



Evaluating protected area and tourism partnerships: a case study of Tiritiri Matangi Open Sanctuary, New Zealand

Mahmoud Sarhan^{A,*} , Tomas Pernecky^A, Mark Orams^B and Michael Lück^A

For full list of author affiliations and declarations see end of paper

***Correspondence to:**

Mahmoud Sarhan
 School of Hospitality and Tourism, Auckland
 University of Technology, Auckland, New
 Zealand
 Email: mis73@cornell.edu

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ABSTRACT

Context. Public-private partnerships (PPPs) are increasingly recognised as a promising governance approach for protected area management, yet scientific evidence on their effectiveness, design, and sustainability particularly in marine protected area (MPA) tourism contexts remains limited. **Aims.** This study examines the collaborative PPP between the Department of Conservation (DOC) and the Supporters of Tiritiri Matangi (SoTM) at Tiritiri Matangi Open Sanctuary, New Zealand, analysing its development, governance dynamics, success factors, and challenges over more than 30 years. **Methods.** A qualitative single case study design was employed, using semi-structured in-depth interviews with 12 key stakeholders including founders, current and past board members, DOC staff, academic researchers, and volunteers. Data were analysed using Braun and Clarke's six-phase thematic analysis framework. **Key results.** The partnership has achieved significant successes in community engagement, ecological restoration, tourism development, and scientific research. Key success factors include a compelling shared vision, strong volunteerism, diversified financing, science-led management, and transparent governance. Persistent challenges include power imbalances, governmental bureaucracy, high DOC staff turnover, ambiguous roles and responsibilities, and insufficient engagement of indigenous Māori iwi. **Conclusions.** Effective PPPs in protected areas require adaptive, inclusive, and well-resourced governance structures. A conceptual framework is proposed identifying the primary drivers, mechanisms of change, and sustainability outcomes underpinning the partnership model. **Implications.** The findings offer transferable lessons for MPA governance, recommending co-produced strategic planning, formal institutional memory mechanisms within DOC, and a dedicated, resourced strategy for meaningful iwi engagement in conservation partnerships.

Keywords: collaborative governance, community participation, evaluation, New Zealand, partnerships, protected area, Tiritiri Matangi, tourism.

Introduction

In recent decades, several types of innovative collaborative management and governance solutions have been promoted to improve conservation and tourism management (Herrero Amo and De Stefano 2019), of which public-private partnerships (PPPs) are considered a promising governance approach (Eagles 2009; Dodson 2014; Fitzgerald 2021). Partnerships are gradually being implemented to improve the effectiveness of protected area (PA) management, sustainable tourism, sustainable financing, and boost green economic growth policies (Franco and Quintela 2013; Hazlewood 2015; Marx 2019).

Partnerships in protected areas enhance governance by advancing cooperation among stakeholders, including government bodies, local communities, non-governmental organisations (NGOs), and private entities (Fitzgerald 2021). These collaborations promote holistic resource management, incorporating diverse perspectives in decision-making (Franco and Quintela 2013). Effective PA management is contingent upon robust monitoring and enforcement, yet these tasks are perpetually challenged by limited budgets (Morrison *et al.* 2012), vast and inaccessible terrains, and the complex, often transboundary, nature of threats such as poaching and illegal logging (Buckley *et al.* 2012). Furthermore, ensuring sustainable tourism requires constant vigilance to mitigate visitor impacts and enforce regulations, a task for which park authorities are frequently under-resourced (Steven *et al.* 2013).

In this context, the pervasive challenges of underfunding and limited technical capacity make it difficult for a single agency to effectively safeguard biodiversity and manage tourism pressures. Pooling resources and expertise enables partnerships to offer a powerful mechanism for addressing these gaps. They combine financial capital, technological tools, and specialised skills to improve surveillance, strengthen enforcement actions, and enable more responsive adaptive management (Marcos *et al.* 2021). This collaborative approach can enhance biodiversity not only within park boundaries but across the broader landscape (Brodie *et al.* 2023) – vital factors for both biodiversity conservation and the long-term viability of sustainable tourism (Stolton and Dudley 2014). Partnerships also increase transparency and accountability, encouraging stakeholder participation in conservation strategies and the strengthening of governance (Marx 2019; Tawfik and Sarhan 2021). Such efforts support economic sustainability while encouraging conservation awareness and appreciation among visitors (Fitzgerald 2021).

Collaborative partnerships and their ability to advance stakeholder collaboration are increasing in popularity, particularly in marine protected areas (MPAs) and tourism. Their design, governance, management, and outcomes require further investigation, especially regarding their potential to create negative effects for conservation and society. To address these gaps, we examine MPA tourism governance in New Zealand, analyse its defining characteristics and approaches, and propose strategies for evaluating and improving MPA tourism governance and partnerships in New Zealand.

Focusing on collaborative partnerships between government, community groups, and other stakeholders, we investigate governance systems and management practices. We report on a partnership case study between the Department of Conservation (DOC) and a non-profit organisation at the Tiritiri Matangi Open Sanctuary in New Zealand. We examine the characteristics of the partnership, exploring its purpose, establishment, benefits, challenges, and success factors, with the ultimate goal of informing strategies for more effective, sustainable governance in MPAs.

Literature review

In the context of PAs, partnerships refer to a PA authority entering an agreement with a partner(s) (NGO, a community group, private sector, research institute, local people etc.) for the collaborative management of activities and programmes (Pfueller *et al.* 2011; Baghai *et al.* 2018). These partnerships seek to balance conservation goals with social and economic benefits through shared governance (Bjärstig 2017), joint decision-making, collaborative planning, and management (Fitzgerald 2021) – partners contribute their expertise, resources, and responsibilities to ensure effective management and conservation outcomes (Herrero Amo and De Stefano 2019; Cohen and Behr 2021).

The history of partnerships in PAs dates back to early collaborations, for example, the establishment of Yellowstone

National Park in 1872 that was managed by public authorities and private operators (Smith 1999). In the late 20th century, ecotourism and conservation organisations influenced partnerships in PAs (Borrini-Feyerabend *et al.* 2013; Burgess *et al.* 2014). NGOs began collaborating with governments through fundraising, research, and field initiatives (Stolton *et al.* 2013). The 1980s and 1990s saw the rise of international conservation agreements, such as the Convention on Biological Diversity (CBD), and initiatives by the World Bank, United Nations Development Programme (UNDP), and International Union for Conservation of Nature (IUCN), with the emphasis on partnerships for conservation and sustainable development goals (SDGs) (CBD 2008; Stolton *et al.* 2013; WBG 2020).

