Figure 4. *Moana New Zealand processing locations*
Source: Moana New Zealand (2020d)

Moana New Zealand fishes and harvests solely from the inshore waters around New Zealand exporting pāua kahurangi (blue abalone), pāua tūwā (wild abalone), ika (finfish), kōura (lobster), tio (oysters) and Kai Ora (ready-to-eat meals). Kai Ora is the newest product for the domestic and international market recently launching ready-to-eat meals. Pāua kahurangi, pāua tūwā, ika, tio and Kai Ora are processed from 15 locations from Parengarenga in the Far North, down to Nelson and across to the Chatham Islands (see Figure 4) (Moana New Zealand, 2022a).

Interests in other companies

All Moana New Zealand Annual Catch Entitlement (ACE) is harvested by contract fishers and divers using their own vessels. Moana New Zealand do not own fishing vessels. Moana New Zealand is a significant owner of lobster quota, which is leased to a pan-iwi specialist operator Port Nicholson Fisheries Limited Partnership (PNF) (Moana New Zealand, 2022a). PNF operates in seven of nine commercially-fished lobster quota management areas covering one million square kilometres around the North Island and the Chatham Islands. In 2012, Parininihi ki Waitōtara (PKW), Iwi Collective Partners (ICP) and Ngāti Mutunga o Wharekauri Asset Holding Company acquired PNF. The company is now New Zealand's largest iwi-owned exporter of kōura, with 18 iwi as limited partners and another 13 iwi as members of ICP. All net profits generated by PNF are returned to the company's iwi partners (Port Nicholson Fisheries Ltd, 2023b). Moana New Zealand operates two food retail outlets (within Moore Wilsons supermarkets in Wellington and Porirua). The stores sell fresh seafood daily directly to Wellington customers. Moana New Zealand also holds a 50% shareholding in Oceanz Seafood Licensing Limited. This company is the franchisor for six Oceanz branded specialist seafood retail stores across Auckland in Albany, New Lynn, Henderson, Botany, Manukau Mall and Mission Bay (Oceanz Seafood, 2023).

Moana New Zealand and four other iwi entities own 20% each of the Bay Packers Limited Partnership (BPLP), a 100% iwi owned entity which exports tuna and processes fish for domestic sale for its fresh fish shop in Mt Maunganui . The four owners with equal shares are Moana New Zealand, Ngāti Tūwharetoa Fisheries Holdings Limited, Te Arawa Fisheries, Te Pātaka o Tangaroa Ltd – Ngā Rauru Ki Tahi and Ngāti Ranginui iwi Fisheries Holdings Company Limited. BPLP is based in Mt Maunganui, owns a small parcel of quota of mainly southern bluefin tuna which is caught in New Zealand, and purchases ACE from other parties including Moana New Zealand.

Moana New Zealand indirectly owns 50% of Sealord, a deepwater business that also farms salmon in Australia. The 50% shareholding was acquired as part of the 1992 fisheries settlement (Moon, 1998). Sealord exports 90% of its catch in various frozen forms (Ihaia, 2023).

Figure 5. *Moana New Zealand store at Moore Wilsons*
Source: Moana New Zealand (2022)

In May 2023, Sanford agreed to sell the ACE for much of its quota of North Island inshore species to Moana New Zealand through a long-term agreement for a minimum term of 10 years. Under the deal, Moana New Zealand would pay $11 million a year for the first five years of catch entitlement, scaling up to $13 million over the next five years, with payment then increasing at 1.5% a year. Moana New Zealand is expected to pay an extra $5–$8 million for two of Sanford's fishing vessels and other equipment and a marine farm. More than 100 staff from Sanford are impacted from the deal and Moana New Zealand are facilitating the employment of affected staff where practical. Sanford said the deal was an opportunity to sell an unprofitable part of its business to generate a low-risk income stream and focus on higher growth areas. Moana New Zealand is well placed to take on the additional catch and processing volumes, and also have a track record of successful inshore operations (Morrison, 2023). In the year ending 30 September 2022, Sanford had a sales revenue of $531.9 million (Sanford Limited, 2022). This deal was approved by the Commerce Commission on 13 September 2023 (Sanford Limited, 2023). The Commerce Commission was satisfied the sale was unlikely to considerably lessen competition in

any whole market in relation to the supply of popular inshore fish species to New Zealand wholesale and retail customers (Sanford Limited, 2023).

Other company highlights

With assets totalling $591.28 million and liabilities at $89.96 million, Moana New Zealand has a total shareholder equity of $501.32 million (Moana New Zealand, 2022a). This is in line with other large seafood catch and processing companies. Under the Māori Fisheries Act 2004, Aotearoa Fisheries, trading as Moana New Zealand continues to play a key part of the intergenerational Māori Fisheries Settlement with the Crown. This means the fisheries assets under the Act will never be sold. As a result, at least 40% of profit is paid to shareholders, comprising 58 iwi, to be used as they wish. The remaining balance is reinvested by Moana New Zealand into growth opportunities (Explore Careers, 2023). Moana New Zealand reported a net profit after tax of $12.01 million. Despite a challenging 2022 year, its results were 25% above Plan. A $4.8 million payout was provided to iwi for the 2022 financial year, with a total of $131 million paid to iwi (NZ Herald, 2022).

According to Moana New Zealand (2022a) of its 310 staff, 38% identify as wāhine and 62% tāne. A total of 34% of all employees are of Māori descent. All of the board members are Māori as well as 60% of the executive team. Of the 37 contract divers, 42% are Māori. In addition to this, 85% of ika is caught by Māori owned vessels and 80% of independent and contract tio growers are Māori (Moana New Zealand, 2022d).

New Zealand is Moana New Zealand's largest market, followed by Australia and Asia. Sales by species were kōura – $7.8 million, tio – $13.2 million, pāua kahurangi – $3.4 million, pāua tūwā and Kai Ora – $26.1 million, and ika – $80 million. Exports of pāua tūwā and te kai ora, pāua kahurangi and kōura exceeded Plan, ika was slightly behind (down 4%) while tio only achieved 56% of Plan (Moana New Zealand, 2022a).

Board and Executive

Te Ohu Kai Moana Trustee Limited is the controlling shareholder of Moana New Zealand and is responsible for appointments to the board. The board has statutory responsibility for the affairs and activities of the company. They meet bi-monthly and their governance role is to maximise Māori fisheries assets owned by iwi and deliver growth for shareholder wealth through maintaining a strong seafood business (Moana New Zealand, 2022a).

Moana New Zealand Board

Directors	Rachel Taulelei, Chair, (Ngāti Raukawa ki te Tonga, Ngāti Rārua, Ngāti Koata).
	Dylan Lawrence (Ngāti Raukawa, Ngāti Ranginui, Tūhourangi).
	Glenn Hawkins (Ngāti Whakaue, Ngāti Maniapoto).
	Greg Summerton (Rākaihautū, Ngāi Tahu, Waitaha, Ngāti Māmoe).
	Mavis Mullins (Rangitāne, Te Atihaunui-a-Pāpārangi, Ngāti Ranginui).
	Jamie Tuuta (Ngāti Mutunga, Ngāti Tama, Te Āti Awa, Taranaki Tuturu).
	Rangimarie Hunia (Ngāti Whatua).
	Paki Rawiri (Waikato, Ngāpuhi).
Associate Directors	Linda Grave (Whakatōhea).
	Ngarimu Parata (Ngāti Porou, Ngāi Tahu).

Table 4. *Moana New Zealand Board. Source: Moana New Zealand (2022a).*

Moana New Zealand Exectuvie

Name	Role
Steve Tarrant	CEO
Grant Shuker	Chief Financial Officer.
Mark Ngata (Ngāti Porou)	General Manager – Inshore.
Michelle Cherrington (Ngāti Awa, Te Whānau ā A0panui)	Group Communications and Sustainability Manager.
David Cossey	Group Portfolio Manager – Projects and ICT.
Dean Pennell (Ngai Te Rangi)	General Manager – Sales and Innovation.
Fiona Wikaira (Te Hikutū, Ngāpuhi, Ngāti Kahu ki Whangaroa)	General Manager – Aquaculture.
Karen Funnell	Group Safety and Wellbeing Manager.
Katrina Thomson (Te Aitanga-a-Hauiti, Te Aitanga a Mahaki)	Group People and Culture Manager.

Table 5. *Moana New Zealand Executive. Source: Moana New Zealand (2022a).*

The Rawlinson Group

Formation

The Rawlinson Group (TRG) has been operating for over 30 years. Initially, the business was established by Bill and Nancy Rawlinson (Ngāti Awa). Today TRG is a successful inshore and deepsea fishing business owned and operated by Roger, Dan, and Marcus Rawlinson under guidance from their mother Nancy, who continues to support her sons and their business as matriarch and business administrator. This is a first-generation fishing family, with over 30 employees and contractors. The Rawlinson business model seeks to future-proof their business by investing in their own whānau first. This ensures that future Rawlinsons have the capability to continue their intergenerational legacy. The next generation of Rawlinsons are advantaged with early exposure to the business of fishing alongside master mariners and learn astute business acumen from working alongside their whānau. Younger members are also encouraged to suggest emergent innovation and technology that may improve the safety and success of their operation.

