Ecosanctuaries, grassroots community development and partnerships with tāngata whenua: a postdevelopment perspective

A thesis presented in partial fulfilment of the requirements for the degree of

Master of International Development,

At Massey University,
Palmerston North,
Aotearoa New Zealand

Scott Burnett

2022

Abstract

Aotearoa New Zealand is in the midst of a human-induced biodiversity crisis, with three-quarters of birds, reptiles and frogs at risk of extinction. Last year a redeveloped National Biodiversity Strategy called Te Mana o te Taiao was released. The strategy argues that we need to change people's relationship with the natural world in order to address biodiversity loss. In this thesis, I explore the socio-cultural aspects of three community-led ecosanctuary projects to examine this problem and illuminate a pathway toward a more sustainable relationship between people and the natural world.

I use a hopeful postdevelopment lens, which seeks to imagine and practise development differently through research couched in hope and possibility. It builds upon postdevelopment's insight that over-reliance upon universally applied, science-based, market-driven technological solutions often delivers unintended negative outcomes and devalues alternative perspectives. A qualitative approach was employed for this research, using semi-structured interviews with key informants, an analysis of documents published by these organisations, and a synthesis of the published literature.

The research illustrates how dominant Western paradigms, which see humans as separate from the natural world, have contributed to the biodiversity crisis. It then reveals that awareness of the state of the environment does not necessarily result in behaviour change, and I argue that the adoption of indigenous approaches may help turn knowledge into action for the environment. I found ecosanctuaries are well-placed to enact this paradigm change in human-nature relationships and are already doing so as a side-effect of their activities rather than with a planned focus.

The research further examined the influence of ecosanctuaries upon their communities, how ecosanctuaries worked with indigenous peoples, and how they incorporated indigenous knowledge. These findings can be used by community conservation initiatives to articulate the benefits such projects deliver to their communities and suggest how stronger relationships with tāngata whenua can be developed and why this is valuable.

Acknowledgements

I would like to dedicate this research to the late Peter McKenzie, 1952-2012, founder of Nga Manu Sanctuary on the Kapiti Coast, for igniting my interest in conservation. I would also like to thank Bill Harris and Ruth McKenzie for their mentorship and encouragement.

This project would not have been possible without the love and enthusiastic support of my wife Rachel Sanson and son Kahu. My deepest thanks for making me always feel like the luckiest man alive. A big thank you also to my wider family for your encouragement and support.

I am fortunate to have the best supervisors one could wish for in Apisalome Movono and Regina Scheyvens. Thank you both for your confidence in me, your timely suggestions, and your encouragement.

I would also like to thank friends who have supported, challenged and inspired, including Mark Andrews, Hana Black, Brian Cresswell, Pete Griffin, Gwilym Griffith-Jones, Rachel Hawthorne, the Hay family, Zach Johnstone, Ethan Knight, Kat McKinnon, the Meas family, Eleanor Meecham, Chris Moretti, Grant Oakes, Penny Olson, Melissa Raftery, Hillary Sites, Polly Stupples, Rebecca Thomas, Mark Watson, and Stacey Williams.

A heartfelt thank you to those who agreed to be interviewed or chatted to me for this research, including Paul Atkins, Jacquetta Bell, Gillian Bishop, Jaap Buys, Ru Collin, Bryce Buckland, Ross Cullen, Hudson Dodd, Rick Field, Emma Giesen, Roy Grose, Gerald Harper, Chris Hawkes, Peter Hay, Matt Hippolite, Bronwyn Hutchison, John Innes, Peter Jamieson, Nicky Jenkins, Andrew John, Phil Lyon, Jim Lynch, Judith Manning, Debs Martin, Deryk Mason, Steve Moorhouse, Tim Park, Anna Polson, Hazel Ross, Ian Shapcott, Barney Thomas, James Wilson, and Aneika Young.

An acknowledgement also, for the work of the late Diane Campbell-Hunt, whose research formed the 2013 book Ecosanctuaries: Communities building a future for New Zealand's threatened ecologies, which was an invaluable resource.

Finally, this research highlighted to me the incredible work of everyone working in conservation and ecological restoration in Aotearoa New Zealand. I thank you for the mahi you contribute.

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Te Reo (Māori language) definitions

Ahi ka roa	Long fires of occupation. Continued connection to, and occupation of, place.
Aotearoa	North Island. Now used as the Māori name for New Zealand.
Haere Mai	Welcome. A greeting.
Hapu	Kinship group, subtribe.
Iwi	Tribe.
Kaitiaki	Environmental practitioner.
Kaitiakitanga	The obligation to nurture and care for the *mauri* of a *taonga*, or the ethic of guardianship or protection. The ethos of sustainable resource management.
Kaipupu	Kai = food; Pupu = shellfish. Place of gathering shellfish.
Karakia	Blessing or prayer.
Kaumātua	A person with knowledge and wisdom.
Kaupapa	Policy, purpose, matter for discussion.
Kura	School.
Mana	The prestige, authority, control, power, influence, status, spiritual power, charisma - *mana* is a supernatural force in a person, place, or object.
Manaakitanga	Reciprocal and unqualified acts of giving, caring, and hospitality.
Mana whenua	Rights of self-governance, rights to authority over traditional tribal land and resources.
Marae	The open area in front of the meeting house and often used to refer to the complex of buildings around the marae.
Matariki	Māori New Year. Also, the star constellation Pleiades.
Mātauranga Māori	Mātauranga Māori – Or Māori knowledge, is the body of knowledge originating from Māori ancestors. This includes the Māori worldview and perspectives, Māori creativity, and cultural practices.
Maunga	Mountain or peak.
Mauri	Life-force. The essential quality and vitality of a being or entity.
Moa	Large extinct flightless bird.
Pākehā	New Zealander of European descent.
Rangatahi	Youth.
Rohe	District, territory, boundary.
Tāngata Whenua	Indigenous people of the land.
Taonga	Treasure.
Tauiwi	Non-Māori.
Te Ao Māori	Māori worldview.
Te Reo	Māori language.
Te Mana o te Taiao	The mana of the living environment and the name of the national biodiversity strategy.
Te Mana o te Wai	Refers to the vital importance of water, its health and wellbeing. Giving effect to Te Mana o te Wai is a requirement of the Freshwater National Policy Statement.

Te Taiao	The natural world.
Te Tau Ihu	The prow of the canoe. Refers to the top of the South Island. There are eight iwi who are tāngata whenua in Te Tau Ihu.
Te Tiriti/Te Tiriti o Waitangi	Aotearoa New Zealand's foundational document signed by the British Crown and Māori chiefs in 1840.
Tikanga	A custom, practice, or correct protocol. It refers to the customary system of values and practises that have developed over time and are deeply embedded in the social context.
Tino Rangatiratanga	Self-determination, sovereignty.
Tono	An application or request.
Waimārama	Moonlight reflecting on the water.
Waka	Canoe.

Definitions paraphrased from the Te Aka Māori Dictionary. https://maoridictionary.co.nz

1 Introduction

1.1 Background

This thesis explores socio-cultural aspects of community-initiated ecosanctuary projects in Aotearoa New Zealand, through a hopeful postdevelopment[1] lens. This introductory chapter provides a brief overview of ecosanctuaries, the specific projects the research focuses upon, and why these projects were chosen. It then outlines why hopeful postdevelopment is a relevant lens for this research, explaining the rationale behind focusing on the social-cultural aspects of these projects, and specifically their level of engagement with *tāngata whenua*[2] and with communities[3].

There are hundreds of community-initiated conservation[4] projects in Aotearoa New Zealand. The focus was narrowed to the 14 fenced mainland ecosanctuary projects (Sanctuaries of New Zealand, 2021), and three were chosen as case studies: Zealandia in Wellington; the Brook Waimārama Sanctuary in Nelson; and Kaipupu Sanctuary in

[1] 'Postdevelopment' without the hyphen (rather than 'post-development) is in alignment with Klein and Morreo's (2019) usage, to emphasise the "ongoing tension in demanding a temporal break with development, an 'after' development", rather than just tinkering with the existent development paradigm (p.8).

[2] In formal usage, the indigenous people of Aotearoa New Zealand are referred to as 'Tāngata Whenua' – the people of the land. This is more appropriate than 'Māori' because it refers to their connection to the land and their status as the original inhabitants of Aotearoa New Zealand, rather than being just another ethnic group (NZPA, 2003; Aug 7; Iorns Magallanes, 2011, p.87). However, as is common, I use 'Māori' in informal usage in this work. Tāngata whenua or Māori are the collective descriptors for the indigenous peoples of New Zealand, who identify with separate tribes called Iwi. Ecosanctuaries form relationships with particular iwi, or subgroups of an iwi, rather than all of Māoridom. Iwi hold 'mana whenua', or political rights and responsibilities for lands and species (Iorns Magallanes, 2011, pp.91-97). Thus, in this thesis, I use 'tāngata whenua' or 'Māori' when discussing more general themes and use 'iwi' when discussing ecosanctuary-Māori relationships as they are held with specific iwi rather than all Māori.

[3] When I refer to 'communities', I mean it as both the community in which we reside and as communities of common interest. This differentiates it from the traditional understanding of 'community' based on geographic location.

[4] In this thesis 'conservation' is used as an umbrella term encompassing both conservation and ecological/biodiversity restoration. This is because it is commonly used and understood in this sense by a majority of people in Aotearoa New Zealand, including those interviewed in this research and the literature quoted.

Picton. They share similarities, being community-initiated, predator-fenced, peri-urban, and having the twin goals of ecological restoration and biodiversity education.

Ecosanctuaries are defined by Innes et al. (2019) as "places where indigenous plants and animals are actively conserved, and pests are intensively managed, surrounded by landscapes of little or no management" (p.370). In addition, they are "a project larger than 25ha implementing multi-species, pest mammal control for ecosystem recovery objectives, and with substantial community involvement" (p.372). The term has been adopted by Sanctuaries of New Zealand, an organisation representing the collective interests of sanctuaries (p.384).

Ecosanctuaries are the focus of this research because they draw together community, conservation, sustainability, and indigenous knowledge, which are all interests of development studies practitioners (Escobar, 2020). Additionally, because the longer-term vision necessary to achieve sustainability and arrest biodiversity loss, inherent in these projects, challenges short-term, 'business as usual' views that are predominant in society and hinder the transition to less damaging ways of coexisting with each other and the natural world.

Research has examined the ecological and conservation benefits of ecosanctuaries (Bombaci et al., 2021; Innes et al., 2019), their economic sustainability (Campbell Hunt and Campbell Hunt, 2013; Innes et al., 2012; Schofield et al., 2011), and the motivations and benefits to volunteers who work at these sanctuaries (Blashkie, 2013; Brampston et al., 2011; Cowie 2010; Heimann, 2018; Shanahan, 2020). In contrast, the socio-cultural aspects of ecosanctuaries have received comparatively little attention. Ecosanctuaries' engagement with *tāngata whenua* or *Te Ao Māori* (Māori worldview), and whether ecosanctuaries shape their communities deliberately or incidentally, appears under-researched.

Ecosanctuary relationships with tāngata whenua are important to this research because of the focus on these relationships within our revised National Biodiversity Strategy - *Te Mana O Te Taiao Aotearoa New Zealand Biodiversity Strategy 2020* (Department of Conservation [DOC], 2020). This document provides a direction and pathway for the next 30 years toward achieving the vision of "Te Mauri Hikahika o te Taiao", meaning that nature's life force is healthy and vibrant (pp.10, 13). To achieve the strategy, it

emphasises the need to focus upon people as much as the environment: "We know full well that if we restore those things, we must also reinvigorate the kinship ties of people to their lands, from the mountains to the sea" (p.6). Additionally, the strategy stresses the need to partner with Māori to fulfil obligations under the *Te Tiriti o Waitangi* and because Māori ecological knowledge, called *Mātauranga Māori*[5], offers an appropriate conceptual framework. Through this framework, humans are viewed as part of nature and have responsibilities toward the natural world (Selby, et al., 2010, p.1; Whaanga and Wehi, 2017, p.100). The strategy posits that conservation goals can be achieved by "braiding" Mātauranga Māori with mainstream science-informed knowledge systems (p.37). Given the new national strategy and direction, it is useful to explore ecosanctuary projects' current engagement with Tāngata Whenua and to what extent they incorporate indigenous knowledge, because as the report authors write, "collaboration and partnership will be at the heart of implementation" (DOC, 2020, p.55).

This research is based upon an interest in grassroots community-building and how communities can initiate and lead projects that provide ownership for aspects of their own communities' development[6]. The interest in these topics is in response to the urgency that resource depletion, climate change, and species loss provide for examining how we might do things differently (Hawken, 2020; Zimmer, 2020, Sep 15). It also stems from knowledge of mainstream development failures highlighted by Ferguson (1994), Escobar (1995), and De Vries (2007), which describe the shortcomings of universal top-down prescriptions. Furthermore, erosion of a community's ability to steer their development precipitated by neoliberal capitalism, increasing inequality, and

[5] Throughout this research, the focus upon Mātauranga Māori is at the paradigmatic level, looking at its potential to inform human-nature relationships and as a counter or balance to modernism and neoliberalism. Its potential to inform quantitative science, place-based knowledge contexts, or how legal personhood constructs might alter how places are managed, are also important but are beyond the scope of this research.

[6] Many of the key terms in this research like development, conservation, community, indigenous knowledge, and sustainability, are amorphous and contested. Their meaning can change depending upon the user's assumption of meaning and the context in which it is used. Cornwall (2007) describes these types of words used in development as "buzzwords" and as "consensual hurrah-words" that are used to "place the sanctity of its goals beyond reproach" (p.472). Cornwall advocates for teasing apart the various meanings of these words as this can illustrate the tensions within these terms and, in so doing, overturns their unquestioned acceptance (p.481). In the next two chapters, these terms are examined, and their varying meanings are outlined. In turn, this work tries not to fall into the trap of fuzzy use of language.

privileging the individual over the community, makes exploring alternatives critically important (Macy and Johnstone, 2012). As Marques (2018) warns, in his compelling book *Capitalism and Environmental Collapse*, "if we are not able to react now and act appropriately to the challenges that confront us, everything will end badly – and soon – for an uncountable number of species, including our own" (p.31).

The hopeful-post development perspective has not previously been applied to Aotearoa New Zealand ecosanctuaries and therefore has the potential for fresh insight, but first, what is hopeful postdevelopment? Chapter 2 will answer the question in detail, but briefly, postdevelopment grew from a critique of the failings of mainstream development (Pieterse, 2020, p.297) and a hopeful approach within postdevelopment seeks to move beyond critique to explore alternatives to mainstream development (Gibson-Graham, 2005, p.6). This hopeful postdevelopment emphasises "place-based studies and local scale action", seeking to illuminate "alternative voices, worldviews and processes…obscured from view" (McGregor, 2009, p.1692, 1697). Elliott (2013) adds that postdevelopment also promotes "grassroots participation and the capacities of organisations as agents of change" (p.39).

Findings from this research may be of use to ecosanctuaries by encouraging a broader view of potential benefits provided by their sanctuary other than just ecological or economic. These benefits include: highlighting the value of engagement with their communities; articulating the value that the sanctuary provides to communities and funders; encouraging more advocacy for sustainability; identifying pathways to deepening connections with local *iwi*; and stressing the importance of incorporating indigenous knowledge into management practices, education and how they tell the story of their sanctuary. Similarly, this research may be of use to tāngata whenua, in regard to promoting indigenous approaches and encouraging community conservation to deepen relationships with iwi. Finally, it is hoped that this research contributes to the postdevelopment conversation by exploring whether these ecosanctuaries might be understood as examples of *alternatives to development* that postdevelopment seeks.

1.2 Research aim and research questions

Research aim

Explore the socio-cultural aspects of ecosanctuaries through the prism of hopeful postdevelopment.

Research questions

1. Where do ecosanctuaries fit in relation to recent strategic initiatives to tackle the biodiversity crisis in Aotearoa New Zealand?
2. How does the relationship between ecosanctuaries and their communities impact upon community development?
3. How effectively do ecosanctuaries a) partner with Tāngata Whenua and b) incorporate indigenous knowledge?

1.3 Overview of thesis structure

This introductory chapter is followed by chapters 2 and 3, which review the literature related to this research. Chapter 2 is focused on hopeful post-development, while Chapter 3 covers ecosanctuaries, community conservation, and indigenous knowledge. Chapter 4 outlines the research design and methodology for this research. While Chapters 5, 6 and 7 each present and discuss the results of one of the three research questions. Chapter 8 comprises a final summary and discussion of findings. An outline of each chapter and a visual representation of the thesis structure follow below.

Chapter 2 explores the suitability and applicability of ‘hopeful postdevelopment’ as an appropriate lens for this research. It outlines the history of postdevelopment, from its roots to its current forms, including recent hopeful approaches. It then describes critiques, achievements, and examples of postdevelopment lenses in use. Following this, it explores the links between postdevelopment, sustainability and indigenous knowledge. Finally, the usefulness of the hopeful postdevelopment lens is assessed, followed by an explanation of how it is used in this research.

Chapter 3 delineates the concepts of connection to nature, conservation and restoration, as well as providing an overview of conservation in Aotearoa New Zealand. Following this, it looks at community as it relates to conservation, traditional ecological knowledge and Māori ecological knowledge. It then describes how these pieces all come together in ecosanctuaries.

Chapter 4 outlines the research design and qualitative methodology chosen for this research. In addition, an overview of the interviewees, and the ethical considerations addressed, is provided.

Following Chapter 4 are three chapters (5-7) which each outline key findings around one of the three research questions, and then discuss these findings in relation to the broader literature.

Chapter 5 addresses research question 1. It begins with an overview of the case study ecosanctuaries to provide context for the research. The key features for each sanctuary are described before their positive attributes, and the challenges they face are discussed. Following this, research findings on ecosanctuaries' place in the wider conservation sphere in Aotearoa New Zealand, including interviewees' thoughts on the biodiversity strategy Te Mana o te Taiao and Predator Free 2050, are outlined and discussed.

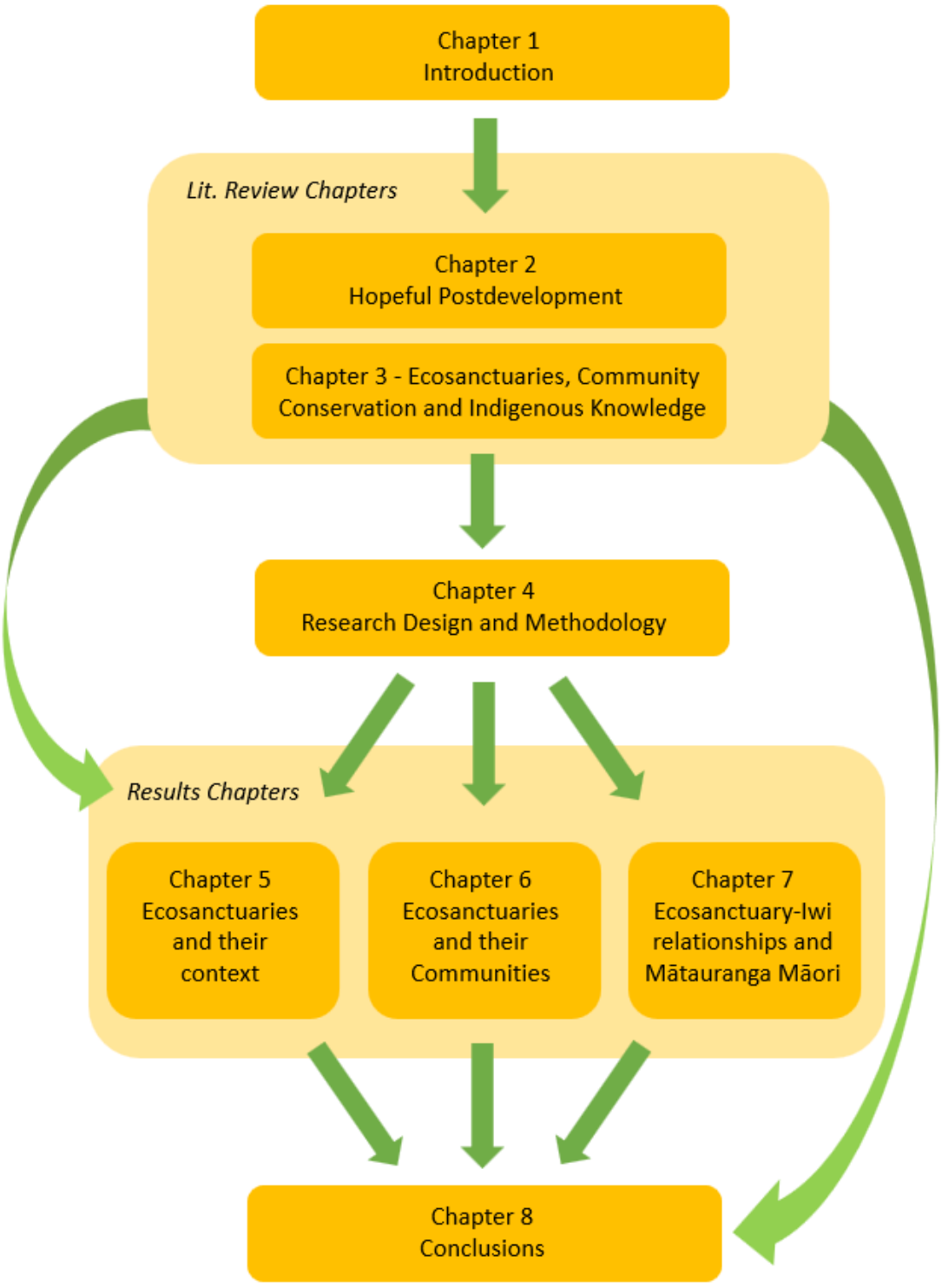
Chapter 6 addresses research question 2. It contains the research findings related to ecosanctuaries and community development, including the value communities derive from the sanctuary.

Chapter 7 addresses research question 3. This chapter presents research findings on ecosanctuary relationships with iwi and the incorporation of Māori indigenous knowledge.

Chapter 8 summarises the key findings from the research and reflects on whether this thesis has answered the research questions. The limitations of this study and recommendations for further research are later discussed before concluding with reflections on the research journey.

A visual representation of the thesis structure is provided in Figure 1 below. The graphic illustrates that the literature is incorporated into the discussion in the Results and Conclusion chapters.

Figure 1. Overview of thesis structure



2 Hopeful postdevelopment

2.1 Introduction

What is *hopeful postdevelopment*, and why use it? This chapter answers the question by exploring the suitability and applicability of hopeful postdevelopment as a lens for examining socio-cultural aspects of community conservation projects. It begins by outlining the history of postdevelopment, from its roots to its current forms, including recent, hopeful approaches. It then examines critiques, achievements, and examples of the postdevelopment lens to gain insight into similar areas to those explored in this research. Alternatives to *development* that postdevelopment has highlighted are related, and the links between postdevelopment, sustainability and indigenous knowledge are described. Finally, an explanation of how the post-development lens is used in this research concludes the chapter.

2.2 History of postdevelopment

The emergence of postdevelopment is described as a "radical reaction" to the failings of "economic and social development in the developing countries" (Pieterse, 2009a, p.339). In order to understand why such a radical reaction took place and what the failings of development were, it is necessary to locate postdevelopment within the broader history of development. The birth of *development*, as we usually conceive of it, is linked to U.S. President Truman's inaugural speech of 1949, in which Truman outlined a paradigm[7] that became mainstream development ("the development project") for the next 40 years (Escobar, 1997, p.85). Truman argued that the world's wealthy nations, who were experiencing high levels of material wealth after industrialisation, had a moral obligation to assist poorer *underdeveloped* nations to expedite their own development (Rist, 2002, p.72).

[7] Paradigms are our ingrained beliefs about how things work and are so pervasive that we do not often question them. Paradigms take the form of "shared social agreements" about the "nature of reality" (Meadows, 1999).

The moral argument of reducing human suffering was used to encourage Western intervention to enable accelerated development (Escobar, 1997, p.86). This argument was underpinned by reasoning based upon a paradigm called *modernism*. Modernism is rooted in historic European liberal and economic values and, critically, a belief in the benefits of *progress* (p.86). Progress in this sense meant a linear progression from primitive to modern. Here rationality, science, industrialisation, and technology are considered modern and therefore desirable, while traditional cultures are seen as primitive, backward, and underdeveloped (p.86). 'Modernisation' became the term for progressing from primitive to modern, enshrined in Rostow's (1960) popular notion that all nations were on a trajectory toward "mass production and consumption", which could be hastened through investment in industrialisation (p.2). This conception led to what Sachs (2019) argues was development's unacknowledged agenda, to Westernise the world (p.xxxi).

Sidaway (2014) argues that *development* was embedded in the geo-politics of "Western Power" and its ambitions for the Third World (p.147). The United States advocated for the independence of countries colonised by European powers and, at the same time, was concerned about the rise of communism and ensuring that newly independent countries did not become communist (Sidaway, 2014, p.147). This advocacy was both an ideological concern and an economic one. Communism was perceived as a threat to democracy, and many feared that communist countries would restrict access to resources and limit trade. In this context, Truman's strategy was also about United States self-interest and about consolidating influence and power (Esteva, 2019 p.1; Rist, 2002, p.75).

Although it is convenient to use Truman's 1949 speech as the point of birth for development, Cowen and Shenton (1995) demonstrate that the ideas of progress and development are not recent ones. Modern conceptions of development were formed during the 1800s by theorist-practitioners such as the Saint-Simonians, Comte, List and Mill (pp.47-56). Before this time, people took a more organic view of civilisation, believing that societies grew, became stagnant, decayed, and were rebirthed - a circular view of history rather than the linear idea of progress that came to supplant it (p.45). Esteva (2019) explains that between the late 1700s and the mid-1800s, the concept of

development changed from moving toward the "appropriate form" to moving toward an "ever more perfect form", absorbing Darwin's evolutionary theory (p.4).

Development is used as both an "immanent and objective process", integral and inherent to itself, and as a "subjective course of action" (Cowen and Shenton, 1995, p.43). This creates a problem of "development [as] both means and goal" (p.43). Cowen and Shenton (1995) explain that "the final outcome [of development] is assumed to present at the onset", but development is not possible if knowledge of potential choices or the ability to choose is not present (p.43). This conundrum was historically overcome through the concept of *trusteeship*, where those who believed they were developed could steward development for others (p.43). It was framed as the "childlike" people of the colonised countries needing guidance and supervision to progress toward European ideals of modernism (Crags, 2014, p.6). Lie (2016) argues that development is still hostage to its own discursive power and technocratic bureaucracy, which perpetuates "asymmetrical trusteeship" (pp.95-96). An example is conservation law in New Zealand which has excluded Māori voice and input and subjected Māori to "paternalistic control" (Ruru et al., 2017, p.67). Trusteeship has been discredited by postdevelopment as *Eurocentric* and damaging to other perspectives (Lie, 2016, p.96).

The 40-years after World War II became known as *The Development Age*, with Eurocentric development ideas informing development projects across the world (Rist, 2002, p.78). Sachs (2019) writes that development became an aspirational beacon that guided newly independent, formerly colonised nations (p.xxvii). However, it meant that poorer countries found themselves labelled 'underdeveloped' (Rist, 2002 pp.78-79). The label *underdeveloped* resulted in an enormous diversity of peoples and cultures branded as *lacking* and in need of development that was growth-focused, top-down, and universally applied (Rist, 2002, p.79). Adichie (2009) warns of the dangers of such 'single story' paradigms, arguing that homogenisation of peoples and places is blind to the value of alternative perspectives and cultures.

The one-size-fits-all approach to development did not work as expected. By the 1970s, there was increasing evidence of failures, where development projects created *dependency* upon donor country funding and technical expertise. Additionally, development's focus upon universal top-down interventions, measured through economic growth, ignored broader cultural, social, and environmental considerations

necessary for it to succeed (Ferguson, 1994; Max-Neef, 1992; Pieterse, 2009a). Thus, a growing dissatisfaction with mainstream development was the genesis for postdevelopment.

Postdevelopment emerged in the 1990s, questioning the process and end goals of development. Ziai (2017a) provides a helpful overview of postdevelopment which highlights the mainstream development failures identified by: Ferguson (1994) in his development as an 'anti-politics machine'; DeVries's (2007) critique of development building hope and not delivering; and Escobar's (1997) statement that development creates the "abnormalities" that it then attempts to treat (p.88). These authors and Sidaway (2014) argue that development is impossible without addressing power and political structures (p.150). Ziai (2017b) states that postdevelopment is critical of development as being Eurocentric and built upon unequal power relations (p.2719). Ziai outlines the main arguments of postdevelopment. These are: The "invention of underdevelopment" that justified Western neo-colonial intervention in developing nations; the claim that development is not neutral or objective and is imbued with relations of power; that development is "shapeless [and] amoeba-like" as it is used to refer to any activity to "improve people's lives"; and that people in the South were increasingly turning away from the idea of catching-up and instead were looking for alternatives to development (pp.2721-2722).

According to McGregor (2009), postdevelopment helps clarify that development is neither desirable nor inevitable and is instead a political and economic project (p.1689). As Neusiedl (2019) affirms, development creates inequality with its market expansion prescription and neo-colonial power relations (p.653). Inequality is then ameliorated with income generation schemes and the like (p.653). Ultimately development takes away the very things it says it provides (p.653). Two strands within postdevelopment are commonly identified: an *anti-development* strand that is suspicious of mainstream development's claims and argues for an end to mainstream development; and a more recent *hopeful* strand that seeks to apply the insights of postdevelopment to explore new terrain and enable more diverse voices to be heard (McGregor, 2009, p.1692; Ziai, 2004, p.1054).

It is important to clarify that hopeful postdevelopment is not a complete theory or recipe for development success. It is an approach that starts with the insights that postdevelopment offers and then seeks constructive avenues of inquiry. These approaches work to bring into view “alternative voices, worldviews and processes”, such as indigenous perspectives, which can help re-conceptualise places and processes by exploring “capacities and opportunities, rather than…needs and limitations” (McGregor, 2009, p.1692).

2.3 Criticisms of postdevelopment

There are many criticisms of early postdevelopment. For example, Peet (1997) argued that postdevelopment was “armchair reflection” rather than being based on empirical research (p.79). Corbridge (1998) states that outright rejection of development and modernism disregards the massive achievements in healthcare and food production that have occurred (p.145). McGregor (2009) points out that postdevelopment has been criticised for romanticising communities and indigenous knowledge (p.1693). While Pieterse (2000), among others, was critical of postdevelopment because it does not offer an alternative way to practise development. Ziai (2004) addresses these criticisms in turn and argues that postdevelopment authors are more nuanced in their views than critics imply (pp.1050-52). Nustad (2001) also asserts that critiques must separate the calls for alternatives to development and acknowledge postdevelopment’s ability to “demonstrate why development interventions do not work” (p.479). Returning to the subject a few years later, Pieterse (2009b) continues to critique, arguing that postdevelopment is outdated and that “development as Westernisation” is no longer applicable in a multipolar world (p.300). However, Sachs (2019) warns that old concepts of development are making a comeback through “the rise of national populism”, focused on the past and self-interest and that national populism is continuing the “Age of Development” that postdevelopment forecast was ending (p.ix).

