

**“Ko au te awa, ko te awa ko au”:**

Kaitiaki active experiences of marae-based river restoration



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## He mihi

E ngā reo, e ngā mana mātauranga o Waipāpa Taumata Rau.

E ngā rangatira o Pūniu River Care tēna koutou katoa.

E mihi tēnei nāku mō tō koutou tautoko me ō koutou āwhina i ahau i te wā e ako ana  
au i te mātauranga i waenganui i a koutou katoa.

E mihi ana ki ngā tini mate i waenganui ia tātou katoa. Haere rātou, haere rātou,  
haere, haere. Kia tātou te kanohi ora, tēnā tātou katoa.

Ko Māhuhukiterangi te waka

Ko Atuanui te maunga

Ko Hoteo te awa

Ko Kaipara te moana

Ko Puatahi te marae

Ko Ngāti Rango te hapū

Ko Ngāti Whātua te iwi

Ko Melanie Te Awhina Mayall-Nahi tōku ingoa

## Abstract

This thesis looks at marae-based river restoration projects through a social enterprise lens. The purpose of this thesis is to explore how the enactment of Māori values enhances the physical and cultural wellbeing of rivers and people. The research provides insights into how kaitiakitanga is practiced and influenced by our interactions with waterways.

This research was informed through colonial politics and diverse ways of understanding Māori worlds. I used an ethnographic approach which was influenced by Indigenous-centred methodologies. The research question asks: How do kaitiaki active experiences of river restoration broaden our understandings of cultural/spiritual dimensions of river restoration?

The research finds that marae-based enterprises face cultural tensions in te ao Māori and te ao Pākehā ways of approaching business. However, Māori values provide the foundation that is needed to guide interactions with awa, whenua and whānau. The research also finds that through embodying and enacting Māori values of care for awa, the awa reciprocates that care. And lastly, this research aims to broaden understandings of kaitiakitanga through experiences of active kaitiaki. This research extends on Māori diverse economies literature through a social enterprise case study approach, emphasising cultural and spiritual dimensions of Māori business.

Explanation of the title of this thesis:

“Ko au te awa, ko te awa ko au” (I am the river, and the river is me) is a prominent whakataukī amongst Māori. The use of the whakataukī in this research is in direct reference to the pepeha of Nga Kaitiaki o te Pūniu Awa ara Te Kāhui a Hiwa:

E kore au e mate  
He kākano i ruia mai i Rangiātea  
Mai i te wāhi ngaro ki te mata o te whenua  
Ko au te maunga, ko te maunga ko au,  
Ko au te moana, ko te moana ko au,  
Ko au te ngahere, ko te ngahere ko au,  
Ko au te awa, ko te awa ko au,  
He kaitiaki tūturu ahau āra te Kāhui a Hiwa

(Pūniu River Care, 2019)

The image used on the front cover was taken by me during a visit to the Pūniu awa in the summer of early 2020. The location of the site is behind Mangatoatoa Pā.

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## Glossary of Māori terms

Aotearoa New Zealand	Pākehā New Zealander of European descent
awa river	pepeha tribal connection
hā breath of life	pūrākau story
hapū subtribe	rākau tree
iwi tribe	rangatiratanga chieftainship
kaitiaki custodian	rāwaho outsider/living away from tribal home
kaitiakitanga guardianship	rohe region
kākahi freshwater mussel	tangata whenua people of the land
karakia prayer	taonga treasure
karanga formal call	te ao Māori Māori worldview
kaumatua elders	te ao Pākehā New Zealand of European descent worldview
kaupapa topic	tikanga protocol
kaupapa Māori Māori approach	tuna freshwater eel
koha gift	tūpuna ancestors
kōrero talk/to speak	wai water
kourā freshwater crayfish	waiata song
māhinga kai food garden	waiata tautoko song of support
mana authority	wānanga to meet and discuss
mana whakahaere management	whakahaere operate
manaakitanga support	whakapapa geneology
Māoritanga Māori practices and beliefs	whakataukī proverb
marae meeting house	whānau family
mātauranga Māori knowledge	whanaungatanga relationships
mihi to greet	
pā village	

These definitions are from the online website Māori Dictionary (2020). These definitions are basic, and I advise the reader to refer to the online Māori dictionary to provide more depth to terms used.