Partnerships in PAs evolve to reflect shifting priorities, societal expectations, and emerging environmental and economic challenges (Borrini-Feyerabend *et al.* 2013). In Africa, ~40 co-management partnerships currently involve 13 NGOs and local partners (Fitzgerald 2021). These partnerships increasingly integrate local communities into decision-making, co-management, and benefit-sharing arrangements with an increasing focus on engagement with indigenous peoples and traditional knowledge in conservation (Wilson *et al.* 2009; Stolton *et al.* 2013). In Australia, Indigenous protected areas (IPAs) have emerged as successful PPP models involving indigenous communities (Ross *et al.* 2009). A review of Arakwal National Park highlighted how collaboration among protected area authorities, the tourism sector, and local communities has improved conservation and tourism management (Bushell and Bricker 2017). Joint management at Arakwal has been highly effective, emphasising increased stakeholder participation and balanced power dynamics.

However, partnerships can have drawbacks, such as undermining public values, diminishing government authority, reducing accountability, and favouring entrenched interests (Dodds 2015). For example, partnerships at Uganda's Bwindi Impenetrable National Park, a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage site, aim to protect mountain gorillas (*Gorilla beringei beringei*) and promote sustainable tourism (Ahebwa *et al.* 2012). Yet, despite tourism revenue growth, local community exclusion has led to conflicts and illegal activities, highlighting the risks of neglecting stakeholder needs (Ahebwa *et al.* 2012). Despite this, the potential for co-management and partnerships to achieve positive social and conservation outcomes remains compelling, despite criticism and challenges faced worldwide (Dodson 2014).

In New Zealand, DOC manages ~30% of the country's land (Townes *et al.* 2019). Since its establishment in 1987, DOC has faced challenges such as biodiversity loss, invasive species, tourism pressures, climate change, relationships with indigenous peoples, public education, and research needs (Hardie-Boys 2010). Limited resources, staff, and funds have prompted policy changes to encourage collaborative conservation and community participation (Townes *et al.* 2019). Community involvement in managing protected areas and tourism is a cornerstone of New Zealand's environmental policy, supported

by the New Zealand Biodiversity Strategy and regional council partnerships (Peters *et al.* 2015; Innes *et al.* 2019). Across New Zealand, numerous community-led initiatives focus on conservation, education, and recreation (Hardie-Boys 2010). These efforts, often involving local volunteers, organisations, and iwi (Māori tribes), aim to restore ecosystems, manage pests, and conserve endangered species (Wilson 2005). Operating in diverse environments, such as islands, forests, wetlands, coastlines, and urban areas, these initiatives reflect a collective commitment to protecting the country's natural heritage (Moon 1998; Horn *et al.* 2019).

This participatory approach emphasises collaboration among government agencies, indigenous communities, conservation groups, and private entities to achieve conservation goals, foster sustainable tourism, and enhance community wellbeing (Peart and Cox 2019). Partnerships enable communities to support DOC and other agencies by contributing through volunteerism, education, and cultural integration, ensuring the protection of biodiversity and ecosystems (Townes *et al.* 2019). Tailored to each protected area's context and goals, these collaborations promote effective management and preservation of New Zealand's natural and cultural heritage (Saunders *et al.* 2022).

However, there are several challenges that can hinder partnerships and effective community involvement. Some of the main challenges include conflicts over resources, inadequate or unclear governance structures, and policies that can create confusion and distrust between communities (Galbraith and Cooper 2013; Saunders *et al.* 2022), lack of effective communication, lack of incentives and benefits, and lack of awareness and education (Peters *et al.* 2015; Townes *et al.* 2019). In addition, conflicting value systems present inherent challenges for cross-sectoral and cross-cultural partnerships (Selsky and Parker 2005; Bryson *et al.* 2015). These tensions often arise from the diverse institutional logics, goals, and operating principles that partners from different sectors bring to the collaboration (Vogel *et al.* 2022). Therefore, the success of such collaborations depends on clearly articulating shared foundational goals and establishing mechanisms to align objectives and actions accordingly (Bryson *et al.* 2015; Vogel *et al.* 2022), while respecting the diverse motivations of all partners (Selsky and Parker 2005). Regardless of the challenges, community participation in conservation plays a crucial role in New Zealand's efforts to preserve its unique biodiversity and natural resources (Peart and Cox 2019). There are ~600 community groups operating on public conservation land (Peters *et al.* 2015). Many of these community organisations and groups work in partnership with DOC to achieve mutual conservation and social goals (Hardie-Boys 2010).

Methodology

Research design and data collection

We utilise a qualitative research approach using a single case study method with semi-structured in-depth interviews

(Flick 2018). The case study approach (Yin 2018) is appropriate for this research because it allows key stakeholders to share their experiences and perspectives on the effectiveness of PPPs. A case study provides a comprehensive investigation of a phenomenon, individual, group, or event, helping to understand the issue more accurately (Yin 2018). Tiritiri Matangi was selected as the case study because of its success as a conservation initiative and global model for community-led conservation (Rimmer 2004; DOC 2013). Most existing research has focused on ecological restoration, with governance and management receiving less attention, that is the focus of this study.

Semi-structured interviews were conducted with 12 participants. The interviews took place both in person and online. As is typical for exploratory qualitative studies, the sample size was small because the emphasis was placed on richness and depth rather than replication or generalisability (Neuman 2011). Additionally, the eligible research population is small due to the small number of stakeholder representatives on the island. Potential respondents who were involved or knowledgeable about Tiritiri Matangi through employment or participation were identified. The criteria used to identify key stakeholders for a potential interview were individuals who had influential current or historic governance and/or management roles in partner organisations (DOC and Supporters of Tiritiri Matangi (SoTM)). It is important to note that the participant categories listed below are not mutually exclusive, as several individuals occupied more than one position (e.g. a co-founder who was also an academic). The participants comprised founders (4), current board members (4), past board members (4), an employee from SoTM, staff from DOC (2), academic researchers (2), and volunteers (2). Other stakeholders such as local visitors, tourists, local Māori people, Auckland Council, and the ferry company were excluded from the investigation because they are not involved in the governance or management of the sanctuary. Most in-person interviews were held on Tiritiri Matangi island, with few conducted in Auckland city. The online interviews were conducted through Microsoft Teams and Zoom.

The interview questions were derived from a review of the literature on protected areas and tourism partnerships (e.g. Eagles 2009; Wilson *et al.* 2009; Pfueller *et al.* 2011; Ahebwa *et al.* 2012; Herrero Amo and De Stefano 2019). To explore the insights and experiences of participants regarding collaborative management and co-governance in nature conservation and sustainable tourism, the semi-structured protocol was organised into three thematic sections. It began with opening questions to establish the participant's background and familiarity with the area. The second section investigated the perceived social, economic, and environmental impacts of tourism, along with the characteristics of the partnership model, the collaboration of key stakeholders, and the associated success factors, challenges, and risks. The final section evaluated management effectiveness and governance by probing strategic vision, decision-making processes, and accountability, concluding with participant suggestions for

improving the sanctuary's governance, management, and long-term sustainability. The research tools (i.e. interview guide, participant information sheet, the consent form) were assessed and approved by the Auckland University of Technology Ethics Committee (AUTEC), to ensure that the study was ethically sound.