2.4 Applying the postdevelopment lens

Postdevelopment is evolving from identifying developments ills to an array of "more constructive approach[es]", exploring "new forms of practice" and future directions (McGregor, 2009, p.1688). Following is a selection of examples of this diversity in approaches - exploring power relations, ongoing impacts of colonisation, indigenous perspectives, conservation, and the illumination of new avenues for research and practice.

Fitzherbert and Lewis (2010) apply a postdevelopment perspective to their study of an indigenous community project in Morewa, Northland, to produce a non-judgemental overview of the project, which is more sensitive to marginalised voices, than a traditional results-oriented, corrective assessment might be (p.149). Also, in Aotearoa New Zealand, Reid et al. (2014) use a postdevelopment lens to draft a framework to help understand how historical trauma experienced by Māori through colonisation and its ongoing impacts presents as "psychological and physical suffering in generations of Māori (p.531).

Using a postdevelopment lens, Martinez-Reyes (2014) finds that some biodiversity conservation projects in Maya forests have tended to follow mainstream development prescriptions, implemented in a top-down manner and without adequate local input or control, which subsequently led to the failure of these projects (pp.172-173). The author comments. "In many ways… the blending of conservation and development has followed the same prescriptions, the same top-down approaches that advocate the creation of the environmental subjects by 'being there' but marginalises their knowledge and meaningful collaborations through the coloniality of nature" (p.173). The author argues for a postdevelopment conservation era that would take political and power considerations into account so that local communities are genuine partners and have ownership of conservation projects (p.173).

A postdevelopment lens is useful in exploratory research, where the researcher wishes to gain understanding or contest the status quo. For example, Matthews (2007) explored the value that a Senegalese nongovernmental organisation delivered when its approach was informed by postdevelopment, sharing that disregarded indigenous value systems

and ways of living were 'revalorised' (p.137). She makes the point that to move beyond the identification of development's ill's, development practitioners who accept the insights of postdevelopment will need to find a way of practising that "takes the arguments of postdevelopment into account" (p.134). In another example of gaining insight, McKinnon (2008) applied a postdevelopment lens to her research of development projects focused on highland peoples in Thailand. She found that despite "state hegemony" that frames ethnic minorities as "problematic", development staff were able to use their agency, to cut across the power structures in which they were embedded, to advance social justice for minorities (pp.290-291).

Looking at economic aspects of development, Curry (2003) uses a postdevelopment lens to illustrate how local non-market practices such as gift-giving challenge assumptions about mainstream development and its focus on capital and markets (p.418). The author argues that because development focuses upon growing a "market economy", it is blind to alternatives (p.419). Similarly, Gibson-Graham (2005) compellingly demonstrate that economies are much more diverse than development's narrow focus upon commodity production, "capital accumulation and export-led growth" (p.12). Curry suggests that postdevelopment should further explore non-market economies and "the social dimensions of economy" to better align development with indigenous, local and community values (p.420).

2.4.1 Alternatives to development

Development has traditionally been focused on the global South to reduce inequality ‘between’ countries and have the global South *catch-up*. However, neoliberal capitalism has resulted in rising inequality within countries, and this inequality applies to countries of the global North as well as the South. Today, all countries are aware of the need to address inequality and live within ecological limits while providing a social floor (Raworth, 2017, p.45). So, what are some examples of the alternatives to mainstream development that postdevelopment seeks?

Blanco and Aguiar (2020) outline the Latin American concept of *Buen Vivir*, or *Good Living*, which can also be defined as *wellbeing*, as an example of hopeful postdevelopment in practice (p.4). The authors share that indigenous ecological and

postdevelopment perspectives inform Buen Vivir. Buen Vivir asks for greater citizen participation and questions the ideology of mainstream economic discourse "based on competitive individualism and permanent maximisation of one's own profit" (p.3, 16). Kothari (2018) outlines another alternative called *Ecological Swaraj* or eco-swaraj. This is an Indian framework with deep cultural roots, promoted to address mainstream development failings. The author explains that eco-swaraj has five key elements, which are: viewing humanity as a part of nature; a focus on equitable wellbeing and justice; devolution of decision-making power to the local level; allowing communities more control over production, markets, and exchange; and finally, holding a diversity of views about knowledge and culture (pp.51-52). Bendix (2017) provides an example of the postdevelopment gaze applied to Germany and the Postwachstum or 'degrowth' movement in the global North. Bendix finds that the degrowth movement shares with postdevelopment a rejection of classical development. However, degrowth does not connect this as strongly to a rejection of linear progress, or how the North has the luxury of considering degrowth because of its history of exploiting the global South (p.2627).

2.4.2 Postdevelopment and indigenous knowledge

Mainstream development viewed culture "as an impediment" (Andrews and Bawa, 2014, p.927). This is due to a European science-informed assumption that a neutral objective perception of reality is possible (Escobar, 2020, p.3). The scientific approach rejected indigenous lenses as too subjective and therefore without value. Indigenous cultures were thought to be static and did not change, disregarding such adaptation as the Māori underwent upon settling in Aotearoa New Zealand and evolving practices to steward food sources. It also viewed indigenous cultures as primitive and inferior. European colonisation devalued traditional knowledge and imposed hegemonic Western modernism onto indigenous peoples. Escobar (2020) writes that the mainstream understanding of development has been challenged in recent decades due to our greater comprehension of the "radical interdependence" of all things (p.4).

So, what relationship does postdevelopment have with indigenous knowledge? Postdevelopment adherents tend to be explicitly aware of how indigenous peoples were subjugated, dispossessed from their lands, and marginalised by colonialism and dominant Eurocentric worldviews. Postdevelopment is interested in how indigenous

knowledge might inform ways of living more in harmony with the natural world. Postdevelopment doyen Arturo Escobar (2020) affirms that questioning the separation of *humans* and the *economy* from the *natural world* is valuable (p.5). It points to "the beginning of a long journey toward a life consonant with other ontologies, a journey toward a profound consciousness of the relationality and interdependence of all that exists, which is, in turn, indispensable for imagining other possible worlds" (p.5). The movement toward seeing the natural world through an ecology lens of interlinked ecosystems, humans being reliant upon those systems for survival, and concepts such as *limits to growth,* have challenged the modernist worldview (Sachs, 2019, p.31). However, Sachs (2019) argues that the science of ecology has also enabled technocratic management to extend human control over nature (p.31).

Briggs (2014) provides an overview of indigenous knowledge in development, covering its importance as a counter to the empty promises of 'modernisation' (p.128). He makes explicit the challenges of implementing indigenous knowledge approaches because they tend to be place-specific and do not fit easily with the rationality of Western science (p.128). However, Thornton and Bhagwat (2021) argue that mainstream science has become too "objectivist, mechanistic and reductionist" and that indigenous knowledge's focus upon how relationships shape knowledge is an advantage (p.3). They outline similarities between science and indigenous knowledge: Both use place-based and empirical inquiry; both seek to understand and engage with environments; both accumulate knowledge over time and across generations; both order knowledge in systemic ways (p.3). The authors suggest that indigenous knowledge and mainstream science should acknowledge the validity of both approaches and see them as being complementary (p.3). Importantly, Briggs (2014) points out that there has been a shift in focus from trying to universalise indigenous knowledge as a development tool to using it in its local contexts as a "perspective on development" (p.130).

How do we reconcile these two forms of knowledge? Bartlett et al. (2012) share that 'Two-Eyed Seeing" was the most important lesson from their work to bring together indigenous knowledge and mainstream science (p.355). They explain that Two-Eyed Seeing refers to using the strengths of indigenous knowledge with one eye while using the strengths of mainstream science with the other (p.355). In practice, people combine the two knowledge systems to gain a broader perspective.

What else can we gain from Two-Eyed Seeing? Hill and Coombes (2004) argue that because indigenous knowledge includes practice and belief, “knowledge outputs” may be more meaningful and more likely to be acted upon (p.48). Furthermore, local, subjective and emotive knowledge may result in greater environmental care in a locale than knowledge that is supposedly universal and objective (p.49).

2.4.3 Postdevelopment and sustainable development

Another development lens considered for this research is *sustainable development*. The Bruntland Commission defined sustainable development in 1987 as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Redclift, 2014, p.333). Postdevelopment was chosen over sustainable development because sustainable developments’ focus upon economic growth presents a paradox, whereby, we must live within planetary and social boundaries, yet sustainable development, as promulgated by the SDGs (United Nations Sustainable Development Goals), is reliant upon growth to achieve development. Sachs (2019) calls this a “proven ruse” (p.28). p.333).

Furthermore, sustainable development is associated with environmentalism but has not sufficiently addressed the contradiction between sustainability and growth (Abson et al., 2017, p.30). Escobar (2011) argues that sustainable development only reduces unsustainability (p.137). As a result, sustainable development “fails to speak about prosperity without growth” (Sachs, 2019, p.xiv). Sustainable development is also shaped by “technocentric environmentalism", which includes “management, regulation and rational utilization of the environment”, along with "culturally hegemonic western preservationist ideologies" (Adams, 1995, pp.86,91).

Postdevelopment was chosen because it is more present to the tension between economic growth and a finite planet, to social justice issues, and alert to the distortions caused by power structures. Affirming this, Demaria and Kothari (2017) see postdevelopment as a potential counter to the economic growth focus and "false solutions" of the United Nations Sustainable Development Goals (SDGs), where outcomes will be achieved by somehow increasing economic growth while improving environments and social inclusion (p.2591).

2.4.4 Achievements of postdevelopment

What have been the achievements of postdevelopment? Firstly, critics have underestimated postdevelopment's influence on development studies (Ziai, 2017a, p.2719). Esteva and Escobar (2017) share that because of postdevelopment, mainstream development is no longer unquestionable (p.2560). Furthermore, most critics have come to accept postdevelopment's observations of Eurocentrism, unequal power relations and paternalism within mainstream development (Ziai, 2017a, p.2719). In addition, Sachs (2019) points to the SDGs as an example of a change from the idea that all states can be wealthy to accepting that development is now about living within planetary boundaries and that the myth of development has been buried (pp.xii-xiii). Today, a growing body of work demonstrates postdevelopment's use as a valid critical approach, including exploring alternatives to development (e.g., the examples in section 2.4).

Much has changed since 'The Development Dictionary': The end of the Cold War; the rise of globalisation; the current withdrawal from globalisation; changes in geopolitical power with the rise of China; the dissolution of the north-south binary; and the current rise of populism. Perhaps postdevelopment has not decisively rendered development obsolete because we live during a contestation between paradigms, where old paradigms are no longer relevant, and new ones are not firmly established (Esteva and Escobar, 2017, p.2565; Sachs, 2019, p.xvii).

2.5 Suitability of postdevelopment for this research

In assessing the suitability of post-development for this research, postdevelopment's attention to power and politics, ignored by most other development lenses, was attractive. Second, postdevelopment also encourages plural perspectives. Pluralism is important because empowerment occurs when people can change the relations of power through being able to imagine the world differently (Curry, 2011, p.268; Eyben et al., 2008, p.6). Third, postdevelopment's interest in local and indigenous knowledge and promoting "localised, pluralistic grassroots movements" is relevant to this research (Ziai, 2004, p.1046). Affirming this, McGregor (2009) shares that postdevelopment research places emphasis on "place-based studies and local scale action" and seeks to illuminate "alternative voices, worldviews and processes…obscured from view"

(p.1692, 1697). Postdevelopment also promotes "grassroots participation and the capacities of organisations as agents of change" (Elliott, 2013, p.39). Fourth, Ziai (2017a) writes that a postdevelopment lens is often applied to environmentalism and sustainability and that postdevelopment offers a critique of power relations and contributes to a "more power-sensitive theory of positive social change" (p.2550, 2553). Finally, postdevelopment is no longer a fringe school of thought but is gaining increasing acceptance as a valid approach within development studies (Ziai, 2017b, p.2722).

The criticality at the heart of postdevelopment encourages the researcher to question assumptions and maintain an open mind. It challenges the pre-eminence of the mainstream economic worldview and promotes acting upon values such as "culture, democracy and justice" (Sachs, 2019, p.xxvi). Postdevelopment exposes the "unexamined certainties of modernist social science" and in doing so, can alter economic and social development directions and pathways through consideration of possibilities other than those that fit within concepts of linear progress and the hierarchy of values placed upon different "cultures, practices and places" (Gibson-Graham, 2010, p.226). Tsing (2015) argues that if we de-emphasise progress, we may become more curious about things that are ignored because they do not fit within the idea of progress (p.21).

A hopeful postdevelopment lens is useful in gaining insight into community development processes and exploring whether change can be effected through ways that enable people and groups to take more ownership of their development. Furthermore, Postdevelopment argues that the modernisation paradigm has passed its usefulness and that we need a plurality of perspectives to address challenges facing humanity. That hopeful postdevelopment is a critical lens, rather than a theory of implementation (Agostino, 2017, p.208), renders it ideal for this exploratory research. In recognising that no one theory or pathway is right for ecosanctuaries, the researcher must be open-minded to possibilities and suspicious of grand claims. Finally, this research aligns with both Gibson-Graham's (2005) challenge "to imagine and practice development differently" (p.6) and McGregor's (2009) assertion that "postdevelopment research must be couched in the languages of hope and possibility" (p.1688).

3 Ecosanctuaries, community conservation and indigenous knowledge

3.1 Introduction

In order for the reader to understand why ecosanctuaries are the focus of this research, it is necessary to explain several things. First, it is necessary to explain some of the ideas that ecosanctuaries are founded upon, including conservation, connection to nature, and ecological restoration. Following this, the history of conservation in Aotearoa New Zealand, *community* as it relates to conservation, indigenous ecological knowledge, and Māori ecological knowledge are unpacked. The chapter concludes by explaining how all these pieces come together in ecosanctuaries; ecosanctuaries place in Aotearoa New Zealand conservation; Māori involvement in ecosanctuaries; and the benefits that ecosanctuaries deliver.

3.2 Conservation

Conservation means to conserve, protect and eke out a resource. Nature conservation works to protect or wisely use natural areas and resources by creating protected spaces (Jay and Morad, 2009, p.259). Conservation, although practised globally, has largely been understood as a Western paradigm based on rationality, science and separation of humans from the natural world (p.260).

So, how do we decide what to conserve? Batavia and Nelson (2017) argue for acceptance that *conservation* is always value-laden and is never objective, and instead, conservationists should "bring ethics to the frontline of conservation planning" (p.373). While Hull and Robertson (2000) argue that "Environmental decision making is a tournament of competing conservation agendas in which some values and beliefs are held up and exalted, others are dismissed and ignored, or left implicit and unnoticed" (p.114). It may be why, for example, one-third of Aotearoa New Zealand's land is protected for conservation, while less than one per cent of the marine environment is protected (Forest & Bird, n.d.). In deciding what to conserve, a tension is apparent

between the efforts to make conservation a "scientific endeavour" and the reality that conservation is a "normative endeavour" because it works to "realise some idea about how the world ought to be" (Batavia and Nelson, 2017, p. 367).

3.2.1 Nature connection

People are likely to become interested in conservation when they feel a connection to nature. However, there is considerable research published on the growing disconnection of people from nature (Barrière et al., 2019; Ives et al., 2018; Louv, 2008; Soga and Gaston, 2016). This disconnection is due to several factors: the rise of individualism and the erosion of community; our current age of distraction whereby technology and entertainment are mediating or limiting engagement with the natural world; and increasing urbanisation and inequality (Balmford and Cowling, 2006, p.694). In his 1993 book, *The Thunder Tree*, Pyle described the increasing disconnect with the natural world as the “Extinction of Experience”. Zylstra et al. (2014) explain that this disconnection is problematic because the level of connectedness with nature that people feel correlates to environmental responsibility (p.119). The authors show that while reconnecting with nature is a universal prescription for modern separation from the natural world, there has not been much progress toward achieving greater connectedness with nature or positive behaviour change due to environmental education (p.120). Schultz (2011) provides the reason for this by arguing that conservation behaviour is not generally improved by education because people see themselves as separate from nature and because behaviour is guided by social norms (p.1080).

This separation is affirmed in the longitudinal and comprehensive *Public Perceptions of New Zealand’s Environment: 2019* survey (Hughey et al., 2019). The survey demonstrates that although public perceptions about the state of the environment had shifted in the last twenty years from a majority of respondents thinking the environment was in good health to a majority considering it to be in poor health, the percentage of respondents who reported involvement with environmental projects or advocacy had not similarly shifted. The authors share, “Relatively few respondents are involved in the restoration or replanting of the natural environment, participate in an environmental organisation, or take part in environmental hearings or consent processes” (Hughey et

al., 2019, p.60). It suggests that New Zealanders have a greater awareness of the poor state of the environment, but this knowledge does not necessarily spur them to act.

Unpacking the paradigmatic basis of this separation from nature, and in alignment with postdevelopment theorists, Kureethadam (2017) outlines how our modern worldview is profoundly shaped by "anthropocentrism, [a] mechanistic perception of the natural world, and metaphysical dualism" which underpin modernism (p.293). This worldview stems from the philosophical work of Descartes, termed 'Cartesian thought'. Cartesian thought differentiates the mind from matter, separating the mind from the body and external objects. Kureethadam traces the impact of Cartesian thought upon philosophy to arrive at "Modern science, technology and the taming of nature" (p.305). He argues that this metaphysical framing has led to science that seeks to predict and manipulate nature, resulting in a reductionist approach toward nature and a hubristic expectation of being able to control natural processes (pp.304-313). Such conceptions have influenced the modern economy's perception of the natural world as a source of resources and a receptacle for waste. The natural world only has value in such a worldview when it directly benefits humans (p.314). This worldview led to the European colonisation of much of the world over the past 400 years (p.316). The ultimate example of this worldview is the dominance of GNP and other economic measures (p.317). Kureethadam declares,

> What is even more detrimental is the stubborn and persistent refusal of modern and neo-liberal economies to recognize that humans are inter-related to and inter-dependent on the natural world for their very survival and sustenance. The modern homo economicus lives under the illusion of not being bound by or pretends ignorance of the limits of the natural world on which he or she is inevitably dependent (p.318).

Kureethadam illustrates how the Cartesian worldview impacts politics and education and has led to the privileging of individuals over community or the collective good (p.321). He suggests that individualism has eroded "social cohesion and solidarity" (p.322).

3.2.2 From wilderness preservation to biodiversity conservation

By surveying New Zealander's attitudes to nature, Fehnker et al. (2021) affirm Kureethadam's assertions in the Aotearoa New Zealand context. The authors found that

more than fifty per cent of interviewees conceived nature as "something of which neither humans nor human influence or activities, are a part of" (p.365). Warren (2020) cautions that the romantic idea of nature as wilderness, free from human interference, is dangerous because it "excludes people from protected areas" and allows no space "for discovering what a sustainable human place in nature might be" (p.283). Such a conception of wilderness is inimical to ingenious concepts of belonging to the natural world and has an elitist element whereby protected wilderness is utilised primarily by those wealthy enough to access it and recreate in it (p.284).

Western concepts of humans being outside of and having dominion over nature, along with the rise of mechanistic thinking and urbanisation, has been "devastating to the human sense of belonging, mutualism and connection with nature, earth and the cosmos as a whole" (Zylstra et al., 2014, p.123). Fehnker et al. (2021) argue that we need to overcome the dualistic separation of humans and the environment "...to achieve a more interconnected and holistic perspective" (p.371). Furthermore, Zylstra et al. (2014) advocate for rediscovering a "consciousness of place that recognises a living interconnected earth yet retains scientific credibility" (pp.136-137).

The idea of wilderness as something important to preserve from human impacts is rooted in the dualism that sees people as separate from nature (Warren, 2020, p.283). The problem with this dualism is that it also created a divide and a hierarchy between ‘moderns’ who view nature and culture as separate and ‘pre-moderns’ who do not see a separation (Sundberg et al., 2020, p.318). This hierarchy has become less overt in recent decades but still slows the adoption of indigenous knowledge in conservation.

The conservation movement began by endeavouring to protect the natural world from “exploitation and conversion to agriculture”, with humans seen as a “destructive force” rather than a natural part of ecosystems (Lyver et al., 2019, p.395). Hill and Coombes (2004) share that this approach, born from European spiritual and scientific beliefs, is sometimes termed *fortress conservation* (p.43). Fortress conservation had the effect of marginalising indigenous peoples who were essentially locked out of their land and prevented from engaging in traditional practices (Lyver et al., 2019, p.395). Conservation structured around restricting human access to protect ecosystems tended to occur in environments distant from where people live. Hence, there is a disconnect between people and the flora, fauna and landscapes. Furthermore, when there is a need

for transformative change in lifestyles to address the ecological crisis, this type of conservation can result in a *business-as-usual* mindset where people continue their lifestyle without consideration for the environment.

> …preservation as a paradigm for conservation, is that, as a non-act, it provides only a weak base for the development of the performance and ritual that will be needed to explore and articulate the terms of our relationship with particular landscapes, to create values related to these relationships, and to generate emotional commitment to them. (Jordan III, 2000, p32).

In recent decades, conservation has changed focus from "wilderness preservation" to "biodiversity conservation" due to our increased knowledge of the interconnected nature of ecosystems (Hill and Coombes, 2004, p.37). Hill and Coombes (2004) share that the evolving understanding of ecosystems as dynamic rather than static means that there may be plural ways of attaining conservation objectives, creating space for "alternative knowledge systems" (p.37).

3.2.3 Ecological restoration

If conservation is to protect and conserve the natural world, ecological restoration is to actively work to alleviate the impact of human actions upon degraded ecosystems. The International Society for Ecological Restoration defines *ecological restoration* as "the process of assisting the recovery of an ecosystem that has been degraded, damaged or destroyed" (Campbell-Hunt and Campbell Hunt, 2013, p. 51). Vinning et al. (2010) list the following in their summary of reasons to undertake restoration. These are: "Ecological purity; species/ecosystem diversity; reclaim threatened ecosystems; stop degradation; reclaim natural heritage; preserve for future generations; educational; benefits to volunteers; the beauty of restored ecosystems; remove invasive or troublesome species." (p.149).

Restoration activities are usually not at the scale necessary for proper restoration because the functioning of an ecosystem is dependent upon scale (Jordan III, 2000, p.32). However, Jordan III (2000) posits that restoration can demonstrate that humans can positively affect local ecosystems. By extension, this may translate into a "symbolic relationship" with more distant and remote wilderness areas (p.32). This *symbolic*

relationship helps bridge the divide between wilderness and community.

3.2.4 Neoliberalisation of conservation

There has been attention given to the neoliberalisation of conservation. This is where conservation projects are created as development schemes or income-generating projects, theoretically benefiting both the environment and the communities associated with them (Castree, 2008; Brockington and Duffey, 2010). Within international development, this approach is termed *community-based conservation* (Berkes, 2007; Brooks et al., 2013; Kothari et al., 2013; Western & Wright, 2013). These projects generate income through tourism or payments for ecosystem services (For example, carbon credits). Castree (2011) points out that neoliberalisation of nature can be constructive, but its application has generally disadvantaged the poor (p.43). Further, Igoe and Brockington (2007) argue that neoliberal conservation rhetoric hides implementation problems behind a "discursive blur" and that equitable conservation can only be gained by addressing power imbalances and seeing through the "illusion" of "technocratic solutions" (pp.435-436). In an example of this sort of problem, Martinez-Reyes (2014) found that these power imbalances and differing priorities between stakeholders resulted in community-based conservation project failure (pp.172-173).

A vigorous debate continues among conservation academics between two schools of thought. Batavia and Nelson (2017) describe the first as those who value the natural world for its *intrinsic value*, which is the belief that the natural world should be protected from humans because it has value beyond the resources it provides humans (p.367). An example of the intrinsic value approach is the renowned scientist E.O Wilson's (2016) recently published book *Half Earth*, which argues for setting aside half of Planet Earth to ensure the survival of biodiversity (p.3). The second school of thought is commonly referred to as *ecosystem services*, which aligns with the neoliberal approach (Ludwig, 2017, pp.252-253). Ecosystem services merge ecology and economics, where the environment is esteemed for the *instrumental value* it provides to people (Batavia and Nelson, 2017, p.367). Instrumental value includes: "provisioning services" like water, food and materials; "regulating services" like decomposition and water drainage; "cultural services" like spiritual connection and recreational spaces; and "supporting services" like photosynthesis (Harmsworth and Awatere, 2013, p.281).

Ludwig (2017) finds faults with the ecosystem services approach, arguing that social values are more important than economic values, that ecological decisions should not be based solely on economic valuation, and that economic theories based on a simplification of reality should not be privileged (p.253).

3.2.5 Conservation and restoration in Aotearoa New Zealand

In Aotearoa New Zealand, ecological stewardship and conservation practices were first evolved and undertaken by Māori, who migrated here in the 1300s (Walter et al., 2017). Māori became attuned to the need to conserve resources for future use, as the plentiful food sources they discovered upon arrival, such as *moa*, were depleted (King, 2003, pp.76-91). Māori and later European settlement with land-clearing, harvesting of resources, and the introduction of non-native species quickly had a catastrophic impact on biodiversity, to the point that today "New Zealand has one of the worst records of indigenous biodiversity loss on the planet" (Campbell-Hunt and Campbell-Hunt, 2013, p.50). Aotearoa New Zealand is an island ecosystem where flora and fauna have evolved for millions of years in isolation from continental species. Thus, many introduced plants and animals cause significant disruption to indigenous biota. Similar problems exist in other islands such as Hawaii and Madagascar, where humans and introduced species have caused significant impacts on indigenous habitats and biodiversity (Steadman, 1995, pp. 1126-30). Today Aotearoa New Zealand has 4,000 species threatened or at risk of extinction, including 74% of terrestrial birds, 76% of freshwater fish and 84% of reptiles (Department of Conservation, 2019a, p.2).

Important early conservation initiatives in Aotearoa New Zealand include the 1894 creation of Tongariro National Park (one of the world's first National Parks). In the same year, Richard Henry began working to protect indigenous birdlife on Resolution Island in Fiordland. Henry pioneered sanctuary-island conservation and species relocation (Stolzenberg, 2011). These early conservation initiatives began a movement toward state protection of lands for intrinsic value in National Parks and economic and recreational use in Forest Parks. Following in the footsteps of Richard Henry, offshore islands that *introduced predators* had not invaded were used as arks to conserve birdlife, and in later years, practices to eliminate introduced mammal species such as rats and possums evolved on these offshore islands (Butler et al., 2014, pp.17-21).

Conservation in Aotearoa New Zealand has historically been a preservation model that assumed success by restricting human impact and economic activity from state-managed reserves (Towns et al., 2019). Today Aotearoa New Zealand has one of the highest percentages of protected lands of any country, yet ecological degradation of protected environments from introduced species continues (Hare et al., 2019). Craig et al. (2013) warn that preservation offers only a "panacea" as ongoing biodiversity decline attests to the failure of preservation focused conservation (p.265). They argue for pluralism in Aotearoa New Zealand conservation, with better integration of nature, society, and the economy, so that New Zealanders have more opportunity to practise genuine stewardship (p.260). Aligning with the sentiments of section 3.2.1 on nature connection, they state that "ecological restoration and resilience are as much about restoring peoples' and communities' connection to each other, and to land and place, as it is about restoring plants and animals themselves" (p.260).

One synthesis of the many emergent strands of contemporary conservation practice is *biocultural approaches* (Gavin et al., 2018, p.5). Biocultural approaches can be described as "conservation actions made in the service of sustaining the biophysical and sociocultural components of dynamic, interacting and interdependent social-ecological systems" (Gavin et al., 2015, p. 141). Biocultural approaches are dynamic, pluralistic, and adaptive, which are necessary to deal with ever-changing social and ecological systems (pp.7-8). Postdevelopment theorists promote biocultural approaches, seeing a clear link between conservation and local input or control of environmental management (Bavikatte and Bennett, 2015, p.15). Lyver et al. (2019) outline the benefits of incorporating biocultural approaches into conservation in New Zealand. They argue that such an approach might reduce conflict over environmental management, reduce appropriation of traditional knowledge and demonstrate that the state understands indigenous relationships with the natural world (p.407).

3.2.6 Tenuousness of biodiversity gains

Just how tenuous our recent biodiversity gains are and what a challenge they are to achieve became apparent during the research. For example, of the 79 reintroductions of *North Island Weka*, just nine have been successful (Carpenter et al., 2021, 13 Aug).

Similarly, Miskelly and Powlesland (2013) found that only half of the 495 recorded translocations of New Zealand birds resulted in successful, established populations (p.8). Furthermore, some species continue to decline despite conservation efforts (Hare et al., 2019). In another recent example, a major *takahē* reintroduction to Kahurangi National Park in 2018 is struggling, with only 19 of 30 reintroduced birds surviving and two chicks surviving from two breeding seasons (Hindmarsh, 2020, 11 Jul).

3.3 Community and conservation

> *"…while conservation needs individuals for leadership, it requires communities for action*" (Young, 2004, p.235).

Since the 1970s, the disciplines of conservation and development have been drawing closer together, with conservation incorporating local people and development incorporating environmental considerations (Campbell and Vainio-Mattila, 2003, p.418). Pretty et al. (2009) suggest that biological and cultural diversity are so intertwined that conservation practices need to include both to sustain biological diversity (p.106). Consequently, increasing community involvement in conservation is partially due to the failings of fortress conservation and shifts toward incorporating humans into ecosystems, and more non-expert participation in conservation (Berkes, 2003, p.622). Buchan (2007) shares that a review of research indicates several benefits from community-led conservation in Aotearoa New Zealand. These include social and mental health benefits to volunteers, increased social capital, rising environmental awareness, and greater attention to Māori approaches (p.2).

Community refers to "a group of people who have something in common" (Townshend, Benoit and Davies, 2020, p.344). Community is usually thought of as a "spatial unit, a social structure, and a set of shared norms" (Agrawal and Gibson, 1999, p.633). Agrawal and Gibson (1999) problematise this definition, pointing out that traditional definitions of homogeneity and connection to place do not necessarily apply in today's world of heightened mobility and disconnect precipitated by the rise of individualism (p.634). The authors explain that concepts of community relying on being rooted in a common locale are yielding to conceptions of communities founded upon common interest (p.635). The authors advocate for more attention to "the multiple interests that

make up communities, the processes through which these actors interrelate, and especially the institutional arrangements that structure their interactions" (p.636).

Agrawal and Gibson (1999) seek to define 'community' as it relates to conservation. They explain that historically the definition of this relationship has evolved from "pristine ecosystems and innocent primitives", to "despoiling communities out of balance with nature", and more recently to 'indigenous' and 'local' communities and the centring of *community* as a focus of conservation (pp.631-632). The recent change in perception is due to the poor performance of state conservation policies, along with the insight that traditional communities "used and shaped their environments" sustainably for centuries (pp.631-632). The authors point out that *community* is a simplistic and romantic construct and that communities are not usually cohesive and often cannot contest embedded power relations (p.633). For example, Meade, Shaw and Banks (2016) share that community is frequently thought to involve democracy and mutual support but can also "manifest as exclusivity, surveillance or control" (p.2).