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## Chapter One: Introduction

### 1.0 Introduction

The purpose of this thesis is to explore how the enactment of Māori values enhances the physical and cultural wellbeing of rivers and people. This thesis argues that river restoration is not just about the condition of the river, but it is about local efforts and the reciprocal nature of the relationship between water and people. This thesis focuses on a marae-based social enterprise as an example of local river restoration. The research will adopt a qualitative approach, focusing on the case study of Pūniu River Care (PRC). Qualitative data includes interviews with kaitiaki and personal diary entries (from myself). This data was analysed using a thematic analysis approach. This research provides a local and ground-level perspective of Indigenous social enterprises and how these non-profit motivated business structures interact with social and environmental concerns. Findings from this research also contribute to intersections between values and place in relation to Māori organisations.

### 1.1 Background

This thesis is a part of a larger study by Dr. Karen Fisher and Dr. Meg Parsons – Rethinking the future of freshwater in Aotearoa. The overall project “seeks to explore how diverse knowledge systems and practices might inform effective freshwater management now and, in the future,” (Marsden Fund Full Research Proposal, 2015, p. 1). This kaupapa aims to reveal and engage with Indigenous efforts to restore cultural physical wellbeing in the Waipā catchment (i.e., rivers and people). This work adds to this mahi by focusing on on-the-ground marae-based river restoration projects.

Environmental scholars in Aotearoa have contributed to extending understandings of how Māori are asserting their rights and governance in freshwater (Ruru, 2010; Te Aho, 2010 ; Parsons & Fisher, 2020; Taylor et al., 2020). A key requirement of The National Policy Statement for Freshwater (2020) includes the “managing of freshwater in a way that gives effect to Te Mana o te Wai” ( p. 9). Te Mana o te Wai recognises the importance of water and wellbeing to tangata whenua. The principles

of the fundamental concept are: mana whakahaere, kaitiakitanga, manaakitanga, governance, stewardship and care and respect. This policy highlights the importance of Māori tikanga and how it should shape legislation for taonga. Holistic approaches to natural resource management and use need to be influenced by Māori ways of thinking, being and doing (Ruru, 2018).

A significant focus of this research is the acknowledging of cultural perspectives associated with freshwater, more specifically Māori values and principles (Tipa & Nelson, 2013; C. Thomas, 2015; Clapcott et al., 2015). Māori freshwater values are informed by te ao Māori. Māori freshwater values have been reflected in policy and legislative frameworks (Harmsworth, Awatere & Robb, 2016), for example The Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010 and the Nga Wai o Maniapoto (Waipā River) Act 2012. Co-management and co-governance frameworks have given space for meaningful partnerships between Māori and the Crown.

Efforts have been made by post-colonial scholars to better understand and engage with Māori initiatives which better register the multidimensionality of Māori values and practices in processes of environmental governance (Harmsworth et al., 2016) and community-enterprise building (Henare, 2011; Bargh, 2014). These efforts depart from traditional academic practices to make scholarship better attuned and a situated resource to support Indigenous lifeworld's to flourish.

Whānau, hapū and iwi are addressing global, national, and regional issues in their own Indigenous way with the establishment of social enterprises. Social enterprises have provided whānau, hapū and iwi with mechanisms to gain profit but also to provide for their communities. Social enterprises can be understood as “an entity that utilises both public and private investment to address a social purpose” (Henare, 2011, p. 230). Social enterprises can also be referred to as community enterprises (Gibson-Graham, Cameron & Healy, 2013). In this sense, social enterprises are business models with a social mission. Profit and individual gain are not core to social enterprises but instead how the enterprise addresses social outcomes

(Gibson-Graham et al., 2013). Social enterprises have provided space for the economy to be re-envisioned and understood in diverse ways.