Data analysis

We used thematic analysis, a common technique for analysing qualitative data (Maguire and Delahunt 2017). It explores the subjective experiences, perspectives, and meanings of participants (Braun and Clarke 2006). The method identifies and interprets patterns or themes to gain insight into underlying meanings. The analysis followed Braun and Clarke's six-phase framework: (1) familiarisation with the data; (2) generating initial codes; (3) searching for themes; (4) reviewing themes; (5) defining themes; and (6) writing. Data were checked for inconsistencies across sources to enhance reliability (Flick 2018).

The thematic analysis involved a systematic approach to coding and developing themes from the qualitative data. The process began with the identification and categorisation of initial codes from the data, which were subsequently developed into individual themes at a low level of abstraction. These themes were synthesised into more complex constructs, demonstrating interactions between individual themes at a middle level of abstraction. Finally, thematic analysis culminated in the creation of broad conceptual areas at a high level of abstraction, offering a comprehensive understanding of the data. This approach ensured that themes

were not only grounded in the data but are also integrated into a cohesive framework that reflected deeper insights into the research topic (Flick 2018). Identifying and analysing themes was a crucial step in ordering qualitative data and obtaining meaningful insights (Flick 2018). After the initial coding of the interview transcripts, similar codes were grouped to form broader categories (themes). This process involved condensing the data while maintaining their essence (Braun and Clarke 2006). All coding was performed by the first author. To minimise single-coder bias, the analysis followed a structured, iterative process involving constant comparison of the data (Ahmed 2024). Codes and themes were systematically checked against the raw data to ensure that they were empirically grounded in participant responses, and an audit trail of analytical decisions was maintained throughout to enhance transparency and reflexivity (Ahmed 2024). The themes were further developed and refined into four main themes to ensure that they accurately captured the essence of the data they represented. The themes were named in a way that reflected the content of data and subthemes they encompassed.

Study location

The Tiritiri Matangi Open Sanctuary, located 30 km north-east of Auckland in New Zealand's Hauraki Gulf (see Fig. 1 below), is managed by the Supporters of Tiritiri Matangi (SoTM) in collaboration with DOC (Galbraith and Hayson 1995). The sanctuary, that attracts ~30,000 visitors annually, is renowned for its rich biodiversity, including native birds

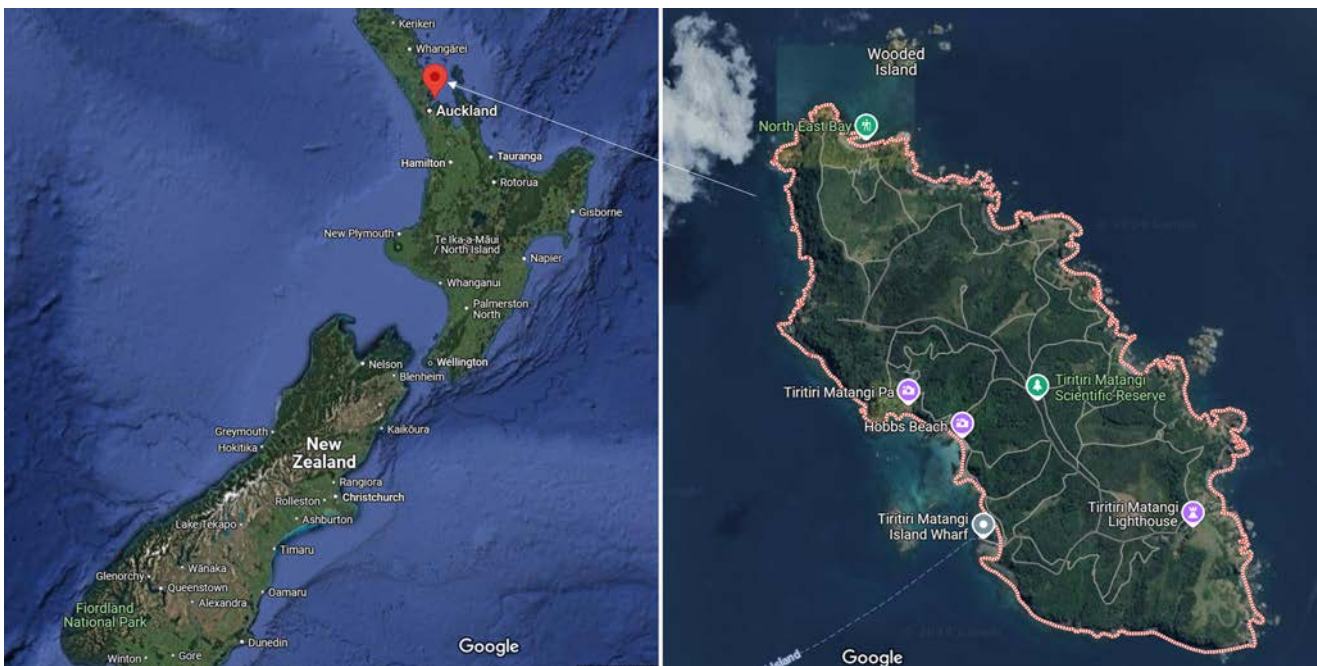


Fig. 1. Location of Tiritiri Matangi Island in the Hauraki Gulf.

such as Kiwi (*Apteryx*), Takahe (*Porphyrio hochstetteri*), and Kōkako (*Callaeas*), and reptiles and plants (Baling *et al.* 2013; Saunders *et al.* 2022). The island also holds significant Māori and European historical value (Rimmer 2021).

Designated as a recreational reserve in 1976 and a scientific reserve in 1980, Tiritiri Matangi’s ecological restoration began in the late 1970s with efforts to remove predators and replant native vegetation (Moon 1998). Volunteers and experts, later forming SoTM, collaborated with the government to restore the island’s natural habitats. Over decades, the eradication of pests such as rats, stoats, and cats, along with native tree planting, led to the reintroduction and successful breeding of endangered species (Rimmer 2004; Galbraith and Cooper 2013). Between 1984 and 1994, 280,000 native trees and plants were planted to promote biodiversity (Galbraith and Hayson 1995).

In addition to its ecological importance, Tiritiri Matangi is a popular tourist destination. Accessible by ferry, the island offers scenic walking trails, beaches, and opportunities for diving, snorkelling, and boating (SoTM 2023). Birdwatchers are drawn to the sanctuary, where they can encounter native species such as the north island Kākā (*Nestor meridionalis*), Saddleback (*Philesturnus*), and Kiwi (*Apteryx*) (Galbraith *et al.* 2013). The sanctuary promotes eco-friendly tourism, encouraging visitors to follow biosecurity measures and respect the environment (Rimmer 2021). Guided tours offer insights into the island’s history, ecological characteristics, and conservation efforts (DOC 2013). Tiritiri Matangi is a model of a successful PPP in conservation, with a local volunteer non-profit group working alongside the government

to achieve shared conservation and tourism goals. Its success in biodiversity restoration has made it a global example of community-led conservation and a valuable case study in the governance of protected areas (DOC 2013).