In their book on Aotearoa New Zealand ecosanctuaries, the Campbell Hunt's (2013) explain that since the 1980s, ecological restoration has been increasingly undertaken by citizen-led organisations and that this has seen the birth of a new governance paradigm for the management of biodiversity in protected areas (p.52). The authors provide an outline for the new paradigm, which includes: a devolution of management from government to local institutions; acknowledgement of indigenous and local knowledge, rights, and values; a desire to link biodiversity protection with socioeconomic development; more emphasis on bottom-up approaches; and greater interest in the restoration of biodiversity (pp.52-53). They explain that the new paradigm is commonly termed "partnership", "participatory management", or "co-management" (p.53). The goals of the new paradigm include greater local control of resources, local empowerment, and the twinned pursuit of social and environmental goals. (p.53). Supporting this claim of twinned social and environmental goals, McNamara and Jones (2016) found that community conservation funders in Aotearoa New Zealand required projects to also deliver socio-cultural benefits (p.365).

The results of Dearden, Bennett and Johnston's (2005) survey of 41 countries, in the ten years from 1992-2002, demonstrates that non-governmental organisations' involvement

in the management of protected areas grew rapidly and that "communities are 'very involved' in decision-making" (p.92). In Aotearoa New Zealand, our latest national biodiversity strategy states that "collaboration and partnership will be at the heart of implementation" (DOC, 2020, p.55).

How extensive is community conservation in Aotearoa New Zealand? In a doctoral thesis focused upon citizen science undertaken by community conservation groups, Peters (2015) found more than 600 community conservation groups, with a collective membership of over 40,000 people (p.187). Peters surveyed over half of these 600 groups and found that *partnerships* were very important to them (p.191). She also found that two-thirds of groups had social objectives, in addition to their conservation goals such as environmental awareness raising, provision of recreation opportunities and community cohesion (192).

Further to this, Lyver et al. (2016) outline how a community forms through people engaged in restoration efforts, despite differences in ethnicity and profession, and that such "interplay between individual agency and collective identity is fundamental for sustainable resource use and the building of an environmental ethic among actors" (p.320). Jordan III (2000) affirms that restoration can build a "constituency" for a site or for conservation more broadly and that ecological restoration can be a way to create community or work through the relationship between people and ecosystems (p.27,31).

3.3.1 Community Identity and conservation

There is increasing recognition that people will not participate in conservation unless they first identify with nature (Ives et al., 2018; Schultz, 2011; Soga & Gaston, 2016; Zylstra, 2019). In a great article about identity as it relates to conservation in Aotearoa New Zealand, Craig et al. (2013) posit that if conservation is a *social construct*, broad group consensus is required to undertake conservation or restoration activities (p.260). Because of this, attention needs to focus on building a national identity related to the natural world (p.260). They argue that most of the conservation language in Aotearoa New Zealand is "judgemental, prescriptive and alienating" (p.262). They suggest it is due to the modernism paradigm with its separation of humans from the natural world, resulting in *Pākehā* (New Zealanders of European descent) perceiving themselves as a

"displaced invasive species that does not truly belong in the South Pacific" (p.260). The authors claim that it "undermines self-esteem as well as both self-identity and national identity" (p.260). To "become native to this place", New Zealanders need to stop identifying with "perfect nature" as having no people in it and instead develop an identity of ecological belonging (p.260).

Individual identities are a social construction in the same way that conservation is. Identities are "shaped by our surroundings" (Verhaeghe, 2014, p.8). Burr (2015) defines *identity* as the "subtle interweaving of many different threads…All of these…are woven together to produce the fabric of a person's identity" (pp.123-124). He argues that identities are not chosen by the individual but are socially constructed and are fluid and not fixed (p.126). Like individual identity, Kahu (2017) explains that community membership is also "socially constructed, contextual and fluid" and is dependent upon the "identity threads a person has" (p.16). Kahu uses 'citizenship' as a concept to understand membership in a community, as it encompasses the "rights and responsibilities" that accompany membership (pp.15-16). Kahu also explains how 'participation' in the community leads to a heightened "sense of belonging" (p.18). It appears that to build community in the context of ecosanctuary projects, people need to participate. Participation can occur through volunteering, membership, visitation, and education programmes. This literature review has not found any existing research into whether deliberate identity formation or community building is a planned outcome from such conservation projects in Aotearoa New Zealand.

3.3.2 Community development

Community development is "a process through which ordinary people collectively attempt to influence their life circumstances" (Meade et al., 2016, p.2). Aimers and Walker (2013), Aotearoa New Zealand community development practitioners and academics, share that it is a bottom-up approach that produces "…a commitment to citizen-led, shared control of social and economic resources" (p.13). They show how community development has been used to "challenge the dominant power brokers of the time" ("a politics of resistance") or to "increase individual and community self-reliance" (a neoliberal approach) (p.15). Walker (2013) states that "…power relations are the single most important aspect of any community development project or

relationship" (p.214). Within community development, there is a tension between the desire of communities to be independent of local and central government and the fact that communities are often in an unequal power relationship because they are reliant upon local and central government funding sources (Aimers and Walker, 2013, pp.29-30). This makes it difficult to contest *business as usual* practices and embedded power imbalances. These unequal power relationships in relation to ecosanctuaries are highlighted in chapters 5 and 6.

3.4 Indigenous traditional ecological knowledge

Across the globe, indigenous peoples are intrinsically connected to the natural world. Watene and Yap (2015) share that "wellbeing and development are intimately bound up with other people and the natural world" and that Indigenous people occupy a quarter of the earth's land, which contains 80% of our planet's biodiversity (pp.51-52). They state that development should "enable…harmonious relationships between people, and between people and the natural world" (p.52). They then argue that indigenous peoples require redress to stand on an equal footing and make meaningful indigenous contributions to development (p.53). Speaking to the scale of the problem, Fernandez-Llamazares and Cabeza (2017) argue that the ethnosphere is as much at risk as the biosphere and is eroded by the same processes (p.1). Degradation of the biosphere, biodiversity losses, conflict over resources, rural-urban migration and state interference combine to upset indigenous people's relationship with the natural world (Lyver et al., 2019, p.395).

Indigenous environmental knowledge is defined as "knowledge generated by Indigenous Peoples about their surroundings, including relations with other beings, human and other-than-human, which is adapted and transmitted from generation to generation" (Thornton and Bhagwat, 2021, p.1). Escobar (2020) notes that in indigenous societies, the separation of the individual from the community does not exist and instead, people are bound to "their ancestors, their kin, their community, the natural world" (p.17). He argues that renewed interest in indigenous knowledge is due to the need to explore ways to "coexist without destroying ourselves or the earth" (p.17). He clarifies that indigenous worldviews do not hold all the answers, but we can learn from them (p.17).

Similarly, Fernandez-Llamazares and Cabeza (2017) share how advances in our understanding of ecosystems have illustrated the value that indigenous peoples can bring to conservation through "embedding facts in values and beliefs", which develops "emotional connections to the landscape, helping to cultivate a sense of place" (p.3).

Hill and Coombes (2004) caution against making universal claims for indigenous environmental knowledge as it removes it from its locality and divorces it from its lived practice (p.51). The strength of indigenous knowledge is its practice and connection to place (Mistry, 2020, p.372). Seeking to apply it in different contexts and without the involvement of indigenous peoples is appropriation and damages indigenous knowledge and indigenous peoples.

3.5 Tāngata whenua involvement in conservation

The mainstream science-based understanding of the natural world is moving closer to the Māori worldview with its embrace of "the interconnected nature of the environment" (Harmsworth & Awatere, 2013, p.283). Because of this, Māori ecological knowledge is gaining prominence in Aotearoa New Zealand, as people become more aware of the scale of environmental losses and look to address them (Wehi, Whaanga, Watene and Steeves, 2021, p.187). Additionally, a revitalisation of Māori culture and attempts to recognise and practise Te Tiriti o Waitangi principles has seen a "genuine desire to incorporate Māori voices in biodiversity conservation" (p.188). The authors share that because Māori in the pre-European era developed practices for managing species loss and resource scarcity, Māori ecological knowledge has much to offer us today (p.189).

Māori worldviews place humans within the natural world, where "what affects a part, affects the whole" (Whaanga and Wehi, 2017, p.100). Māori link ecosystem health with spiritual and cultural wellbeing (Harmsworth and Awatere, 2013, p.274; Wehi, Beggs and McAllister, 2019, p.1). The interdependency between humans and the natural world contrasts with traditional European spiritual and economic beliefs that treat humans and the natural world as separate entities. Harmsworth and Awatere (2013) link Māori "holistic thinking" about ecosystems with emergent western science that is increasingly cognisant of the interlinkages in ecosystems and the inseparability of humans from them

(p.274). An example of the inclusion of people within ecosystems, shared by the authors, was the 2001 United Nations Millennium Ecosystem Assessment (p.276). This was the first global assessment to incorporate indigenous knowledge systems (McElwee et al., 2021, p.346).

Māori indigenous knowledge is part of a system of knowledge called *Mātauranga Māori,* defined as "the knowledge, comprehension or understanding of everything visible or invisible that exists across the universe" (Marsden, 1988). As well as "the pursuit and application of knowledge and understanding of *Te Taiao* (the natural world), following a systematic methodology based on evidence, incorporating culture, values and worldview." (Hikuroa, 2017, p.5). In contrast to mainstream science, Mātauranga Māori is grounded in lived experience in the world. In the table below, Hikuroa (2017) illustrates the key differences between Mātauranga Māori and mainstream science (p.9).

Figure 2. Some differences between Mātauranga Māori and science

Mātauranga Māori	**Science**
Participatory 'experiencers' of systems	Detached 'observers' of systems
Explicit intrinsic values	Implicit instrumental values
Knowledge as belonging	Knowledge for control
Intuition as method	Intuition rarely acknowledged
Inclusion of facts and values	Facts and values separated
Everything is interconnected	Everything physical is interconnected

Source: Hikuroa (2017).

A key aspect of Mātauranga Māori is the interconnectedness of people with the physical and spiritual world. Māori perceive themselves as tāngata whenua (people of the land), sharing a *whakapapa* (ancestry) with *Ngā atua kaitiaki* (gods). This perception leads Māori to see themselves as "the physical representation of Ngā Atua kaitiaki and therefore *kaitiaki* of te Taiao, the environment" (Kotahitanga Mo Te Taiao, 2019, p.7). Similarly, Wehi, Whaanga, Watene and Steeves (2021) make clear that in a Māori worldview, ecological knowledge "cannot be separated from the principles and responsibilities that surround its use" (p.187). Furthermore, Selby, Moore and Mulholland (2010) illustrate how "practices such as Manaakitanga and kaitiakitanga"

involve responsibilities to protect and care for the natural world (p.1). While Harmsworth and Awatere (2013) explain that *kaitiakitanga* revolves around reciprocity, meaning that if humans care for the environment, the environment will return benefits to humans (p.281). Finally, it may be more appropriate to think of Māori knowledge as "mātauranga-ā-iwi", which is "local knowledge that is connected to specific iwi or mana whenua; that is, to people who have resided intergenerationally on a localised landscape" (Wehi et al., 2019, p.1).

Tāngata whenua are integral partners in conservation in Aotearoa New Zealand, as legislation affirms Māori guardianship of indigenous species (Campbell-Hunt & Campbell Hunt, 2013, p.121). For a long time, Māori have been deeply concerned by the degradation of natural ecosystems (Harmsworth and Awatere, 2013, p.274). For example, in 1874, Te Wehi lamented the lower numbers of native birds that he felt were due to introduced species such as cats (Bioethics Panel, 2019, p.6).

The 1840 Te Tiriti o Waitangi/Treaty of Waitangi is Aotearoa New Zealand's foundational document outlining the relationship between Māori and the Crown. Settler government apparatus often ignored the Treaty, resulting in Māori disenfranchisement from much of their lands over the first 140 years of European settlement. Beginning in the 1970s, Aotearoa New Zealand has seen a revitalization of Māori culture and work to redress legitimate Māori grievances through the Waitangi Tribunal claims process, which has seen the Crown gradually agree upon settlements with iwi claimants. This process is viewed neutrally by most Pākehā New Zealanders and is upheld as commendable by many (Winchester, 2021, p.342). Nevertheless, Mutu (2018) argues that the settlement process removes Māori rights conferred by the Treaty and does not achieve justice or reconciliation (p.209). She references repeated indigenous rights reports from United Nations Special Rapporteurs to illustrate ongoing indigenous human rights violations (p.208).

In summary, Māori indigenous knowledge can inform ecological restoration (Wehi, 2009, p.272). Many are enthusiastic about the potential of a Mātauranga Māori approach to improving New Zealander's connection with nature (Marques et al., 2018, p.88). Notably, the recently released National Biodiversity Strategy places the Treaty partnership at the centre of biodiversity work (DOC, 2020, p.14). The report identifies that strong relationships between stakeholders are crucial to achieving biodiversity goals

and states that work will focus on improving linkages between stakeholders (pp.22-23). However, Ruru et al. (2017) argue that for Aotearoa New Zealand to meet its "aspirational conservation goals", Māori need to have more leadership, yet it is not easily achieved under the current legislative regime (p.66).

3.6 Ecosanctuaries: pulling the threads together

The previous sections of this chapter provide the reader with background context to ecosanctuaries. This section now focuses upon ecosanctuaries themselves. First, to briefly recap. Ecosanctuaries are defined as sites for biodiversity restoration, larger than 25 hectares, with "substantial community involvement"; where the fence confers similar protections to species provided by an offshore island (Innes et al., 2019, p.372). Ecosanctuaries are a subset of the broader community conservation movement in Aotearoa New Zealand.

3.6.1 Ecosanctuary benefits

Many believe that ecosanctuaries are possible because they are community-initiated rather than by the state or private business (Campbell-Hunt & Campbell-Hunt, 2013, p.16). The reason for this is that these projects rely on volunteer labour, and people involved in ecosanctuaries believe that people are far more likely to give their time to a community initiative than an "agency led project" (Campbell-Hunt & Campbell-Hunt, 2013, p.118). Furthermore, such projects can also "advocate for social change beyond what governments can now justify" (Campbell-Hunt & Campbell-Hunt, 2013, p.259). Consequently, ecosanctuaries can rally greater public support in terms of participation and advocacy than comparable agency-led projects.

Ecosanctuaries comprise only 0.2 percent of Aotearoa New Zealand's land area (Innes et al., 2019, p.384). Given this, what potential do they have to address the biodiversity crisis? To answer this question, it is first necessary to ascertain the benefits they deliver in addition to biodiversity restoration within the sanctuary bounds. The Campbell Hunts (2013) argue that the unique benefit ecosanctuaries deliver is "to build social support for the conservation cause" (p.78).

Conservation will not succeed unless people care, and they are unlikely to care if they do not have direct experiences in nature (Zylstra, 2019, p.50). Zylstra (2019) also points out that "reconnecting people with nature" is the most important step toward achieving conservation goals (p.51). It is possible that through education and stimulating curiosity about the natural world, people may be encouraged to develop a connection to the natural world. This research contends that such projects may act as a catalyst for a paradigmatic change in the wider community by facilitating such connections.

Through fortress conservation practices, New Zealanders have experienced conservation as something that happens at a distance to them and occurs in a constrained space away from their day to day lives. Craig et al. (2013) share that New Zealanders rank the environment as *important* and broadly support conservation initiatives (p.259). They write that New Zealanders have generally "accepted conservation as a mainstream ethic" but that many New Zealanders think that conservation is the state's responsibility and is separate from natural resource use which fuels the economy (p.257). Many ecosanctuaries address this separation by bringing the area being conserved much closer to where people live.

Other benefits provided by ecosanctuaries that Knight (2021) focuses upon are the wellbeing benefits of spending time in nature, which are broadly documented both at an individual and a population level (pp.40-48). These wellbeing benefits include increased happiness and reduced stress.

3.6.2 Tāngata whenua involvement in ecosanctuaries

According to the Campbell-Hunts (2015), a strong relationship with local *iwi* (tribe) is usually not achieved, and sanctuaries often have no "clear plan" on how to maintain relationships with iwi over time (p.122). This is despite the key role iwi play in species reintroductions. When a new species is introduced into a sanctuary, guardianship passes from the "source iwi" to the iwi that holds mana whenua of the sanctuary's location (p.121). The authors speculate that it is partially due to most sanctuaries being established by Pākehā, for whom interaction with Te Ao Māori is not a focus, and because iwi have limited resources and time (p.131). Lyver et al. (2016) found that environmental managers in Aotearoa New Zealand did not value cultural stewardship,

which is a value held by Māori stakeholders, who see it as a way to retain, reinforce and develop ecological knowledge (p.320). The authors felt that this was a "lost opportunity for partnership" and a potential source of conflict (p.320). In their article on a mainland island project in Te Urewera, Hill and Coombes (2004) found that Māori involvement was limited by the state's preservation strategies butting up against Māori attempts to reclaim mana whenua (p.67). The authors felt that Māori participation should be founded upon their rights and aspirations (p.67). Additionally, there appears to be a need to address the cultural bias that Lyver et al. (2019) argue is a problem within environmental management in Aotearoa New Zealand (p.396).

However, sanctuaries overwhelmingly accept that iwi partnerships are critical to their long-term sustainability and believe that iwi can also benefit from participation (Campbell-Hunt & Campbell Hunt, 2013, p.132). Positively, Innes et al. (2019) note that iwi involvement in ecosanctuaries is growing (p.382). Innes et al. (2019) advocate for ecosanctuaries to better integrate Te Ao Māori into the management of their sanctuaries to "meet the expectations of current and future multi-cultural communities" (p.385). As noted earlier, the Campbell-Hunts' (2013) respondents believe that iwi involvement is necessary for "long-term sustainability" (p.132). Peters (2015) argues that more investigation of iwi involvement in restoration needs to occur. Such research will likely highlight best practices for partnering with restoration-focused iwi (Campbell-Hunt & Campbell-Hunt, 2013, p.210). Certainly, this background research has found more calls for iwi involvement than examples of such. More will be revealed in Chapter 7.

3.6.3 Critique of ecosanctuaries

Fenced sanctuaries have been criticised for being expensive and not ensuring they recover bird populations (Butler et al., 2014, p.151; Scofield et al., 2011). This argument has been countered by more recent research by Bombaci et al. (2018), which compellingly demonstrates the effectiveness of fenced sanctuaries for recovering bird populations and "meeting conservation objectives" (p.12). However, due to the contested nature of conservation, there are likely to continue to be conflicting opinions. It is undoubtedly the case that fenced sanctuaries are expensive, and the role of

ecosanctuaries in the goal to restore biodiversity is not clear (Campbell-Hunt and Campbell-Hunt, 2013, p.75).

Are ecosanctuaries sustainable? They are expensive to establish and require a long-term multi-generational commitment to achieve their vision, with constant vigilant monitoring for predator reinvasion. The Campbell-Hunt's (2013) and Butler et al. (2014) are concerned about the sustainability of the sanctuaries movement, and as the number of ecosanctuaries grows, the economic sustainability of securing funding is of concern. The Campbell-Hunt's also found that because ecosanctuaries are so reliant upon community support, a major concern for ecosanctuaries is maintaining that support over time (p.125). Additionally, the support has tended to come from the white middle class (p.127). This suggests a need to broaden the community by seeking wider community engagement.

3.7 Conclusion

This chapter has explored some of the foundational paradigms that underpin and inform ecosanctuaries, including conservation, connection to nature, community, and indigenous knowledge. In summary, these showed that conservation is values-laden and not objective and that human disconnection from the natural world is increasing and problematic. Awareness of environmental problems alone does not prompt participation to address these problems. These problems can be attributed to Eurocentric worldviews that separate humans from the natural world. Indigenous worldviews challenge this paradigm and are promoted as pathways toward a rapport between humans and the natural world. Evolving conservation practices have increased community participation and leadership of community conservation projects, where communities benefit from their contributions.

Given there are "600 or more community environmental restoration groups throughout New Zealand…a broad sphere of influence is suggested both environmentally and in society, though it remains largely unquantified" (Peters et al., 2015, p.187). Similarly, Butler et al. (2014) suggest significant benefits in social terms from the sanctuaries movement, without elaborating on what these might be (p.385). Furthermore, the

Campbell-Hunts (2013) book touches on but does not deeply explore social and cultural benefits and linkages to conservation. Finally, there has been little research into ecosanctuaries' engagement with tāngata whenua and Te Ao Māori.

The absence of existing literature on the topic means this research may be of use to community conservation initiatives to better identify and articulate social and cultural aspects of their projects. Three key questions have been identified from this review of literature related to ecosanctuaries. Firstly, where do ecosanctuaries fit in Aotearoa New Zealand's current conservation sphere? Secondly, how are they engaging with their communities and is community building a planned outcome? Finally, what is their relationship with local iwi, and how do they incorporate Māori indigenous knowledge?

4 Research design and methodology

4.1 Introduction

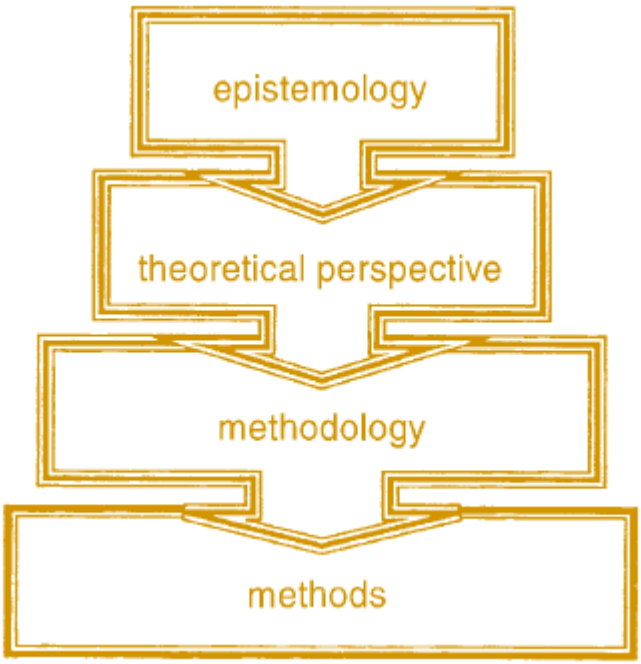
Academic research seeks to obtain “trustworthy information”, which requires strategy, creativity and flexibility from the researcher, who needs to parse, evaluate and then decide what is trustworthy (O’Leary, 2017, p.11). This chapter explains how trustworthy information was obtained in this research, by outlining the research design and methodology selected, to then explain how the postdevelopment lens, and the methods used, answer the research questions. It covers the application of the chosen approaches through the preparation to undertake fieldwork, during the fieldwork, and in the analysis of fieldwork data.

4.2 Research methodology

Crotty (2020) outlines four layers to social research design (Figure 3 below). These layers are the *methods* chosen to gather data; the *methodology* or structure informing these methods; the *theoretical perspective* that directs the focus of the research; and the *epistemology*, or the nature of knowledge and ways knowledge is acquired (pp.2-3). Methodology refers to how knowledge is acquired in research (Moses and Knutsen, 2007, p.5).

Methodology is rooted in research philosophy that is built firstly from *ontology* which are theories of the "nature of being" and what kinds of things have existence, and secondly from *epistemology*, which is "theory of knowledge" and how we come to gain knowledge (Murray and Overton, 2014, p.19). Crotty (2019) points out that because ontology and epistemology "tend to emerge together" in social science research, trying to discriminate between them can become problematic (p.11). For this reason, only the epistemological basis for the methodology and how the epistemology informs the postdevelopment theoretical perspectives used in this research is discussed. When taken together, the epistemological frame, and the theoretical perspective used, underpin the selected methodology and methods chosen.

Figure 3. Research design: Illustrating how each element influences the next



Source: Crotty, 2020, p.4.

4.2.1 Epistemology

Social Constructivism is the epistemological basis for this research, which informs the methodological approach. Social constructivism comes from the understanding that we cannot make claims about the world, uninfluenced by our experience of it, because we are not truly independent from what we observe. Instead, we construct meaning while being immersed and entangled in the world, and as much as we may try, it is simply not possible to be wholly objective. Consequently, we all experience and understand phenomena differently (Hubbard et al., 2009, p.34). The *social* aspect of social constructivism emphasises how culture influences and colours the way we perceive things (Crotty, 2020, p.58). Which ultimately leads to the observation that "knowledge and truth are created, not discovered by the mind" (Schwandt, 1998, p.236). As individuals, we do not perceive the world in isolation. Instead, we are a part of a social world where our culture shapes our perceptions. For example, an ecosanctuary exists in the world but only exists as an *ecosanctuary* if we perceive it to be so. Thus, an ecosanctuary is a concept that is "constructed, sustained and reproduced through social life" and, therefore, may be perceived differently depending upon the social milieu in which the individual resides (Crotty, 2020, p.55). For example, Zhang (2020) found that

some international visitors to ecosanctuaries had “remarkably different perceptions and preferences”, such as preferring possums and rabbits to native wildlife or believing the ecological restoration occurred solely for the benefit of the visitor rather than for biodiversity (pp.99-101).

Social constructivism contrasts with Western science's *positivist* belief that there is an external world independent from our minds that can be accurately observed. Positivists believe that it is possible to identify laws that shape human actions. In contrast, social constructivists argue that people act on reasons related to their intentions, interests, and values, which are informed by their culture, and these reasons cannot so easily be quantified (Smith, 2009, p.242).

4.2.2 Theoretical perspective

Murray and Overton (2014) outline different branches of science, empirical-analytical, historical-hermeneutic, and critical (p.23). This research falls within the ‘critical’ branch of science, which has a “moral dimension” and is suited to research that brings to light “non-explicit processes and relations” in order to “act upon them” (p.23). This research combines several theoretical perspectives from ecological restoration, community development, and indigenous studies. Primarily it is underpinned by a hopeful postdevelopment lens. This lens seeks to highlight the value of alternatives to mainstream approaches.

Development Studies as a discipline has tended to focus upon the countries of the global South. However, problems such as the ecological and social crisis caused by unchecked capitalism, the failings of the modernisation paradigm, increasing inequality within countries, and the need to live within planetary boundaries, have become global problems. For this reason, the postdevelopment lens can also be usefully applied to countries of the global North. In doing so, the research touches upon whether re-linking humans with the natural world and the longer-term perspective required to manage ecological restoration projects might assist toward engendering the paradigmatic change required “to reinvigorate the kinship ties of people to their lands” and “restore the mauri (lifeforce) of nature”, which is the aspiration of Aotearoa New Zealand Aotearoa’s

latest biodiversity strategy. (DOC, 2020, p.6,10).

4.3 Qualitative research methodology

Methodology can be likened to a well-resourced toolbox and methods as tools to illustrate the difference between the two (Moses and Knutsen, 2007, p.4). A qualitative methodology has been chosen because the research topic is bound in social constructs such as beliefs, identity, and attitudes that lends itself to a qualitative approach (O'Leary, 2014, pp.148-149). A qualitative approach is focused upon understanding rather than measuring or quantifying. Stewart-Withers et al. (2014) explain that qualitative research "seeks to collect or generate data in natural settings" (p.59). Furthermore, a qualitative approach is appropriate "when we are looking to describe, explore or explain social phenomena…where the goal is to both understand and find meaning, and perhaps bring about change (p.61).

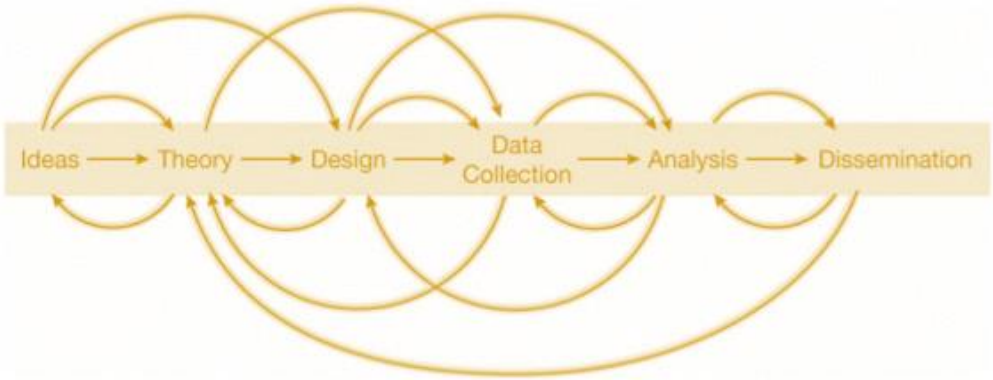
A qualitative approach to this research presents advantages, including creating a deeper understanding of issues by combining individual experiences with cultural and political contexts. This deeper dive also means fewer case studies are required to generate rich data. A qualitative approach leaves more scope for the researcher to practise reflexivity and enables a more personal connection with the subject matter. Finally, qualitative research is often focused on a small selection of case studies allowing for information gathered to direct the research outcome and build a nuanced understanding of various subjectivities (Mayoux, 2011, p.120).

4.4 Methods

Interviews with key stakeholders and analysis of literature produced by the case study sanctuaries were the two methods used to gather data for this research. Using two methods was thought to be more reliable than the use of interviews alone because interviewees share their individual perspectives, while documents produced by the case study ecosanctuaries are a collectively agreed perspective. By using both individual and collective perspectives, richer data was gathered.

This research has mirrored the spiralling research approach that Berg and Lune (2017) outline in Figure 4 below. While it could be dismissed as a *make-it-up-as-you-go* approach, instead, it has allowed for flexibility, reflexivity and refinement. An example of the spiralling research approach was adapting the interview questions during the fieldwork to include questions about perceptions of the Predator Free 2050 initiative in the aftermath of the popular *Fight for the Wild* documentary series (Young, 2020), which screened on television during my fieldwork and was top of interviewees minds.

Figure 4. The spiralling research approach.



Source: Berg & Lune (2017).

4.4.1 Method 1. Key stakeholder interviews

Interviews are one of the methods recommended to discover what "people think, feel or believe", which this research is working to illuminate (Stewart-Withers et al., 2014). Dunn (2016) makes the point that interviewing is also a method that "empowers the people who provide the data" through them being able to reflect upon their experiences (p.150). "Semi-structured interviews" with "key informants" were used. This method gathered specific information without putting words into the interviewees' mouths or having them say what they thought the researcher wanted to hear. Making it less likely

that the researcher's personal biases and beliefs would distort the data gathered (Dunn, p.158).

The interviews averaged a little over an hour's duration and were recorded using 'Otter.ai', a recording and transcription app. Each interview transcript was corrected for transcription errors. Then the audio file and the transcript document from each interview was saved to secure cloud computer storage.