There is a growing literature on social enterprise and social entrepreneurship in Aotearoa (Amoamo, Ruckstuhl & Ruwhiu, 2018; Warren, Mika & Palmer, 2017; Mika, Fahey & Bensemman, 2019). In this thesis I draw largely on the work of Māori scholars who use this approach to understand the social/cultural enterprises being created by different Māori to support Māori aspirations. Social enterprises can provide spaces for Māori ways of being, seeing and doing to be recognised in the economy (Henare, 2011). Social enterprises acknowledge other ways of participating in the economy but can also question the outcomes of individual profit and how these profits can instead be focused on social or environmental concerns. The establishment of social enterprises in Aotearoa and specifically by Māori provide space for Māori to assert their rights and address their people's concerns and aspirations in ways that work for their whānau, hapū and iwi (Bargh, Douglas & Te One, 2014). For example, tribal organisations across Aotearoa are looking at social enterprises to address global issues such as climate change, yet in a uniquely Māori way. Looking at social enterprises with a Māori context highlights the cultural dimensions and values associated with such organisations.

This thesis looks at PRC which I approach through the lens of a social enterprise as it aims to address environmental and social issues associated with their awa and their whānau and hapū. Systems of knowledge production dominated by Pākehā ways of thinking have degraded the environment in Ngāti Maniapoto, and significantly impacted iwi, hapū and tikanga. Pūniu River Care's approach to river restoration is values-based and these values inform and influence PRC's interaction with te awa Pūniu. Social enterprises bring community concerns to the forefront. The social enterprise structure has been able to provide the people of PRC with the space to build hapū capability and cultural capital. Pūniu River Care provides an embodied experience of the economy where kaitiaki come to know the kaupapa of PRC through experiencing the whenua.

For the purpose of this thesis, I will refer to the individuals who work at PRC as Kaitiaki. When referring to the concept, value, or practice, I will refer to kaitiaki. There is a need for distinguishing how different people have become kaitiaki and how they practice kaitiakitanga. In the case of the PRC Kaitiaki, they are employed as kaitiaki which includes another layer of meaning to their roles.

## 1.2 Research question and objectives

Research question: How do kaitiaki active experiences of river restoration broaden our understandings of cultural/spiritual dimensions of river restoration?

As stated above, the aim of the research is to explore how the enactment of Māori values enhances the physical and cultural wellbeing of the rivers and people. To achieve this, the research has the following objectives:

- To consider how the values identified by PRC influence their restoration efforts as a marae-based enterprise,
- To explore how PRC's values are embodied and put into practice by Kaitiaki,
- To explore how conceptions of place intersect with kaitiakitanga.

## 1.3 Research contribution

This thesis contributes to theory focused on Indigenous values and place. The case study explored in this research has allowed me to go into depth about how Kaitiaki think, feel, and act. This provides for a nuanced understanding of the intersections between values, place, and practice.

This research also contributes to theory focused on the role of Indigenous social enterprises in river restoration. Although this thesis does not focus on the commercial nature of social enterprises, it does provide a further perspective on how

social enterprises can allow Indigenous groups to engage with the economy in ways that suit their own interests.

#### 1.4 Thesis overview and structure

Chapter one provides the approach and application of this research. It outlines the rationale for the research and the Aotearoa context of river restoration. Chapter one also includes discussion of the case study Pūniu River Care and the overall outline of the thesis.

Chapter two and three provide the theoretical framing of the thesis. These chapters critically review literature discussing river restoration and holistic restoration. It also includes discussion of Indigenous (specifically Māori) understandings of water and Māori values attached to water.