Results

Analysis of the interviews revealed several key themes (see Fig. 2 below). The titles selected for these themes are drawn from the data and represent an overall descriptor for the aggregated data grouped within the theme.

Theme – Development of the community-led partnership initiative

Conceptual – The sanctuary establishment phase: the ‘spade brigade’

In the 19th century, the island was deforested and farmed. A community-driven conservation effort had begun by the 1980s, led by a dedicated group known as the ‘spade brigade’. The group included the lighthouse keeper, local volunteers, University of Auckland scientists, park rangers, and conservation enthusiasts, all united by a shared commitment to ecological restoration. As *one founder* recalled:

At the beginning, there were a few people involved. They were all people that were quite able to be influential and dedicated, and they put their shoulder to the wheel and got things moving. People gradually joined up.

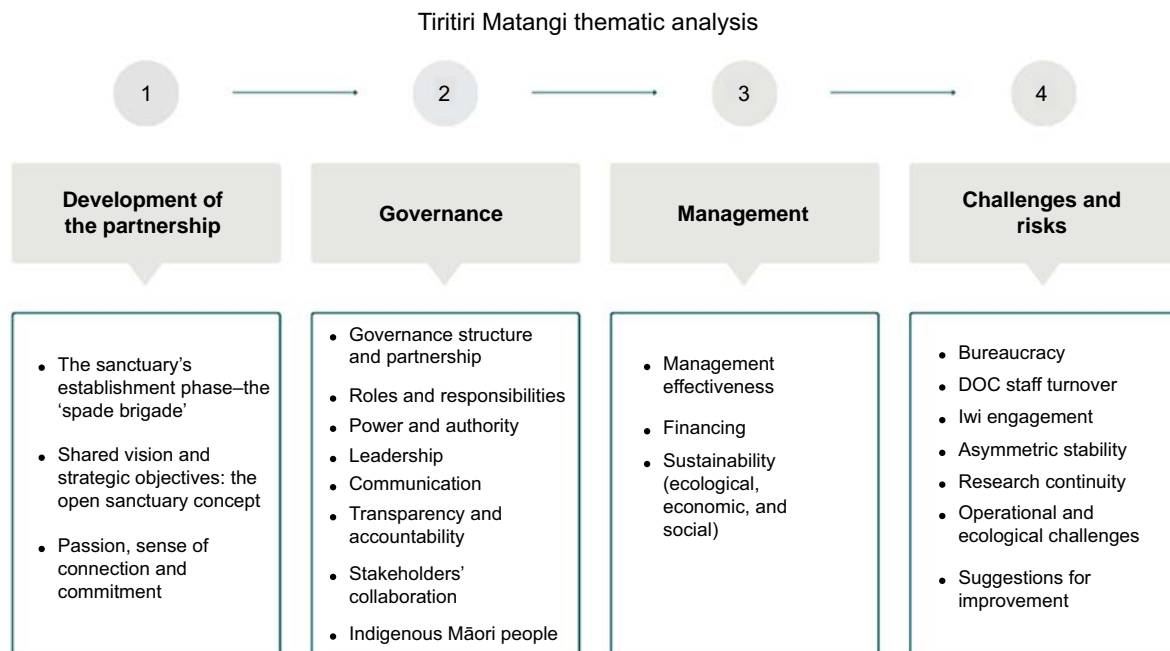


Fig. 2. Themes and subthemes emerged from the data.

In 1988, the group established the non-profit group SoTM. Since then, SoTM has collaborated with DOC, university researchers, and Māori tribes to manage the island.

Conceptual – Shared vision and strategic objectives: the open sanctuary concept

During the sanctuary’s early development, the Tiritiri Matangi Island Working Plan 1982 was created to outline a shared vision and strategic objectives. It was based on fieldwork conducted from 1974 to 1982 by University of Auckland researchers. The Working Plan envisioned an ‘open sanctuary’ prioritising public involvement in its design and development. It aimed to offer visitors enriching experiences while ensuring the island’s long-term conservation, restoration, and sustainable resource use. *An interviewee* elaborated:

They [SoTM] had this vision that people should be involved, in that sort of time, it wasn’t popular to involve people in [conservation]

Several interviewees highlighted the strategic vision of restoring the island as an open sanctuary as vital to its conservation success. *One interviewee* argued:

Without the vision for what the place could become, it would never have happened. But it’s still continuous.

Conceptual – Passion, sense of connection, and commitment

Since the sanctuary’s inception, hundreds of volunteers have devoted their time and skills to restoring the island.

Many interviewees expressed deep passion, commitment, and a strong connection to the sanctuary, promoting a shared mission and camaraderie. The long-term dedication of volunteers is a quality that defines Tiritiri Matangi. Many of them felt responsible for the island and consider themselves to be part of it, as well as being its stewards. *An interviewee* added:

I see hundreds of volunteers participating . . . a lot of the volunteers have been involved for a very long time they have that long longevity. There’s an inclusive, real family feel.

Most of the interviewees appeared to be quite passionate about the island with strong feelings of pride, ownership, and belonging. Everyone wanted to do what was best for the island, despite the challenges. This commitment could be attributed to New Zealand’s strong volunteerism culture, as *one of the volunteers* debated:

I mentioned . . . that magic word, culture . . . some things within the culture of New Zealanders as a whole do very well in something to get it [done].

The findings highlight the crucial role of volunteers and local conservation activists, the ‘spade brigade’, in initiating this community-led sanctuary. The founding group combined scientific planning with passion, commitment, and a deep connection to the sanctuary to create a shared vision and strategic objectives. A historical timeline of the partnership’s development (see Fig. 3 below) reveals eight key milestones and phases. Beginning in the mid-1970s, the sanctuary’s story