Operations

TRG is an inshore and deepwater commercial fishing business which operates within the northern part of New Zealand exclusive economic zone (EEZ). They have been successful in establishing and fishing an integrated catch plan, which has enabled them to fish sustainably. Currently, TRG is the owner-operator of six commercial fishing vessels, making the Rawlinson's the largest Māori-owned fishing company that exclusively fish for Moana New Zealand. In addition to commercial fishing, TRG also holds significant quota parcels, which provides them with a competitive advantage. TRG is dedicated to developing sustainable fishing practices and approaches. A primary focus has been fleet modernisation. Effort and money have been invested in achieving business efficiencies. As a result, TRG have been agile in expanding and rationalising their business operations as they make fluid adjustments to political, economic and societal expectations across the commercial fishing sector in response to market, industry and operational demands.

Species TRG catch include snapper, blue cod, flatfish, gurnard, tarakihi, and trevally (Ministry for Primary Industries, 2022).

Whānau

Originally from Rotorua, Bill and Nancy owned and operated a successful plumbing business. In addition to their home in Rotorua, Bill and Nancy had a family batch in the Coromandel. Their son, Roger Rawlinson spent a considerable amount of his holidays in the coromandel and upon leaving school found work in aquaculture. Encouraged by his parents who had obtained a commercial fishing permit through purchasing the family's first fish quota, Roger established the Rawlinson's first commercial fishing enterprise and was soon joined by his brothers, Daniel and Marcus. Buoyed by Roger's success, Bill and Nancy purchased more quota and their first commercial fishing boat. In the 1990s the Rawlinsons moved to Tauranga. This was a pragmatic decision because of the access to fishing grounds that provided mixed species and the region's growth that supported their young families.

Vessels

Built in 1978, the *Margaret Philippa* is a 26-meter fishing trawler and the oldest of TRG vessels (see Figure 6).

The *Santy Maria* (2016) was built with co-investment with Moana New Zealand. This

Figure 6. *Margaret Philippa*
Source: Ultimate New Zealand Soccer (2023).

state-of-the-art commercial fishing vessel satisfied both TRG's and Moana New Zealand's commitment to their strategic business relationship, including a long-term ACE agreement. The *Santy Maria* was named after Nancy Rawlinson, the whānau matriarch. The vessel achieves both TRG's and Moana New Zealand's commitment to strategic fleet renewal and supporting Māori fishers in the fishing industry. The vessel is a dedicated fishing trawler, fuel-efficient and built to respond to New Zealand's challenging oceanic conditions. Designed to improve sustainable and efficient commercial fishing, the *Santy Maria* is an example of how new and state-of-the-art technology coupled with marine advancements can improve fishing capability whilst minimising environmental impact.

The *Hikurangi* is a 22-metre refurbished fishing trawler launched in 2022. Based in the Far North, this vessel is dedicated to fostering TRG's relationship with hapū and iwi. In addition to being a fully operational trawler fitted with modern marine harvesting technology, the *Hikurangi* provides opportunities for local Māori and the community generally who want to experience being on a commercial fishing vessel and to undergo training, creating potential pathways for whānau into the fishing industry.

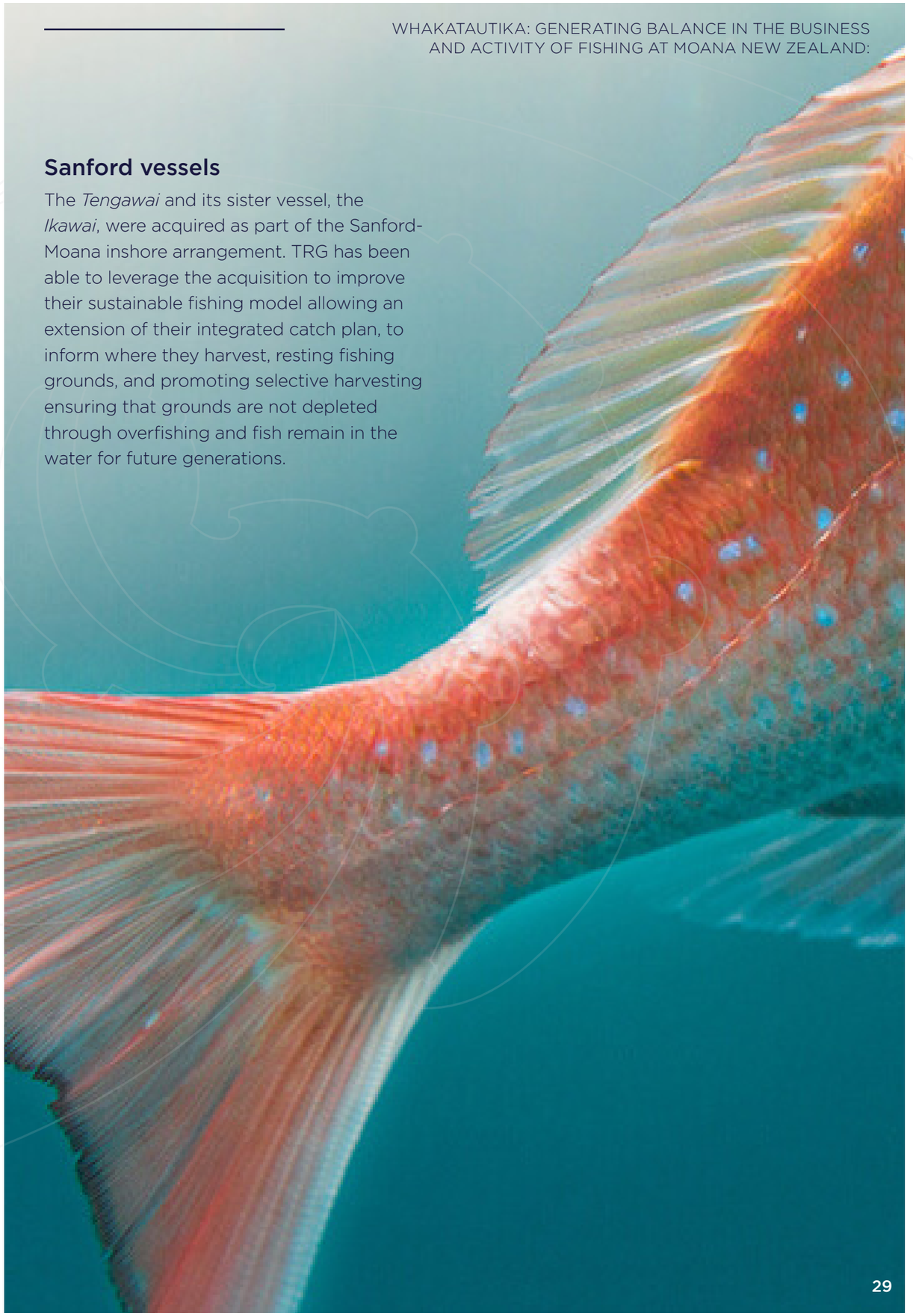
The *Aotea* is an 18-metre trawler converted to a longline vessel. It currently operates on the West Coast with three or four crew. The longline fishing technique ensures quality snapper is caught and exported. This vessel and crew was set to move across to TRG in early 2024. TRG have actively promoted the need to invest in building capability in Aotearoa New Zealand's fishing sector. This partnership is a realisation of their strategy to identify opportunities to integrate and extend their business.

Figure 7. *Santy Maria*
Source: Aimex (2017).

Figure 8. *Hikurangi*
Source: Marine Traffic (2022).

Sanford vessels

The *Tengawai* and its sister vessel, the *Ikawai*, were acquired as part of the Sanford-Moana inshore arrangement. TRG has been able to leverage the acquisition to improve their sustainable fishing model allowing an extension of their integrated catch plan, to inform where they harvest, resting fishing grounds, and promoting selective harvesting ensuring that grounds are not depleted through overfishing and fish remain in the water for future generations.



Findings

This section presents findings from the case study based on interviews with Moana New Zealand and TRG. Results from the interviews provide a deeper understanding of each company's values and aspirations and how they are implemented in their operations and in their relationships.

Sustainability journey

In 2015, through the United Nations (UN), 17 Sustainable Development Goals (SDGs) were established to end poverty, protect the planet, and ensure prosperity for all (United Nations, 2018). Moana New Zealand has aligned its strategy to the SDGs (Moana New Zealand, 2022c). Here is how some of the company's projects align:

- Engagement – A focus on bringing their people on the journey of sustainable development by embedding a commitment to the 6R's: rethink, refuse, reduce, reuse, recycle and repair to reduce waste, particularly of plastics. To help with engagement, Moana New Zealand launched its sustainable rewards programme – He Koha. This initiative was launched in July 2022 and encourages ideas to help reduce the company's carbon emissions. The first quarter saw an uplift of 72% in engagement with 38% of ideas implemented (Moana New Zealand, 2022a). The company's commitment to the 6R's has resulted in a number of tangible results including:
  - The use of energy efficient lighting.
  - A new refrigeration unit in Auckland that moves reject heat generated from refrigeration to heat water, and
  - Fuel efficiency measures for its truck fleet (Moana New Zealand, 2022b).
- Lighten our harvest and farming – An ambitious agenda to minimise the company's environmental footprint, better care for marine ecosystems and understand significant sites. A number of initiatives have been identified under the following topics:
  - Future of fishing gear
  - Understanding where and when they will, and will not, fish
  - Fisher behaviour and culture, and
  - Tio (oyster) transformation.
- The company's commitment to lightening its environmental footprint has resulted in a number of outcomes including:
  - In 2016 the *Santy Maria* was launched with world leading seabird migration technology.
  - $52 million invested in the Precision Seafood Harvesting trial, a new fishing technique.
  - 100% of contract trawl vessels in SNA1 have electronic monitoring installed.
  - Moana provide Responsible Fisher Training annually for all fishers.
  - Participation in a trial that used AI to detect seabirds.
  - 100% of its long-line fishers are trained in seabird smart fishing practices.
  - Participating in the SNA1 tagging project to improve stock management, and
  - Moana New Zealand voluntarily taking less fish when they can and shelving quota where needed (Moana New Zealand, 2022b).
- Plastic and packaging – To ensure they are a sustainable company for future generations, Moana New Zealand are moving towards being part of a circular economy. Initiatives to achieve this include:
  - Establish the company-wide baseline of plastic volumes
  - Design out use of hard-to-recycle plastics, and
  - Where reduction is not possible, work with suppliers to develop recycle programmes.
- Results from these initiatives include:
  - 22 tonnes of waste diverted from landfills through recycling.
  - Recyclable plastic bins are used to transport oysters, replacing polybins.
  - A commitment to use chilltainers made from cardboard, also replacing polybins.
  - Remaining polybins to be recycled into photo frames, and
  - Recycling gumboots into playground mats for tamariki (Moana New Zealand, 2022b).
- Climate change response – Moana New Zealand has set an ambitious target to be carbon neutral by 2040. This target includes their own direct and downstream emissions. What emissions they are unable to eliminate, they intend to offset or inset the remainder. Moana New Zealand will measure its impact to decide the best ways to mitigate and manage its effects (Moana New Zealand, 2022b).
- Minimise use of freshwater – The company will do all it can to reduce its freshwater use including:
  - Mapping their water footprint.
  - Reduction initiatives, including reducing water use at all its processing facilities.
  - Increasing their rainwater harvest, and
  - Increase water recycling and reuse (Moana New Zealand, 2022c).

Intergenerational planning

Similar to the long-term inshore fishing contract signed with TRG, the aquaculture division of Moana New Zealand is focused on partnering with suppliers through long-term contract grower arrangements. This enables Moana New Zealand to increase its geographical spread as well as working with Māori to own their own businesses and/or utilise productivity of whānau-owned water leases. Fiona Wikaira (Te Hikutū, Ngāpuhi, Ngāti Kahu ki Whangaroa) is the General Manager Aquaculture at Moana New Zealand. She shared with us an example of how Moana New Zealand provides support to sustain and improve the business of a contract grower in Parengarenga. The company also work with its contract growers to share knowledge and expertise to improve both their business and productivity which benefits both parties. Fiona adds that the long-standing relationships with contract growers have also resulted in small independent operators selling their businesses to Moana New Zealand, if their children do not want to take the operations on.

Training and retaining research and development talent is critical to the future of Moana New Zealand, and Nelson is seen as the country's aquaculture hub. Nelson Marlborough Institute of Technology (NMIT)

has developed the curriculum, alongside the aquaculture industry to entice interns into training and work opportunities. Fiona talks about how hard it has been to recruit people into aquaculture roles, where work is seen as manual and repetitive. A change in work scope has seen students with an interest in research, also have the opportunity to 'get their hands dirty' and participate in practical jobs within the business.

"What's been really successful in that Nelson model is there's a demographic of people who go and study and do that research, but they also want to be practical and hands-on, so creating roles that provide both in a pathway. So, that's something that we're starting. So, taking that model of the hatchery and creating farm technicians for this new technology, which is data, plus farming and hands-on, so you've got that balance of both, and then the potential to move to leadership. There's a pathway in trying to create a different type of workforce within there, appeal to a broader demographic"
Fiona Wikaira

Being whānau is the foundation and provides a competitive advantage for TRG. Currently, three generations of Rawlinsons work in all facets of TRG business. Building whānau capacity and capability and ensuring the Rawlinson legacy is passed on to the next generation have been key drivers in the strategic development of their business.

"Our whānau are not only working to secure our business for future generations but also realise that we need to invest in our tamariki and mokopuna. The business is not the legacy, our tamariki and mokopuna are."
Roger Rawlinson.

Kaitiakitanga and the business of fishing

Like the Rawlinson whānau, Moana New Zealand (2023) look at their business activities through a multi-generational lens to ensure the sustainability of fisheries for future generations. Kaitiakitanga is one of the key values of the company. Moana New Zealand is committed to being custodians for future generations and going above and beyond what is legally required. This includes lessening their environmental footprint and taking better care of marine ecosystems and other significant sites. A company-wide pledge to enable staff and contractors to be kaitiaki across its operations is also given (Moana New Zealand, 2022c).

Focus areas for Moana New Zealand to show kaitiakitanga include:

- collaborative fisheries management
- environmental improvements from innovative farming and harvesting practices, and
- a commitment to be carbon neutral by 2040 (Moana New Zealand, 2022a).

The Moana New Zealand values model demonstrates how the company creates value for its shareholders and stakeholders, including the communities they operate in. Under the vision and purpose, Moana New Zealand has key measures which include: whakatipuranga (financial, manufactured), whakapapa (intellectual, social and relationship), manaakitanga (human, social and relationship, and kaitiakitanga (natural). Table 2 discusses Moana New Zealand's outputs of success (Moana New Zealand, 2022d).

The company is committed to its responsibility as kaitiaki and strives to uphold its role in all areas of its operations. Moana New Zealand also only works alongside contract fishers and divers who share the same commitment to kaitiakitanga. Being true to Māori values (manaakitanga, whakapapa, whakatipuranga and kaitiakitanga) requires a high level of responsibility, ambition and innovation to invest in the right initiatives to underpin future operations. Moana New Zealand depends on thriving fish and shellfish stocks, which can be difficult in the natural marine environment. What can be controlled is how Moana New Zealand interacts with the environment and its associated behaviours.

Quota owners and operators

Supporting the Rawlinson family's multi-generational business aspirations is to diversify their business operations. As well as running a successful fishing business, the family have also built up their quota which has enabled them to fish this quota. One point of discussion was around the QMS and whether prices were fair, especially with slim margins. The difference in the margin affects not just the fishers, but also the consumers who are paying so much. Having their own quota has increased profits for the Rawlinsons, as they receive a greater share of quota per catch, than solely operating as a fishing company. The whānau believe there is a squeeze of operating margins which iwi do not fully understand or appreciate.

"There's so many taking their bit of the ika; but look at it – the head, the middle, the tail, our cut is like a little fin. We've got to run our machines on these skinny numbers"
Caryn Rawlinson

The future of bottom trawling

The Ministry for Primary Industries (2022) indicated that in the 2020/2021 fishing year, almost 250,000 tonnes, or 68% of the volume of all fish caught commercially in New Zealand was caught using bottom contact fishing gear or mid-water gear within one metre of the seabed. Close to one-third of New Zealand's EEZ is closed to this process within 30 Marine Protected Areas. In addition, together with Benthic Protection Areas and Seamount Closers, these areas protect over 1,2000,000km2 of the seafloor (see Appendix C). Moana New Zealand catches 76% of its wild harvest volume using this catch method (Moana New Zealand, 2023d).

TRG catches its quota through bottom contact fishing, also known as trawling, which is a process where a fishing net is towed by a boat either through the water column (mid-water

Immediate impacts to inshore fishing industry

For operations
• Would increase fishers, contractors and Moana New Zealand's operating costs. • Put pressure on all current bottom contact harvest methods, and • A loss of over 1000 jobs across Moana New Zealand and Sealord.
For the environment
• The industry's carbon footprint would increase as an additional 20 – 30 vessels would be required to fuel long-line vessels to catch the same amount of fish. • A shift from bottom contact to long-line fishing will increase pressures closer to reefs and seagrass beds which will impact fish production, and • The bycatch profile will change and increase potential seabird capture.
For the market
• The cost of fish supply will increase • There will be a constraint on demand • Pressure on long-line fishing value, and • Cheaper, imported seafood will be sold in New Zealand.
For shareholders
• A risk to $850 million quota value across Moana New Zealand and Sealord. • Significant dividend reductions, and • Significant quota value decrease to iwi-owned quota.
Other commercial implications
• A 42% reduction in harvest volumes – 3,300 million tonnes • Domestic fish available will be reduced.

Table 6. *Immediate impacts to inshore fishing industry.*
Source: Moana New Zealand (2023d).

trawl) or along the seafloor (bottom trawl). Trawling is one of the most common methods of fishing and enables larger quantities of fish to be caught in a single tow. Many of New Zealand's popular fish live on or near the seafloor and include orange roughy, squid, and snapper. A description of current bottom contact fishing methods are shown (see Appendix D). This process has come under scrutiny from environmental non-governmental organisations (eNGOs) who want to ban bottom contact on seamounts in deep sea fisheries, with a particular focus on the Hauraki Gulf Marine Park. Their campaign has had considerable influence on the media and the public's perception (Moana New Zealand, 2023d). Moana New Zealand and other fishing industry groups have been rebutting these misconceptions showing the limited impact this activity has on the environment. A ban on bottom contact fishing would have a detrimental effect on all levels of the inshore fishing industry.