Chapter four provides the methodological approach to the research. In this chapter I discuss the ethnographic inspired approach which involved interviews, auto-ethnography (diary entries), active involvement in marae activities (participant observation). This approach was also influenced by Kaupapa Māori research. I took inspiration from grounded approaches to research as they can be ethically responsive. These approaches were needed given the research was on a marae and people of that marae. I analysed the data collected throughout the research process using a thematic approach. I also provide a reflective discussion on my own positionality and tensions between my Māori and Pākehā worlds. Ethical considerations and limitations of the research are also acknowledged.

Chapter five considers how the values identified by PRC influence their restoration effect as a marae-based enterprise. This chapter outlines how Māori practices have influenced PRC as an organisation and what they do as an organisation.

Chapter six explores how PRC's values are embodied and put into practice by Kaitiaki. This chapter focuses on the individual and how they have changed themselves as a result of working for PRC. This chapter also highlights the reciprocal

nature of change and how the wellbeing of individuals affects the wellbeing of the awa and vice versa.

Chapter seven also explores how conceptions of place intersect with kaitiakitanga. This chapter reflects on connections to place and connections through mahi. This chapter also adds to the discussion of kaitiaki through whakapapa and how non-mana whenua can connect to place through caring for te awa Pūniu.

Chapter eight brings together the findings from chapters five, six and seven. This chapter also includes theoretical and methodological contributions and future directions for further research.



## Chapter Two: Context

### 2.0 Introduction

In this chapter, I present the context for the research. I start with the awa because it provides the geographical location of PRC. I then move to introducing the case study, PRC, who are a group aiming to replenish the Pūniu River.

### 2.1 Location: Te awa Pūniu

One of the stories about how te awa Pūniu received its name is related to a patupaiarehe (he iwi atua - supernatural being) from Pureora forest, who sought out knowledge of the future (Pūniu River Care, 2020). There may be other stories of how te awa Pūniu received its name, but this is what PRC understand the source of the name to be. The awa is 57km long with a catchment area of 527km<sup>2</sup>, ranging from Pureora Forest to Pirongia. The awa is a tributary of the Waipā River, which is a tributary of the Waikato River. The awa is of cultural significance to those who whakapapa to the area. Historically, marae in the area used to collect tuna (freshwater eel), kākahi (freshwater crayfish) and kōura (freshwater crayfish) from the awa. The awa was once a source of kai and a place where people could swim and be with the awa. However, in certain areas of the Pūniu, Escherichia coli (E. coli) is significantly high resulting in the awa being defined by Waikato Regional Council (2020) as unswimmable. There are four marae within the Pūniu River catchment area: Mangatoatoa, Rāwhitiroa, Aotearoa, and Whakamārama.

According to Kelly (1933), the significance of the Pūniu and Mangatoatoa is evident in a whakataukī shared among the King Country Tribes:

*Mōkau ki runga,  
 Tāmaki ki raro,  
 Mangatoatoa ki waenganui,  
 Ki Te Kaokaoroa-o-Pātetere,  
 Ki Te Nehenehenui,  
 Pare Waikato,  
 Pare Hauraki.*

*From Mōkau in the south,  
 To Tāmaki in the north,  
 Mangatoatoa at the centre,  
 The long armpit of Pātetere,  
 The big forest of Maniapoto,  
 From the mouth of the Waikato River  
 in the West  
 To all of Hauraki.*

Kelly (1933) suggests this whakataukī demonstrates the mana of the pā, whereby Mangatoatoa “was the centre of the Tainui territory, not only geographically but also politically” (Kelly, 1933, p. 167). Mangatoatoa Pā is situated directly beside te awa Pūniu (see Figure 2.1).