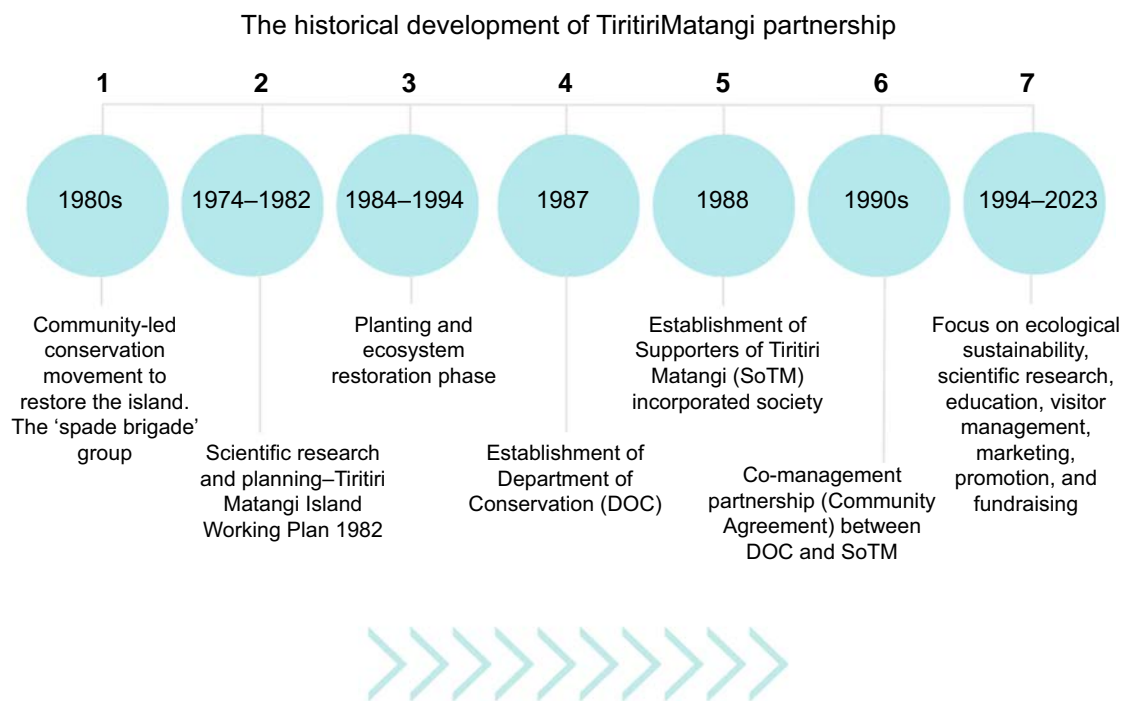


Fig. 3. The historical development of Tiritiri Matangi partnership.

was rooted in a planning phase with a long-term vision of ecological restoration. The establishment of DOC and SoTM marked significant milestones in shaping the partnership model.

Theme – Governance

Conceptual – Governance structure and partnership

The sanctuary is under the official responsibility of DOC and is co-managed by DOC and SoTM. A DOC Community Agreement between the two parties organises this partnership. Other stakeholders, including local government, iwi, the ferry company, universities, researchers, conservationists, volunteers, donors, non-profit groups, schools, tourism operators, and visitors, have interests in the island but lack full involvement in its governance or management.

Roles and responsibilities. DOC and SoTM share key responsibilities on the island. DOC oversees conservation planning, governance, law enforcement, permits, and stakeholder relations. SoTM focuses on implementing conservation, education, marketing, visitor management, and fundraising efforts in collaboration with and under DOC's supervision. However, some roles overlap and are not always clearly defined.

Conceptual – Leadership

The leadership of the sanctuary can be exchanged between several players, including SoTM, DOC, volunteers, and researchers. Leadership creates an environment that advances collaboration, empowers partners, ensures sustainability, and drives positive change. However, there is some rivalry for leadership that the partners addressed.

Power and authority. In some cases, there could be a disagreement between SoTM/volunteers and DOC concerning power and authority. The reason was that because stakeholders have different perspectives and approaches to exercising power and authority. Over time, SoTM has grown increasingly influential, taking on significant responsibilities and fundraising for the island. As a result, DOC has gradually involved them in the island's strategic decision-making. SoTM also involves DOC in some of their planning process. *A SoTM member* confirmed:

But they [DOC] do give us [SoTM] a sort of a seat on the board for major decisions that were made. But quite often the ranger would come to our [SoTM] meetings, and they'd have input into what we wanted for the island, so we had guidance from the ranger.

Conceptual – Communication

There is direct communication between the main partners through regular meetings and daily conversations. This facilitates the cooperation, minimises disagreements, and

builds trust. The partners also communicate with the external world through a variety of communication channels such as websites, social media, and magazines.

Transparency and accountability. Transparent governance builds trust and promotes long-term commitment. Transparency and accountability are embedded in the DOC and SoTM governance systems by law. This has been acknowledged by *one of the interviewees*:

The important thing is not to hide anything. We [SoTM] told them [DOC] what we were doing and what we're going to do and all the rest of it.

Conceptual – Stakeholder collaboration

Collaboration is a key governance feature of the Tiritiri Matangi partnership, with stakeholders working together, each contributing technical or financial support. There is a culture of appreciation and respect among stakeholders. The contribution of each player is recognised and acknowledged, as *one of the participants* confirmed:

They [SoTM] are the gold . . . because they're always really passionate, and generally do awesome work. . . . this place definitely wouldn't be anything like it currently is without the community group [SoTM].

Conceptual – Indigenous Māori people

Local Māori people were the first to settle on the island. Although they do not currently physically live there, they are still connected to it and have a claim to the island. *An interviewee* elaborated:

We have nine iwi that have an interest in the island. There's no physical existence, like buildings, and infrastructure, but there's archaeological sites that are important to them [Māori].

Under the Treaty of Waitangi, DOC is required to consult with iwi in planning and operations on the island. Iwi refers to Māori tribes, with most Māori identifying with one or more iwi, often linked to specific regions and sacred sites. Both DOC and SoTM consult with iwi about several issues on the island. Yet, most interviewees indicated that engagement of iwi is one of the key governance challenges. There is a desire for more engagement, but it requires more effort, resources, and time. The findings indicate that the sanctuary is managed through a collaborative governance framework, involving both public and community actors. While roles and responsibilities are shared, clearer definitions are needed. Stakeholders cooperate transparently to address issues of power, authority, and communication.

Theme – Management

Conceptual – Management effectiveness

As an incorporated society, SoTM has been successful in accomplishing its goals due to the flexibility in planning and decision-making, efficient resource mobilisation, the strong volunteer base and ability to raise funding. *One of the interviewees* debated:

The restoration of Tiritiri Matangi, like the state that it is now, wouldn't have happened without having a community trust, like the SoTM is because DOC has limited resources ... they [SoTM] have people that can apply for grants ... volunteers as well.

SoTM has an effective management culture and less bureaucracy that creates a constructive, efficient work environment.

Conceptual – Financing

Partners have recognised the importance of securing sustainable financial resources for the island since the start of this initiative. *Some of the founders* remembered:

The trigger was the lack of funding for the island, financial resources makes you independent.