To support pāhekoheko (integration), Moana New Zealand and contractors are working to mitigate these concerns as kaitiaki, exercising their rangatiratanga and whanaungatanga. These solutions also work across the other themes of auahatanga (differentiation) and whakatautika (balance). This includes:

- Collaborating with contract fishers investing in its own in-house GIS mapping capability and software to understand where contract fishers are harvesting.
- Voluntarily operating onboard cameras on 100% of its inshore contracted trawl vessels before this was regulated.
- Investing $52 million in precision seafood harvesting of which Moana New Zealand and Sealord Group's share was $9 million each, which improves selectivity and the quality of catch. Thus, Māori collectively invested $18 million into this technology.
- Creating a Māui Dolphin Protection Plan and supporting the Maui63 drone project.
- Meeting all regulatory compliance obligations as well as instilling kaitiaki protocols with their fishers, and
- Having representation and input into key central and local government marine and fishing protections and plans (Moana New Zealand, 2023d).

Some operators and experts are sharing their innovations to reduce their impact on the environment. This includes:

- Mike Terry from Atlantic Dawn talks about the installation of semi-pelagic trawl boards and sensors which are activated to lift off the seabed to minimise impact (Moana New Zealand, 2023e).
- Dr Stephen Eayrs, a leading international fisheries researcher, discussed how to use lightweight trawl gear to minimise impact on the seafloor.
- Nathan Harvey from Eight Bells sharing how he is using six inch square mesh instead of the traditional five inch diamond mesh. This reduces their undersize catch and fish they would deem legal but still small, and
- Ron Baker from Sea H and Exenda shares the improvements made from autopilot and automatic hydraulic haulers to running tory lines to minimise the bycatch of birds (Moana New Zealand, 2023b).

TRG's business would be directly affected if there were changes to the current inshore fishing practices, and over the years have made their own modifications and innovations to the way they fish. By making small tweaks to their trawling nets, the experience of their skippers, and now, their state-of-the-art technology vessels, the Rawlinson's believe they are sustainably fishing and having very limited impact on the seafloor. Mark Ngata agrees that the trawling industry has changed for the better and is currently the only method that can catch all of the species that 'we' own.

"On the inshore side, we're fishing on sandy muddy bottoms because that's where the fish feed. But they don't live there. They come there to feed and they live over the reefs and coral. Inshore boats don't fish over those reefs and corals, otherwise, they'd get their gear caught and lose all their gear, which is very expensive. They've learnt over the years not to do that"
Mark Ngata

Using their intimate knowledge and mātauranga of fishing grounds, TRG skippers avoid areas where there are high populations of juveniles and unwanted by-catch.

"We've been catching a lot of fish for a number of years. We go back to the same places, and if there wasn't any left behind the year before we wouldn't be able to go back in the following year, or the future years. So that's important to us"
Roger Rawlinson

Innovation in aquaculture

The Aquaculture division of Moana New Zealand encompasses pāua kahurangi (blue abalone) and tio (oysters). Pāhekoheko (integration) is a key element of this division's growth, and it is important to understand the scale of these operations. Moana New Zealand own, operate, and contract lease out aquaculture farms in a number of North Island locations. These include Parengarenga, Whangaroa, Orongo, Waikare, Kerikeri and Houhora in the Far North and Te Kouma Creases and McGregor's Bay in the Coromandel. At the top of the South Island are farms in Croisilles Harbour. In addition to this, seven are contracted out leases. This includes Moana New Zealand-owned farms totalling 332.94 hectares and contract grower farms of 67.32 hectares (Moana New Zealand, 2022d). There is also an 80-hectare site in the Kaipara Harbour which is not currently being farmed.

The strategic direction for Moana New Zealand (2022d) and its tio (oyster) production is clear:

- Improve the reliability of triploid spat supply.
- Leverage its selective breeding programme.
- Increase tio (oyster) volume to 1.65 million dozen by 2028, through maximising existing water space and securing long-term agreements.
- Reducing biosecurity risks.
- Innovation in farm husbandry practices and equipment.
- Maximise asset utilisation, and
- Live export opportunities to a minimum of 600,000 dozen per annum.

Fiona says innovation creates immense benefits for te taiao (environment). In regard to farming innovations, she gives an example of a tio farm that was upgraded and resulted in reductions of H6 treated timber infrastructure, reductions in repairs, maintenance and siltation, and improvements made in waterflow and visual impact, notable effects on biotic value by wild catch, reduced seabed disturbance, and no bag movements between farms and regions for transfer (Moana New Zealand, 2022d). Fiona says that working with contractors and showing them how innovation can improve sustainability, will then improve the quality of the product. Moana New Zealand also supports innovations through funding for contractors to complete upgrades and pay Moana New Zealand back over time through contract grower payment deductions.

Impact of the Sanford sale and purchase

Sanford's recent sale of its ACE for much of its quota of North Island inshore species to Moana New Zealand is expected to present opportunities for multi-generational integrated planning in the Māori marine economy. Moana New Zealand are now the largest inshore operators in the country and under this deal take over the catching, processing, and selling of fish utilising the catch rights, along with increasing the economies of scale at its Auckland processing plant. The Commerce Commission approved the deal in September 2023, which enabled Moana New Zealand to lease the catch entitlement from Sanford through a long-term agreement for a minimum term of 10 years (Morrison, 2023).

Moana New Zealand has made some immediate changes to their operations as a consequence of the Sanford deal. To manage the volume the company has put in place a night shift, and is also renovating a site in Wellington to take extra capacity. Sanford has also transferred up to 30 staff and fishing contractors to Moana New Zealand. Thirty more staff are employed to process the volume of product. With a new facility to be built in Wellington, this will bring the processing of pāua, finfish and koura onto one site. Michelle Cherrington (Ngāti Awa, Te Whānau ā Apanui) is the Group Communications and Sustainability Manager and shared the

feedback from the newly-transferred staff who attended the Moana New Zealand whakatau to welcome them to the company. Michelle said, "for many it was their first time experiencing such a welcome and they appreciated the manaakitanga, care and support they received when they arrived."

Running alongside this, in September 2023, Sealord entered an agreement to buy Independent Fisheries. This could make Sealord New Zealand's biggest deep water seafood business. This sale is of interest, not only to Moana New Zealand, but also iwi and Māori-owned entities who also own 50% of Sealord. If sold, Māori will be the largest shareholders in this country's seafood industry. The Commerce Commission and the Overseas Investment Office have cleared this deal. The proceeds would include a quota of 46,000 metric tonnes, two owned and one chartered deep water factory fishing vessels, more than 500 staff and a cold storage facility (Radio New Zealand, 2023).

TRG was able to utilise its strategic relationship with Moana New Zealand to secure an additional catch plan and vessels, which is mutual beneficial. As Moana New Zealand's main Māori fishers, TRG was able to provide confidence that the ACE secured in the Sanford arrangement would continue to be harvested providing business continuity and a fluid operational transition.

Discussion

Auahatanga (Differentiation)

This section analyses the differentiating kaitiaki-generated products from commodities and the diversity of Māori activity in the marine economy.

Moana New Zealand's commitment to mātauranga Māori

As an iwi-owned business, Moana New Zealand is committed to strengthening the mātauranga and tikanga within the organisation and will further enhance the company's commitment to iwi, its other key stakeholders, and the environment. Mark Ngata believes this is fundamental, as it is important to understand the stories of our ancestors and how they shaped the world for Māori. He says Moana New Zealand is making good strides to embed its values into the workplace and encourages the board to lead in this area, so the company and contractors fully understand this commitment and how to embrace mātauranga and tikanga within their divisions.

Carbon neutral

Moana New Zealand's commitment to be carbon neutral by 2040 is a clear example of how auahatanga (differentiation) is applied across the whole business. The use of polystyrene packaging to local and overseas markets has an impact on the environment. In 2020, the company publicly committed to phase out some of its polystyrene food and beverage packaging, as well as all of its PVC food and beverage packaging, and oxo-degradable plastic products. Reducing the use of polystyrene boxes is an important reduction to make. Mark noted the company was leading the way in trialling plant-based boxes which are robust to withstand transportation and to ensure the quality of the product is not compromised.

> **"They're [the oxo-degradable product company] just testing to see whether they can handle the rigours of airfreight and handling, and not leak. But if that comes in that's a major innovation"**
> ***Mark Ngata***

But it's not just the packaging this project is looking at, but the issue with airfreight which has a large carbon footprint. Mark talked about an innovation where seafood can be sent on boats still with 2-3 weeks of shelf life after the product has reached its destination. As Moana New Zealand are not transportation experts, they will rely on the transport industry to come up with a solution.

Croft and Farrelly (2021) completed a comprehensive case study on Moana New Zealand and the role the finfishing industry plays in minimising its marine plastic pollution. They complimented the company on its willingness to initiate positive change and acknowledged the steps taken a year since the project was completed. This included conducting audits on its plastic usage across the company, looking at setting plastics reduction targets, and finalising its procurement policies.

Kirikiritātangi Hatchery

The Pacific oyster industry started in the 1970s with farming methods based on catching wild spat on sticks. This is still standard practice in the industry, but outcomes are difficult to control and very seasonal (Townsend, 2022).

Figure 9. *Kirikiritātangi Hatchery.*
Source: Moana New Zealand (2022d).