4.4.2 Method 2. Textual analysis

A secondary method used was "thematic analysis" of texts produced by the three case study ecosanctuaries. This analysis examined how ecosanctuaries present their sanctuary in documents they publish, including their goals, incorporation of indigenous knowledge, and relationships with tāngata whenua (Glesne, 2016, p.184).

4.4.3 Qualitative data analysis

Maguire and Delahunt, 2017 explain that "thematic analysis is the process of identifying patterns and themes within qualitative data" (p.3352). After completing interviews and analysing documents, an initial understanding of the main themes was formed. However, the interview transcripts were coded for themes in NVivo qualitative data analysis software to ensure rigour. The coding followed Braun and Clarke's (2006) six-step process explained in Figure 5 below (p.87).

Figure 5: Phases of thematic analysis

Phase	Description of the process
1. Familiarizing yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Source: Braun & Clarke, 2006

The thematic analysis resulted in a thorough breakdown of interview data into multiple themes. Many of these themes were later dismissed due to being narrowly held, irrelevant or tangential to this research. Others were merged. During this process, themes were assessed at the "semantic" and the "latent" levels identified by Braun and Clarke (p.84). At the semantic level, the researcher is not looking beyond what has been said or written (p.84). Whereas at the latent level, the researcher "starts to identify or examine the underlying ideas, assumptions, and conceptualisations" (p.84). At the end of the process, fifteen key themes and twenty-seven sub-themes were identified and are presented in Table 1 below.

Table 1. Themes identified from interview data

Ecosanctuaries

- Ecosanctuary sustainability
  - Funding and finance
- Criticism of eco sanctuaries
- Challenge and complexity of ecosanctuaries
  - Multiple priorities
  - Collaboration
  - Capacity restraints
- State of New Zealand's environment survey
- Predator Free 2050
- Power relations/agency
- National coordination/direction
- Tenuousness of biodiversity gains
- Paradigm shift
  - The need for conservation
  - Human-nature reciprocity
  - Values

Community

- Community
  - Place, identity and belonging
  - Community building
- Benefits of sanctuaries
  - Ecosanctuaries build a constituency for conservation
  - Demonstration of what is possible
  - Social halo effect
  - Nature connection
  - Wellbeing benefits
  - Developing a community resource
  - Building expertise – fence, species, education
  - Benefits of a longer-term perspective
- Motivation for participation
- Volunteers
  - Value of volunteers

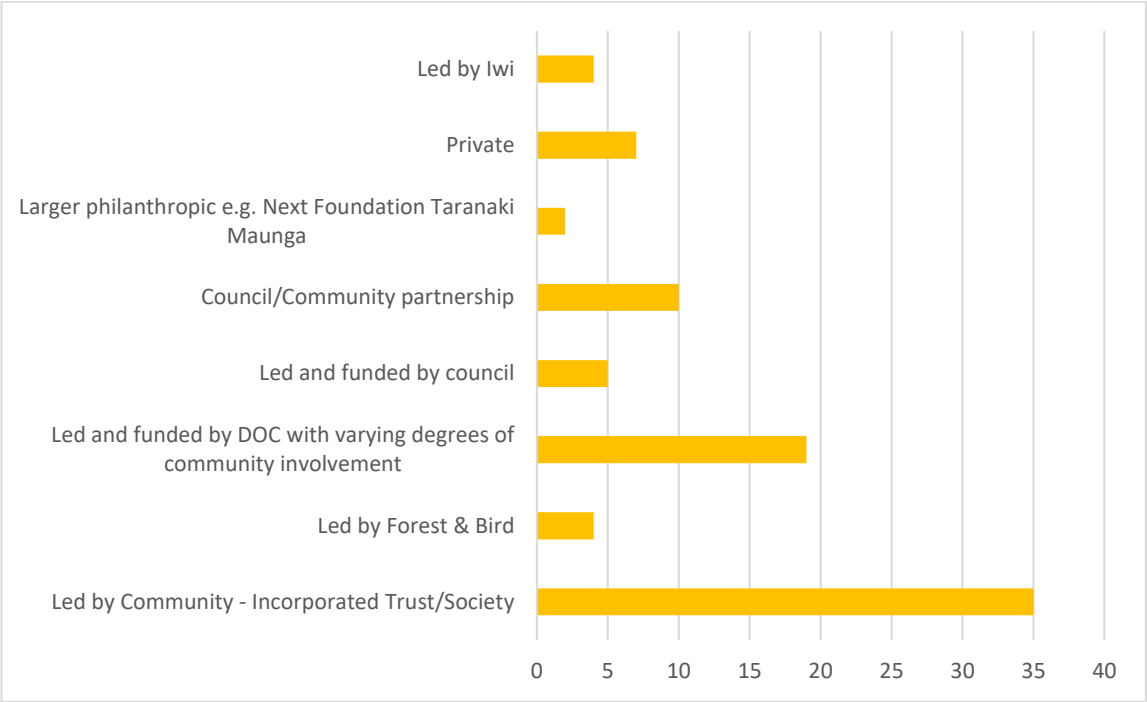
- Recruitment and engagement - Tension between volunteers and professionalisation
Māori
- Iwi involvement - Co-governance - How to partner with iwi - Iwi capacity constraints - Māori/Crown/council relationships - Cultural harvesting - Mātauranga Māori incorporation - How to incorporate - Cultural appropriation

4.5 Rigor

Methodology aside, the research must have "validity" and "reliability" (O'Leary, 2014, p.58). All studies "need to consider whether: subjectivities have been managed; methods are approached with consistency; 'true essence' has been captured; findings have broad applicability; and finally, whether the research process can be verified" (O'Leary, 2017, p.143). Three case studies help to ensure the validity and reliability of this research because findings shared across all three are more likely to be replicable at other similar sites by reducing factors that may only be specific to one project and location.

Rigor was applied to the choice of case studies. They are all incorporated trusts which is representative of common governance structures, with two thirds of community environmental groups being incorporated trusts or societies (Peters, 2015). Furthermore, an assessment of the leadership of ecosanctuary projects (Figure 6 below) demonstrates that most are community-led or are led in partnership with the community.

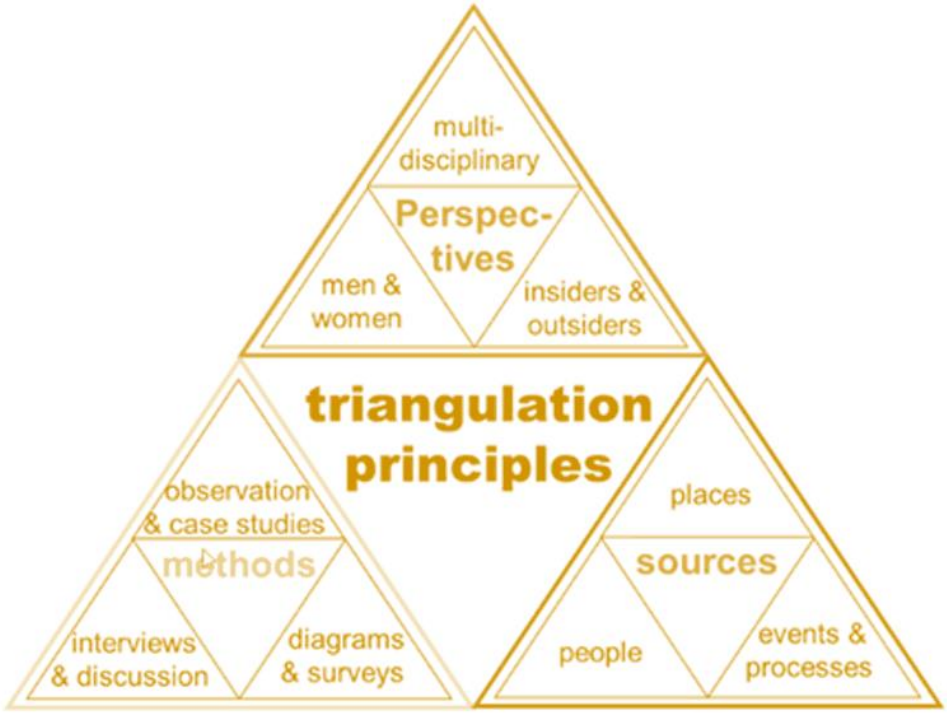
Figure 6. Summary of ecosanctuary leadership



Source: Data gathered by author from Sanctuaries of New Zealand website: https://www.sanctuariesnz.org/projects.asp

Research validity can also be increased through triangulation. Jenkins & Jenkins (2001) offer a diagram (Figure 7 over page) of ways research can be triangulated. Taking the diagram and looking at each area, in turn, this research is triangulated in the following ways. Beginning with *perspectives*, interviewees were men and women, Māori and Pākehā, people involved in ecosanctuaries and some who are critical of ecosanctuaries. Next, with reference to *sources*, many different people across three different case studies were interviewed. Thirdly, with regard to *methods*, triangulation occurred by using three case studies and data drawn from both interviews and thematic analysis.

Figure 7. Triangulation of research.



Source: Jenkins A & Jenkins M, 2001

4.6 Interviewees

It was necessary to identify potential interviewees who had knowledge and experience with ecosanctuaries and the wider conversation around our biodiversity crises that these sanctuaries work to address. Choosing interviewees started with contacting the managers of each case study ecosanctuary and a few people already known to the researcher. From this starting point, "snowball sampling" was used, with interviewees recommending others to speak with (O'Leary, 2017, p.211). For example, people at Kaipupu suggested speaking to Picton Dawn Chorus while John Innes suggested Phil Lyon of Maungatautari and Tim Parks at Ōtari-Wilton's Bush. One outcome of the snowballing approach was that it led to the inclusion of interviewees from beyond the three ecosanctuaries, and these outside perspectives greatly informed the research.

Table 2. Interviewees and their roles.

Brook Waimārama Sanctuary

1. Jacquetta Bell, QSM, is a volunteer at the Brook Waimārama Sanctuary.
2. Jaap Buys is a volunteer at the Brook Waimārama Sanctuary.
3. Ru Collin is the Chief Executive at the Brook Waimārama Sanctuary.
4. Hudson Dodd is the former Chief Executive at the Brook Waimārama Sanctuary.
5. Rick Field is the Educator at the Brook Waimārama Sanctuary.
6. Chris Hawkes is board chair of the Brook Waimārama Sanctuary.
7. Peter Jamieson is a volunteer and former board member at Brook Waimārama Sanctuary.
8. Peter Hay is a volunteer at Brook Waimārama Sanctuary.
9. Deryk Mason is a board member and volunteer at Brook Waimārama Sanctuary and is of Ngāti Tama ki Te Waipounamu and Te Ātiawa o te Waka-a-Māui descent.

Kaipupu Sanctuary

10. Gerald Harper is the committee chair and a volunteer at Kaipupu Sanctuary.
11. Nicky Jenkins is a committee member and volunteer at Kaipupu Sanctuary
12. Andrew John, QSM, is the Educator at Kaipupu Sanctuary.
13. Judith Manning is a committee member and volunteer at Kaipupu Sanctuary.
14. Anna Polson is Kaipupu Sanctuary Manager.
15. Hazel Ross is the Biodiversity Manager for Kaipupu Sanctuary.
16. Ian Shapcott is a member of the Kaitiaki Team at Te Ātiawa o Te Waka-a-Māui.

Zealandia

17. Paul Atkins is the Chief Executive at Zealandia.
18. Jim Lynch, QSM, is the founder and patron of Zealandia
19. Steve Moorhouse is the Manager of Learning and Engagement at Zealandia.

Department of Conservation

20. * Roy Grose is the Northern South Island Operations Director.
21. * Matt Hippolite is a Partnerships Manager and is of Ngāti Koata descent.
22. Barney Thomas is one of six Pou Tairangahau (Iwi liaison) and is of Ngāti Rārua, Ngāti Toa Rangatira, Ngāti Tama, Te Ātiawa and Ngāi Tahu descent.

Other conservation organisations

23. Gillian Bishop, QSM, is board chair of Tasman Environmental Trust.
24. Bryce Buckland is founder of Birdlife on the Grampians trapping group.
25. Emma Giesen is Stakeholder Engagement Manager at Predator Free Wellington, Community engagement manager at Trees That Count and a board member of the Endangered Species Foundation.
26. Phil Lyon is the CEO of Sanctuary Mountain Maungatautari.
27. Debs Martin, QSM, is the Top of the South Regional Manager for Forest & Bird.
28. Tim Park is the Manager of Ōtari-Wilton's Bush, a native botanic garden.
29. James Wilson is a co-founder and board member of Picton Dawn Chorus.

Researcher

30. Ross Cullen of Lincoln University is an Emeritus Professor in environmental and resource economics.

31. John Innes is a Senior Researcher in Wildlife Ecology at Manaaki Whenua Landcare Research.
32. * Aneika Young is Kaiāwhina Māori (Māori Cultural Advisor)/Environmental Scientist at Cawthron Institute and is a board member of Project Janszoon, and the Abel Tasman National Park ecological restoration project. Aneika has iwi affiliations with Ngāti Rārua (ki Motueka), Te Ātiawa (ki Te Tauiihu), Ngāti Ruanui, Ngāti Koroki Kahukura and Waikato Tainui.

* The three interviewees marked with an asterisk are personal friends and were not formally interviewed. Instead, notes were made from conversations and email dialogue.

Table 3. Interviewee demographics

Demographic	Number of Interviewees
Region	
Nelson * (Location of Brook Waimārama sanctuary)	16
Picton * (Location of Kaipupu Sanctuary)	10
Wellington (Location of Zealandia)	6
Other regions	1
Role #	
Sanctuary Staff	9
Sanctuary board member	6
Sanctuary volunteer	10
Manager of an associated conservation organisation	7
Department of Conservation	3
Researcher/scientist	3
Māori who are mana whenua in relation to one of the sanctuaries	5

Male/Female	Female	Male
	9	23

Age	Under 40 yrs.	40-60 yrs.	60 yrs. +
	5	10	17

* Note: Two interviewees worked across Nelson and Picton.
# Some interviewees held more than one role.

To ensure that inadvertent personal or relationship harm did not occur to any person or organisation, interviewees quoted in the results chapters are not often named. Instead, descriptors are used so that the reader can get a sense of the person's viewpoint without knowing their name. These descriptors are *sanctuary staff person* for case study sanctuary staff and board members; *sanctuary volunteer*; *conservation project manager* for interviewee managers from non-case study projects; *researcher* for researchers and scientists; and *tāngata whenua* for a person belonging to one of the iwi associated with the case study sanctuaries.

Not as many people at Zealandia were interviewed compared to the other two case study sanctuaries. Zealandia receives numerous research requests, and it took considerably longer to work through their research application process and gain permission. After planning a total of six interviews at each sanctuary, by the time permission came through for Zealandia, 25 interviews had already been completed across Kaipupu and Brook Waimārama sanctuaries.

Fewer iwi representatives were willing to be interviewed as hoped. It was not that these people were disinterested in talking, but because they were simply too busy. Currently, iwi are grappling with capacity issues due to treaty claims, treaty settlements, their own projects and demands for consultation from multiple directions. Furthermore, most of this work is not remunerated, putting pressure on *kaumatua*, who do this work while holding down a regular job.

Finally, the gender ratio of the interviewees is unbalanced. The possibility of the researcher having unconscious bias cannot be dismissed, but it is more likely a result of using snowball sampling to gather interviewees and that sanctuary senior leadership was predominantly male. Certainly, similar studies incorporating greater numbers of volunteers had more gender balance in their interviewees (Cowie, 2010; Phipps, 2011).

4.7 Research positionality

Awareness of positionality is essential because the researcher always colours the research (O'Leary, 2014, p.54). Summer and Tribe (2009) share that "Development

researchers are part of a process they want to influence" (p.123). Therefore, it was important to clearly state my positionality to the research and reflect upon it throughout the research. I maintained a research diary and engaged in sporadic "critical reflexivity" to assist me to reflect upon my biases to avoid tainting the data (Dowling, 2016, p. 34). In the following paragraphs, I outline my background in conservation and development and its influence upon my positionality.

I have had a lifelong interest in conservation, beginning with my involvement in the Scout movement and friendship with the McKenzie family, who founded Ngā Manu Sanctuary on the Kapiti Coast. As a teenager, I worked school holidays at Ngā Manu. As an adult, this interest continued through activist work with Greenpeace and through an experiential education organisation, Pacific Discovery, that I founded and ran for eighteen years. Through Pacific Discovery, I gained a much deeper insight into contemporary conservation practices, facilitating groups of 18–24-year-old volunteers undertaking volunteer conservation work at sites around Aotearoa New Zealand and in several other countries. More recently, I have become involved in an incipient ecological restoration project on the 643ha peninsula named Te Taonui o Kupe/Cape Jackson, at the entrance to Queen Charlotte Sound.

I have also had a long interest in international development. My extended family have worked for Volunteer Service Abroad (VSA) and the United Nations. Through Pacific Discovery, I worked with several grassroots community and conservation projects in multiple countries. These experiences exposed me to shortcomings in mainstream development and interested me in alternatives.

This background in conservation and development meant that I approached the research with some *insider knowledge* but without the subjectivity of direct involvement, as I have no relationship with the three ecosanctuary projects selected for the research. In assessing my positionality, my contacts, knowledge, and experience in conservation projects are an asset. However, care was taken that my desire to demonstrate linkages between these conservation projects, community development, and development theory does not bias the research and analysis by making the data fit my assumptions.

4.7.1 Trust

It was essential to ‘build trust’ to have interviewees talk openly with me, so that the research could ‘capture truth’ (O’Leary, 2014, pp.56-57). I believe that my age, experience, and relatability helped foster candour, along with semi-structured interview methods, which allowed the conversation to flow more naturally. To further enable conversation flow, I ensured that the interviewees were relaxed, comfortable and had made time to be present and engage with the interview. It required preparation and organisation, and a willingness to meet interviewees when and where they wished to meet.

4.7.2 Positionality in relation to Māori and Mātauranga Māori

Research involving Māori required careful consideration of positionality because: “For the constructivist, the battle is not so much about truth as it is about power, interests and identities of those involved” (Moses & Knutsen, 2007, p.12). Positionality is particularly relevant to research involving Māori. As Tuhiwai Smith (1999) clarifies, researchers from a Western background possess different values and frames of reference to indigenous peoples (p.42).

As a Pākehā researcher, I had to be mindful of the fact that research is inextricably linked to European imperialism and colonialism” (Tuhiwai Smith, 2012, p.30), and that there is ongoing “asymmetry” in the Pākehā-Māori relationship (Walker, 2004, p.389). I had initially thought to avoid grappling with Aotearoa New Zealand’s history of colonisation and subjugation of Tāngata Whenua by not specifically focusing upon Māori involvement in ecosanctuaries. However, three key considerations meant that this was not tenable. Firstly, relationships with iwi are an instrumental aspect of every ecosanctuary because sanctuaries rely upon Māori to mediate species relocations through a process called *Tono*. At Tono, the recipient iwi assures the gifting iwi that they and the recipient ecosanctuary will be responsible custodians of the species. If iwi do not agree on the species transfer, it will not happen. It makes a constructive relationship between ecosanctuaries and iwi a necessity. A second consideration that arose during the development of the research questions was the release of the Te Mana o te Taiao National Biodiversity Strategy (2020) and its advocacy for the incorporation

of Mātauranga Māori into our conservation approaches. The background process of decolonisation is the third consideration.

This third consideration requires a little bit of unpacking. Decolonisation is a slow process because, as Mahuika (2011) argues, postcolonial discourse does not resonate with Māori because they feel that colonialism continues (p.18). He quotes Leonie Pihama, who states that "every aspect of our lives is [still] touched and imposed upon by the colonisers" (p.18). Mahuika continues, "Perhaps the real question is not whether it is possible to 'close the gaps' but whether Pākehā are conscious of or determined enough to relinquish their positions of power in order to learn, grow and adapt" (p.20). The government calls Aotearoa New Zealand a bicultural nation, yet Māori would argue that is not the case. Walker (2004) suggests Māori are bicultural as they must regularly step between two worlds, whereas Pākehā infrequently step into the Māori world and are generally monolingual and monocultural (p.389). He suggests that Pākehā need to become "bicultural enough to be at ease in the other founding culture" (p.390).

Given the three considerations outlined above, it was beneficial to bring Māori perspectives into the research in a way that was supportive of Māori and was not furthering dispossession through appropriation. Postdevelopment provides a solid theoretical basis for this position.

4.8 Ethical considerations

Research ethics, to do with the researcher's responsibilities, behaviour, and way of acting toward the research subjects, need to be scrutinised (Dowling, 2016, p. 31). A key consideration is power. The presence of power throughout social relations means it is important to be aware of power and seek to address it throughout the research process (Dowling, 2016, p. 35). Power is present in the relationship between the research subjects and the researcher. However, given the age and seniority of most interviewees, I believe I had a balanced "reciprocal relationship" (p.36). Although an "insider" in terms of knowledge and understanding of the case study organisations, I worked independently, so I was not in any way beholden (p.37, 40).

Power relations are also present within and between various organisations in this research. The most significant ethical challenge is working with the potential tensions between people involved in sanctuary projects, between sanctuary projects and iwi, or between sanctuary projects and local government or funders. It is at the heart of what O'Leary (2014) means when she states that "Researchers must actively manage power, politics and ethics" (p.55).

This research is done under the guidance of Massey University. I went through an ethics application process to gain approval to undertake research. Additionally, the "Waitangi Obligations and Principles" of Massey University's Code of Ethical Conduct for Research (MUHUC) applied (Massey University, 2017, p.8). In practice, it meant that I ensured the Treaty principles of partnership, participation and protection were upheld and that I was mindful, as a Pākehā, of being culturally sensitive and not engaging in cultural appropriation. I am cognizant of Tāngata Whenua efforts to navigate decolonisation and the complex relationships within iwi, between iwi, and between iwi and the State, and finally, the diverse perspectives of Tāngata Whenua interviewees who whakapapa to nine different iwi informed this research.

To ensure that I was sensitive to power and politics and did not cause emotional or reputational harm to any person, relationship, or organisation, I took the following precautions: 1). Transparency in the purpose of the research, how it will be presented and disseminated, and gaining the informed consent of interviewees; 2). Sensitivity to not causing reputational or relationship harm in the writing up of the research; 3). Preserving anonymity where appropriate. Although I have named all the interviewees in this chapter, they are not identified in the results if I felt that what they were communicating could be sensitive. 4). Distributing completed thesis or relevant findings to interviewees and stakeholders. By taking these steps, I felt I would mitigate the risk of harm, build and maintain trust with my interviewees, and "give back" by providing research findings. These precautions fulfill the principles of "Ethics from the bottom up", outlined by Banks and Scheyvens (2014), where the researcher ensures that the research also serves research participants (2014, pp.161-162).

4.9 Scope and limitations

A crucial point that O'Leary (2014) makes is the need to be aware of the limitations of your study (p.65). In this work, a limiting factor is that it is a broad enquiry synthesising aspects of postdevelopment, sustainable development, conservation, community development and indigenous knowledge. This breadth means that less specificity is possible than more focused research. While it is broad it is also particular to specific geographical locales and contexts, which may reduce the relevance of findings outside of these. Given these limitations, the findings do not attempt to identify or claim any underlying universal truths. Instead, I hope that this research has met the bar set by Corbridge quoted in Banks and Scheyvens (2014), to "provide plausible alternatives to existing social arrangements or patterns of development" (p.161).

5 Research findings: Ecosanctuaries and their context in Aotearoa New Zealand

5.1 Introduction

Research question 1 asks, where do ecosanctuaries sit with recent strategic initiatives to tackle the biodiversity crisis in Aotearoa New Zealand? This research question is the subject of this chapter. The chapter begins with an overview of the three ecosanctuaries, informed through the literature published by each Sanctuary, case study interviews[8], and media articles. Table 4 below highlights key differences between the sanctuaries, such as considerable variance in sanctuary size and the adjacent town or city population. The second part of the chapter outlines Aotearoa New Zealand's current community-conservation space, followed by interviewees' thoughts on power and agency, funding and economic sustainability. Finally, the impact of recent strategic initiatives, like Te Mana o te Taiao National Biodiversity Strategy and Predator Free 2050, is discussed.

Table 4. Comparison of ecosanctuaries selected for research

	Zealandia	Brook Waimārama	Kaipupu
City/town adjacent to sanctuary	Wellington	Nelson	Picton
Population of adjacent town/city	215,400	52,000	4,300
Sanctuary type	Ring fenced	Ring fenced	Peninsula fence
Sanctuary Size	225 hectares	700 hectares	40 hectares
Sanctuary trust established	1995	2004	2006
Fence completed	1999	2016	2008

[8] Quotes from interviewees will be in italics, for both quotes within a paragraph or block quotes.

Fence length	8.6km	14.4km	600m
First bird species reintroduced	2000	2021	2016
Number of bird species reintroduced	12	2	1 (unsuccessful)
Number of active volunteers	Approx. 500	Approx. 350	Approx. 120
Operating Costs	$5,533,000 Year to June 2020	$571,000 Year to June 2020	$134,000 Year to March 2021
Cost of entry – per adult	$23	$17 visitor $9 local	By Koha
Annual visitor numbers (Note numbers were lower due to impacts of Covid-19)	143,000	7,317	Unknown
Annual student visits	8,000	3,000	1,100

Sources: https://www.visitzealandia.com/About; https://www.brooksanctuary.org.nz/our-story; http://www.kaipupupoint.co.nz/about.html; https://www.stats.govt.nz/tools/2018-census-place-summaries/

5.2 Zealandia

Image source: https://www.visitzealandia.com/About

Zealandia is an icon for both the sanctuaries movement and conservation in Aotearoa New Zealand. It was the first fenced mainland-island sanctuary and has had numerous species reintroductions, including some bird species absent from the mainland for over 100 years. Founder Jim Lynch (2020) called his book about the sanctuary *Zealandia: The Valley That Changed a Nation*. The Sanctuary has had an outsized impact, bringing

birdlife back to Wellington, contributing to Wellington's economy as a key visitor attraction, and being the impetus for several other fenced sanctuaries.

Positive Attributes

Zealandia is a proof of concept for fenced ecosanctuaries, pioneering the reintroduction of several species that had become extinct on the mainland, including *"tīeke/saddleback, hihi/stitchbird, little spotted kiwi, red-crowned parakeet/kākāriki, tuatara, giant weta and Hamilton's frog"* (Lynch, 2019, p.171). Zealandia has also proven a business model that generates funds through visitor entry fees, guided tours, and a café and function facility. The sanctuary is not far from economic self-sufficiency (Zealandia, 2020, p.53). Other sanctuaries like Brook Waimārama in Nelson and Orokanui near Dunedin have adopted Zealandia's model.

Interviewees from the Brook Waimārama and Kaipupu sanctuaries tended to see Zealandia's success as aspirational, indicating a trajectory they hoped their sanctuary could follow.

> *I love what happened at Zealandia with the halo effect and its impact on the Wellington community. I think that the awareness it creates and that level of community engagement is great. It's fair to say that we are in the early days of that.*
>
> (Sanctuary volunteer)

The lack of contiguous forest within and beyond the sanctuary's boundaries makes it easier for visitors to see wildlife. It reduces the problem of vulnerable birds such as Tīeke (Saddleback) and Hihi (Stitchbird), leaving the protection of the sanctuary. These species spend a lot of time foraging on the ground and are thus vulnerable to predation outside the sanctuary fence (Burge et al., 2021).

Zealandia is the most well-resourced ecosanctuary in New Zealand. This resourcing has enabled it to get involved in projects outside the sanctuary, including the Kaiwharawhara Stream restoration project, connecting the sanctuary to the sea (Pascal et al., 2019).

> *We are just operating at a scale here, COVID aside, that is quite large compared to many other projects. So, our ability to resource things is much greater than the other sanctuaries, which puts us in a position where we can*

> *make inroads into doing these things but also, I think, it puts an onus on us to share that information among the other sanctuary networks.*
>
> (Sanctuary staff person)

Zealandia and Wellington Zoo are the most prominent environmental education providers in Wellington. Aside from their education work with school children, Zealandia is also working to connect with non-traditional sanctuary users like immigrant communities.

> *Kat is working with Refugee Settlement Services. She said that many Afghani immigrants and refugees in New Zealand are farmers, so they've got the connection, but their context is totally different to ours. And they're keen to get into New Zealand conservation. So, Kat's work creates that pathway and breaks down those barriers. 'What is it you need?' 'What is stopping you?', 'How can we work with you if you're interested in being involved?'*
>
> (Sanctuary staff person)

Zealandia has also established a scientific research centre chaired by Dr Danielle Shanahan, who has published interesting research demonstrating the wellbeing benefits of involvement in conservation by comparing the wellbeing of sanctuary volunteers against the general population (Shanahan, 2020).

Challenges

Zealandia does not have many immediately apparent challenges, partly due to its maturity as a sanctuary and strong community support in Wellington. The overarching challenge for Zealandia is enacting the paradigmatic change it would like to see:

> *Our goal is always to keep pushing and find what urban restoration conservation is not yet doing. We are always going to be the demonstration model, and we're going to constantly learn from it. Our research programme needs to be strong and vital in the mainstream because that research enables us to say, here's how we did it, and here's what we're learning from it.*
>
> (Sanctuary staff person)

5.3 Brook Waimārama Sanctuary

Image source:
https://www.nelsontasman.nz/assets/ProductImages/_resampled/FillWyIxMDAwIiwiNTAwIl0/Brook-Sanctuary-Waterfall-taken-by-Oliver-Weber-credit-www.nelsontasman.nz.jpg

The Brook Waimārama Sanctuary is a 700-hectare ring-fenced sanctuary in the hills forming Nelson City's skyline. The fence was completed in 2016, and it is the largest fenced sanctuary in the South Island. The sanctuary surrounds the Brook Stream catchment, with much of the sanctuary being steep-sided hills covered in mature beech forest. Like Zealandia, the site is a disused water catchment reserve controlled by the city council. It is an ideal location, being situated close to downtown Nelson. The sanctuary is managed by a charitable trust, with council and iwi representation on its board.

> *I think it was quite a genius stroke of Donna and Dave Butler to think. 'Here is this unused water catchment reserve, which is pretty much pristine bush, and just four kilometres from the city centre'. I think it's just extraordinary that we have got that and that now it's fenced. Even while I've been doing my monitoring over a two-three-year period, the amount of birdsong is really increasing. For the people who are really involved, it's been life-changing.*
>
> (Sanctuary volunteer)

The sanctuary has been on a long journey from trust formation in 2004 (Bell, 2008) to get its first species reintroductions of Tīeke (Saddleback) and *Kākāriki karaka* (Orange Fronted Parakeet) in 2021. Having observed the debt and funding challenges Zealandia faced in the early 2000s (Burgess, 2011), the Brook Waimārama team took a cautious approach and fundraised, rather than borrowed, to build the fence and a simple visitor

centre. This took time, as did a protracted legal challenge from some opposed to the use of poison to rid the sanctuary of rats, stoats, and possums (Meij, 2017).