The financing journey began in the 1980s with only a few thousand dollars, a small grant from the World Wildlife Fund (WWF), and has grown to millions of dollars annually. DOC and SoTM are currently the two parties responsible for providing funding for the sanctuary. The central government budget, the earnings from the DOC's bunkhouse, and the island concessions are the main sources of funding for DOC. However, DOC's budget is constrained and unable to pay for the necessary management expenses. The incorporated society relies on diverse funding sources, including membership fees, donations, gift shop and guiding service proceeds, grants, and private sector support. *A SoTM interviewee* stressed:

So those two things (the shop and guiding fees) alone have been fundamental to driving a lot of income for the island ... we get donations ... grants are another big thing ... we were approaching some rich listers.

Conceptual – Sustainability

Sustainability for the partnership involves incorporating ecological, social, and economic factors into the work of the sanctuary. A great deal of work has been undertaken to restore and preserve ecosystems to ensure the ecological sustainability of the island. *An interviewee* confirmed:

So now it's [the sanctuary] pretty much a fully functioning ecosystem. We're just enhancing it now..

SoTM's fundraising strategies help the partnership model remain financially viable by focusing on long-term economic growth. The social sustainability of the island is based on providing an high quality visitor experience, promoting education, citizen science, and community engagement in conservation. The guiding programme and school visits are examples, *an interviewee* explained:

So it's an opportunity to put that message across to people at times. But then we have the school kids to get the groups and put a seed in a child's mind and hopefully somebody's gonna water it.

The findings show that the co-management approach between SoTM and DOC effectively manages the sanctuary, secures resources, and supports its environmental, social, and economic sustainability. SoTM's flexibility and adaptive management define the sanctuary's management style.

Theme – Challenges and risks

Several challenges, identified during the study investigation, are facing the sanctuary. These include governmental bureaucracy, inadequate funding, undefined roles and responsibilities, lack of indigenous iwi engagement, disagreement and conflict among partners, changes in representatives of stakeholders/partners, and DOC staff turnover. Other issues identified include personal attitudes and agendas of some partners. Ecological issues such as climate change and slow progress in conservation of the marine environment were expressed by some participants.

Conceptual – Governmental bureaucracy and DOC relationships

The relationship between SoTM and DOC has been a persistent source of friction. Multiple interviewees described DOC as a bureaucratic obstacle that, despite generally supportive intentions, is heavily constrained by rules, regulations, and diminishing budgets. One long-term participant noted that DOC is

bureaucratic, bloody ball and chain ... they're absolutely confined by the DOC's rules and regulations. They can argue on our behalf, and they can advise us, but they can't take certain parameters.

DOC's tendency to be process-driven rather than outcome-driven has frustrated many involved with the island. One interviewee characterised the agency as 'ultraconservative' and that suggested it actively hinders what could be exceptional community-led conservation:

I'm not a strong supporter of DOC ... they're not outcome driven, they're very much process driven ... I think they get in the way of what could be a pretty fantastic community leader.

The bureaucratic burden extends beyond DOC. Auckland Council, iwi consultation processes, and the Historic Places Trust all add layers of complexity and cost. One senior SoTM member described the consent process for a new visitor centre:

It took four years . . . it's probably cost us over \$100,000 in consent fees, and we haven't even dug a piece of soil . . . I don't know [if a] handful [of] organisations could ever do this.

Conceptual – DOC staff turnover and loss of institutional knowledge

A recurring theme across interviews was the damaging effect of DOC's high staff turnover on collaborative relationships. New rangers arrive with no knowledge of the island or its history with SoTM, therefore the community group must continually invest time in re-educating DOC personnel:

DOC seem to be changing their staff on a very regular basis. And every time someone new comes on, they know nothing about the island . . . in the old days, we used to have DOC staff who were there for many years, and you could develop that relation.

We have a three-year rotating changeover [with rangers]. So it's harder to form that relationship. So we have to keep educating them as they come on.

This instability is compounded by a broader cultural problem within DOC. One former DOC staff member who later worked closely with SoTM observed that the department historically failed to attract entrepreneurial staff and was resistant to volunteer involvement:

Department of Conservation . . . attracts people who love rules . . . unfortunately, Department of Conservation . . . didn't employ the people who were more entrepreneurial or willing to make things different . . . there were a lot of people there who still really didn't like dealing with volunteers.

Conceptual – Complexity of iwi engagement

The requirement to consult with mātauranga Māori and secure iwi consent has added significant complexity to governance. While interviewees acknowledged the legitimacy and importance of iwi involvement, the practical challenges are substantial. Multiple iwi groups hold an interest in the island, and reaching consensus is difficult:

The biggest challenge we have is that there are so many iwi . . . if it was just one or two [iwi groups] then that probably would already be happening . . . we can't even get all [of those] who have an interest in the island to sit in the same room together.

Iwi political cycles also create unpredictability. Annual elections within iwi bodies mean that relationships must be rebuilt regularly, and decisions can be delayed or reversed:

Involvement with iwi – wherever possible we get them involved. And it gets quite annoying when they get uncomfortable with DOC and then say, we're not going to talk to anybody anymore for a while – that completely stopped everything.

Personal agendas and political manoeuvring among stakeholders were also cited as challenges by DOC staff:

People's personalities, people's personal agendas, political gaming – that goes on on both sides – is definitely a challenge.

Conceptual – Asymmetric stability: SoTM vs changing partners

SoTM has maintained organisational continuity over decades, while many of its key partners – DOC, iwi bodies, ferry operators, and Auckland Council – experience frequent personnel changes. This asymmetry places a disproportionate burden on SoTM to rebuild relationships:

We've been around for a long time. The others haven't . . . we're having to keep rebuilding that relationship with these ever-changing stakeholders. We are static, they are changing. That's the difference.

The voluntary nature of SoTM itself presents internal challenges. Reliance on volunteers means continuity of culture and direction is not guaranteed, and individuals may bring varying priorities or a sense of personal ownership:

Challenge – also the fact that we're a voluntary organisation, that people come and go . . . Although we've got a mission statement, everyone's got their own quirks.

When people have been involved in a project for a very long time, and they give up a lot of their time and energy for it – sometimes people can develop a sense of ownership or entitlement, which is really natural, but has to be carefully managed.

Conceptual – Operational and ecological challenges

The island's geographical isolation creates logistical vulnerabilities not shared by land-based sanctuaries. Access depends entirely on a ferry service, meaning that adverse weather directly affects income and visitor access:

Other sanctuaries around New Zealand are land-based so people can drive . . . we're constrained by a ferry service. So if anything happens to that ferry service . . . we lose income.

Ecological risks also loom large. As an open sanctuary, Tiritiri Matangi is vulnerable to pest reinvasion. A rat incursion took 3 months to resolve and highlighted the ongoing vigilance required. Climate change was identified by multiple participants as an emerging threat, given the island's exposure to severe weather events:

Climate change may make a difference [as] a challenge to the island ... very, very vulnerable island because it's dry ... cyclone-type weather patterns ... it's not going to be plain sailing.