A key auahatanga (differentiation) was Moana New Zealand's five-year $21 million investment in a ground-breaking tio (oyster) hatchery, Kirikiritātangi, in Nelson (see Figure 9). Currently, in phase one, Kirikiritātangi will provide end-to-end control of the oyster growing process, which will increase the consistency and reliability of spat supply and the hatchery is key to this. Kirikiritātangi has enabled Moana New Zealand to produce consistently high-quality oysters year-round (Townsend, 2022).

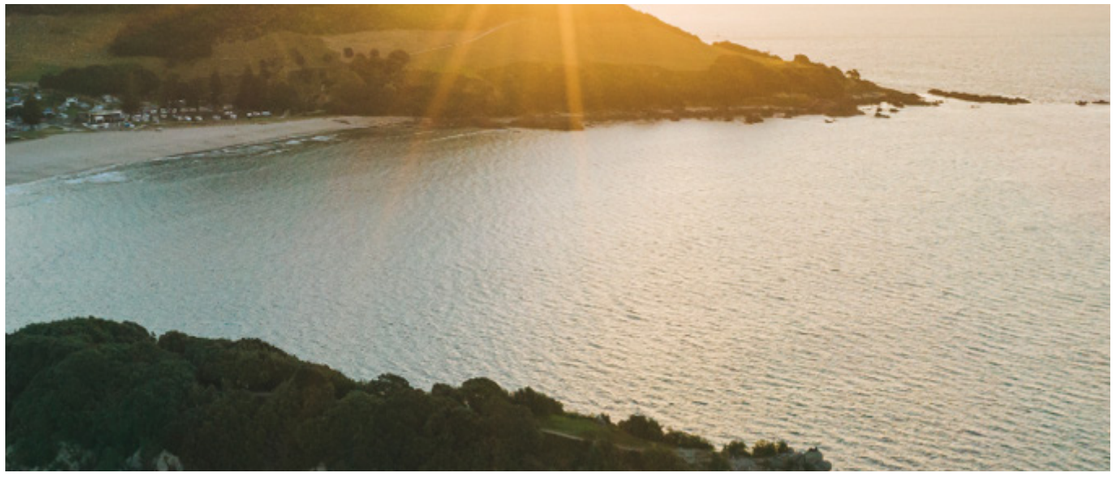
This investment supports the company's growth in the blue economy aquaculture industry and will help achieve sales of $1.65 million dozen oysters per year by 2028. Moana New Zealand are already New Zealand's largest tio producer and understand how important innovation is to sustain its future. Work has already begun to replace existing old timber tio farming infrastructure, replacing it with semi-automated farming technology which includes floating tio baskets on longlines. This not only provides better working conditions but also has less impact on the environment.

Entering in mutually beneficial partnerships has meant Moana New Zealand are leading the way in single-seed oyster farming. They are working on combined research, working in a shared space with a patented unique Cawthron Institute Research method for producing the triploid oyster, which is an all-season oyster. This innovation means Moana New Zealand is one of only three or four businesses globally that has a fully integrated tio business (Moana New Zealand, 2022d). This is also linked to pāhekoheko (integration) as the partnerships support Māori-led multi-generational integrated planning. Fiona Wikaira describes single seed as the production of single tio babies that then grow as a single seed rather than all clumped together. This produces a better and more consistent product to sell to the market.

"So, you have your selective breeding programme, of which you then have your brood stock. Then you bring that brood stock in, and you get it in condition and fertilise it... So, they leave the hatchery at about one micron, then they go into the nursery... we get them up to 6.5-10 mil and then we send them out to all our different farms. We've got farms spread all round the country"
Fiona Wikaira

Each farm has a different process. Juvenile farming takes the tio from 6.5mm up to 50mm. They are then moved to grow-out farms where they are grown to saleable size, then fattened and in conditioned, before they are transported to Moana New Zealand factories, where they go to market. This is a fully integrated business model, and a game changer in that you have oysters you can harvest all year. Fiona Wikaira says Moana New Zealand has done about 15 years of investment in selective breeding programmes. However, in 2010, when the herpes virus, ostreid herpesvirus-1 (OsHV-1) was discovered, the virus nearly wiped out the New Zealand tio (oyster) industry. Moana New Zealand quickly moved to make virus resilience its primary focus. This crisis also made Moana New Zealand look at the long-term resilience of all of its aquaculture farms. Having farms in multiple locations across the country lessens the risk if another virus were to hit the industry again. The innovations and tio farming also aligns with pāhekoheko (integration) and whakatautika (balance).

"In the tio business, it's really important having that geographic spread again for risk mitigation. Like with any sort of farming, you've got external uncontrollables, whether it be a weather event, whether it be a virus that comes into the water or the harbour"
Fiona Wikaira



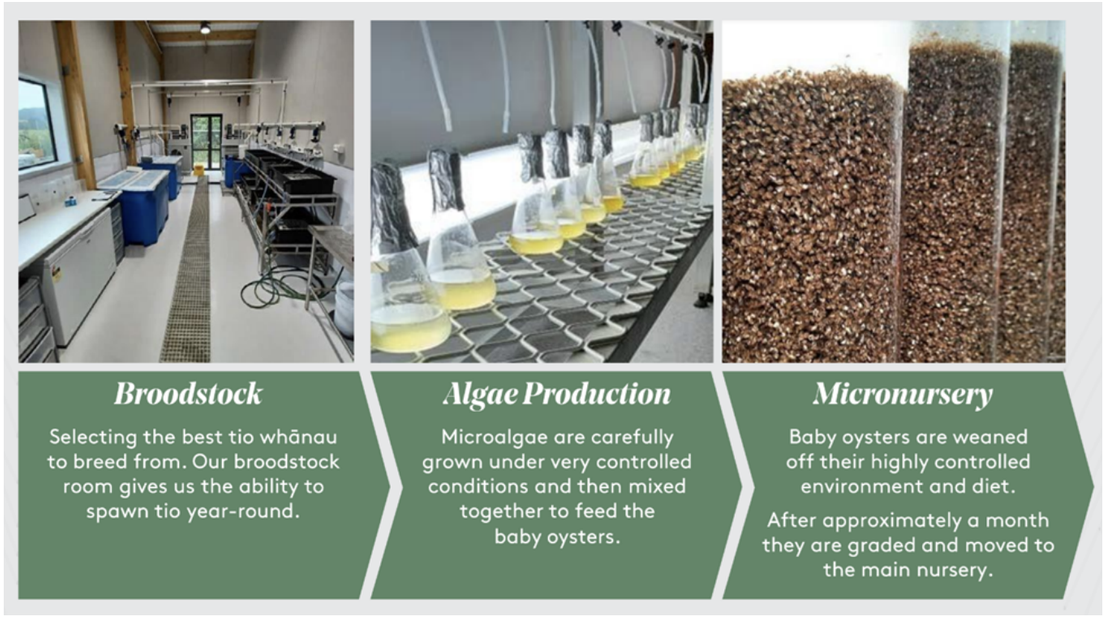


Figure 10. *Tio breeding process at Kirikiritātangi Hatchery.*
Source: Moana New Zealand (2022d).

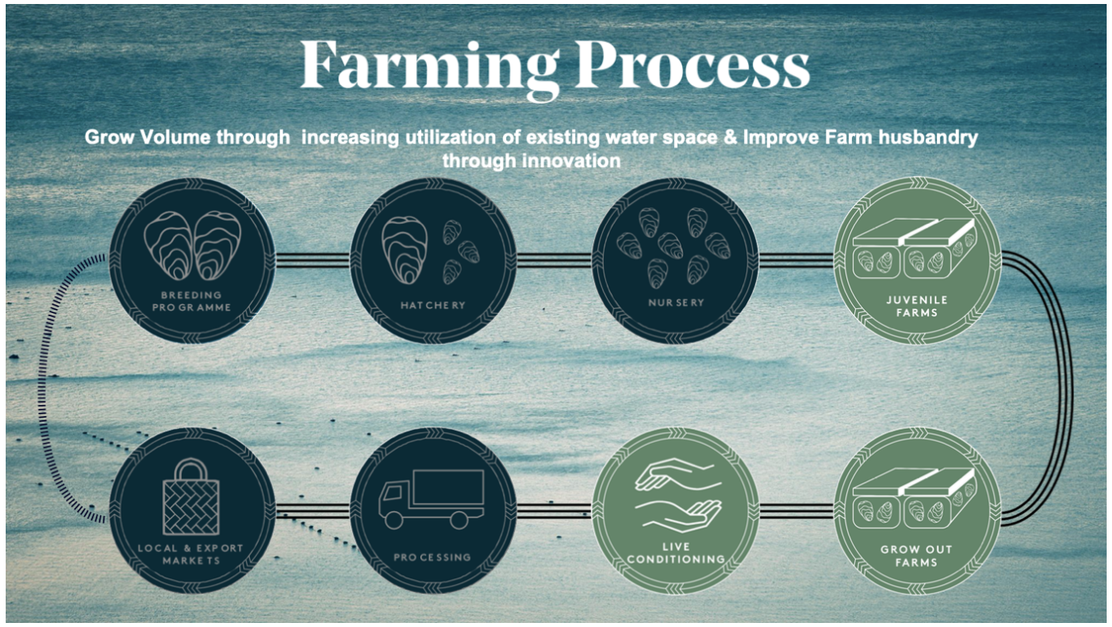


Figure 11. *Tio farming process.*
Source: Moana New Zealand (2022d).