Positive attributes

The sanctuary encompasses elevation-specific habitats, from the valley floor at 100m above sea level to the ridge tops at 900m. The sanctuary's size and mature beech forest provide suitable habitat for the bulk of Aotearoa New Zealand's forest birds and make it an appealing site to visit. Sanctuary staff reiterate that most first-time visitors have their expectations exceeded. Zealandia Chief Executive Paul Atkins shared that he thought the "Brook Waimārama was twenty years behind Zealandia in terms of reintroductions, but three hundred years ahead in terms of its mature forest" (Atkins, 2020). The sanctuary is embedded into a further 250,000 hectares of forested council reserve land and Mt Richmond Forest Park, suggesting an enormous habitat area for positive spillover of birds from the sanctuary.

> *The brook Waimārama sanctuary site is unique amongst the sanctuaries of New Zealand, in terms of its proximity to big habitat, with extensive hectares of pristine forest and all its constituent parts. That was always one of the things about the Brook Sanctuary vision that really captured my imagination, and I think a lot of people's imaginations. It's the core of a much bigger landscape-scale opportunity for conservation.*
>
> (Sanctuary staff person)

The sanctuary sparked the formation of community trapping groups in areas around Nelson. Nelson City Council has, in turn, developed a halo habitat project called Nelson Nature to trap pest species in areas outside of the sanctuary and coordinate community trapping groups.

The potential for species reintroductions is high, with the sanctuary currently working on plans for several more. The sanctuary has a strong board, great staff, and motivated volunteers. It is in a stable financial position and maintains good relationships with local iwi. The sanctuary's proximity to Nelson is an advantage, and it has the potential to become a significant asset to Nelson in much the same way Zealandia has in Wellington. The sanctuary is improving its tour offerings and continues enhancing visitor infrastructure. It is also rapidly increasing supporter memberships and improving its communication with the community.

Challenges

The sanctuary's biggest challenge is its fence, with erosion and windfall damage a constant threat. This challenge requires regular fence inspections and an on-call response team to deal with windfall and storm damage. Steep terrain is difficult for sanctuary staff and visitors. People of low fitness are somewhat restricted to the valley floor. On a positive note, the steep terrain leaves large habitat areas relatively undisturbed for wildlife. While the habitat linkages to surrounding mature forest are an advantage, the lack of predator control in the water reserve land around the sanctuary means that birds such as Tīeke that venture outside the fence are vulnerable to predation (Stone et al., 2021). The forest around the sanctuary would require an enormous effort to trap effectively, and it is unlikely that the public would tolerate broadcast poison operations in the water reserve areas at this time.

During the court case surrounding the poison operation, the sanctuary pulled back from community engagement and focused inside the fence. *"We kind of circled the wagons and went into our shell for three or four years while we were busy fighting a bloody useless court case"* (Sanctuary staff person). The sanctuary is now working hard to build a larger constituency of support within the community because

The sanctuary has a strong environmental education programme. However, it competes with several other organisations and sites in the region that also offer environmental education programming.

The sanctuary is immediately behind a motor camp owned by Nelson City Council. The future of the motor camp is somewhat uncertain, but the current arrangement means the sanctuary has little room to expand visitor or sanctuary operational facilities.

5.4 Kaipupu Sanctuary

Image source: https://kaipupupestmonitoring.weebly.com/

Kaipupu Sanctuary is a 40-hectare forested peninsula between Picton Harbour and Shakespeare Bay. Kaipupu sanctuary is predator-fenced, with the 600m fence built in 2008. The sanctuary comprises regenerating coastal forest of varying age. The land is owned by Port Marlborough and the Department of Conservation (DOC) and has been loaned to the community to develop as a sanctuary. The sanctuary was established and is run by a volunteer committee of community members and representatives from Port Marlborough and DOC. Public access to the sanctuary is by boat only, via a jetty in Shakespeare Bay. This is because Port Marlborough operations span the foot of the peninsula and consequently prevent public access by land.

Positive attributes

The sanctuary has a significant impact upon Picton, primarily due to the number of volunteers relative to the size of the population[9], thus creating awareness in the wider community. Secondly, Picton schoolchildren have two educational experiences at the sanctuary during their primary school years, through a very successful environmental education program run by volunteer-educator Andrew John. The sanctuary has an enthusiastic committee and staff, committed volunteers, and has low overhead costs. Port Marlborough has given the sanctuary use of a shop in a prominent location, which helps maintain the profile of the sanctuary within the Picton community. Finally, the sanctuary has a positive relationship with the most prominent iwi in Picton, Te Ātiawa o te Waka-a-Māui.

[9] 1 in 25 Picton residents is a volunteer at Kaipupu. This compares with 1 in 148 in Nelson and 1 in 430 in Wellington. Volunteer numbers in relation to population size from Table 5.1 above.

A significant success of Kaipupu has been the consequent establishment of Picton Dawn Chorus. This community trapping group has expanded outwards to trap 1,000 hectares of town, coast, and hills around Picton. Picton Dawn Chorus are currently in the process of increasing this to 4,000 hectares of stoat and possum control, thanks to funding from the Jobs for Nature scheme. According to one of the founders, James Wilson, Picton Dawn Chorus would be unlikely to exist or have gained the degree of community buy-in it receives had Kaipupu sanctuary not first existed and created a rallying point for conservation efforts.

Challenges

Perhaps Kaipupu's most significant challenge is that the public can only access the sanctuary by boat. Local water taxi companies charge eighty dollars for up to four people to visit the sanctuary. It creates a barrier to Picton residents engaging with the sanctuary and could create a perception that it exists as a visitor attraction rather than a community asset.

Kaipupu's small size restricts bird reintroductions because birds can readily fly out of the sanctuary to nearby forested headlands, including the Wedge across Shakespeare Bay to the South and The Snout across Picton Harbour to the North. The future success of the sanctuary is in firming up a larger halo of pest control on these neighbouring peninsulas to reduce predator pressure on bird species. Peninsula fences are known to be leaky, with pests being able to enter the sanctuary by gaining access around the ends of the fence at low tides or by swimming (Innes et al., 2019). Thus monitoring, trapping and baiting invaders is an ongoing job.

As the port company and DOC own the land, the sanctuary is restricted in what it can and cannot do, as the following points attest. Firstly, the Reserves Act legislation prevents Kaipupu from controlling visitor access. A tour company could, for example, bring clients to the sanctuary without having to pay Kaipupu a concession fee. Secondly, volunteers checking trap lines or other work on the sanctuary can access the sanctuary through the port and a gate in the predator-proof fence. Recently the port has disallowed children from accompanying adult volunteers through the port due to the port's safety management requirements. This change has stopped families from easily volunteering at the sanctuary.

5.5 Shared challenge & complexity

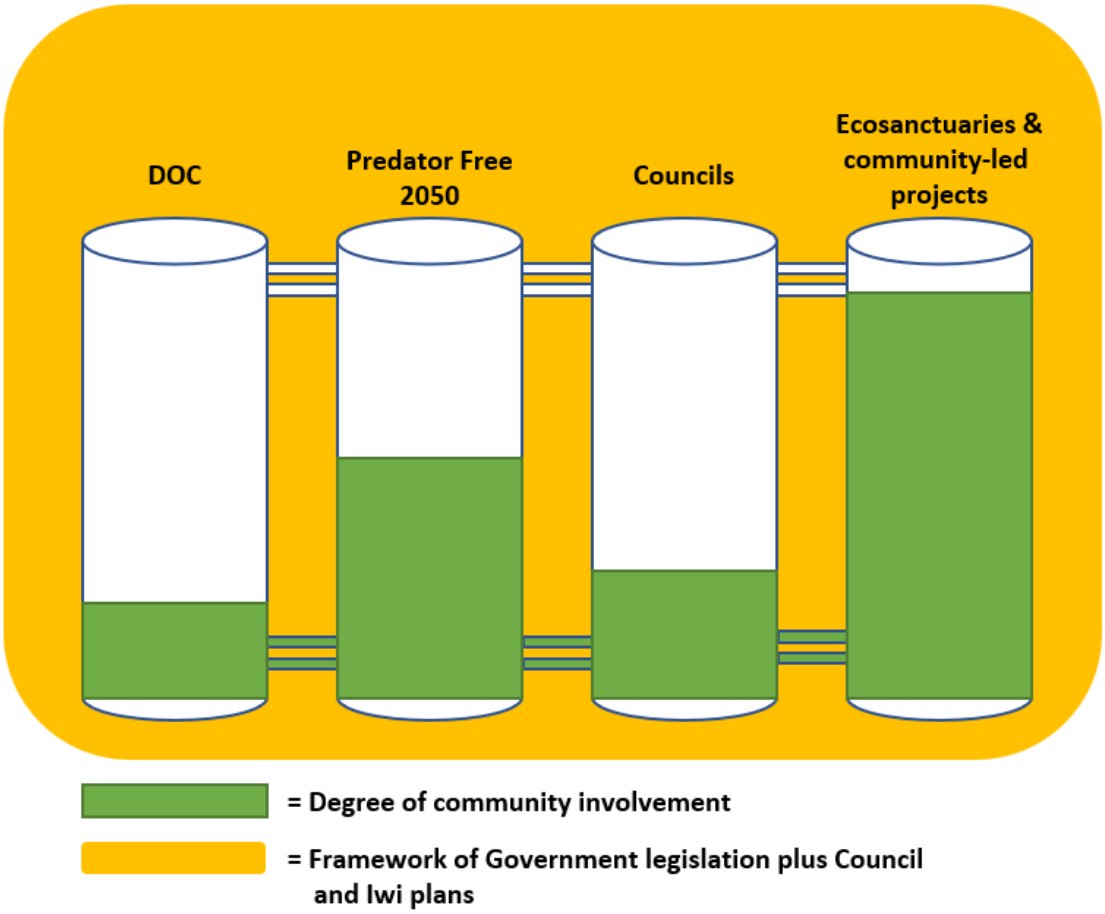
In sum, these ecosanctuaries are challenging to establish, manage and sustain. Each sanctuary is a complex amalgam. They combine: an ecological restoration site, which is free from rats, stoats, weasels, possums and cats but requires constant vigilance to ensure this status; a biodiversity conservation site, where reintroduced species are carefully managed; a community organisation reliant upon community funding and support both financially and with volunteer labour; a tourism business focused upon providing a visitor experience to earn income; an environmental education provider, running educational programmes for school-age children; an infrastructure manager of fences, roads, tracks and bridges; and a manager of a network of relationships with various entities that are critical to the sanctuary. To take species reintroductions as one example, Lynch (2019) explains,

> *Each of the species transferred needed a thorough process of planning, permitting, obtaining funding, negotiating with DOC and iwi, preparation of facilities, training and management of volunteers, execution of the transfer, managing public events at releases, and dealing with the media. They had to cope with peoples' often unrealistic expectations, information bulletins, supervision of researchers, ongoing monitoring, banding and recording of data on the species, troubleshooting, veterinary care, and so the list goes on* (p.165).

Lynch also points out that the complexity of sanctuaries like Zealandia means that they cannot be a volunteer-only project (p.197). They require paid staff and a level of professionalism to manage the complex demands outlined above.

5.6 Where do ecosanctuaries fit within the Aotearoa New Zealand conservation sphere?

Figure 8. Community involvement in Aotearoa New Zealand's conservation space



Source: Drawn by author. Community involvement levels are indicative only, based on assessment using the following sources: Department of Conservation (2022); Sanctuaries of New Zealand (2021); Predator Free 2050 (2022); Marlborough District Council (2022); Nelson City Council (2022); Greater Wellington Council (2022); Wellington City Council (2022).

This section turns to locate ecosanctuaries within the broader conservation space in Aotearoa New Zealand. The conservation space contains plural approaches. In Figure 8 above, the conservation space is represented by four silos with one containing DOC; one containing Predator Free 2050; one containing Councils; and the last one containing community-led projects which includes most ecosanctuaries[10]. All pursue the same

[10] Another group not mentioned in the illustration above are private landowners, including farmers and Iwi, many of whom also work to protect and enhance biodiversity on their land. Some also involve communities in this work. These are not included as they are outside of the

overall conservation goals but with differing approaches and focus. Although there is overlap and partnership, indicated by the horizontal 'pipes' between silos, each silo is distinct, with differing levels of community involvement. All these entities work within a regulatory framework of government legislation and council and iwi plans.

As discussed in Chapter 2, postdevelopment theorists argue for plural approaches so that alternative voices and perspectives can be heard (Ziai, 2004). Conservationists do as well (Gavin et al., 2018, p.1; Matulis & Moyer, 2017, p.284). Arguably conservation in Aotearoa New Zealand does allow for plurality, as seen in the multiple approaches in Figure 5 above. However, legislation, power, decision-making, and funding still appear to favour top-down initiatives and reduce the ability of community conservation projects to self-govern. Such community projects typically only have the "authority to implement rules created elsewhere" (Agrawal and Gibson, 1999, p.638).

Our National Biodiversity strategy, Te Mana o te Taiao, sets out a vision for all these separate entities to work towards, but there is an absence of prioritisation and direction. "Ecosanctuary establishment is only rarely preceded by a regional, let alone a national, prioritising process, limiting the likely contribution of ecosanctuaries to national environmental representation objectives" (Innes et al., 2019, p.385). As one interviewee put it:

> *Lou Sanson* [formerly Director General of DOC] *in that recent TVNZ series 'Fight for the Wild', said 'DOC was the conductor of the orchestra'. And DOC might see itself as that, but in reality, I don't think that's what's happened? There's acute recognition now in the Sanctuaries space, in the Predator Free New Zealand scene, and the new biodiversity strategy - all of them understand that there's a lack of coordination and leadership across it all.*

Another interviewee shared:

> *I'd like to see more coordination. Across the country, everyone seems to be having a go and all doing a good job, but I think that if we better linked together, we might get better synergy.*

Our biodiversity strategy, Te Mana o te Taiao admits this problem: "…addressing the biodiversity crisis in New Zealand is complicated due to the number of organisations

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scope of what this thesis is examining. However, I do not want to minimise their contribution or potential. For example, approximately 25% of indigenous vegetation in New Zealand is located on sheep and beef farms (Lambie, 2021, 17 Oct).

working in the space, without overarching direction and coordination; policy frameworks that are “inconsistent, disjointed, under-resourced and poorly enforced”; and a diversity of competing values and interests” (DOC, 2020, pp.22-23).

5.6.1 Low engagement with National Biodiversity Strategy

Te Mana o te Taiao redefines conservation in Aotearoa New Zealand. It acknowledges that the battle to ensure the ongoing viability of biodiversity is not going to be won by relying upon a fortress conservation mentality where people are excluded because introduced predators do not recognise those boundaries (Daugherty & Towns, 2019, pp.444-445; DOC, 2020, pp.12-13). There is also recognition that conservation must be a part of everyone's daily life so that instead of conservation happening in national parks, at a distance, and somebody else's responsibility, it becomes something that is a part of people’s everyday lives, in all places (Craig et al., 2013; Daugherty & Towns, 2019, p.444).

A surprising finding was that most interviewees had not engaged with the new biodiversity strategy. When asked if they were familiar with it, common responses were: *“No, not really”; “Yeah, I've only read the summary”; “To some extent”; “I haven't read it. No. I was involved in the consultation on it”; “I'm not as familiar as I should be. I need to read it”; “Yeah, I’m aware of it but I’ve not read it”.* Of those familiar with it, most failed to see much value in it for their project. One interviewee shared, *“It’s like an election manifesto, isn’t it? Where you can promise the world but not explain how it’s going to be achieved”.* Another said:

> *I'm rather cynical about biodiversity strategies because, for me, they’re just blah, blah, blah, blah. Like we are going to reverse biodiversity declines across New Zealand and there'll be peace in Lebanon, and everyone will stop smoking. Until the government sticks real money into it, it’s meaningless.*

This lack of engagement had not been anticipated. However, three reasons why engagement was not happening to the extent expected were identified. The first is capacity restraints caused by staff having to manage multiple priorities. Ecosanctuaries have small numbers of paid staff working on multiple competing priorities: species and pest monitoring; fence inspections and maintenance; visitor facility maintenance; visitor

management; school education programmes; fundraising; and liaising with multiple stakeholders.

The second reason is funding. There is no funding available to ecosanctuaries to undertake the community education that Te Mana o te Taiao will require. There are funding streams available through the Ministry of Education, under the banner of EOTC (Education Outside the Classroom), for school environmental education programs. The case study sanctuaries saw environmental education of youth as important and appeared to be doing an admirable job. While funding for school education is available, there is no comparable funding for adult community environmental education. So, youth education gets prioritised over adult or community education due to funding availability.

The final reason is one of priorities, which is related to capacity. For most sanctuaries, their biodiversity goals take precedence, followed by efforts to generate their own income through offering a visitor experience that people will pay for. Only sanctuaries at the staffing and resourcing scale of Zealandia appear to have the capacity, under existing funding regimes, to be looking deeply into affecting paradigm change that the Biodiversity Strategy calls for.

The Biodiversity Strategy is currently something of a vision statement without a clear pathway toward implementation. As an interviewee shared:

> *It's got no funding pathway. It's got no action pathway. It doesn't really work in with who's going to do what. There's no allocation of responsibilities to different agencies.*
>
> (Tāngata whenua)

Interviewees were asked how the Biodiversity Strategy vision might be achieved. Some familiar with the strategy and how it might be implemented shared the following thoughts.

> *I think you'll see that in the three statutes replacing the Resource Management Act. I think they'll be conduits for its enablement.*
>
> (Tāngata whenua)

> *A lot of the strategy here is a driver to kick butt of statutory agencies that should be doing a better job. And whether that's supporting community groups that already exist, or providing the frameworks, network structures, or funding to enable a sense of security around it.*
>
> (Conservation project manager)

While an aspect of the National Biodiversity Strategy is to inform rule and decision-makers, the strategy is aimed at everybody, not just government agencies. As the strategy states: "It is intended to guide all those who work with or have an impact on biodiversity, including whānau (family groups), hapū (clans) and iwi (tribes), central and local government, industry, non-government organisations (NGOs), scientists, landowners, communities, and individuals" (2020, p.14).

> *… a lot of the things that came out of that review showed how easy it is to write a strategy and put it on the shelf and leave it up to some agency to implement it, as if it was their responsibility. And people often think that the Biodiversity Strategy is a DOC strategy. It's not, it's a strategy for the whole country.*
>
> (Conservation project manager)

Ecosanctuaries could play an integral role in achieving the biodiversity strategy vision. The strategy requires a paradigm shift in how people perceive themselves in relation to the natural world. Getting this paradigm shift necessitates a programme of education that will be much more effective if it has an experiential component, rather than being done solely through a media education campaign. Ecosanctuaries are often located close to population centres, already engage in experiential education programmes, and can leverage their existing community of volunteers and supporters. Thus, they must be among the best-placed organisations to deliver this. A focus upon such education is also inexpensive as much of what is required is already in place or is underway[11] and simply requires prioritisation and attention.

After all, most interviewees agreed with the contention that because ecosanctuaries comprise only 0.2% of Aotearoa New Zealand's land area, their potential to make a dramatic impact upon biodiversity losses is limited by their size, but that their potential to educate is large. This potential to educate was the focus of Conservation Minister

[11] See section 7.3 illustrating how case study sanctuaries are beginning to incorporate Māturanga Māori conceptions.

Eugenie Sage's (2018) address to the Sanctuaries of New Zealand annual workshop, where she saw that ecosanctuaries could make a big difference through "inspiring", "motivating" people to act and "promoting" collaboration (p.3).

5.6.2 Power relations and agency

These community-initiated conservation projects experience challenges in their interactions with more powerful entities such as councils and government agencies who control permissions, funding streams and legislation. Furthermore, in each case study, government agencies and councils were generally not perceived as enablers of the sanctuary vision.

> *I have to say there is poor recognition from council of the value we add.*
>
> (Sanctuary staff person)

> *What I can say is, the council is the single most important stakeholder relationship, it's the landowner, it's the access, the most significant funder. And it's important in terms of community involvement. That said, we pretty much achieved the success we achieved despite council, not because of council - a lot of roadblocks. And you know, councils are fundamentally risk-averse, and that project is risky, no two ways about it. So, I get it. I understood why. But it was always disappointing that it had to be so adversarial and such fighting tooth and claw to get what support we did get.*
>
> (Conservation project manager)

These last interview excerpts illustrate the challenges smaller organisations face in moving further or faster than power-holders are comfortable moving.

The fenced sanctuary movement's antecedents, including people such as Jim Lynch of Zealandia and Dave Butler of the Brook Waimārama Sanctuary, share parallels with McKinnon's (2008) finding discussed in section 2.4, of individuals exercising agency to cut across the State's hegemonic framing of conservation approaches. Leading them to initiate fenced sanctuaries. As one interviewee shared:

> *Sanctuaries have returned species, extirpated by mammalian predation from the New Zealand mainland 100 years ago, back to the mainland, and they have done it single handily. It's like the crown jewels of New Zealand conservation for me, and I find it weird that this was not done by DOC. Community groups did it and*

> *DOC has some involvement. But these places punch way over their weight. DOC have no predator-proof fences, they have no parallel for this. It's a parallel universe of people who are making conservation gains that that are nationally significant. And they're doing it not quite without DOC, but this has not been a top-down action, it's been a bottom-up one. Is it worthwhile? You bet your boots it's worthwhile!*
>
> (Researcher)

For smaller conservation organisations, managing demands from larger bodies can be challenging to meet, illustrating the tension between professionalisation and the grassroots, community-led nature of these projects (McNamara and Jones, 2016; Jones and Kirk, 2018). Many authors speak to these professionalisation pressures eroding the community input and ownership that community projects are established to attain (Nightingale, 2005; Gray, 2010; Scheba & Mustalahi, 2015; Appleton et al., 2021). There is also resistance to being managed:

> *So, under the Halo plan, the council has an operational plan that says they will do everything they can to help. After ten years we finally got a small amount of funding but then out of nowhere, council started to list the things that they needed from us: they want a health and safety plan; they want a COVID response plan; they want a trapping plan; they want a business plan; and they want us to use specific software to get all the data of every trap. I had to say, 'So, guys, I'm not doing that. Don't ask us to do more. We're volunteers!'*
>
> (Conservation project manager)

> *This sort of outdoors work attracts, in the baby boomer cohort, quite gung-ho guys, and a lot of them would not be people who have worked in professional business organisations and seen the slow incremental growth of health and safety and risk management. Then suddenly, it is thrust on them when they're in a volunteering role, and they can feel quite resentful about it.*
>
> (Sanctuary volunteer)

One clear way that community-initiated conservation projects succeed is by attracting higher community participation and volunteer commitment than agency-led projects (Jones & Kirk, 2018, p.116). Ecosanctuaries are heavily reliant upon volunteer labour, and those involved in ecosanctuaries believe that people are far more likely to give their time to a community initiative than an "agency led project" (Lynch, 2019, p.118; Jones & Kirk, 2018, p.116). Furthermore, community projects can "advocate for social change beyond what governments can now justify" (Lynch, 2019, p.259), meaning that

ecosanctuaries can rally greater public support in terms of participation and advocacy. This came through clearly in some of the interviews.

> *Wellington City Council has realised that community-led projects draw more community involvement, so the council supports and promotes these groups.*
> (Conservation Project Manager)

> *People are going to be much more enthusiastic about volunteering for a mission-driven locally-controlled initiative than a council led project, because they think 'Well. I'm already paying rates, why should I give up my weekends too?'*
> (Sanctuary volunteer)

A conservation project manager also spoke to these tensions within power and agency:

> *People often come and say 'I want to set up a group. Can you give me the formula?' And we don't really do that, because for us to say 'do this, this and that' just doesn't work. For example, there was no trapping group in this particular suburb and so we put a call out: 'It would be great if somebody wants to start up a group in this suburb. And a couple of people came forward and we began to work with them, but it just died. So, it just doesn't work like that. It must happen organically. We can come alongside and provide advice and support but it's hard to create and sustain a community project from above.*

5.6.3 Funding & financial sustainability?

Arguments over the best use of funds appear to be a divisive topic within the broader conservation sphere in Aotearoa New Zealand, as can be seen in correspondence within the New Zealand Journal of Ecology over the economics of fenced sanctuaries (Schofield et al., 2011; Innes et al., 2012; Schofield et al., 2012). This is partially because is difficult to measure and then place a monetary value on ecological restoration. It is also because different conservation projects have different approaches and focus and compete for a limited funding pool.

The case study ecosanctuaries try to generate as much of their own funds as possible through presenting themselves as a visitor attraction and charging for entry and tours. Case study ecosanctuaries are working toward being wholly or mostly self-funding. It would be easy to assume that this is an example of the neoliberalisation of conservation discussed in section 3.2.4. However, unlike most community-based conservation, these

projects were initiated from the bottom-up rather than agency-led, resulting in less of the power and agency issues commonly experienced in community-based conservation projects. Nevertheless, there are tensions inherent in a conservation project that is reliant upon tourism. Managing visitors is an added complicating factor that other community conservation projects do not grapple with. For example,

> *We went to a workshop about the sanctuary once, run by a guy, from the perspective of tourism, and he went right around the whole group of twenty people, and they all seemed to concur with him that it was great for the town's economy, and for tourism, and so on. And then it came around to dear old Pam and she just stood up, and said, 'I don't give a fat rats arse about tourism. I'm here for biodiversity and educating the children of tomorrow!' I was next and I said, 'I'm with her!'*
>
> (Sanctuary volunteer)

Interviewees were asked if charging for entry was a barrier to sectors of the population who most need to be engaged. While some sympathised with this idea, many felt that the entry fee was not prohibitive or that only a very small portion of the population would be excluded. Additionally, none doubted that sanctuaries should seek to generate their own income. The pervasive neoliberal paradigm may have normalised commodification and user-pays to such an extent that it has become unquestionable. However, many interviewees felt such a framing was unfair. For example,

> *Look, we have not put up a fence to keep non-paying members of the public out. The fence has been designed to do a specific job, and that is to protect some of our biota, which is so sensitive to predation that it will not survive otherwise. There is nothing magical about the fence and let's not make it be anything more than what it is, which is a barrier to mammalian predators.*
>
> (Sanctuary staff person)

Furthermore, some interviewees reframed the question and argued that entry charges were more than just paying for an experience. Instead, entry fees were an investment into building a community asset.

> *I tell people to look at it as an investment. Rather than spending $15 on a movie, you're investing that money in biodiversity gains and a constantly improving visitor and education experience. You're helping build an asset for your community.*
>
> (Sanctuary staff person)

> *There is a challenge in getting people to accept the notion of paying an entry fee to support conservation. You're not just paying to go for a walk in nature; you're paying for this project that is conserving biodiversity and giving you opportunities to engage with biodiversity that you would not have otherwise.*
>
> (Sanctuary staff person)

When asked if they thought these sanctuaries should be thought of in the same way as other public goods such as recreational facilities, museums, and libraries, that were funded through the public purse. The majority thought that this framing would not gain traction.

> *I think it's a community asset and I also think it's just something that the council, and or central government should be engaging in. But councils are going to be under increasing pressure with climate change and a whole lot of other infrastructure crises that they face, so funding from the council will always be a bit of a struggle and there will always be people who say they shouldn't be funding it.*
>
> (Sanctuary volunteer)

An interviewee shared that no one aside from people involved in sanctuaries had asked them to exist. So, it is not realistic to advocate for the creation of these sanctuaries and then turn around and expect a Council or DOC to manage them. Aside from Auckland Council's Tawharanui and Shakespeare Regional Parks, which are peninsula fenced sanctuaries, no council or government agency has developed a fenced sanctuary. This suggests that the public appetite for paying for such things is not high enough, amidst competing demands on the public purse.

> *There's a guy David Pierce. A very good economist. Died probably in the 90s. He suggested, quite a while back, that there doesn't seem to be a big demand from the general population for a lot of this sort of stuff. Supporting nature, etc., is good, but it's a question of how much of it do people want and are prepared to support? And he said, "We just don't see too much evidence that people want too much more than the government is spending now".*
>
> (Researcher)

The case study sanctuaries all expend considerable energy raising funds through applications to funding bodies. When interviewees were asked whether they thought the Predator Free 2050 initiative, with its landscape-scale projects, would absorb funding that had otherwise been available for sanctuaries, some thought it would.

> *I think that's already happened to some degree, where there's already been the argument from conservationists that this is money going into a social thing (sanctuaries), rather than a conservation outcome. So, I think yes it does. And when you're looking at clearing out massive areas like the Perth Valley at 100,000 hectares, you must accept that money should go there.*
>
> (Conservation project manager)

> *There was a lot of angst from the fenced sanctuary movement. All this money was pouring into these hare-brained projects. And the sanctuaries have been shut out of it. It happened big-time in Dunedin with the Dunedin City Council not even wanting to know about Orokanui. And so Orokanui was basically set up without any support from the council. And then this predator-free crowd comes along, and they start getting millions of dollars for something unproven. So, while the sanctuaries are hard work, they are fairly sustainable, whereas I just can't see any sustainability in these predator-free projects.*
>
> (Sanctuary staff person)

Campbell-Hunt and Campbell-Hunt's (2013) book on ecosanctuaries is concerned with long term viability. The authors question whether ecosanctuaries can continue to "sustain a flow of benefits to society, such as conservation and advocacy, that are not fully priced" without government funding. More than a decade later[12], this research has not seen any evidence that ecosanctuaries are at significant risk. While funding is a perennial problem and takes more time and effort than ecosanctuaries would like, none have folded, suggesting that ecosanctuaries maintain support over time.

5.6.4 Predator Free 2050

Since the Campbell-Hunts (2013) and Butler et al. (2014) books on ecosanctuaries, the major change within the conservation space has been the launch of Predator Free 2050 in 2016. Predator Free 2050 seeks to eradicate rats, stoats, and possums from the North and South Islands by 2050. As Peltzer et al. (2019) share, "this is one of the largest socio-environmental experiments ever envisaged" (p.429). Predator Free 2050 and ecosanctuaries are both working toward addressing our biodiversity crisis. Ecosanctuaries are focused on restoring biodiversity in an area where predator removal is one aspect. Predator Free 2050's sole focus is the eradication of three species of

[12] Research for this book was undertaken between 2006-2008.

introduced pests. Both have a vision of arresting Aotearoa New Zealand's biodiversity crisis. While ecosanctuaries are community-initiated grassroots projects, Predator Free 2050 is a top-down government-led initiative. Predator Free 2050 could be understood, if using Hardin's (2017) analysis, as providing a technical solution that does not require people to change behaviours (Hardin, 2017, p.422).