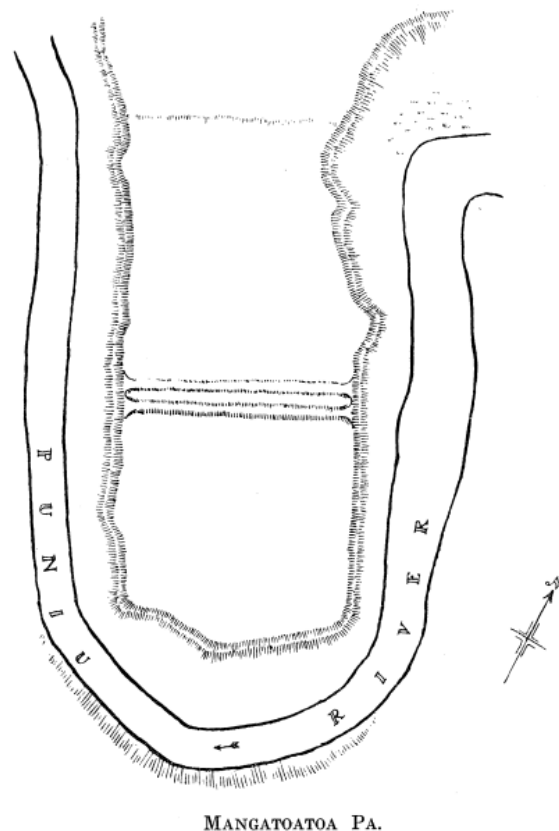


Fig. 2.1. Map showing the proximity of the Pūniu awa and Mangatoatoa Pā  
 (Source: Kelly, 1933)

## 2.2 Case study: Pūniu River Care

Pūniu River Care is a marae-based enterprise with the kaupapa to “enable local hapū to be involved in improving the water quality and replenishing taonga within the Pūniu River catchment” (Pūniu River Care, 2020). Pūniu River Care is an incorporated society and a New Zealand registered charity. Pūniu River Care was established in 2015 by Shannon Te Huia with the mission “Safe places, healthy water, healthy people”. The PRC nursery is based at Mangatoatoa Pā, as this is the marae that Shannon is from. As a result of the nursery being located at Mangatoatoa, PRC are guided and practice te reo me ona tikanga o Ngāti Maniapoto. Although PRC is based at Mangatoatoa Pā, the benefits reach the other marae in the hapū (Rāwhitiroa, Aotearoa and Whakamarama). As of October 2020, PRC has planted approximately 540,000 trees, and constructed 18 kilometres of fenced waterways to remove stock grazing, mitigate erosion and create better water quality and ecological outcomes (Pūniu River Care, 2020).

PRC aims to employ whānau and hapū of the area. This influences PRC’s approach to caring for their awa due to the whakapapa that exists between some Kaitiaki and the awa itself. Pūniu River Care have foundational values that influence their mahi. The values that underpin PRC are common values in some Māori worlds, yet PRC have defined these values in context-specific ways (see Figure 2.2).