Whakatautika (Balance)

This section looks at creating employment, enterprise, and other economic opportunities for whānau and hapu in coastal communities, leveraging the assets of iwi and pan-iwi authorities.

Attracting new workforce

There is a good and challenging side to attracting staff to participate in the MME. Creating employment for Māori within Moana New Zealand is something Mark Ngata is very proud of. His inshore division boasts a high percentage of Māori staff and contractors, and across the company Moana New Zealand has seen an increase in Māori staff.

"I would say I have the most Māori in the business as well. My management team is pretty much in the factories. All the management is really Māori. Here, my senior management team is principally Māori. I have got an Indian-Fijian lady who does all of our export sales who's awesome; and of course, a poor Pākehā fella that is married to a lady from Ngāpuhi. Everyone feels sorry for him. He's one of our Māori cousins"
Mark Ngata

These positive examples, however, are not reflected across the whole industry. TRG shares how hard it is to attract a good crew to work on their vessels. They purposefully look for Māori crew which can be equally as challenging. Unappealing factors for working in the fishing industry include weeks away from family and extracurricular commitments, not meeting the relevant health and safety requirements, a criminal history, not being qualified enough for certain roles, and just not being suited to hard work. TRG have even advertised for foreign workers and have employed friends of friends to fill vacancies. Even with good employment and pay conditions, support to gain relevant tickets and sea time, ongoing professional development and training opportunities, it is tough to keep a long-term crew.

"Yeah, and we want them to be educated. As soon as they stay with us it's like, "Right, you're going to get your Deckhand ticket. You need to go get your first aid; you need this. And not just sit there, and not get it, because the hardest thing to get those tickets is actual sea time, and they're already doing the hardest thing, actual sea time"
Caryn Rawlinson

Employment has helped to create opportunities for whānau and hapū in coastal communities. Fiona Wikaira notes the challenge to find good workers for their aquaculture operations in the Far North. So, the search goes wider, and efforts are made to get staff ready for work. In the Coromandel, there is both low unemployment and high accommodation costs, so the contractors have to be creative with local workers.

"We're trying to target schools and bring kids through. We haven't solved that one yet, but we're working on it. We are starting to see a slight increase in people available"
Fiona Wikaira

Fiona Wikaira says in Nelson there are a number of career opportunities in aquaculture including pond manager, technician, project manager and operations manager. In the grow-out farms in Parengarenga, Whangaroa, Coromandel, and Nelson there are roles from farm worker, administration and shore team supervisor and manager, through to site manager and national farm manager (Moana New Zealand, 2022d). Fiona Wikaira agrees with the difficulty aquaculture contractors have in securing workers, especially in more manual and remote roles. She says Moana New Zealand are continuing to work with contractors to understand these barriers and support with employment and training opportunities where possible. Attracting new workforce also aligns with pāhekoheko (integration).

Pātaka kai: Te Taitokerau

The Rawlinsons are proud of their relationships with the people of the Whangaroa Harbour in the Far North and the local hapū there. Through the Ministry for Primary Industries' Customary Fishing Special Permit system and with the approval of kaumātua within the rohe, they were able to catch and supply the community with seafood. During COVID-19, the Rawlinsons not only caught the fish and kina, but also bought a refrigeration truck to help with the cold storage and distribution of fish to Far North communities. Roger says this was very humbling; an experience which has allowed the relationship with the communities to flourish. Relationships are very important to Roger and Dan. They catch and distribute kaimoana because they can, and they want to. Not only is the whānau helping to feed a community, but they also see first-hand where the fish goes. The relationships built by TRG and the use of the Customary Fishing Special Permit system also aligns with pāhekoheko (integration).

"I've got the relationship, I trust these people; at any time I go with them and do the deliveries and the feedback, and what I get back from it, oh it's just immense. We'll go to the pub, I take my boys to the pub even though I don't drink, people will come up, 'Oh man that fish was awesome was that some of your fish'"
Roger Rawlinson

Supporting Māori fishers

Moana New Zealand supports Māori fishers while ensuring the sustainable future of its fisheries assets in the commercial fishing industry. In 2016, Moana New Zealand underwrote the construction of the *Santy Maria*. This arrangement was the first of its kind for Moana New Zealand who saw the agreements as an opportunity to provide funding toward upgrading the fishing fleet which in some cases were 50-60 years old. There are mutual benefits in this arrangement for both parties.

TRG upgraded two of their vessels which increased their equity and ability to purchase more gear with the option to purchase more vessels in the future. The TRG vessel upgrades have reduced maintenance costs, enabled more catching time, and also provided new training opportunities for crew to learn across their fleet.

"A lot of Māori skippers didn't have the equity that Roger had at the time. He's proven himself. The new vessels are state-of-the-art and have been performing really well. That's allowed him to buy other vessels"
Mark Ngata

For Moana New Zealand, their commitment to Māori fishing businesses is evident in their investment in relationships with TRG and other Māori fishers. TRG recognise that their strategic business relationship is mutually advantageous, benefiting both Moana New Zealand and TRG. Roger recognises the interconnection and interdependency between the players within this Indigenous blue economy.

"It's one big circle and Māori enterprises where iwi own the quota, TRG catch the fish, and Moana New Zealand processes and sells the fish"
Roger Rawlinson

TRG knows the valuable experience and knowledge they bring with them to Moana New Zealand and sees the partnership more as a relationship. The Rawlinson's see Moana New Zealand growing compared to other companies and are looking forward to seeing how the relationship develops in the future.

"We're integral team members of each other's business. So, if they keep us strong, we keep them strong"
Dan Rawlinson

The strategy by Moana New Zealand to identify Māori contractors and operators has seen an increase in Māori across their operations. This is reflected in 34% of all 310 employees being of Māori descent, with inshore having a higher percentage still. All of the board members are Māori, as well as 60% of the executives. Of the 37 contract divers, 42% are Māori (Moana New Zealand, 2022a). In addition to this, 62% of ika are caught by Māori owned vessels and 80% of contract tio growers are Māori (Moana New Zealand, 2022d).

Figure 12. *Hikurangi*

The future of Moana New Zealand

With the growth of Moana New Zealand, alongside its connectedness to marine ecosystems and human communities, it is timely to revisit the values of the company to see if they align with the aspirations of its shareholders, stakeholders, and the communities in which they operate. Moana New Zealand's values are people centric, encompassing manaakitanga (looking after our people our way), whakatipuranga (prosperity for future generations), whakapapa (our genealogy—where we're from) and kaitiakitanga (custodians for our future generations) (Moana New Zealand, 2022a). To transition to an Indigenised blue economy, it is important to create economic value while contributing positively to ecological, cultural and social wellbeing in New Zealand; this, while steeped with mātauranga Māori and treaty principles. Mika (2022) also highlights a focus on wellbeing and relational balance with Tangaroa as our tīpuna. While meeting with Michelle Cherrington, a valuable discussion was held on what the future of Moana New Zealand could be like. Topics discussed included: what does a modern fishing company look like in 20 years' time and what does Moana New Zealand need to do to get there? What business models meet the expectations of shareholders and stakeholders, while meeting our responsibility as kaitiaki? What can we do to lessen our environmental impact on fisheries, and how would our shareholders feel in terms of a loss in revenue? What do the next generation of inshore and aquaculture staff and contractors look like?

These are relevant questions that Moana New Zealand is exploring. Transitioning to an Indigenous blue economy that meets the expectations of shareholders and stakeholders will take time. Using kaitiaki-centred business models that embed Māori social and commercial activity within a sustainable ecosystem could aid in the continued evolution of Moana New Zealand. The aspirations of Moana New Zealand can also align with pāhekoheko (integration) and auahatanga (differentiation).

The Rawlinson's are looking forward to a future with Moana New Zealand and seeing how their relationship will continue to care for people and taonga across our moana.

Conclusion

Indigenising the blue economy builds on Māori marine economy research, *Whai Rawa, Whai Mana, Whai Oranga: Creating a world-leading Indigenous blue economy*, which set out to map the Māori marine economy, both its institutions and enterprises, and the business models they employ. For an Indigenous blue economy to thrive, mātauranga-inspired innovations which enable Māori to partner and lead in marine management and decision-making is required. This enables the Māori marine economy to be both profitable and sustainable over time.

This case study of Moana New Zealand investigated the opportunities for marine activities that create economic value and contribute positively to ecological, cultural and social wellbeing in Aotearoa New Zealand. This research explored Moana New Zealand's enterprises, along with Māori fishing business TRG. Both operate within a blue economy seeking to incorporate and apply mātauranga Māori and treaty principles, while also focussing on wellbeing and their relationship with Tangaroa. From an Indigenous view, 'economy' can be seen as problematic, as economy needs to be embedded in, and considered within, both the natural and social world. This project looked at existing models and frameworks of mātauranga Māori used in the management of the marine ecosystem and economy.

Māori hold a world view that shows the connectedness between the marine ecosystems and human communities. It is a view that does not separate economic, social, environmental and spiritual realms. The emphasis on kaitiaki-centred business models embeds Māori social and commercial activity within a sustainable ecosystem, which can be understood in a more expansive manner. The approach to managing the marine ecosystem and economy provides a number of commercial advantages to Māori businesses if they choose to harness these appropriately.