Progress in extending conservation efforts to the marine environment surrounding the island remains limited, with early attempts reportedly encountering resistance from fishing interests:

The marine part of the island – if we tried ... unfortunately, there was too much resistance from the fishermen.

Conceptual – Research continuity

The shift in university research towards short-term post-graduate projects has undermined long-term scientific monitoring of the island. Unlike the sustained research programmes of earlier decades, student researchers typically complete their work and leave:

University researchers ... will come and research and disappear. So the research is sort of punctuated ... rather than continuous. I've seen over the years university researchers dropping down [their] support.

Conceptual – Suggestions for improvement

According to *several interviewees*, there are various areas where the partnership model could be strengthened. These include developing a new plan that advances participation from all key actors:

I think there needs to be a new plan for how the island will be going and how to be managed because at the moment, it's just sort of two groups [DOC and SoTM] doing slightly different things.

The roles and responsibilities of other stakeholders and user groups should also be further clarified. SoTM needs to operate more professionally by employing qualified individuals, outlining duties and responsibilities, ensuring the trust's independence, and promoting trustee rotation. Several interviewees stated that DOC needs more funding, human resources, and less bureaucracy.

According to the results, the initiative's success stems from key factors: the founding group's leadership, passion, commitment, personal ties to the island; family influence; strong community participation; a culture of volunteerism;

and active scientific involvement. However, institutional challenges and natural risks pose threats if left unaddressed.

Discussion

This study examined the governance and management of the PPP at the Tiritiri Matangi Open Sanctuary, contributing to a growing body of scholarship on collaborative governance in MPAs. Drawing on qualitative interviews with key stakeholders, the findings demonstrate that effective PPPs can simultaneously advance ecological restoration, community engagement, and sustainable tourism, provided that governance structures are adaptive, inclusive, and well-resourced. The conceptual framework developed here (Fig. 4) identifies the conditions, mechanisms, and outcomes that underpin this model, offering transferable insights for MPA governance more broadly (Ghate 2018; van Tulder and Keen 2018).

Successes: what has worked in the context of public-private partnerships (PPPs)?

The Tiritiri Matangi partnership demonstrates several hallmarks of effective PPP governance that are well-documented in the protected area literature. Perhaps most foundational is the early agreement on a shared strategic vision, the 'open sanctuary' concept that oriented all stakeholders toward a common goal and enabled sustained, multi-decadal collaboration (Franks and Booker 2018; Herrero Amo and De Stefano 2019). This shared vision has been instrumental in mobilising hundreds of volunteers over more than three decades, illustrating how a compelling mission can generate and sustain community participation, one of the defining features of successful conservation PPPs (Pfueller *et al.* 2011; Saunders *et al.* 2022).

A second key success is the innovative, diversified financing model developed by SoTM. Faced with chronically constrained DOC budgets, SoTM has drawn on membership fees, donations, guiding income, grants, and private sector support to ensure the sanctuary's financial resilience. This aligns with evidence that mixed financing mechanisms, rather than reliance on any single source, are critical to the long-term sustainability of protected areas (UNDP 2018; Bohorquez *et al.* 2022). The ability of community-based organisations to leverage non-governmental funding, thereby supplementing public resources, is increasingly recognised as a major advantage of PPP models in conservation (Eagles and Hillel 2008; Fitzgerald 2021).

The role of science and research has also been central to the partnership's success. The sanctuary was founded on a decade of ecological research conducted by the University of Auckland, and this science-based foundation has continued to guide adaptive management decisions. Cross-sectoral collaboration between community groups and researchers has enabled the integration of scientific knowledge into

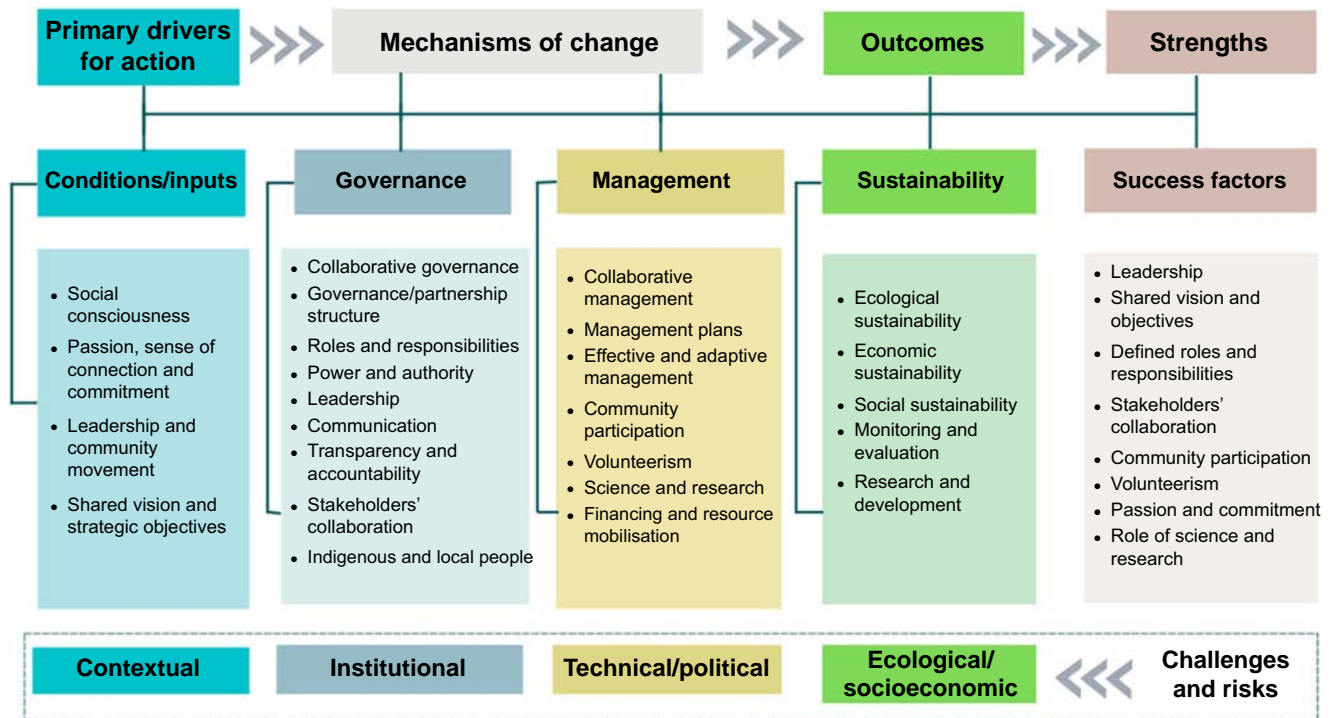


Fig. 4. A conceptual framework for protected area partnership.

governance – an approach associated with improved outcomes in protected area management (Rimmer 2004; 2021; Saarman *et al.* 2013). Together, these elements, shared vision, community volunteerism, diversified financing, and science-led management, constitute a model of collaborative governance with considerable transferability to other MPA contexts (Petursson and Kristofersson 2021).