# Ngā Uara

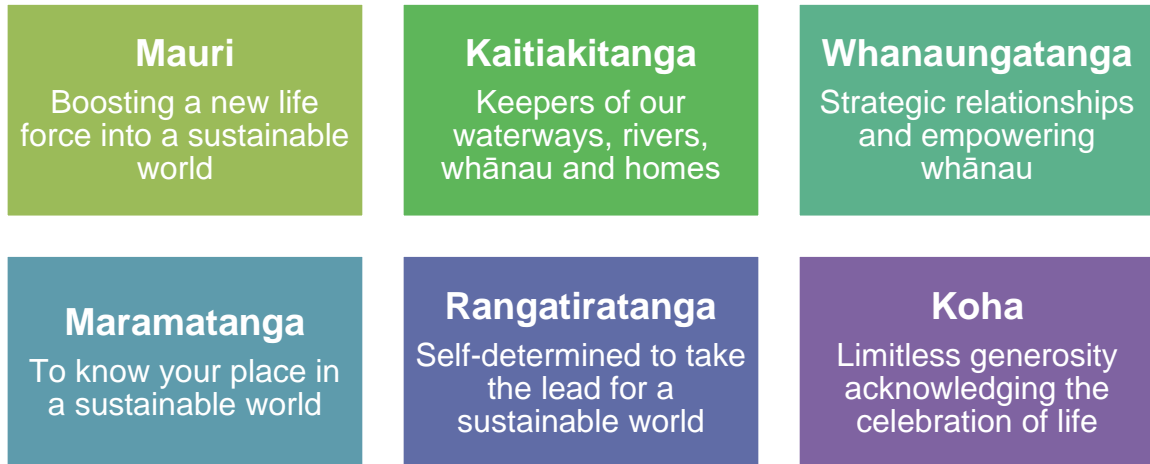


Fig. 2.2 Ngā uara o Pūniu River Care and their definitions (Source: Pūniu River Care, 2020)

As a way of conceptualising their mahi, PRC represent their values through the life stages of a seed to a fully grown tree or plant (see Figure 2.3):

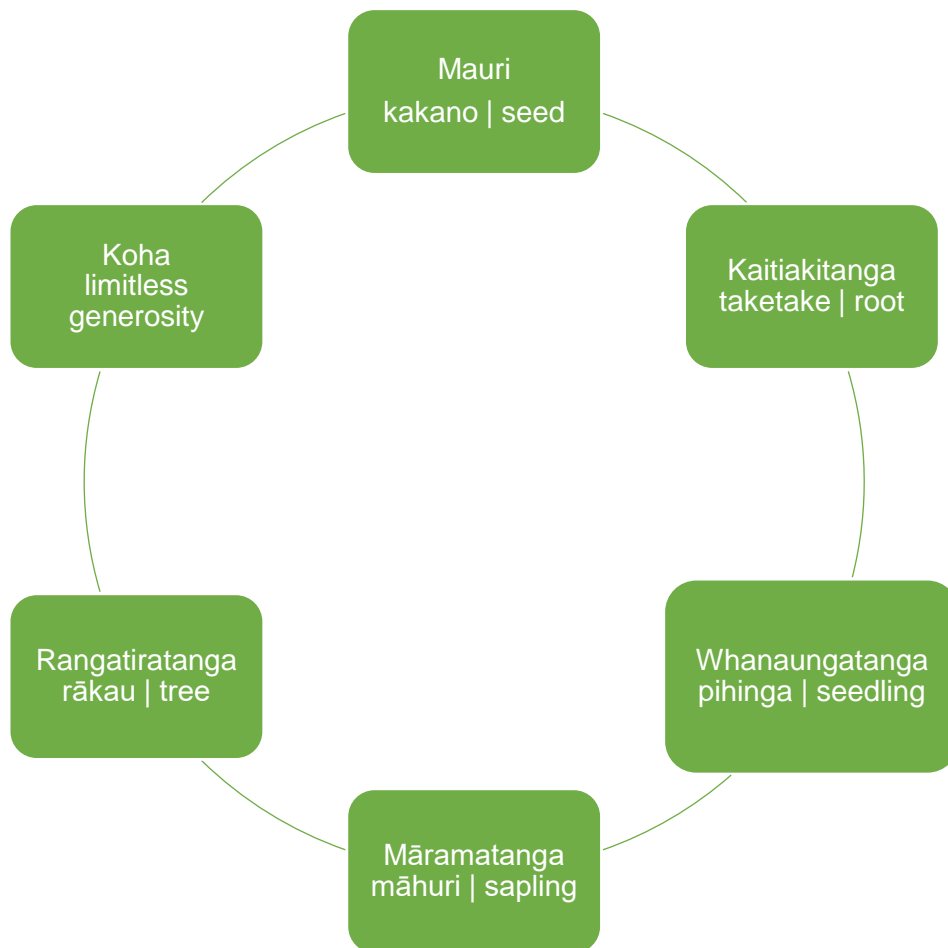


Fig. 2.3 Pūniu River Care ngā uara represented through life stages of a plant or tree.