Indigenising a blue economy requires Māori marine enterprises to focus on the future while being guided by their past. Both operate within the framework of kaitiaki-centre business models (Rout et al., 2019; Rout, Lythberg, et al., 2019), however, they are constrained within a settler institutional framework and restricted by legislative constraints that govern Māori fisheries (Reid et al., 2019). This has resulted in an innovative approach to business led by the values of manaakitanga, whakatipuranga, whakapapa, and kaitiakitanga.

This Moana New Zealand case study used Indigenising the blue economy principles and focused on three key themes:

1. **Pāhekoheko** (integration) – supporting Māori-led multi-generational integrated planning across economic sectors in their marine districts to maintain te mauri o ngā taonga, katoa and enhance the efficiency of asset holding and resource utilisations.
2. **Auahatanga** (differentiation) – differentiating kaitiaki generated products from commodities and diversity Māori activity in the marine economy, and
3. **Whakatautika** (balance) – creating employment, enterprise, and other economic opportunities for whānau and hapū in coastal communities, leveraging the assets of iwi and pan-iwi authorities.

This case study is part of a larger five-year multi-disciplinary study where researchers and experts from across New Zealand have partnered with five iwi and pan-iwi entities.

While these themes overlap, findings focus on one theme. The research concerns Māori perspectives on the blue economy, which in Māori terms is regarded as the Māori marine economy or MME. The MME is defined by the integration of three concepts: whai rawa, whai mana, whai oranga (Mika et al., 2022). Indigenising the blue economy, therefore, is about transitioning to state where human relationships with the moana are "holistic, relational, and balanced" consistent with a Māori world view (Rout et al., 2024, p. 1). It is apparent that Moana New Zealand and TRG already operate within an Indigenised blue economy because their activity aligns with expected features of kaitiaki-centred enterprises (Rout et al., 2019). Examples of pāhekoheko (integration) include:

- Moana New Zealand partnering with Māori fishers and contract growers using long-term supply agreements.
- TRG has succession plans in place for a multi-generational business.
- TRG strategy of owning fishing quota alongside the fishing operations.
- Proactive and innovative approaches to trawling to minimise impacts on the environment.
- TRG using their long-held mātauranga to fish sustainably.
- Innovations in aquaculture.
- Moana New Zealand taking a long-term view of the fishing industry and Māori shareholder view through the recent Sanford deal.

Auahatanga (differentiation) is discussed in this case study with examples including:

- Moana New Zealand's commitment to strengthening the mātauranga and tikanga within the organisation.
- Moana New Zealand's ambitious target to be carbon neutral by 2040.
- Moana New Zealand's oyster hatchery, Kirikiritātangi and their farming techniques to produce a high-quality product.

Examples of whakatautika (balance) were highlighted and included:

- The rewarding and challenging side of attracting staff and contractors, and the mitigations used to fill positions.
- TRG established hapū relationships and support of customary harvesting.
- TRG strategic fleet renewal.
- Moana New Zealand supports Māori fishers to upgrade their fishing fleets.
- The future of Moana New Zealand.

The report concludes that with Māori owning a significant stake in the fishing sector, it is important to continue to responsibly manage marine ecosystems through a multi-generational lens with a deep sense of responsibility and taking a long-term view of operations to ensure the sustainability of fisheries for future generations.

With the current growth of Moana New Zealand, it is timely to revisit the purpose and values of the company. Recognising the ongoing interdependent relationships with a Māori world view, this is an opportunity to evaluate what is important for shareholders,

stakeholders, and Tangaroa. The purchase of Sanford assets has meant that very soon Māori will have a much-expanded share of the marine economy, particularly in terms of the fisheries sector, and with this comes greater responsibility to lead and influence industry direction and standards to be more kaitiaki-centred. This is an example of pāhekoheko (integration) of assets and activity across the industry. This is an opportunity for alignment and a shift in the operating culture and practices of fishing because of the addition of new people, assets, and capabilities.

Relationships with iwi as owners of the business are a constant and unique feature for Moana New Zealand, which require a relational approach to management and operation.

This approach means regular engagement with iwi in the most efficient ways possible and consideration about the benefits that flow between the company and iwi. This goes beyond the economic, to include social, cultural, ecological, and spiritual elements as whānau and whanaunga. Whakatautika (balance) and relations between an iwi-owned enterprise and whānau-owned enterprise in the same sector is where this relationship centres in an operational sense in this case.

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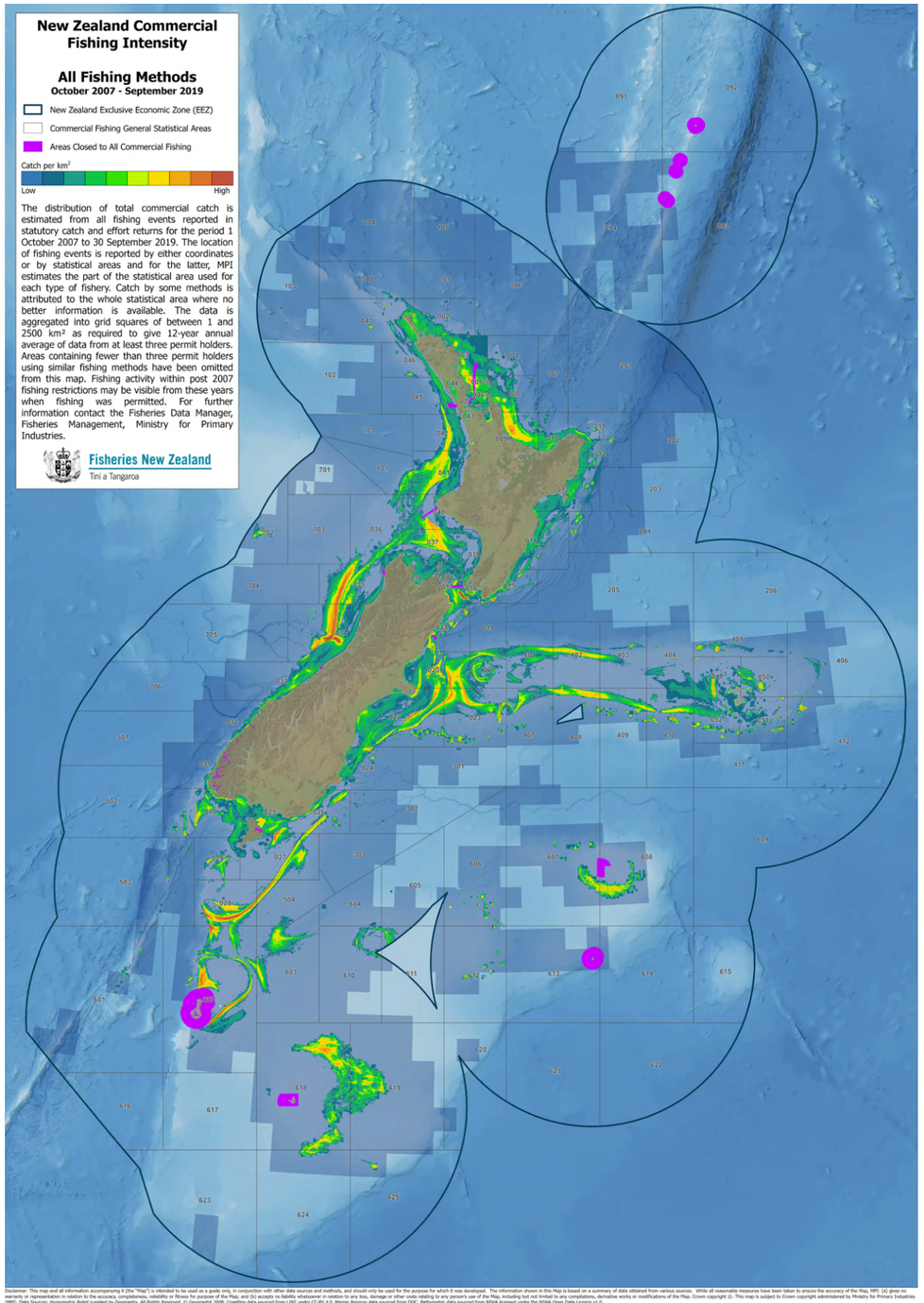
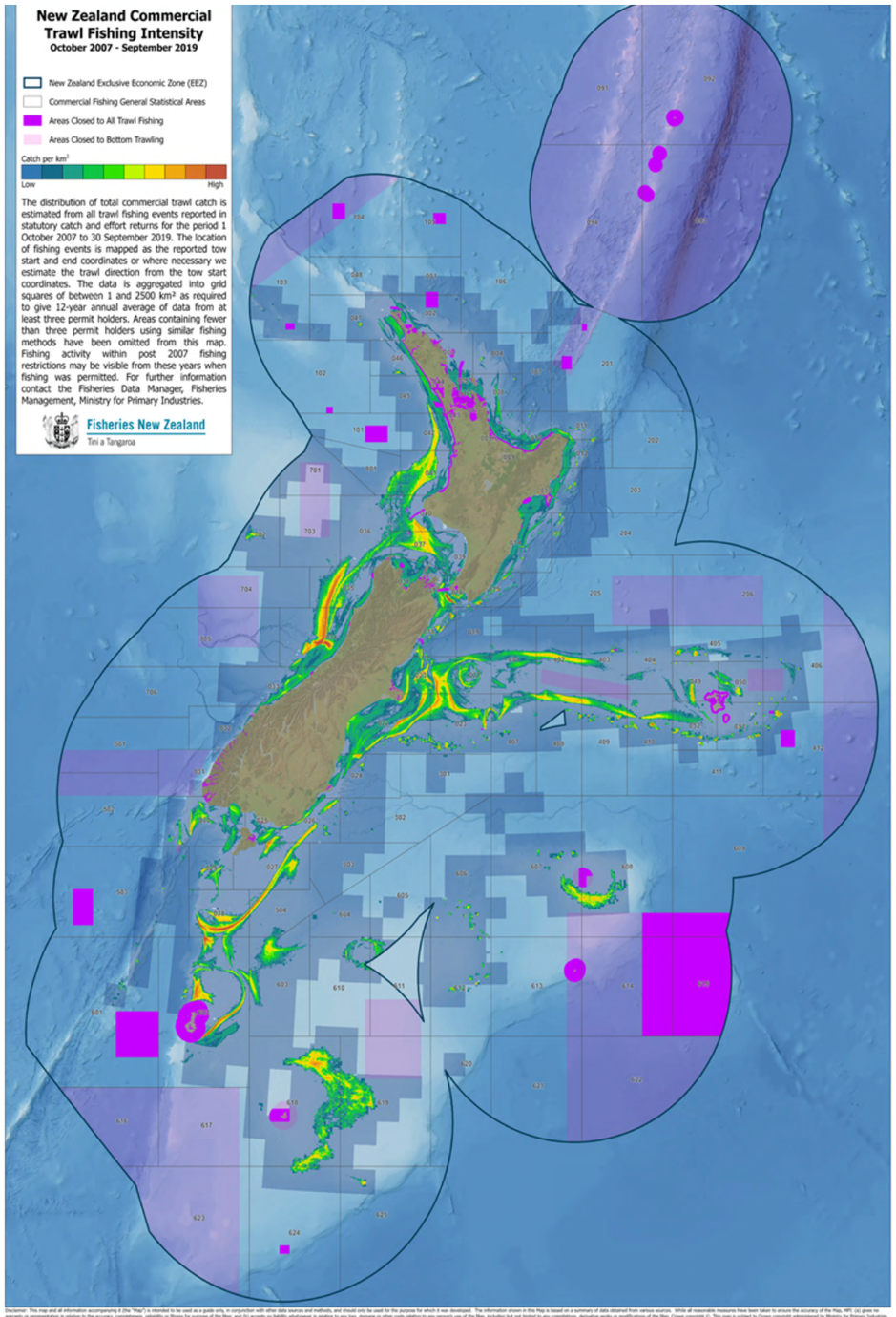
Appendix A
New Zealand Commercial Fishing Intensity