Transparency and accountability, embedded in the governance structures of both DOC and SoTM, have further underpinned the partnership’s longevity. Consistent with good governance principles, including stakeholder responsiveness, fairness, and rule of law (Eagles 2009; Borrini-Feyerabend *et al.* 2013; Worboys *et al.* 2015), the partnership has maintained open communication channels and a culture of mutual respect that has withstood leadership changes and periods of tension. The formalisation of the collaboration through a DOC Community Agreement has provided an institutional foundation for this, even if some ambiguity in roles and responsibilities has persisted (Edwards 2001).

Challenges: what persists and what has been overcome?

Despite its successes, the Tiritiri Matangi partnership faces challenges common to many PPP models in protected areas, some of which have been partially addressed, while others remain unresolved. Power asymmetries and ambiguous roles represent a persistent tension. While DOC holds formal authority over the sanctuary, SoTM has grown considerably

in influence and capacity over time, creating informal power dynamics that are not always well-reflected in the governance agreement. Overlapping and undefined responsibilities have caused friction, a challenge widely observed in cross-sectoral conservation partnerships (Van Huijstee *et al.* 2007; Herrero Amo and De Stefano 2019; Marx 2019; Petursson and Kristofersson 2021).

Governmental bureaucracy, particularly within DOC, has been a recurring source of frustration. The agency’s process-driven culture, combined with frequent staff turnover, has disrupted institutional memory and strained the working relationship with SoTM. Each change of DOC ranger requires SoTM to invest time in re-education, a structural inefficiency that undermines the relational capital upon which effective co-management depends. These difficulties reflect broader tensions inherent in cross-sector partnerships, where differing institutional logics and operating principles can impede collaborative momentum (Selsky and Parker 2005; Bryson *et al.* 2015; Vogel *et al.* 2022). Some progress has been made through informal mechanisms, regular meetings, direct communication, and DOC’s increasing willingness to involve SoTM in strategic decisions, but a more formal solution to staff continuity remains outstanding.

The limited engagement of indigenous Māori iwi is perhaps the most significant unresolved challenge. Under the Treaty of Waitangi, DOC is obligated to consult with the nine iwi that hold interests in the island; however, the practical complexity of multi-iwi engagement, including political cycles within iwi bodies and competing priorities, has meant that meaningful

participation remains elusive. This reflects a well-documented tension in New Zealand conservation governance between legal obligations to Māori and the practical capacity to fulfil them (Peart and Cox 2019; Towns *et al.* 2019). The consequences are not merely procedural: without authentic iwi participation, the partnership risks marginalising important cultural knowledge and legitimacy. This challenge has not yet been overcome and warrants dedicated attention in any future governance strategy.

Ecological and operational vulnerabilities also persist. As an open sanctuary, the island remains susceptible to pest reinvasion, and its island geography creates income volatility linked to weather and ferry service reliability. Climate change poses an emerging long-term threat, particularly given the island's dry, exposed conditions. While the partnership has demonstrated adaptive capacity in responding to past ecological incidents such as rat incursions, the absence of a comprehensive marine conservation strategy for the surrounding waters represents a significant gap, with earlier efforts reportedly blocked by resistance from fishing interests (Stolton and Dudley 2014).

Recommendations for public-private partnerships (PPPs) and future research

Our results point to several practical recommendations for improving governance effectiveness and sustainability in MPA partnerships. The development of a new, co-produced strategic plan, one that clarifies the roles and responsibilities of all partners, including iwi, the ferry operator, Auckland Council, and other user groups, is an overdue priority. The existing Community Agreement between DOC and SoTM no longer fully reflects the complexity and maturity of the partnership, and a revised framework would help institutionalise shared decision-making and reduce the informal power imbalances that have accumulated over time.

Deliberate mechanisms to preserve institutional memory within DOC are needed. Options may include longer posting durations for island rangers, structured handover processes, or the development of a dedicated knowledge repository co-managed with SoTM. Relatedly, SoTM itself would benefit from enhanced professionalisation including clearer governance structures, defined trustee rotation, and a stronger organisational identity that distinguishes the trust's strategic role from the volunteer activities it coordinates.

A focused, resourced strategy for iwi engagement is essential. Given the complexity of multi-iwi consultation and the political cycles that affect iwi bodies, this cannot be addressed through *ad hoc* relationship-building alone. Drawing on models from other New Zealand conservation partnerships such as the Arakwal National Park co-management experience in Australia, or Indigenous Protected Area frameworks (Ross *et al.* 2009), the partnership could develop a standing iwi liaison mechanism that survives changes in personnel on all sides.

Future research should examine how the transferable lessons of Tiritiri Matangi, particularly regarding community-led conservation, diversified financing, and science-community integration, can be adapted to MPAs in different governance and cultural contexts. Comparative case studies involving other New Zealand eco-sanctuaries (Innes *et al.* 2019), and international MPA partnerships, would help assess the broader generalisability of the conceptual framework developed here. There is also a need for longitudinal research on how PPP governance evolves as partnerships mature, and on the conditions under which informal power dynamics are most likely to create governance failure.

Conclusion

We addressed important research gaps in collaborative governance and partnerships within protected areas, with the Tiritiri Matangi Island as a study site. The aim was to help improve understanding of the dimensions of management and governance systems, the relationships and dynamics among stakeholders and partners, and the challenges and success factors of PA collaborative governance and partnership tourism. The PPP model is a highly beneficial approach to conservation with potential to contribute to ecological, economic, and social sustainability. The study highlighted the importance of stakeholder collaboration and public participation in conservation, to assist in removing impediments to cooperation and enable PA management to become more inclusive and effective. Evaluating the perspectives of the partners, stakeholders, and actors in the partnership and their views on the performance, dynamics, and future of the partnership model, enables important recommendations for PPPs in PAs to be made. Tiritiri Matangi is, therefore, a prime example of how government, community, academics, and the tourism sector can effectively collaborate to offer a sustainable tourism activity within an ecological restoration project. Community participation in conservation and volunteerism, longevity and commitment, the role of science and research, stakeholders collaboration, collaborative and adaptive management, trust and effective communication between partners/stakeholders, and innovative financing solutions, among others, characterise a successful partnership. However, management and governance issues, for example the lack of participation from some stakeholder groups, leadership competition, power, authority imbalances and governmental bureaucracy, necessitate ongoing monitoring and evaluation that improve the partnership's ability to adapt to problems and risks.

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Author affiliations

^ASchool of Hospitality and Tourism, Auckland University of Technology, Auckland, New Zealand.

^BAuckland University of Technology, Auckland, New Zealand.