The knowledge and mātauranga that PRC enact is context specific and place-based – Ngāti Maniapoto-centred. Therefore, a part of PRC’s mission is to increase whānau, hapū and iwi cultural capital, capacity, and capability. This influences the overall wellbeing of the people who interact with te awa Pūniu.

PRC also strives to upskill their Kaitiaki in various programmes (e.g., horticulture classes). The rākau in the PRC nursery have all been eco-sourced (collected from the area). This is to ensure the whakapapa of the plant is known and also to track the species of rākau that grow in the rohe of Ngāti Maniapoto. Pūniu River Care and the nursery began with a Te Puni Kōkiri Maara Kai grant. From there the nursery and

PRC grew. Pūniu River Care has successfully obtained funding and support from Ministry for the Environment, Waikato River Authority, Ministry for Primary Industries, Momentum Waikato, Te Puni Kōkiri, Mercury, Waikato-Tainui, Waikato Regional Council, Te Puna o Waikato - Trust Waikato, Department of Corrections and Te Uru Rākau.

### 2.3 Conclusion

This chapter discussed the contextual background for the research. The location of PRC on Mangatoatoa Pā, and more broadly a marae, allows them to articulate success for Māori, on Māori terms. Pūniu River Care is deeply situated in Māori worlds with local goals. This determines how PRC care for their awa and also how the marae guides the Kaitiaki interactions with the awa. Understanding the context in which PRC operates provides a different perspective from mainstream social innovation contexts. Pūniu River Care's location helps us to understand the multiple aspirations and values that area associated with marae-based river restoration projects. The following chapter provides the theoretical framing for the thesis.

## Chapter Three: Literature review

### 3.0 Introduction

Colonial treatment of environments worldwide has affected the state of waterways. In an Aotearoa context, Pākehā settlement heightened environmental alteration. Attempts at developing the environment included extensive logging, mining and farming (Salmond, Brierley & Hikuroa, 2019). Broadly speaking, Pākehā understandings of water reflect a 'command and control' approach that inevitably leads to the breakdown of ecosystems (Paterson-Shallard et al., 2020). This reflects broader western and colonial anthropocentric values, which in turn has led to further exploitation of the environment (Gratini et al., 2016). Understandings of the environment as a resource and commodity conflicts with Indigenous people's kin-centric relationship with the environment (Parsons and Fisher, 2020; Salmond et al., 2019). In Aotearoa New Zealand, Pākehā modifications of the environment significantly affected Māori connections to the environment. The fragmentation of landholdings through the sale of land because of Pākehā reinforcing land as property rights has also fragmented the relationship between some Māori and the environment (Salmond et al., 2019). Māori access to customary resources has also been significantly impacted (Harmsworth & Awatere, 2016). For some Māori, access to ancestral land is no longer possible due to colonial laws that are still in place today. This has also affected Māori attempts at caring for their ancestral lands. As a result, some Māori no longer have connection to the place to which they are genealogically connected. There has been increased recognition of the deterioration of water quality in Aotearoa (Salmond et al., 2014). This problem has been defined in many ways most importantly: unswimmable rivers, and the inability to use waterways as a food source. In order to understand the impact of colonisation in Aotearoa, we need to understand other ways of knowing, doing and being.

## 3.1 Colonialism

### 3.1.1 Settler colonialism

Conflict between Indigenous and non-Indigenous understandings of the environment arise because of settler colonialism. Settler colonialism refers to the dispossession of Indigenous people from their land, in order for settlers to make that land their own (Wilson et al., 2019; Tuck & Yang, 2012). Scholars have demonstrated how structures have been created and maintained as a result of the dispossession and continued dispossession of Indigenous peoples' from their land (deLeeuw & Hunt, 2018; Wilson et al., 2019). Notably, Bacon (2019) demonstrates how attempts made by settlers to eliminate Indigenous people from land include physical (genocide), cultural (assimilation), political (termination), and discursive (erasure) attempts. Eliminating Indigenous people from their land and resources was a key step towards enabling settler societies to be established (Pulido, 2018; Wilson et al., 2019; Veracini as cited in Barker, 2012). Whereas Indigenous peoples' relationship to land is "epistemological, ontological and cosmological" (Tuck & Yang, 2012 p. 5), settler colonialism is based on settler understandings of land as property and capital (Rowe & Tuck, 2017; Tuck & Yang, 2012).