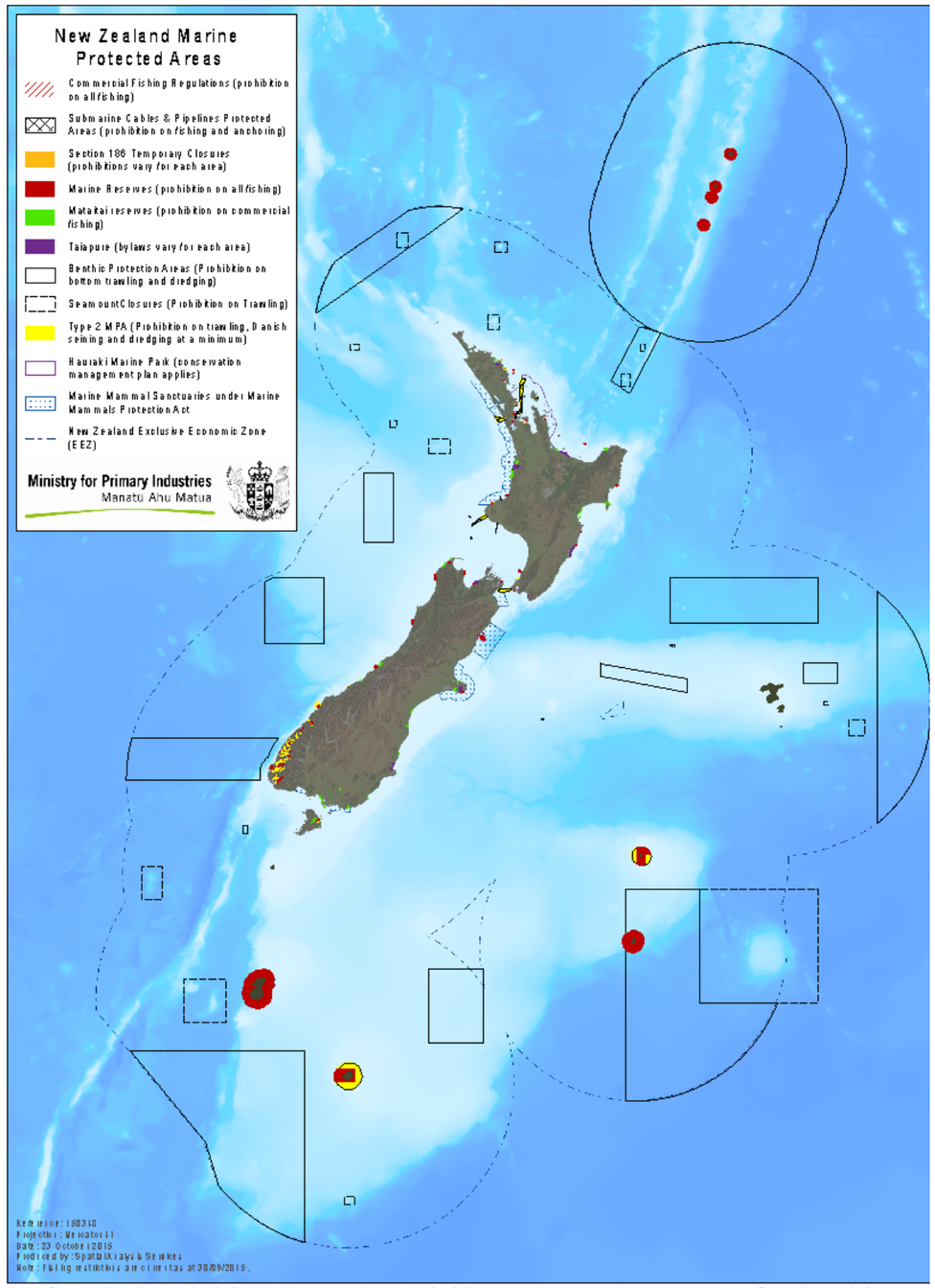
Source: From Fisheries New Zealand (2021) New Zealand Commercial Fishing Intensity.

Appendix B
New Zealand Trawl Fishing Intensity



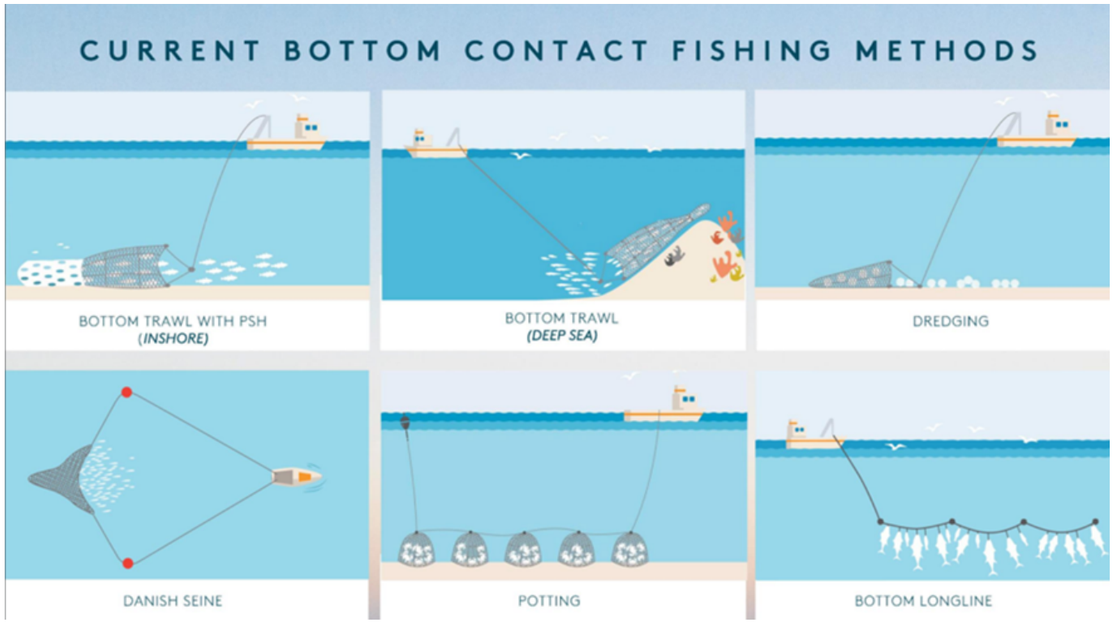
Source: From Fisheries New Zealand (2021) New Zealand Commercial Trawl Fishing Intensity.

Appendix C
New Zealand Marine Protected Areas



Source: From Fisheries New Zealand (2021) New Zealand Marine Protected Areas.

Appendix D
Bottom Contact Fishihng Methods



Source: From Moana New Zealand (2023b). Lightening our touch. In: Moana New Zealand.

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