Predator Free 2050 came up in the interviews because these took place soon after the documentary series about Predator Free 2050 called *Fight for the Wild* (Young, 2021). Interviewees expressed complex relationships with Predator Free 2050, from embrace to scepticism. Many expressed sentiments aligned with this interviewee:

> *Well, I think it's great. And I think even if we get to 2050, and we haven't got rid of all the predators, it's not a failure. Every single bit that we can do is important. And a lot of people say, 'Oh, we'll never get there'. To me that's not the main issue or the most important thing. The most important thing is that we're working towards it, and that more and more people are getting involved, and more and more people are saying, 'Yes we can do this in our small area.'*
>
> (Sanctuary volunteer)

Others were critical. For example, one interviewee shared that focusing on predator-free is an easy way out, as it can be done everywhere, yet does not require us to change the way we live. *"You can go on being a pillaging economic developer, so long as you put a few rat traps out"*. They argued that there are a whole lot of harder things that require concessions from people, like retiring and replanting marginal farmland. Furthermore, they argued,

> *The government spent 300 million on Predator Free 2050. There was nothing yesterday or any other time that convinces me that Predator Free is going to be successful. It's so far away from delivering large predator-free areas that people are dreaming. We are losing biodiversity left, right and centre, and I worry that Predator Free New Zealand is fiddling while Rome burns. Because one of the things about Predator Free New Zealand is that it is not focused on places where biodiversity needs help, it is not. It is plain not.*
>
> (Researcher)

> *I'm worried they're putting effort into the wrong places – farmland and front-country. We were quite frightened that Predator Free would get off to a hiss and a roar, and expectations would be far too high. Then the whole thing would*

> *grind to a screaming halt and do more harm than good. And I would say it's about three or four years away from that happening.*
>
> (Sanctuary staff person)

Linklater and Steer (2018) are also sceptical. In their article labelling Predator Free 2050 as a flawed conservation policy, they argue that it is unlikely to succeed, given the scale of the task, with Aotearoa New Zealand being 4,000 times larger than any island so far made rat-free (p.2). Parkes et al. (2017) also felt that "the predator-free vision has echoes of past eradication failures where government policy had visions of national rabbit and deer eradication" (p.158). One interviewee shared that scale made Predator Free 2050 unrealistic because the larger the area, the more difficult predator eradication is.

> *The larger the area you're trying to clear, the exponentially more difficult it becomes. And I don't think anybody's done any real work on that. Getting one rat out of 200 hectares is tough. Getting one rat out of 2,000 hectares is not ten times harder, it's 50 times harder.*
>
> (Sanctuary staff person)

Furthermore, as a technical solution, Predator Free 2050 draws attention away from more paradigm-changing conservation approaches, such as those outlined in Te Mana o te Taiao. This was a concern of Sachs (2019), expressed earlier in section 2.4.2, of "technocratic approaches" being used to address environmental problems, approaches that had been observed to fail in mainstream development (p.31). Another interviewee thought Predator Free 2050 still had a lot to prove to address these concerns.

> *I think we're probably overestimating how easy it will be to get to predator-free. It's a massive challenge, I think it will make huge leaps and maybe even eliminate some species in some areas, but we're going to be struggling to get to predator-free.*
>
> (Conservation project manager)

These concerns were put to Emma Giesen from Predator Free Wellington: suggesting that some saw Predator Free as a technical solution addressing the effect of the problem rather than the cause. She shared,

> *The point of doing this in a city is about people: hearts and minds and being able to see and touch and experience the outcomes. That's why we are doing it.*

> *It's labour intensive and full-on. We need a device every 50 square metres in Miramar. That is a lot of people we need to talk to. So, it's not the most practical way of restoring biodiversity in terms of the amount of resourcing required and the number of people we have to engage with. But it's got much bigger outcomes than that. There are 200,000 people that will be seeing wildlife daily that you used to have to go to a sanctuary to see. The beauty of the Predator Free Wellington project is that the outcomes can be seen quite quickly. Whereas climate change and waste streams are less tangible, and actions are longer-term. So, the project is a great motivator, getting people engaged in nature and conservation.*

She revealed that human behaviour change was front of mind for their organisation now that Miramar Peninsula has almost reached predator-free status.

> *How do we change the way we live to accommodate the wildlife that is going to return? The next phase is thinking about how we're going to have birds everywhere, and we need to move from pest eradication into that space of being Kaitiaki.*

While there seems to be some validity to criticisms of Predator Free 2050 being a top-down imposed technical solution to our biodiversity crisis, Warne, in her 2020 New Zealand Geographic article, shared:

> *Some criticise the initiative for being a government juggernaut rolling across the landscape, crushing individual liberties and community-based initiatives in its path. That's not what I saw. All the projects are seeking, and finding, a sweet spot between agency implementation, community ownership and individual action.*

Ultimately, even with concerns, all the interviewees saw their sanctuary having a role in Predator Free 2050.

> *The sanctuary's value for Predator Free 2050 is the link between the community and conservation. We know the effort we put into managing our sanctuary, and for the country to be predator-free by 2050, we are talking about a staggering amount of resources needed. There is no way anybody or anything will get anywhere near that goal without the community's support, and we are an entry point for the community to begin to engage with that vision.*
>
> (Sanctuary staff person)

5.7 Conclusion

The focus of the chapter has been to clarify where ecosanctuaries fit within the current conservation context in Aotearoa New Zealand and recent strategic initiatives to tackle the biodiversity crisis. An overview of the case study ecosanctuaries showed they are all community-initiated. Despite the differences in sanctuary size, age of sanctuary, and size of the surrounding population centre, it is apparent that they have succeeded in gathering large communities of support. This support has enabled the creation of the sanctuary, its ongoing operation and has influenced the formation of other community conservation groups operating outside of the sanctuary fence. All share a model of combining income from funders with income generated in-house from guided tours and entry fees. All have critical relationships to maintain with government entities, iwi, other partners and stakeholders.

There are plural approaches to biodiversity conservation within Aotearoa New Zealand's wider conservation sphere, albeit within a regulatory framework that limits pluralism. Interviewees identified a lack of big-picture coordination around priorities and funding, which is affirmed in the literature. Although there might appear to be a dichotomy between arguing for pluralism in one breath and greater coordination in the next, this is not the case. Plural responses allow for differing approaches and local ownership, while calls for coordination are about avoiding duplication of effort and best use of resources, rather than taking away local control or adaptation to the local context (Craig et al., 2013; Gavin et al., 2018; Matulis & Moyer, 2017). Like Curry (2011) and Eyben et al. (2008) shared in section 2.5, pluralism is an enabler of empowerment, which Jordan III. (2000) argues is necessary to achieve conservation goals. Finally, in alignment with Campbell-Hunt & Campbell-Hunt (2011) ten years earlier, this research found that ecosanctuaries appear to be sustainable. Another decade has passed without any failing, which indicates that they are maintaining community support and funding.

Moving on to recent strategic initiatives, interviewees shared their assessment of Te Mana o te Taiao National Biodiversity Strategy. The research found low engagement with the strategy from the conservation community. This is unfortunate, as much of the strategy aligns with what has been learned during this research, namely that many researchers and practitioners now argue that focusing on environmental problems alone

is not sufficient to address our biodiversity crisis and that people need to develop a reciprocal relationship with the natural world (Escobar, 2020; Jordan III, 2000; Sachs 2019; Soga and Gaston 2016; Zylstra, 2019; Zylstra et al., 2014). Furthermore, despite increasing awareness of the poor state of our environment, people are not necessarily spurred to act (Schultz, 2011). Finally, this research argues that ecosanctuaries are well placed to play a role in achieving the vision set out in Te Mana o te Taiao because they are accessible to communities, because they already undertake environmental education work and because of their existing community of volunteers and supporters. The next chapter covers how Mātauranga Māori approaches that are being adopted by ecosanctuaries further affirm this argument.

Predator Free 2050 is a significant change for ecosanctuaries. Many interviewees were sceptical of whether Predator Free 2050 could succeed but were also supportive in the hope that it would draw more funding and people into conservation and that new knowledge and technology would be generated. Some expressed concern that Predator Free 2050 might reduce funding available to ecosanctuaries. From a postdevelopment perspective, Predator Free 2050 appears an example of a mainstream development approach, as it is a universally applied, technical solution to a problem without necessarily requiring any associated "socio-cultural transformation" (Kothari et al., 2019, p.105). The next two chapters present findings on these socio-cultural aspects of ecosanctuaries.

6 Research findings: ecosanctuaries and their communities

6.1 Introduction

The relationship ecosanctuaries have with their communities is the focus of this chapter, which answers research question 2. The chapter shares interviewees' perceptions of the relationship between the ecosanctuary and their communities and whether the ecosanctuary influences or benefits their communities. From here, the ecosanctuaries' impact upon community development can then be demonstrated. The research finds that ecosanctuaries are positive community development initiatives, benefitting their communities and contributing to individual and community identity and belonging.

6.2 In what ways do ecosanctuaries influence or benefit their communities?

Interviewees were asked how they thought the sanctuary influenced or benefitted their communities. Multiple themes resulted from the question, but four clear themes topped the others. These are the *demonstration effect* of showing what is possible, a *halo effect* of change rippling out from the sanctuary, the provision of *opportunities to connect with the natural world* and *building a constituency for conservation*. The following paragraphs will discuss these themes.

6.2.1 Demonstration effect

Interviewees often discussed a benefit being ecosanctuaries demonstration of what is possible. Interviewees believed that further conservation activity would be encouraged by demonstrating conservation success. This demonstration effect is threefold. First, it shows what is at stake by highlighting our threatened biodiversity. Second, it shows that these threatened species can be rehabilitated. Third, it motivates people to become involved. Unlike conservation efforts on offshore islands or remote wilderness areas,

these projects occur in visible and accessible sites. Here interviewees discuss the demonstration effect:

> *There's been an amazing education process taking place, where people in Wellington are saying, 'That's amazing, listen to the birds, never heard that before'. So that is very direct from the education point of view, they suddenly see what can be achieved.*
>
> (Conservation project manager)

> *It showed people what could be done. So, if you're setting up your own group, you don't have to start from the ground floor. It shows you what could be done and what can be achieved.*
>
> (Sanctuary volunteer)

> *Where the sanctuary has a powerful message to tell, is showing what it can be like. The goal isn't that we save x-many Kiwi; the goal of it is to show people what is possible.*
>
> (Sanctuary staff person)

> *... part of the Wellington story now is that it's possible. If we do things collectively and at scale, we can really deliver amazing results.*
>
> (Sanctuary staff person)

> *I would doubt that 'Predator Free' would even be in people's minds, let alone being actioned on the ground, had Zealandia not existed. It's evidence of what's possible.*
>
> (Sanctuary staff person)

6.2.2 Social halo effect

In Aotearoa New Zealand, the *halo effect* has usually been about the spread of birds beyond the sanctuary fence, where the sanctuary acts as a reservoir to sustain a wider population (Bruge et al., 2021, p.1). However, as a sanctuary manager shared, *"We used to talk about the halo effect as being all about birdlife spreading out from the sanctuary, but I reckon the halo is all about the effect on the community.*" This appears to be the case with Zealandia Ecosanctuary, "with numerous community trapping groups springing up since the sanctuary began, and a project well underway to eliminate rats from Wellington beginning with the Miramar Peninsula" (Predator Free Wellington, 2021)

> *Our project is happening here because of that sanctuary. Because wildlife doesn't stay behind the fence and people see it around and want to look after it. Showing what's possible. Almost seeing the outcomes of things before you even start doing it, which is rare, and it's a great motivator.*
>
> (Conservation project manager)

The demonstration effect has developed a social halo of community change, inspiring community trapping groups and conservation strategies to create a protected halo for bird species beyond the sanctuary. For example, Kaipupu inspired the formation of Picton Dawn Chorus. The creation of the Brook Waimārama sanctuary spurred the formation of Birdlife on the Grampians, Marsden Valley Trapping Group, Birdlife Central and the Council-led Nelson Nature initiative. Zealandia has inspired numerous community trapping groups and ultimately Predator Free Wellington. As Zealandia founder Jim Lynch (2019) put it, "*The effect on people's minds and on the conservation fraternity has been considerable and has permanently changed the New Zealand conservation scene" (p.211).*

6.2.3 Opportunity to connect with the natural world

Sanctuary staff and volunteers across all three sanctuaries emphasised the opportunity to connect with the natural world as a vital benefit the sanctuary provided. This nature connection is important because it has been identified as a critical first step in challenging the prevalence of human-nature separation covered earlier in section 3.2.1 (Pyle 1993; Soga and Gaston, 2016; Zylstra et al., 2014). How could visiting a sanctuary confer benefits different to spending time elsewhere in the outdoors? Over and above what is available everywhere in the outdoors, sanctuaries *provide,* and more importantly, *facilitate* opportunities to connect with nature through volunteer opportunities, education programming and interpretation supplied to visitors. Some interviewees mentioned their focus upon connection stemmed from their awareness of research undertaken at Zealandia, or the publication of a recent book titled *Nature and Wellbeing in Aotearoa New Zealand* (Knight, 2021), and a talk they had attended from the author.

> *Conserving the richness of creation in the spread of species and their incredible interrelationships within an ecosystem enriches people. And if that is lost, we*

> *are diminished, inherently. There's a certain peak experience that people have, connecting with nature. Not only is it invaluable. It is profound for people's personal lives and experiencing life on earth, and it's one of the most important things we can do to counter the modern world and its unintended side effects.*
>
> (Sanctuary staff person)

These sentiments are encapsulated in the Brook Waimārama Sanctuary's fifteen-year vision document.

> *Enabling people to engage with the natural world in a way that promotes environmental responsibility and our community's health and wellbeing and contributes to the recovery of our local and national ecosystems. Connecting with the natural world helps us understand our environmental responsibility, the importance of a harmonious ecosystem, our mental and physical wellbeing, and how we might contribute to its restoration*
>
> (Brook Waimārama Sanctuary, 2020, p.2,4)

6.2.4 Sanctuaries build a constituency for conservation

Lynch (2019) writes that influencing people's attitudes towards conservation was a fundamental goal in establishing Zealandia, which would not have been possible had the sanctuary not been located proximate to an urban area (p.195). Likewise, John Innes, a Maanaki Whenua Landcare Research scientist, was asked if he believed a key benefit of ecosanctuaries is their potential to educate and build a constituency for conservation; he said, *"Yes, absolutely. You bet I do".* This sentiment was borne out through all the subsequent interviews.

> *Fenced sanctuaries are an important part of the conservation endeavour. For me, the most important part of it is not the mechanism by which we create the sanctuary at all. It is the fact that we're able to create them in or close to where people live and thereby have social transformation.*
>
> (Sanctuary staff person)

> *The important thing with sanctuaries is they're a connection between the community and conservation, it's like conservation in action.*
>
> (Sanctuary staff person)

This constituency building is what Craig et al. (2013) argued in section 3.2.5 is necessary to galvanise efforts to address biodiversity loss and build community.

6.2.5 Additional community benefits

A 2011 doctoral thesis by Hilary Phipps explored the value of community-based restoration in New Zealand. She identified twenty different ways in which projects delivered value, as shown in Table 5 below. The four key benefits identified earlier correlate with themes identified by Phipps (In blue/bold/italic in Table 5). Her research illustrates the multitude of benefits communities derive from restoration projects. A thematic analysis of the interview data found a great degree of correlation with Phipps's themes. Four additional themes were identified (Added in bold in Table 5) and are described in the following paragraphs.

Table 5. Value attributed to community-based restoration projects in New Zealand: Expanded from Phipps (2011).
Improves condition of local environment - Removes pest species - Provides a safe haven for native species - Facilitates ecological spill-over - Improves ecosystem health - **Building expertise in pest control and species management**
Builds sense of community - Brings people together to work towards a shared vision - Expands and strengthens social networks - Strengthens institutional networks - **Building a community resource**
Strengthens people's connection to place (***Opportunity to connect with the natural world***) - Helps make the environment accessible - Enhances aspects that are special about an area - Provides an opportunity to act - **Wellbeing benefits**
Facilitates learning and sharing knowledge **(*Building a constituency for conservation*)** - Education resource - Scientific research opportunities - Opportunity to increase eco-literacy levels in local community - Opportunity for training conservation professionals - Provides access to knowledge and inspiration

- Builds skills and confidence
Helps shape future of local regions - Demonstrates we can make a positive difference **(*Demonstration effect*)** - Helps to instil an environmental ethic - Encourages spin-off action for the environment (***Social halo-effect***) - Makes a contribution to the local economy - **Benefits from a longer-term view**

Source: Phipps, 2011, p.208.

Building expertise in pest control and species management

Ecosanctuaries build specialist knowledge in biosecurity and management of sensitive species (Bombaci et al., 2021; Bombaci et al., 2018; Butler et al., 2014; Hare et al., 2019; Innes et al., 2019; Lynch, 2019). A biosecurity example is the Brook Waimārama Sanctuary's 24/7 fence response team. If a tree or a branch falls on the sanctuary fence, an alarm goes off, and the response team is notified. They are typically at the breach site within an hour of the alarm, working to restore the fence's integrity. Then is followed up by placing traps and tracking tunnels around the breach to identify any potential pest incursion. The expertise gained in maintaining biosecurity and dealing with pest incursions is valuable and is shared between sanctuaries. Regarding the management of sensitive species, those working in ecosanctuaries learn about behaviours, preferred habitats, range, and conflicts with other species (Lynch, 2019; Innes et al., 2019; Burge et al., 2021). This knowledge contributes significantly to understanding and managing sensitive endangered species.

Benefits from a longer-term view

A long term perspective is necessary for making decisions related to sustainability (Klauer et al., 2013, p.79). The longer-term vision necessary to achieve sustainability and arrest biodiversity loss, inherent in these projects, challenges short-term, *business as usual* views that are predominant in society and which hinder a transition to less damaging ways of living (Marques, 2020, p.425). Once a fenced ecosanctuary is funded and constructed, those involved are making a long-term commitment to ensuring its success. It is not a case of building it, and once reintroduced species are established, leave them alone. Instead, such sanctuary requires constant biosecurity monitoring. This affects people involved in sanctuaries, who see their work as a long-term endeavour for

future generations. Ultimately, these longer-term views help challenge the predominance of short-term thinking in society and are encapsulated in Zealandia's 500-year vision statement. Chief Executive, Paul Atkins, shared his thoughts on it:

> *It's important. Not because it's 500-years, but because it outlives us. It forces an intergenerational view, and it forces us to ask questions of a world that will be here long after we cease to exist. So, it's not just another 10 years not just 20 years. It's a long, long way beyond this. It could be 100-years; it doesn't matter that it's 500. The intergenerational framing sets up a mindset that is different. I know that I don't own this. And I don't control it. And I know that if all I do is manage it, that won't be sufficient. What I must do, what my predecessors did, and what my successors will have to do is lead it. This is deeply active leadership for future generations.*

Building a community resource

Outside of ecological restoration gains, ecosanctuaries are often judged on their degree of economic self-sufficiency and their contribution to the region's economy as a visitor attraction. However, by taking a more holistic view of economies as suggested by Gibson-Graham (2005), it is apparent that these case study sanctuaries add significant value that is not commonly identified or articulated to their communities. Rather than viewing ecosanctuaries like a business, with visitor income contributing to the annual accounts, visitor income can also be seen as an investment in developing a significant community asset. If we consider these ecosanctuary's community assets, then the value of volunteer labour should also be considered. Taking the Brook Waimārama Sanctuary as an example, volunteers in the 2020-2021 year provided the equivalent labour of ten full-time staff. Volunteer labour makes these ecosanctuaries viable and should be factored into cost-benefit conversations. Further value is created for the community through the benefits that sanctuary volunteers receive from their involvement. In her master's thesis examining conservation volunteers in Wellington, Cowie (2010) identified an increased quality of life through connecting with others, exercise, learning, sharing knowledge/skills; and psychological benefits gained through having purpose, camaraderie, and connection to the natural world (p.120).

Wellbeing benefits

The wellbeing benefits gained from spending time in the natural world (mentioned in section 3.6.3) is the fourth additional theme to those identified by Phipps. As well as

being mentioned regularly by interviewees, our Biodiversity Strategy emphasises these benefits (DOC, 2020, p.24), and ecosanctuaries are promoting them (Shanahan, 2020, Feb 26). There are mental health benefits from disconnecting and recharging through spending time in nature and, in doing so, the potential to develop an identity of ecological belonging (Craig et al., 2013; Knight, 2021; Nisbet et al., 2011; White et al., 2019). For example, the Brook Waimārama Sanctuary (2020) state in their ten-year vision document:

> *"Nature is proven to heal, soothe and restore us, building appreciation of our connection to each other and the larger world, and combatting stress, depression and anxiety. Being surrounded by nature has a considerable impact on our health and wellbeing: Just one of the many reasons to visit your Sanctuary" (p.12).*

6.3 Ecosanctuaries as examples of community development initiatives

What is community development in the context of conservation? In Chapter 3, definitions of community development were provided and are briefly recapped here. Meade et al. (2016) describe it as a process through which people work together to foster change. At the same time, Aimers and Walker (2013) describe it as working from the bottom-up to enable citizens to have greater shared influence over economic and social assets. The 600-plus community-led conservation groups that Peters (2015) identified are certainly indicative of community development in the conservation space. Community development in the context of conservation, the *Anthropocene*, and the biodiversity crisis, is primarily about building a constituency for conservation and the mechanism by which we might see "positive environmental change" (Naro and Lichtenfeld, 2021, p.23). At an individual level, this constituency-building occurs through changing a person's mindset so that they no longer perceive environmental protection as solely the role of the state but something that they need to take some personal responsibility for (Zylstra, 2019, p.50). As interviewees expressed:

> *Maybe it's symptomatic of our age of distraction. A lot of the communications we get about the world are negative, and there's not enough positive news, you know, where's the good news?*

Author: "So are you saying that people need to feel like there is hope in order to want to act?"

"Yes,' act' does not inspire. It needs to be about love, not loss. And if we're going to win people's hearts, we are not going to do it with loss, and we're not going to do it by excluding people from places. We need to enable people to be part of the place."

(Conservation project manager)

New Zealanders had never had to make concessions for wildlife that mattered. You can plant a tree, but that's a win-win, right? I'm talking about lost wins where someone has to pay a price, and it might be in their time, or their opportunities, or in their pocket, heaven forbid, where sacrifice is needed to stop species going extinct or maintain them on the mainland.

(Researcher)

As development strategies, community-based conservation projects have regularly not delivered the benefits they were established to provide (Berkes, 2004; Mulrennan et al., 2012). This is because of authorities not wanting to share power, the community being treated as homogenous, and the assumed compatibility of commercialisation and conservation (Brooks et al., 2013, p.2). Ecosanctuaries appear to avoid many of these pitfalls by being one hundred per cent community-initiated and bottom-up, providing empowerment, and local ownership, which is often missing in projects that are established in a more top-down fashion. Furthermore, they find a semi-sustainable economic model that delivers both economic and conservation benefits.

Contributing to community identity and belonging.

The community conservation movement in New Zealand is large. Most get involved for much the same reasons as this interviewee:

We've got a biodiversity crisis going on and the government's not doing enough. I value our native flora and fauna, so I was motivated to get involved and do my bit

(Sanctuary volunteer)

These motivations have resulted in *communities of common interest* coalescing around protecting and restoring Aotearoa New Zealand's biodiversity. In turn, those involved in this work deepen their connection to the natural world and develop an identity of

ecological belonging. At the case study ecosanctuaries, the community of volunteers and supporters have their identity affirmed through regular newsletter updates, member open days and events for volunteers such as talks from visiting experts. This all helps create a sense of purpose, identity and belonging for those involved.

It is inarguable that Zealandia and now the Predator Free Wellington initiative has had a big impact on the identity of Wellingtonians and has instilled interest and pride in what has been achieved for their city's native wildlife. Similarly, in Nelson and Picton, the sanctuaries are becoming part of their community's identity.

> *The sanctuary has created awareness, and the community has a lot of pride in it.*
> (Sanctuary staff person)

> *There is a level of pride in having the sanctuary in our community, where people see that it is doing good things.*
> (Sanctuary volunteer)

People participating in these projects benefit in multiple ways. These benefits include wellbeing gained through time spent in the natural world, wellbeing from being a part of a community (Townshend et al., 2020), personal and community connectedness (Vannier et al., 2021), believing they are contributing to something worthwhile, and developing skills and expertise (Brooks et al., 2012). These benefits result in community empowerment. Furthermore, because ecological restoration is not a short-term endeavour but a long-term project, involvement in such a project forces people to adopt a longer-term view, which is more aligned toward sustainability and future generations.

Is community building a planned aspect to ecosanctuaries?

This research found that community building, or community development, was not an intentionally planned aspect of the case study ecosanctuaries. However, all the interviewees saw their communities as critical in their sanctuary's operation and long-term sustainability. Their communities are the source of volunteers, supporters, and funders. The sanctuaries focus on community building to grow the pool of people who value them, fund them, and volunteer for them. Building community in this sense occurs

through volunteering, education programmes, membership schemes and outreach activities, where greater support is co-opted.

> *So, part of the work here is about, 'how do you enable places like the Sanctuary to increasingly be seen as 'my place'? That I belong there.' For everybody, irrespective of where they come from: their ethnicity or their demographic.*
>
> *(Sanctuary staff person)*

Ecosanctuaries as community development initiatives

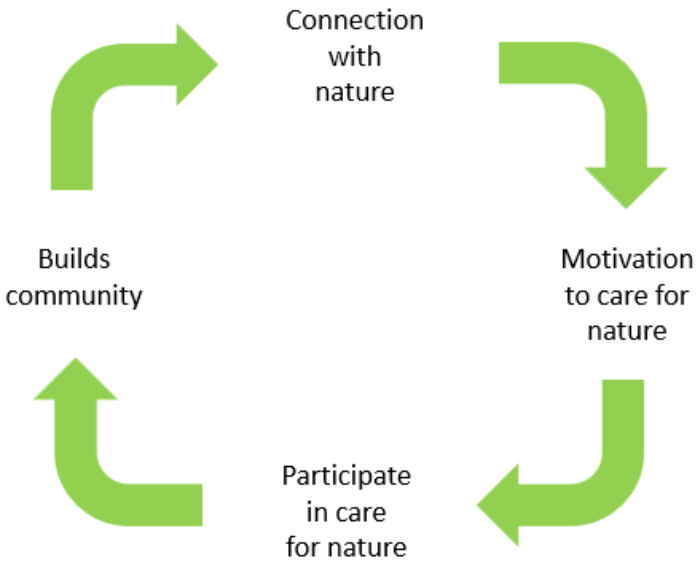
These case study ecosanctuaries are certainly examples of community development initiatives. They are community-driven, from the bottom-up, allow people to work together to foster change, and draw in large communities of support for the sanctuary vision from the wider community (Lyver et al., 2016, p.320).

> *There are massive concentric circles of support, rippling out from the idea that became this place…and this idea, the amount of volunteer effort that went into it is massive…tens of thousands of hours. And that just goes to show that people got the vision and wanted to make it happen, with their blood sweat and tears… literally. And then, of course, people paid memberships and people made donations and sponsored things.*
>
> (Sanctuary staff person)

The mechanism through which ecosanctuaries build community can be seen in Figure 9 below. People first develop a *connection to nature*, leading to a *motivation to care for the natural world*. This prompts some to *participate* in community conservation projects, and this participation *builds community* through connection to place, identity and belonging. Finally, the community coalescing around the ecosanctuary encourages others to connect with the natural world.

Figure 9. Cycle of community building through community conservation

Source: Author



Community participation reduces the *cycle of community erosion* (Figure 10, below) identified by Macy and Johnstone (2011) in their book, Active Hope, which occurs because of growing individualism precipitated by unfettered capitalism and commodification (p.123). Furthermore, this *cycle of community building* also leads people to further community involvement outside of the sanctuary. For example, most sanctuary volunteer interviewees participated in other community initiatives. Perhaps this could be attributed to the *type* of person involved in community conservation. However, Ohmer et al. (2009) found that the more engaged volunteers were in a community conservation programme, "the greater their motivation, conservation ethic, and volunteerism in other community activities" (p.377).

Figure 10. The cycle of community erosion

Source: Macey and Johnstone, 2012.

6.4 Conclusion

This research has found that these ecosanctuaries affect positive change in their communities through four interlinked benefits. These are the *demonstration effect* of showing what is possible; the *halo-effect* of conservation action spreading beyond the project site; the provision of *opportunity to connect with the natural world*; and the way that sanctuaries help *build a constituency for conservation*. None of the benefits identified are new, and each are present within the literature review. For example, the *demonstration effect* and the *halo-effect of social change* create the *social norms* that Shultz (2011) argues is necessary to change conservation behaviour (section 3.2.1). Furthermore, Craig et al. (2013) argue for the provision of opportunity for connection and involvement that ecosanctuaries provide (section 3.2.5), and the Campbell Hunt's (2013) argue that a key benefit is that sanctuaries create social support (section 3.6.2). Although the literature mentions these benefits, it does not put them together to show how paradigmatic change within the community can be made. Therefore, this research makes two points. The first is that sanctuaries could improve their constituency building by focusing upon these benefits. Second, sanctuaries could use these interlinked benefits

to better articulate the value they provide to the wider community, which may be helpful with funding and social license.

This research found that community development is not a planned outcome of ecosanctuaries, nor a focus beyond maintaining support and funding. While Peters (2015) and the Campbell-Hunt's (2013) argued that such projects had social goals, this was not a particular focus of their research. This research did examine community development and found that these ecosanctuaries focused on the wellbeing benefits visitors could gain and upon supporting their community of volunteers, but Zealandia was the only ecosanctuary that saw itself as explicitly having a community development role.

Nevertheless, this research argues that these sanctuaries are community development initiatives because they encourage people to participate in making change and return benefits to their communities, which meets the definition of community development provided by Aimers and Walker (2013) and Meade et al. (2016) in Chapter 3. These projects build "social capital", which is the value placed upon reciprocal relationships (Putnam, 2000). Richardson et al. (2019) view social capital as an asset because "you'll do more together than you ever could alone" (p.1). By working together these ecosanctuary communities provide benefits to the wider community, including the provision of opportunities to connect with the natural world and to develop an identity of ecological belonging; the demonstration that positive action is possible, motivating others to participate; the creation of a resource for the community; and the provision of wellbeing benefits. Furthermore, ecosanctuaries make a substantial contribution to biodiversity conservation in Aotearoa New Zealand, returning species that had become extinct on the mainland and evolving skills and knowledge in biodiversity restoration and species management.

7 Research findings: Iwi relationships and Mātauranga Māori

7.1 Introduction

Here, the third research question is explored: the degree of iwi involvement in ecosanctuaries and the incorporation of indigenous knowledge. The first half of the chapter is about iwi-sanctuary relationships, including how the interviewees conceived the relationship between the eco-sanctuary and iwi, the barriers to deeper partnership, and good practice in building relationships with iwi. The second part of the chapter explores the case study ecosanctuaries' incorporation of indigenous knowledge and their openness to Mātauranga Māori. Following this, the extent to which ecosanctuaries already incorporate Mātauranga Māori, the barriers to further incorporation, and the possibilities within a Mātauranga Māori approach is elucidated.

7.2 Iwi relationships

Degree of involvement from tāngata whenua

All of the case study sanctuaries have constructive and positive relationships with their local iwi but none where iwi are involved in a hands-on way outside of specific initiatives or individuals. This is congruent with existing research (Campbell Hunt & Campbell Hunt, 2013; Innes et al., 2019). The reasons why none have a particularly close or comprehensive relationship are outlined below.

How do these projects partner or work with tāngata whenua?

Zealandia has a representative from Taranaki Whānui on their board. Taranaki Whānui ki te Upoko o te Ika is the collective name of the various Taranaki iwi who are mana whenua in Wellington. Zealandia founder Jim Lynch shared that Iwi were not initially involved in Zealandia, aside from Wellington City Council staff, until 2003, eight years after the sanctuary trust establishment. It was symptomatic of the era, where Māori

engagement was less of a priority for many organisations than it has subsequently become and where Māori had less ability to compel engagement if they so desired.

The Brook Waimārama Sanctuary Trust was founded around the same time Zealandia began working with iwi. The Brook Waimārama Sanctuary has always had iwi representation on their board, and their original trust deed specified this. In 2019, the Brook Waimārama Sanctuary changed its trust deed to have three board seats for Iwi, representing the three waka that the eight tribes of the top of the South Island are descended. It addressed a concern from iwi board members that iwi participation needed to be representative. To date, the third seat has not been filled. However, it is thought this will change as more species reintroductions are negotiated, and it becomes sensible for iwi such as Ngāti Koata, who are kaitiaki of *Tuatara*, to become more involved.

Kaipupu Sanctuary has a good relationship with Te Ātiawa o Te Waka-a-Māui, whose offices and marae are in Picton. Kaipupu does not have any iwi representation on their committee. However, this is not surprising due to Kaipupu's relatively small size and because Te Ātiawa is working on in-house projects and capacity building after their recent treaty settlement.

7.2.1 Partnership with iwi

Every interviewee valued iwi relationships and thought them beneficial. Whether interviewees were sanctuary staff, volunteers, or managers of other conservation organisations, all were uniform in their desire to have closer relationships with iwi. This is for what iwi might offer in terms of deepening connection to place and knowledge, for the leverage these relationships might provide in dealing with government bodies and funders, and because they supported iwi empowerment. This suggests a rapidly changing attitude toward partnership with Tāngata Whenua from community-conservation practitioners, compared to the Campbell-Hunt's (2013) findings.

Many interviewees suggested alignment between their own ecological restoration values and those held by Māori, for example: "*Iwi are generally supportive of ecological restoration, and I say to people, 'that out of all the possibly fraught relationships between Māori and us colonisers, conservation seems one of the easier ones'*

(Researcher). On navigating these relationships, multiple interviewees emphasised the importance of forming relationships and the value that these relationships provide, such as:

> *A couple of years ago, we changed our trust deed to establish three iwi representative positions on the board and looked at what we'd need to do to engage with iwi to fill the positions. And what we realized quickly, with some excellent advice from iwi representatives, was the important thing is to establish the working relationships, and face to face meetings, and confidence and working alongside with shared goals, etc. That was a way more important first step than simply filling a position on the board.*
>
> (Sanctuary staff person)

The importance of developing relationships is stressed by Hall et al. (2021), who argue that to include indigenous peoples in ecological restoration, you must first "build respectful relationships" (Hall et al., 2021, p2). However, forming such relationships requires effort: *"Consultation and partnership are difficult. There is no easy answer otherwise we would have found it a long time ago."* (Sanctuary staff person). One reason is the sense of loss of power or control when opening to other perspectives. *"I know people working in conservation are curious, and maybe slightly fearful that some of that degree of white privilege may be taken away."* (Conservation staff person).

There must be an understanding of the other party's goals and motivations to form successful relationship. In relation to tāngata whenua involvement in ecosanctuaries, an interviewee shared the following:

> *In my experience, Iwi are supportive of ecosanctuaries. Although not all are supportive, because they're at different positions in learning about how this works, and because of the impact of colonialism. And sometimes they need to assert their own kind of kaitiakitanga in their own way and we have to give them space to do that. And sometimes that doesn't suit us. We've had experiences of that. People have blocked translocations that we've been involved with - key individuals really. But generally speaking, Iwi are enormously in favour of what we're doing. And I think there's growing recognition that there's been Pākehā agencies and individuals who have spent their careers passionately saving their taonga species. And they wish to learn more about it but it's not just about species for them, it's about their relationship to the whole, to the land in its entirety. So, there is a Western view of conservation, which they see as a bit weird. They are trying to preserve their very relationship with the land and their ancestors and their worldview.*
>
> (Researcher)

A traditional conservation model has been to develop plans and then seek iwi approval (McMurdo Hamilton et al., 2021, p.1163). However, as many interviewees pointed out, it is difficult to partner with iwi retroactively.

> *Look, the problem with a lot of what we do is that we've already started doing it before we think about bringing other people into it. And this sanctuary was a case in point. This was very largely created from a particular worldview and particular ideas. And so, it's very, very difficult to then invite somebody in and say 'look, I'd like you to partner with me', particularly if it's in relation to Te Tiriti. 'I'd like you to partner with me, but by the way, we've already built it. Sorry we didn't include you. It's already done. So, we'd actually like you to just come alongside us and carry on doing what we want to do.'*
>
> (Sanctuary staff person)

Many conservation projects seek to engage iwi after the project is established rather than involving iwi from the beginning. An example is Maungatautari Sanctuary Mountain in the Waikato region, which today has an iwi-sanctuary co-governance structure and is celebrated as a great example of partnership but travelled a rocky road to get there. This is detailed in Harms' (2018) social anthropology doctoral thesis that examined the relationship between the Sanctuary and iwi. Harms (2018) found that while the Trust had consulted with iwi in the Sanctuary's establishment, it had not done so very thoroughly, with low participation rates from Māori, and a lack of recognition of tāngata whenua cultural needs or views (p.51). This later led to tension between local iwi and the Sanctuary, which is now being addressed through a co-governance arrangement where the Sanctuary board has both an iwi chair and a non-iwi chair (Harms, 2015, p.157).

Co-governance

Many interviewees expressed a view that co-governance models were increasing, such as the management of Te Urewera National Park.

> *We have iwi crucially and applaudingly having increasing roles, and that was the one single big thing that came out of yesterday's meeting at Te Papa is that iwi co-governance of these procedures, both for Predator Free and for the biodiversity strategy, is the beginning of a tidal wave.*
>
> *(*Researcher)

Maungatautari CEO Phill Lyver shared how he thought co-governance was working:

> *It's working amazingly well. Obviously, within the history of the project, it's been a journey for the organisation. But certainly today, it's a real strength. The principle of being part of the land, or for the land, is inherent through the whole organisation. From governance all the way through to the day-to-day operations. The organisation has matured, and co-governance is adding a lot of value to our restoration work from an ecological and a cultural perspective.*
>
> *We have diversity measures within my KPIs; we're proactively looking to employ Māori; and we have a cultural advocacy staff person. That's all about educating our team and ensuring that we're starting to apply tikanga through the organisation. Those examples are simple but it's who we are now. The goal ultimately is of me leaving the maunga to manawhenua to manage and keep moving forward as they are doing.*

Another sanctuary manager shared:

> *The long-term vision is to step right back and hand it back to iwi. The long, long-term vision of what this would be is to be able to have iwi sustainably harvesting native wildlife. We've always had mana whenua representatives at the governance level, and we've promoted jobs we have available with iwi. They are being pulled in so many directions and because of that, perhaps there hasn't been the desire to be more involved at this time.*

Interviewees were open to co-governance arrangements and felt that such arrangements helped empower Māori. One interviewee felt that co-governance was great but that it is even better with Māori participation in the day to day work and operations of the sanctuary, as they felt that "*hands-on experience is where the magic is made*" (Sanctuary staff person). Co-governance with entities like DOC certainly appears to help address power imbalances between Māori and agencies. It is not clear that the same power imbalance exists between iwi and community conservation organisations. However, co-governance in Maungatautari appears to deepen the connection between iwi and the *maunga* and bring indigenous approaches into the Sanctuary.

7.2.2 How to partner with iwi

Both Māori and Pākehā interviewees were asked what they thought was the ideal way community conservation groups could go about building relationships with iwi. Some responses follow:

> *A month ago, I was at a meeting at the marae, and it was several iwi partners and ourselves looking at what needs to happen to get kiwi into the sanctuary.*

And one of our iwi representatives said 'Look, it's all well and good talking and planning, but really you need to come to us first and say, 'How can you see this? What should this look like?'. That, for me, was a light bulb moment... So, I went back to my board and said, 'We've developed this consultation, but instead, how about we go back to iwi and say what do you think?' And that would be my advice. Just go and speak to manawhenua and say, 'What do you think? How should we do this?' without any expectations. Because we're quick to go with a Western approach, and I've realised that's not the right way.

(Sanctuary staff person)

If we were to restart the program now, we would do it quite differently in terms of how we would involve mana whenua in the establishment of the project. And I think now we're looking at resetting some of that stuff.

(Conservation project manager)

So, we step towards it by setting up interactions that enable us to build trust and if that takes a little bit longer than slapping a proposal on the table and saying, 'Here, sign this, we'd like you to be a partner.' So be it.

(Sanctuary staff person)

A guy came in a couple of weeks ago about a new conservation project. He did what we like to see. We were the first people he came and saw. He was acknowledging the mana of the indigenous people here and acknowledging ahi ka roa, the occupation of the land by the indigenous people. So, he's had a very good start because he said, 'I'm starting here. Yes!'

(Tāngata whenua)

From these responses, emphasis is placed upon involving iwi from the start and the importance of building relationships. Harmsworth (2005) emphasises that relationships tend to be built by individuals, which leads to the problem of maintaining partnership when key staff-people change (p.38). Working to alleviate the relationship breakdown during staff transition is vital if organisations wish to maintain and deepen relationships with iwi. Many interviewees highlighted the importance of these interpersonal relationships:

When the sanctuary was first starting, we had a discussion with the people who were proposing the sanctuary and I suggested that they should provide space for iwi on their board. They were a bit taken aback by that, and I said that, 'the reason you want to have representation there is not just to provide the cultural expertise, it's also about building long-term relationships.'

(Tāngata whenua)

It is one thing to be aware of the importance of interpersonal relationships and another to manage them over time.

> *The sanctuary founder and I would present at an Iwi Chairs Forum about once a year. And, you know, those chairs change. And so, each time we'd rock up and give a brief presentation, an update; and some of the folks would be very much along on the journey with us and others would be brand new to it and were like, 'Who the hell are these guys. And it sounds to me like you just want to grab our taonga species and charge money.' I think one of the challenges is that relationships are between individuals. It is difficult to have a meaningful, strong relationship between two organisations based upon individual relationships.*
>
> (Sanctuary staff person)

A conservation organisation staff person shared that one challenge for Pākehā is the *"…notion of partnership and what does that mean and how do I make the iwi partners accountable to me, but they never can be in the same way that a council is accountable, or a government is accountable?"* Partnership with iwi is not contractual like it is with a government entity, or a business, where the contractual relationship takes the place of interpersonal relationships and trust built up over time. Pākehā are so habituated to contractual relationships that there is an awareness gap in the importance of relationship building and discomfort in not being able to easily make demands of iwi partners.

> *The whole thing, as you probably appreciate, at every level, is about respectful personal relationships, nothing else. And having them driven by moral compass rather than by compulsion of law is a much sounder process, and I believe it's the way that change might well-up.*
>
> (Tāngata whenua)

The following interviewees point out that community conservation groups should not expect financial or participatory input unless the project involves iwi concerns or important sites for iwi.

> *What manawhenua are saying is, 'We want to lead our own project, and if you want to support us, that's all good. But this is the direction we're heading. And this is where we want to focus things on. And this is what we value. If you want to go this way, haere mai and if you don't then that's fine. But this is where we're heading and where we want to lead'. And so, the conversation is, 'Okay then how can we support you, with what you want to do in that space.'*
>
> (Conservation project manager)

> *I mean, let's be honest, iwi around here have only just recently received settlement. And the focus, quite frankly, is being commercially viable. Because without that money coming in, you can't support anything else.*
>
> (Sanctuary staff and Tāngata whenua)

A Māori interviewee outlined how an entity could begin a relationship with iwi in Te Tau Ihu (the top of the South Island). This advice is broadly applicable across the country.

> *First, write a letter to each iwi, addressed to the Board. Send it via the iwi office reception/ communications. Set out what the project is trying to do and focus on reciprocity. Don't expect anything to happen or even to get a response, but this is how to start a relationship. It puts your project on their map (in a file, perhaps) and provides a reason for them to talk to you again in future.*
> *Second, visit each of the iwi offices and ask to have a chat with someone, preferably the CEO, setting out the same info. This is just planting a seed.*
> *Third, do the same with the hui of the Chairs of Iwi. It coordinates cross-iwi issues in Te Tau Ihu. This is also just about relationship-building.*
> *The reality is that all the iwi are busy with their own stuff. They might have their settlement completed, but a lot of their assets are tied up in land and businesses, and there's not necessarily much free cash around. Every iwi will be a bit sceptical about Pākehā initiatives and won't necessarily be interested in tāngata whenua unless they affiliate to that particular iwi, but that's not to say nothing could happen in the future. My advice is to work on long-term relationship-building and take a gently, gently, slowly, slowly approach. Being able to offer something meaningful or valuable to iwi is equally important to expecting something from them.*

The experience and advice interviewees shared in this section is affirmed by Te Arawhiti: The Office of Māori Crown Relations (2018), in its *Guidelines for engagement with Māori*, emphasising that "Effective and genuine engagement supports relationships that are based on trust and confidence" (p.1). In a Landcare Research publication on guidelines for forming relationships with tāngata whenua, Harmsworth (2005) stresses that relationships are founded upon trust, respect, and cultural understanding and that such relationships are the foundational element of partnership (p.37).

In section 3.6.2, the Campbell-Hunts' (2013) findings highlighted that most ecosanctuaries had no clear plan on how to maintain iwi relationships over time and that a strong relationship with iwi was not achieved. In contrast, this research has found that

sanctuaries do have clear plans to maintain and improve iwi relationships. This demonstrates increased ecosanctuary prioritisation of the relationship with iwi in comparison to a decade earlier.

7.2.3 Iwi capacity restraints

An unequivocal finding from this research is the degree to which many iwi are stretched by demands for consultation and by their in-house capacity constraints. All interviewees with a familiarity of the situation because they were Māori, or were involved in seeking consultation from Māori, shared versions of the following:

> *But what I've seen is a pre-settlement world where we were involved in consultation with just government essentially. Now, we've advocated for collaborative partnerships and we're getting it. And we can't deal with what we're wishing for. Because now we're really struggling to find any time to do anything. And so, that's our biggest limitation.*
>
> (Tāngata whenua)

Community conservation staff are aware of these capacity restraints:

> *There's a massive issue around resourcing. We're asking iwi to address every resource consent as well. We're asking iwi to be as resourced as you would expect a council to be.*
>
> (Conservation project manager)

> *Iwi are extremely capacity challenged. They have all kinds of statutory responsibilities, obligations, and opportunities, and about half a dozen people to do it all. They are very much in the process of upskilling and building their capacity. And I recognise that and very much appreciate where they're at.*
>
> (Sanctuary staff person)

> *And it's so tricky because the pool of people they have is finite, and they're all getting pulled in all sorts of directions. The demands on iwi are huge.*
>
> (Sanctuary staff person)

Such consultation-demand pressure is due to the increase in expectation for government departments and local authorities to consult with iwi, to honour Te Tiriti partnership commitments, and more recently, to an expectation for community organisations to do the same. In addition, because most community organisations rely on external funding,

funders now often require evidence of consultation with iwi, particularly in the environmental sphere (Department of Conservation, 2019b, p.5; Rata Foundation, 2019, p.1). While interviewees strongly identify consultation capacity as a problem, they tend to have a realistic view and see it as a stage in the journey of Māori-Pākehā relations.

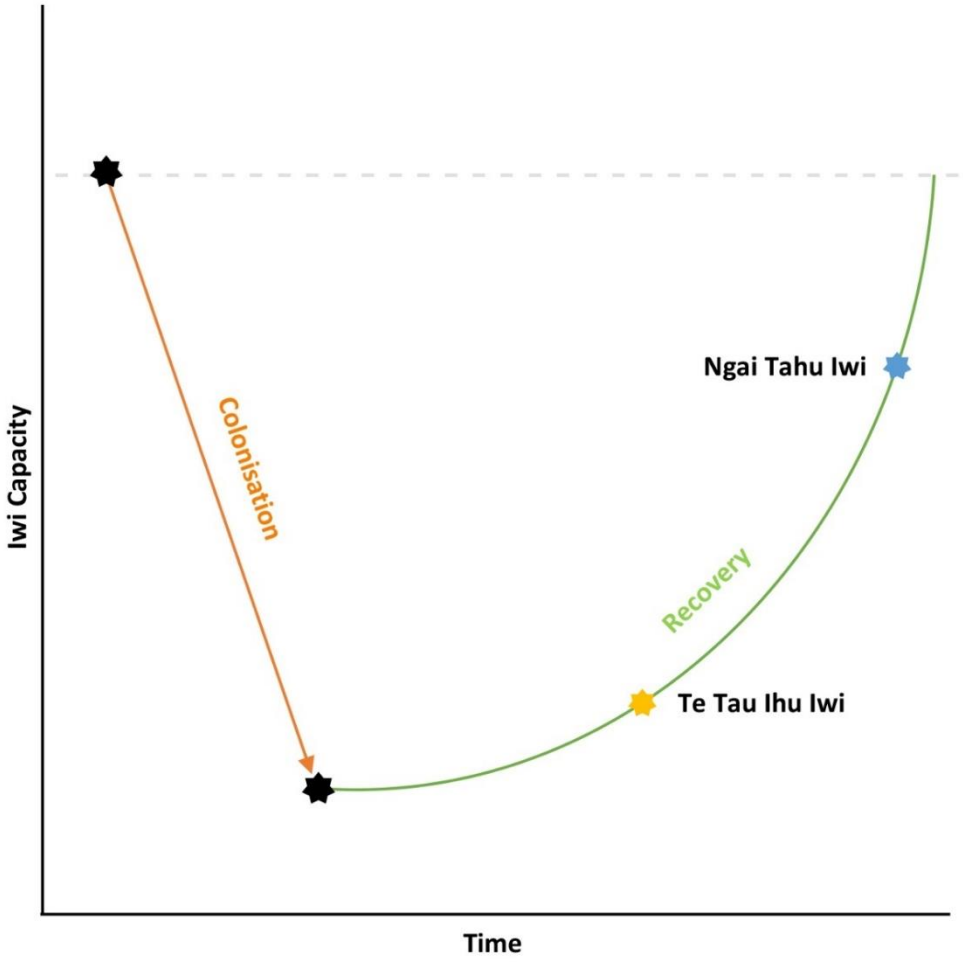
> *We're only a sanctuary and we aren't the most pressing issue. We have to realize that. There too few Māori, far too overcommitted, far too overstretched, and it's the same few people carrying this burden. How are we going to deal with that? It's an ongoing problem.*
>
> (Sanctuary staff person)

> *I've learned I've got to be very patient, I've got very resilient and be very open and agile with stuff, because it's not a case of people not wanting to but a hell of a lot of work on their plates.*
>
> (Sanctuary staff person)

A person who worked for an Iwi provided the following explanation for iwi capacity challenges.

> *Here's a diagram for you* [See Figure 11 below]. *So, this is colonisation, and this is settlement, and this is recovery. Now I'm an athlete, and if I take two weeks off, it takes me two weeks to get back. So, take 170 years off, it's going to take a long time to get up there. Ngai Tahu have had settlement for about 23 years, and they're going places. I put them here. And this is the Te Tauihu Iwi* [Top of the South Island Iwi] *here. That's what it looks like and it's not disparaging, it's just factually the reality.*

Figure 11. Impact of colonisation on iwi



Source: Drawn from interview notes

This assessment was affirmed when a *kaumātua* of Uenuku Iwi, taking questions at the 2021 Sanctuaries of New Zealand conference, was asked how best to go about partnering with iwi. He shared that *"Iwi like us who have only just received Te Tiriti settlement, are just learning to walk in our interactions with government agencies, let alone being able to also work effectively with third party organisations".*

If Aotearoa New Zealand's 600-plus community conservation groups were not pressure enough, Statistics New Zealand (2018) data clarifies that environmental organisations make up only 2% of Aotearoa New Zealand's non-profit organisations (p.11). If large numbers of these organisations are reaching out to consult with iwi, is it surprising that iwi cannot currently meet that demand? Following are some thoughts from interviewees on this consultation pressure:

In my office we're dealing with things like climate change; the review of the Resource Management Act; Te Mana o te Wai [freshwater legislation]*; three different councils in the Top of the South Island, all in plan review; we've also got the Conservation Management Strategy from DOC coming up. Given these pressures, if we are looking at consultation with community organisations…then what's the answer? Is it a patience and give us time thing? Is it that the government should be funding some of the work that iwi are being asked to do? I mean, this is how it is.*

(Tāngata whenua)

Our old people are just so busy. They're constantly being asked to be on this board or that board and are getting burned out. There are not enough of them and there is no funding for the work they're being asked to do.

*(*Tāngata whenua*)*

They're asked to engage everywhere but a lot of the time they're not reimbursed. So, it's like walking up and saying, 'We want you to sit here and consult on a strategy plan, just in your free time. And I think that's a really challenging space for iwi to be in, and because they're wanting to be involved, and they really care about the environment, and they really care about conservation, but having the capacity to do it all is hard.

(Sanctuary staff person)

I do think that iwi need to be reimbursed. I think the issue is where is the money coming from? So, when it's DOC, or the Council, one hundred per cent they should be reimbursed, but when it's a small community group, where does the funding come from?

(Sanctuary staff person)

When discussing these consultation pressures, one interviewee thought there was a place for a funded community-iwi liaison role, perhaps attached to local councils, that community groups would go to in the first instance to triage some of the consultation pressures faced by iwi. Most Councils have an Iwi Liaison role where the liaison person facilitates interaction between the council and iwi. However, this role is for council-iwi matters rather than for community groups. Nelson City Council, Marlborough District Council, Wellington City Council and Wellington Regional Council were subsequently contacted by this researcher, who found that none have a dedicated role that provides such a liaison service to community groups.

7.3 Mātauranga Māori

The Traditional Indigenous Ecological Knowledge section of Chapter 3 shared that there is currently keen interest in indigenous knowledge as a pathway toward a more holistic relationship between humans and the natural world. Indigenous knowledge is a body of knowledge generated over time by indigenous peoples based on close observation of their surroundings (Thornton and Bhagwat, 2021, p.1). Current interest in indigenous knowledge is due to the need to explore ways to live in balance with the natural world so that it is sustained to maintain human life (Escobar, 2020). Māori indigenous knowledge is called Mātauranga Māori. Te Mana o te Taiao, New Zealand's Biodiversity Strategy, emphasises the importance of incorporating Mātauranga Māori approaches to achieve Aotearoa New Zealand's biodiversity goals. However, "consideration of Mātauranga Māori remains largely unfulfilled and invisible in conservation practice" in New Zealand (McMurdo Hamilton et al., 2021, p.1162). Findings on the extent to which ecosanctuaries incorporate Mātauranga Māori are presented below.

This research found that ecosanctuaries are open to the use of Mātauranga Māori. As an example, a sanctuary manager shared, "*I think the future for the planet is really about thinking about our relationship with the land, and I think Mātauranga Māori is such a wonderful model to apply"*. Another interviewee shared:

> *There needs to be something more than just knowing that the environment is in trouble. There needs to be an actual value system behind it. And I think that's where Mātauranga Māori comes in. This entire value system has been here long before Pākehā came to New Zealand, and it's something that can bring that understanding and meaning, which engenders reciprocity.*
>
> (Sanctuary staff person)

When asked how much was currently included, interviewees gave the following responses:

> *Not enough. I'm doing a Te Reo course. I know a few phrases I can use with the kids. And where some things work, where I feel comfortable and confident enough to talk about the concepts, but as I say, I'm learning every week.*
>
> (Sanctuary staff person)

> *Yeah, I mean, we're not as forward on it in the education space as we should be, but certainly, as an organisation, we're much further forward on it.*
>
> (Sanctuary staff person)

> *We as an organisation are coming to grapple with what it means to work with that concept of Mātauranga Māori and engage with iwi. For an organisation that's prided itself on being based on science, it is a challenge to our organisation, which is predominantly white and mainly middle class. I think over time, we're seeing opportunities and places for it. Particularly conservation at place.*
>
> (Conservation project manager)

These interview excerpts above hint at how quickly change is occurring in this space. Some ecosanctuaries like Maungatautari and Zealandia have employed cultural advisors to weave tikanga and mātauranga into the sanctuary. For example, the Brook Waimārama Sanctuary has recently engaged an indigenous storyteller to develop resources to convey information to visitors through a cultural lens. Sanctuaries also include indigenous concepts in framing relationships with the environment through their publications. For example, a review of each organisation's strategic plan found that each plan included elements of Mātauranga Māori. Kaipupu shares that its mission is "Working together to enrich the community through restoration and guardianship of Kaipupu Wildlife Sanctuary" (Kaipupu, 2020, p.2). Here we see the concept of kaitiakitanga or guardianship as a central aspect of what the sanctuary perceives as its mission.

Similarly, the Brook Waimārama Sanctuary state: "Connecting with the natural world helps us understand our environmental responsibility, the importance of a harmonious ecosystem to our mental and physical wellbeing, and how we might contribute to its restoration" (Brook Waimarama Sanctuary, 2020, p.4). We can see that Brook Waimārama are also incorporating kaitiakitanga and linking it to the idea of reciprocity. Finally, Zealandia (2016) are explicit about wishing to incorporate Mātauranga Māori further and that "We want everyone who has contact with Zealandia to be inspired and empowered as change agents for biodiversity" (p.24).

The concern that cultural knowledge is as much at risk as biodiversity was discussed in section 3.4. Academics such as Wade Davis in his (2007) book, *Light at the Edge of the*

World, highlight how threatened cultural knowledge has become, with half the world's 6,000 estimated current languages being essentially dead, as they are no longer taught. Even Māori cultural knowledge has been dramatically impacted.

> *My personal view is there's been enormous loss, and that daily, older Māori who have some of the best memories are passing. And so, like language or species, this is disappearing in front of your eyes, and there is acute recognition that it's valuable and should be retained, and people are racing against time.*
>
> (Researcher)

Is Mātauranga Māori still valid? How much knowledge is there out there? An iwi interviewee shared, "*One of the problems with Mātauranga Māori is that it's been having to be relearned fundamentally, and then adapted". A*ffirming this, Royal (2007) wrote that "understanding…is fragmentary and incomplete" due to the impacts of colonisation (p.8). However, loss of knowledge is not a reason to dismiss the potential of Mātauranga Māori. For example, Berkes (2009) posits that what we should be looking at is "knowledge as process rather than content" (p.151). In addition, he argues that we need to move past the traditional knowledge versus science debate to "a science *and* traditional knowledge dialogue and partnership" (p.151).

Mātauranga Māori is based upon place-based experience. Some of the interviewees spoke about Māori connection to place and how important that is for conservation.

> *Do you know what Ōtari means? Ō is literally 'place of' and tari is 'traps' or 'snares'. Then there is Ōtari Kākā which is its full name. Today we've got many traps* [for pest species]*, and we've got Kākā back again in a different context, so those stories can really add value to the conversations we have and enable people to think more deeply about places.*
>
> (Tim Parkes, Manager Ōtari-Wiltons-Bush)

> *The Brook Waimārama sanctuary and the Te Hoiere Bat Recovery Project has only been enriched with our engagement with Ngāti Kuia. We have a strong relationship with them and a better understanding of some of the stories that they are happy to share. These are rich conversations coming out of place-based conversation.*
>
> (Debs Martin, Forest & Bird)

If Mātauranga Māori is about connection to place, can it be universally applied? An iwi staff person shared:

> *All indigenous peoples carry the essentials. They probably share 85%. The principles are sound because it's holistic living, in understanding who you are and why you are and where you're living, and why that is, and what your responsibilities are.*

So, although many conceptions are shared, Māori and their knowledge cannot be treated as a uniform whole. As one interviewee shared: "*I find it very difficult to engage with iwi when you're talking more generally, because when you're working with iwi, you're working with iwi and hapu in place, so it's very place-based because of 'ahi kha' because of the need to keep the home fires burning."* (Conservation staff person).

Pākehā interviewees tended to claim limited understanding of Mātauranga Māori, despite what seemed a reasonable amount of knowledge, because they were not comfortable that they fully understood it, and because they were tentative about cultural appropriation.

> *I'm not tāngata whenua. I sometimes feel as a pākehā that I don't have enough of a grounding in that worldview. I don't always feel comfortable because I don't want to engage in cultural appropriation.*
>
> (Sanctuary staff person)

These are appropriate responses and align with the anxiety Jones (2020) observes Pākehā experiencing "in the face of Māori anger [from land loss and cultural dispossession] and a non-heroic settler history" (p.216). In this case, how do ecosanctuaries overcome this anxiety and seek to incorporate Mātauranga Māori without engaging in cultural appropriation? An interviewee shared their thoughts on this:

> *Let's face it; everybody has been an indigenous person somewhere. It's only the words to a large degree that are misappropriated. The concepts are universal. There's a universality to those concepts that we've all carried at some stage, and some of us have been more removed from them than others. Māori have been very damaged in 170 years because the approach from colonisation was integration. It wasn't cooperation, and it wasn't the Tino Rangatiratanga that was in the Treaty.*
>
> (Tāngata whenua)

The whole thing is about collective responsibility. Building an understanding that everything we do fits into cause and effect. That's the immutable law that people don't seem to get. The behaviours that they're investing in run counter to a knowledge of cause and effect.

(Tāngata whenua)

Interviewees were asked how they thought Mātauranga Māori could be incorporated? They shared:

I've been working with manawheuna on the best way to tell stories, and that's orally. Māori traditions are communicated orally. Learning is done orally and not much is written. And I think there's an inherent tension between the Pākehā way of doing things in a written way and the Māori way of sharing knowledge. We are interested in working with mana whenua on an audio guide here to help tell the stories of these species.

(Sanctuary staff person)

I'll share with you what we are doing with Doughnut Economics. A couple of years ago, we looked at the doughnut economic model and we inverted it. So, we've created an indigenous model. At the heart of everything, we are about the maunga. At the heart of our doughnut is Maungatautari, and then our deliverables, our impact around life on land, life in the water, and climate change. In this model, we realise the SDGs [United Nations Sustainable Development Goals]. *So, for us, it's about resilient maunga, healthy maunga, and the impact. The ecological foundation provides a social foundation and it's all about people.*

(Sanctuary staff person)

We are right in the middle of Matariki (as we speak). People seem to think that it's the Māori New Year. But there is a lot more to it than just the Māori new year. It's about preparing the lands for the next season and reflecting on the year. 'What are the things that we need to be aware of?' Now I'm sure maramataka and working by the moon is just one way of considering those things, but it helps you become more in tune with them. Just looking at, 'what are the issues, and how do they interlink, and how do they interrelate?' I'll give you an example: the dam that they're building up the Lee Valley [Tasman District]. *If we ask, 'Why are we building the dam?' They say, 'It's because there's not enough water'. But it's not because there is not enough water, it's because we've over-allocated the water.*

(Tāngata whenua)

These responses illustrate the multitude of ways that Mātauranga Māori can be incorporated. This section has clarified that interviewees are concerned about their

cultural competency and do not wish to appropriate indigenous knowledge. Furthermore, Māori are working to rebuild their knowledge-base, and specific Mātauranga Māori knowledge may need to be relearned. A conclusion from this is that incorporation of Mātauranga Māori approaches will take time. However, as Berkes (2009) suggests, by viewing Mātauranga Māori as “process rather than content”, ecosanctuaries could incorporate a two-eyed seeing approach to deepen understanding while supporting Māori to rebuild their knowledge base. In this way, seeking mutual benefit is encouraged. For example, the use of Mātauranga Māori in conservation may also enable "positive outcomes for Te Reo Māori and tikanga Māori" (McAllister et al., 2019, p.2). So, rather than appropriation of knowledge, partnership, respect, mutual support, and understanding are emphasised.

7.3.1 Kaitiakitanga/reciprocity

Kaitiakitanga refers to practices that increase the wellbeing of people and the natural world through a reciprocal relationship between humans and nature (Walker, Wehi, Nelson, Beggs & Whaanga, 2019, p.2). If awareness of our biodiversity crisis is increasing, how do we get from awareness to action? How do we enact the paradigm shift toward responsibility and reciprocity toward the natural world that Te Mana o te Taiao suggests? Some interviewees believe that the paradigm shift is happening rapidly, citing the growth of community conservation groups around Aotearoa New Zealand and the Predator Free 2050 vision as examples of activities that would have seemed remote thirty years earlier. Other interviewees shared thoughts on reciprocity.

> *It’s all about changing people's mindsets. We need to see conservation as our responsibility. I’m talking about all New Zealand. Team New Zealand. This is our responsibility. It's not something that happens in National Parks at a distance, in a few sanctuaries, or by a few people or groups, it's everyone and everywhere. All joined up. Farmland is often seen as 'we don't need to do any conservation here because that's where we extract resources or produce from it'. But in fact, I feel that a conservation ethic has to inform everyday practice.*
>
> (Conservation project manager)

> *We've got to understand our place in the scheme of things. We are the apex pest species. Let's fucking own it! We need to be honest about who we are and where we are. Instead, we take almost a circumlocutory approach to the issue, talking around it and postulating fantasy to supplant reality. We can only be*

comfortable with ourselves if we learn who we are, where we are, and that living responsibly is rewarding.

(Tāngata whenua)

The task we have in front of us is fundamentally about changing the way people value the natural world. That's all people, not just certain sectors of the population. Therefore, we have to talk and behave in ways where everybody can see themselves as part of it.

(Sanctuary staff person)

The biodiversity strategy is fundamentally about people. Whether we agree with each other's worldviews or not, the ability for people to work together for a single goal is ultimately what matters. And therefore, understanding and embracing each other as different human beings is going to be important, and that includes our worldviews. And along the way, who knows, we might just notice and learn new things, about how to do stuff and how to look at things. But we must take that step towards each other because there is not enough time to spend our effort and energy on our differences. And in terms of biodiversity, if we know so much, why we are in so much trouble. And why is it getting worse? I love the idea of weaving together indigenous and Western scientific worldviews.

(Sanctuary staff person)

We are trying to get people to stop thinking, 'Oh, they're doing a great job'. There are now more Kakapo...great, then they have been doing a good job. We need to change it so that it becomes 'WE will do a good job', rather than 'THEY do a good job' – taking personal responsibility for it. I mean, you talk to local people here about Kaipupu and they say, 'Oh, you're doing a hell of a good job out there', rather than 'we're doing a helluva good job'.

(Sanctuary staff person)

These responses speak directly to the main thrust of this research, which is exploring the socio-cultural aspects of conservation and the need to focus upon people as much as the environment, identified in Te Mana o te Taiao. This research has found that interviewees are aware of the need to connect people with the natural world as a critical first step toward living more sustainably and arresting biodiversity decline. This finding is also affirmed through the literature (Abson et al., 2017; Ives et al., 2018; Kollmuss and Agyeman, 2002; Schultz, 2016; Soga and Gaston, 2016; Zylstra et al., 2014).

7.4 Conclusion

This chapter has focused on the degree of Tāngata Whenua involvement and ecosanctuary incorporation of indigenous knowledge. In the Chapter 3 literature review, the Campbell-Hunts shared findings that most ecosanctuaries had no clear plan for maintaining iwi relationships over time and that a strong relationship with iwi was often not achieved. In contrast, this research found that sanctuaries do have clear plans to maintain and improve iwi relationships, suggesting that ecosanctuaries prioritise iwi relationships compared to a decade earlier. However, this research found that strong relationships were still not always achieved.

Non-achievement of a strong relationship is attributed to iwi capacity constraints; iwi being invited to participate until after a project is commenced; lack of cultural competency in ecosanctuary staff; multiple priorities drawing ecosanctuary attention away from investing in relationships; and our colonial history where some Māori feel that "The conservation sector comes very much out of a colonial, white supremacist, patriarchal environment" (Hall et al., 2021, p.2). This research did not find evidence of the cultural bias among interviewees that the Campbell-Hunts (2013) claimed was present within ecosanctuary management, or that Lyver et al. (2019) argued is a problem within environmental management more broadly in New Zealand.

Sanctuaries are beginning to incorporate Mātauranga Māori and are enthusiastic about including more, as interviewees believed it might help build connections between people and the natural world. Examples of how the interviewees thought it might be applied were shared. Encouragingly, Pākehā interviewees are wary of overstepping their knowledge bounds and do not wish to appropriate knowledge. Incorporation of Mātauranga Māori should not mean appropriating knowledge from Māori or glossing over legitimate Māori grievances. And furthermore, Mātauranga Māori cannot be meaningfully integrated into technocratic frameworks (McKay, 2013, p.333). Instead, Pākehā must get used to stepping into the Māori world as learners, not borrowers or takers. If Pākehā very rarely step into or consider the Māori world, Aotearoa New Zealand will remain a monocultural nation. This seems a lost opportunity because, as discussed in Chapter 2, holding two worldviews can be likened to gaining binocular

vision wherein more depth and detail can be discerned than by seeing the world through a single lens.

Finally, an overwhelming majority of interviewees were not opposed to Māori cultural stewardship aspirations and were supportive of practices such as cultural harvesting of native species if populations were stable enough to support it. The research presented in this chapter indicates that ecosanctuaries are evolving toward more *biocultural approaches* to conservation, outlined in Section 3.2.5 (Bavikatte & Bennett, 2015; Gavin et al., 2018; Lyver et al., 2019). In this prior section, biocultural approaches were described as sustaining all the components of "socio-ecological systems" (Gavin et al., 2018, p.141), meaning that attention is placed on both the environment and society and culture. Encouragingly such approaches are thought to reduce conflict and enable better management of the environment (Lyver et al., 2019, p.407).

8 Conclusions

8.1 Introduction

Through the prism of hopeful postdevelopment, this research has examined three peri-urban community-initiated mainland-island conservation projects in Aotearoa New Zealand to gain insight into community development and partnerships with tāngata whenua. The previous three chapters have shared and discussed the dominant themes arising from the research. This chapter first relates these findings to the research questions and reflects upon what this research has illuminated regarding community development and partnerships with tāngata whenua. Next, the other themes that have arisen are summarised before exploring how these themes might be synthesised and applied. Following this, the study's limitations and possibilities for further research are presented. Finally, a short reflection on the research journey is offered.

8.2 Thesis summary

What has been learned about ecosanctuaries in the current conservation context, community development and partnerships with tāngata whenua?

It is helpful to revisit the research aim and research questions to see if they were met. Chapter 1 explained that the choice of thesis topic was partially due to interest in grassroots community-building and how communities can initiate and lead projects that provide ownership for aspects of their own communities' development. Preliminary research, including a literature review, identified three questions for this research. These questions were:

1. Where do ecosanctuaries fit in relation to recent strategic initiatives to tackle the biodiversity crisis in Aotearoa New Zealand?
2. How does the relationship between ecosanctuaries and their communities impact upon community development?
3. How effectively do ecosanctuaries a) partner with Tāngata Whenua and b) incorporate indigenous knowledge?

The first research question was addressed in Chapter 5. This question explored where ecosanctuaries fit in relation to recent strategic initiatives to tackle the biodiversity crisis in Aotearoa New Zealand. An overview of the case study sanctuaries was provided and, in doing so, highlighted the complexity and multiple priorities that ecosanctuaries must juggle. This complexity appears to be under-acknowledged in the literature and is vital for understanding ecosanctuary capacity limitations and demonstrating that community organisations can successfully undertake complex projects.

Following this, ecosanctuaries were situated within the broader conservation sphere, emphasising the plural responses present in Aotearoa New Zealand. However, the literature clarified that power must be devolved and shared for this plurality to succeed, and greater coordination of priorities and funding must occur.

This research found a surprisingly low level of engagement with Te Mana o te Taiao National Biodiversity Strategy. This lack of engagement was not solely due to it being a recently updated strategy but appeared to be an ongoing disengagement. Yet interestingly this research found high correlation between the strategy's goals and those held by ecosanctuaries. This research argues that ecosanctuaries are ideal partners to help enact the paradigmatic change in attitude toward the environment that the strategy calls for. This is discussed in more detail in section 8.3.4 below.

Next examined were power relations and agency, as well as funding and financial sustainability. This research found that ecosanctuaries experience tensions in their interactions with power holders and in relation to funding. This is not surprising as it is covered in the literature and is common to most community organisations. However, a few key points are worth emphasising. First is the advantage experienced by community organisations in attracting volunteer support over agency-led initiatives. Second is the framing around entry fees contributing to the creation of a community asset, helping people see these entry fees are more than simply having to pay to walk in nature. Finally, this research found that ecosanctuaries continue to demonstrate ongoing financial sustainability.

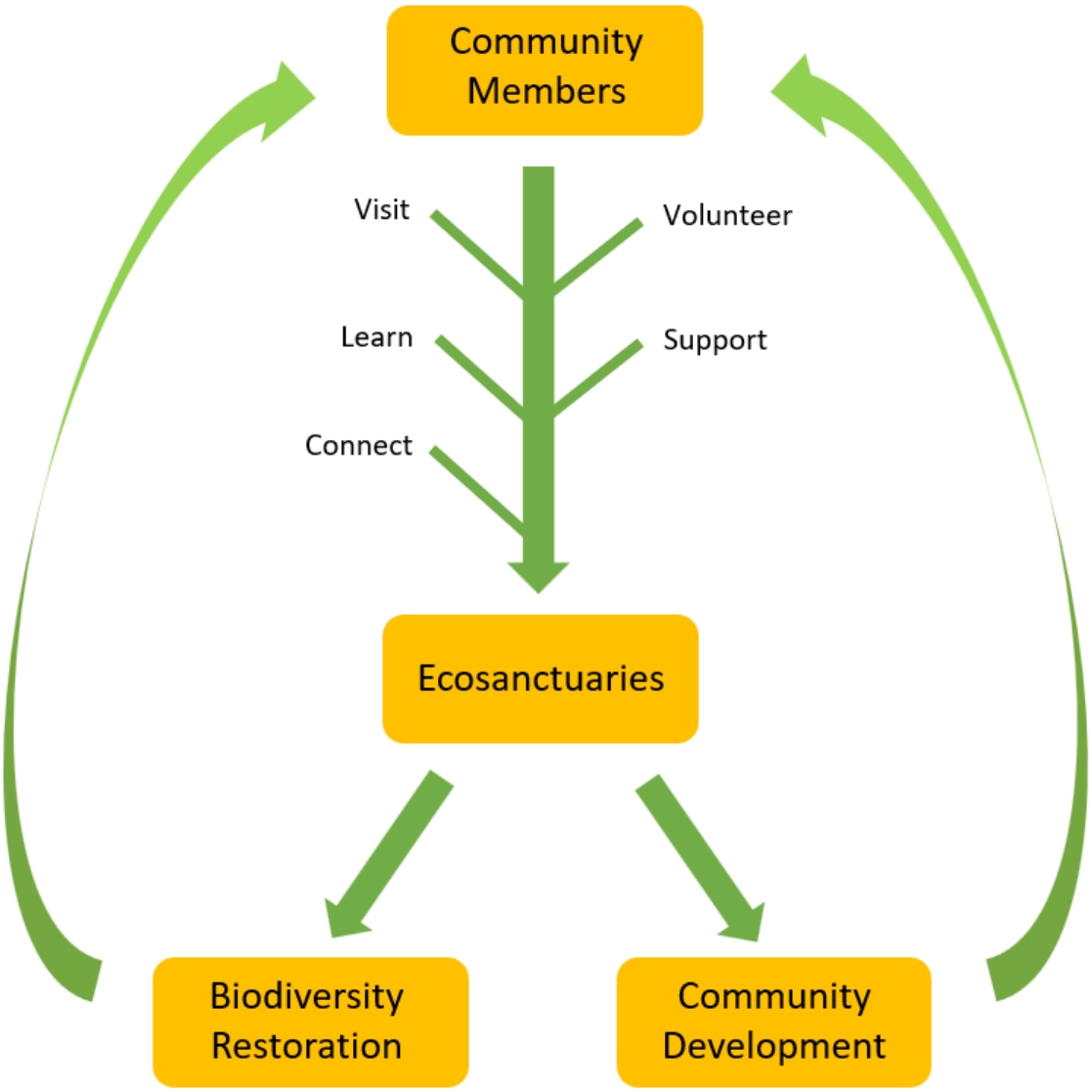
The final part of the chapter was about the effects of Predator Free 2050. This has impacted ecosanctuaries, with ecosanctuaries feeling like the initiative has partially

eclipsed them through its larger ambition and scale. The research has found that many people involved in ecosanctuaries are sceptical of Predator Free 2050 being achieved but nevertheless supportive of the effort.

Chapter 6 focuses upon the second research question around how the relationship between ecosanctuaries and their communities impact upon community development. This research has found that these projects are examples of community development initiatives because they are community-initiated, community-led, inclusive, and are effecting positive change in their community. These positive changes include the *demonstration effect* of showing what is possible: the *halo-effect* of conservation action spreading beyond the project site; the provision of *opportunity to connect with the natural world*; and that sanctuaries help *build a constituency for conservation*. These benefits are visually represented in Figure 12 (over page). Here communities gain the twin benefits of biodiversity restoration and community development resulting from their communities' involvement in an ecosanctuary.

Next, the twenty benefits identified by Phipps (2011) and a further four that this research identified were presented. These are *wellbeing benefits*, *building a community resource*, *benefits that arise from a longer-term view* inherent in these projects, and the *expertise gained in pest and sensitive species management*. The later part of the chapter argued that ecosanctuaries are examples of community development initiatives which combine communities of place and common interest and contribute to community identity and belonging. Finally, the chapter highlighted how a community is built by the ecosanctuary (Figure 10).

Figure 12: Ecosanctuaries' twin benefits: biodiversity restoration and community development



Source: Author

Chapter 7 addresses the third research question examining ecosanctuary relationships with tāngata whenua and the incorporation of indigenous knowledge. This research highlighted the key aspects to partnership with iwi, including early engagement, respectful long-term relationships, and awareness of iwi values and priorities. The three ecosanctuaries were found to have healthy relationships with iwi that they work with. These relationships are limited by iwi interest because aside from contributing to the common good, which iwi are regularly asked to do, there is comparatively little to gain

in greater involvement, given the competing priorities they currently manage. Iwi focus is upon rebuilding. Iwi are working to address historical grievances, deepen relationships with State and local government entities, build their capacity, rebuild their knowledge base, and adapt it for contemporary applications. Sanctuaries are also managing competing priorities and have limited capacity to invest in these relationships. However, this research found that there is genuine effort and willingness to deepen relationships from both ecosanctuaries and iwi despite these limiting factors.

An unexpected finding of this research is the extent to which consultation pressures currently stretch iwi. These consultation pressures were discussed in some depth by interviewees. It was beyond the scope of this research to ascertain whether this is a problem now that will dissipate quickly or whether this is a significant ongoing problem that needs addressing. It is discussed further in the recommendations for further research in section 8.4 below.

Ecosanctuaries are incorporating indigenous knowledge, and all interviewees expressed a desire to learn and engage more. Some shared thoughts on how Mātauranga Māori concepts might inform sanctuary management and education and a discussion of how it might be incorporated is presented in section 8.3.3 below. The use of indigenous knowledge starts with acknowledging the connection Māori have with *te Taiao* and the establishment of relationships and trust. Sanctuaries are using framing concepts like kaitiakitanga, which imply interconnection, responsibility, and reciprocity, and are using the indigenous names for flora, fauna, and other natural phenomena. In their desire to incorporate more indigenous knowledge, these ecosanctuaries deepen relationships with iwi, employ indigenous staff in cultural roles, and develop two-eyed seeing approaches. Finally, they may also use storytelling to connect values and beliefs to facts, making knowledge *stickier* which increases memorability.

8.3 Broader learnings

Four broader learnings emerge from this study and are discussed in the sections below. These learnings are, first, how this research might inform community-based conservation. Second, the need to contest the dominant human-nature paradigm as a first step toward addressing the biodiversity crisis. The third learning is the potential for a Mātauranga Māori approach to turn knowledge of the state of the environment into action that supports the environment, by embedding values and beliefs into facts and thereby helping to develop an ecological identity and connection. Fourth is the potential for ecosanctuaries to play a role in achieving Te Mana o te Taiao through their proximity to population centres and education programmes.

8.3.1 How might this research inform community-based conservation?

The following four factors stood out when examining how the research might inform community-based conservation initiatives. First is the advantage of community-initiated or co-created projects with broad community stakeholder involvement (Brooks et al., 2013, p.26). Projects must also be adapted to the local context and top-down or cookie-cutter initiatives are unlikely to be successful (Brooks et al., 2012, p.21267). In the long-term, engagement is best maintained through local input and control, which is essential for individual and community empowerment (Jones and Kirk, 2018, p.116), as well as the success of the project (Brooks et al., 2013, p.2).

Second, by devolving power to communities, greater promotion of an environmental consciousness occurs (Brockington et al., 2012). Put another way, greater ownership of conservation projects translates to increased environmental awareness and responsibility. This was touched upon in section 3.2.5, where Craig et al. (2013) call for connecting communities to place and to each other to achieve ecological restoration; and Lyver et al. (2016), who argue this empowerment is fundamental to "building an environmental ethic" (p.320).

Third, the project should have a clear long-term vision, such as Zealandia's 500-year intergenerational vision. It helps to frame the project in a way that challenges problematic short-term decision making. Contesting short-term decision making is at

the heart of sustainability, ensuring that today's needs are met without reducing the ability for future people to meet their own needs (WCED, 1987, p.27). Furthermore, such long-term views can assist in positioning the project in the public eye as being more valuable than just a non-profit tourism operation. Finally, it also allows for more opportunity for community members to imagine ways to become involved, particularly once a project is established, and there is a decline in the initial excitement and novelty that first drew support.

Fourth, these projects' contribution is much broader than just their ecological benefits. Projects need to articulate the non-ecological and non-market economic value they deliver, which can help secure funding and support. These include the value of community engagement in the sanctuary, which provides wellbeing benefits from time in the natural world; the creation of a community asset; the economic value of volunteer labour donations; building a constituency for conservation; and spurring other ecological restoration initiatives beyond the project.

8.3.2 Contesting the dominant human-nature paradigm

Last year saw the release of *Te Mana o te Taiao*, an updated national biodiversity strategy to guide Aotearoa New Zealand's strategic direction concerning biodiversity for the next 30 years. The strategy emphasises that we need to focus upon people as much as the environment and promotes the braiding of Western science and Mātauranga Māori.

Why is it important for conservation to focus on people as much as on the environment? New Zealand has one of the largest protected land areas of any country but also has among the highest number of threatened species, with three-quarters of birds, bats, reptiles, and frogs at risk of, or threatened with, extinction (Statistics New Zealand, 2021, 15 April). The high number of threatened species is entirely due to human-led impacts, including introduced pest species and land-use practices incompatible with sustaining our indigenous biodiversity (Craig et al., 2013, p.256). This biodiversity crisis is a *wicked problem*, meaning it is complex, has many causes, cannot be solved using current strategies, and requires people to change behaviour (Willis, 2017, p.1).

Awareness of the biodiversity crisis has seen growth in a community conservation movement over the last forty years. Community conservation/restoration groups are doing inspiring work around the country, from establishing pest-free ecosanctuaries to starting neighbourhood tree planting or trapping groups. All of this seems encouraging, but despite these efforts and the regular success stories reported in the media, these gains are tenuous, and biodiversity's rapid decline continues.

In section 3.2.1. the Public Perceptions of New Zealand's Environment survey made clear that New Zealanders are increasingly aware of the poor state of the environment but that this knowledge does not spur them to act. Contributing to the problem is a disconnection with the natural world, due to a constellation of factors related to modern lifestyles, and which have led to an extinction of experience, where people have fewer opportunities to connect with nature (Ives et al., 2017; Louv, 2008; Pyle, 1993). While knowledge alone does not spur action, the more profound people's connection with the natural world, the higher their environmental responsibility (Zylstra et al., 2014, p120).

While reconnecting with nature is a universal prescription for modern separation from the natural world, there has not been much progress toward greater connectedness with nature, nor positive behaviours flowing from this understanding (Zylstra et al., 2014). This is because conservation behaviour is not generally improved by education. Social norms guide conservation behaviour, and people see themselves (often unconsciously) as separate from nature, thereby wishing to control and shape nature (Schultz, 2011; Kureethadam, 2017). Accordingly, if we want to ensure the survival of our indigenous biodiversity, we need to ask how do we get from awareness to action? Here we turn to how Mātauranga Māori might take us from an awareness of the state of the environment to acting upon that knowledge.

8.3.3 Mātauranga Māori to turn knowledge into action

Within the European-scientific approach, ecological “knowledge becomes concentrated in fewer people with a sustained personal interest” (Pligrim et al., 2008, p.1007). This has led to indigenous knowledge being posited by many as a pathway toward reconfiguring human-nature relationships (Agrawal, 2009; Ban et al., 2018; Berkes, 2009; Briggs, 2014; Escobar, 2020; Harmsworth & Awatere, 2013; Fernandez-

Lamazares & Cabeza, 2017; Marques, McIntosh & Hatton, 2018; Daugherty & Towns, 2019).

There are three main strands to how Mātauranga Māori can turn knowledge into action. Firstly, the science of ecology has increased our understanding of the interconnectedness of ecosystems and has brought us closer to a Mātauranga Māori conception of human relationships with the natural world (Daugherty & Towns, 2019; Harmsworth & Awatere, 2013). Within this conception, it becomes evident that if the environment is not in good health, people cannot be in good health (Harmsworth & Awatere, 2013). Seeing ourselves as interconnected and interdependent with nature engenders reciprocity and care for the natural world (Escobar, 2020; Chapin et al., 2010, p.247; Hill and Coombes, 2004).

Secondly, by embedding *values* and *beliefs* into *facts*, knowledge becomes more memorable, meaningful, and relatable, helping to form an identity of belonging within the natural world and a connection to place (Fernandez-Llamazares and Cabeza, 2017). We are far more likely to care for a place if we feel a connection to it (Zylstra, 2019).

Thirdly, awareness of our interconnections and dependency upon the natural world helps us see the dissonance between practising stewardship in conservation spaces while acting in contrary ways outside them (Craigs et al., 2013). Aldous Leopold (1933) captured this dissonance.

> *One regards conservation as a kind of sacrificial offering, made for us vicariously by bureaus, on lands nobody wants for other purposes, in propitiation for the atrocities which still prevail everywhere else. We have made a real start on this kind of conservation, and we can carry it as far as the tax-string on our leg will reach. Obviously, though it conserves our self-respect better than our land* (p.639).

8.3.4 Sanctuary positioning in relation to the biodiversity strategy

This research has reviewed ecosanctuaries' engagement with tāngata whenua and communities in relation to the updated National Biodiversity Strategy. This research has found that sanctuary engagement with the strategy is low because the strategy is new,

and implementation pathways have not yet been promoted[13]. However, ecosanctuaries can play a significant role in working toward Te Mana o te Taiao's vision through the use of Mātauranga Māori approaches outlined above. Being intentional about working toward changing human-nature mindsets need not be expensive or difficult for these organisations, as much is already in place. For example, ecosanctuaries provide opportunities to connect with the natural world through volunteering and education. Furthermore, they demonstrate that environmental restoration is possible and show how conservation is also a community responsibility and not just the State's role. Finally, they effectively build a constituency for conservation within the community.

> *The vision we set out for this strategy is not only for the return of health to the natural world in a way that we can measure but also for the return of a health and vibrancy that we can feel, touch, smell and hear, as well as an emotional reconnection with nature. Central to this vision is the recognition that people are a part of nature – and that we can only thrive when nature thrives* (DOC, 2020, p.10).

That is not to gloss over some challenges. Case study sanctuaries work to deepen relationships with iwi and are aware of iwi capacity constraints due to increasing demands for consultation and partnership. They also understood the necessity for iwi to prioritise their own people and projects, which is entwined with bigger picture iwi negotiations with the State regarding Te Tiriti, the Māori – *tau iwi* relationship, and National identity.

Incorporation of Mātauranga Māori should not involve appropriating knowledge from Māori or glossing over legitimate Māori grievances. Instead, leaning into another worldview and being open to differing perspectives helps people become aware of their blind spots and assists in the journey toward Aotearoa New Zealand becoming a truly bicultural nation. Being able to hold two worldviews allows people to see more than is visible through a single lens.

[13] As this thesis was being readied for submission in February 2022, the Department of Conservation is advertising new positions focused on the implementation of Te Mana o te Taiao.

Conservation needs to be practised everywhere rather than only in conservation spaces to maintain and improve our biodiversity. Embracing Mātauranga Māori concepts could assist in developing an identity of ecological belonging and becoming much better guardians of our biodiversity.

8.4 Limitations of this study & recommendations for further research

The research aim was to use a hopeful postdevelopment lens to explore a subject in the hope that the subject matter could be approached from a fresh perspective and thereby generate insights. I believe this research has achieved the aim.

The *hopeful* approach has led to a focus on constructiveness, usefulness, and applicability rather than pure critique. Furthermore, rather than asking a more focused question, exploring a situation provided a holistic understanding of the subject. As a result, this research identified interesting and useful aspects of these projects which contribute to the literature. However, they are not definitive due to the broad nature of this research and the limitations of what can be achieved within the scope of a master's thesis. One difficulty in this exploratory research was the challenge in deciding what to tie in or leave out.

Attempting to determine or assess the degree to which these ecosanctuaries have shaped the public's attitudes would be a practical next step in following the line of inquiry this research has started upon. Such research could take the form of a qualitative survey of community attitudes toward conservation to ascertain whether the sanctuary has influenced people's understanding and engagement with the natural world.

Two linked gaps in the literature related to consultation with iwi that this research has identified are the challenges iwi face with increasing demands for consultation and the issue of who pays when non-profit community groups wish to consult with iwi. A literature review did not find any existing research into either topic. This research indicated that iwi are under some pressure due to multiple parties seeking engagement. As one interviewee shared, iwi have advocated for parties to consult with them but are

struggling to cope with the sheer volume and complexity of the requests. It is unrealistic to expect iwi to be as well-resourced as a council. Consequently, one urgent research avenue is exploring this consultation pressure. Is it actually problematic? What are the impacts on iwi and on those reaching out for consultation? Are iwi being fairly recompensed for consultation work?

The second avenue is the growing number of community organisations reaching out to iwi for consultation and partnership. This increase is being precipitated by the State, wishing to honour its Te Tiriti obligations, and then creating an expectation communicated through Government agencies, councils, and funding bodies that consultation occurs. These entities expect to pay for consultation, but what is appropriate for a small community-led non-profit organisation? Should iwi be expected to contribute because it is a community good, or should there be some recompense? Is there a place for State-funded cultural advisor roles to help triage asks from community organisations and alleviate the pressure iwi face?

Finally, there is abundant research into conservation volunteer's motivations for participation and benefits gained from participation, but one area lacking in research is the long-term engagement of volunteers. What are best practices for maintaining the motivation and engagement of conservation volunteers over time? Several interviewees raised this question. Answering it might involve reviewing practices across different community conservation organisations to identify a suite of strategies.

8.5 Reflections

This research has been a journey of discovery that has deepened my understanding and has generated insight. I feel privileged to have met inspirational people and engaged with meaningful projects.

It is challenging to synthesise differing bodies of knowledge. This research has drawn from development studies, ecology, conservation, and community development. One problem to navigate was a lack of understanding of *development studies* held by people

involved in these projects. This led me to read more about ecology and ecological ethics than I had first planned to have a common understanding with the interviewees.

As I have previously mentioned, my initial thought as a non-Māori was to avoid incorporating iwi relationships and Te Ao Māori into this research. However, I firmly believe a *two-eyed seeing* approach can better inform biodiversity restoration and ecological belonging. Furthermore, I believe that as a Pākehā, it is important to learn to sit with the discomfort of acknowledging our nation's history of dispossessing Māori from their lands and eroding their communities and culture.

Predator Free 2050 was bought to mind when I read *Under a White Sky* (2021) by Elizabeth Kolbert. The book is about various efforts to address environmental issues, and the author describes the book as being about "people solving problems created by people solving problems" (p.200). I saw parallels between Kolbert's case studies and Predator Free 2050, which illustrates how people fixate on finding solutions to environmental problems without necessarily addressing the root causes. People avoid the root cause as it requires them to question and modify their behaviour toward the natural world. I am not suggesting that Predator Free 2050 is not a worthwhile endeavour, but simply making a point that reliance upon science and technology to solve problems can blinker us from seeing the bigger picture.

In the introduction, I expressed hope that this research would contribute to the postdevelopment conversation by exploring whether these ecosanctuaries might be understood as examples of *alternatives to development*. They are plural, local, community-initiated projects with considerable benefit, and they are the opposite of top-down interventions. They challenge the status quo, and they empower their communities. However, they are also reliant upon the State, and their success depends on State funding and legislation. Furthermore, they are also reliant upon capitalism and technology. So, I would argue that they are not *beyond development* but that in this context, development occurs at the intersection of community ownership and agency, and empowering national frameworks and funding.

When reflecting upon what I have learned from using a hopeful postdevelopment lens to examine community conservation in NZ, I see that my life experience aligns with

Pieterse's (2020) explanation that "postdevelopment starts out from the realisation that attaining a middle-class lifestyle for the majority of the world population is impossible" (p.297). In sitting with this, it is easy to become despondent or believe the challenges are too great to overcome. However, I have found the stubborn optimism within the *hopeful* approach to be helpful, and I do feel like I am "a small part of an enormous project going on among many disciplines…to redefine human nature as something more communal, cooperative, and compassionate" (Solnit, 2016).

Hei te tau tītoki

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