The persistence of settler colonial thinking and discourses is reflected in present day understandings of the environment whereby institutional structures within settler colonies continue to disrupt Indigenous peoples' relation to land (Wilson et al., 2019). Indigenous peoples' relationship to and protection, and restoration, of land is, therefore, a form resistance to the ongoing processes of contemporary settler colonial structures (Fox et al., 2017).

## 3.2 Indigenous ontologies

The dominance of western scientific ontologies has significantly affected the realities of Indigenous peoples and Indigenous ontologies. Increasingly, Indigenous and non-Indigenous scholars refute claims that rights and practices associated with Indigenous knowledge and research are inferior to that of western scientific knowledge systems (Smith, 1999, 2006), while also acknowledging the ongoing



privileging of western scientific knowledge over other forms of knowledge (Sorlin, 2013). As a result, there have been many attempts to combine western and Indigenous ontologies. Various conflicts can result from the integration of Indigenous knowledge and forms of western science (Parsons, Nalau & Fisher, 2017). This does not simply mean that there are cultural differences, but rather that there are multiple ontologies at play, and multiple worlds being practiced (Blaser, 2009; Blaser, 2014; Cameron, de Leeuw & Desbiens, 2014). Parsons et al., (2017) argues that Indigenous ways of knowing, being, and doing is a valid form of knowledge, yet it needs to be understood and viewed as different from that of western science. This is important to acknowledge as ontologies are shaped through interactions with humans and the more-than-human (Blaser, 2009). Therefore, Indigenous practices and interactions are holistic and multidisciplinary (Pierotti & Wildcat, 2000 as cited in Weiss, Hamann & Marsh, 2013). Weiss et al., (2013) highlight the need for different ways of knowing to be recognised as it can allow for dialogue. This dialogue can then address the possibility of effective cross-cultural engagement. Negev and Teschner (2013) challenge dominant positivist forms of knowledge and instead argue that Indigenous and local knowledge can also provide objective methods.

### 3.3 Indigenous relations to water

First Nations, Indigenous Australians, and Māori understand and relate to water in diverse ways. In a North American context, First Nations respect water as they see water as a living relative (NJ Wilson & Inkster, 2018). First Nations understand that they have a responsibility to care for the water's spirit, as they would care for their relations. In particular, First Nations women have significant rights to water, as they bring life into the living world (Lawless, Taylor, Marshall, Nickerson & Anderson, 2015). This reflects the special relationship between First Nations women and the wellbeing of water. This indigenous understanding of water is not reflected in Canada's mainstream culture. Dupont et al., (2014) highlighted concerns of First Nations communities and health risks associated with tap water. First Nations in these communities often need to boil their water before consumption. This has significant ongoing impacts to their relationship with water resources.

Similar to First Nations' relationship with water, Indigenous Australians are the traditional carers of the land and water to which they are affiliated (Maclean & The Bana Yaarialji Bubu Inc, 2015). However, Indigenous Australian knowledge was only acknowledged in the National Water Initiative in 2004 (Ayre & Mackenzie, 2013). This reflects the settler colonial ways of thinking that are still present in policy today. Indigenous Australian values in relation to water are also only considered as cultural values (Ayre & Mackenzie). This creates further barriers to implementing Indigenous Australian values in water management policy. Attempts have been made to include Indigenous Australian values in community-based programmes. These programmes are often referred to as Indigenous ranger or guardian programmes (Kennett, Jackson, Morrison & Kitchens, 2010). The ranger programmes recognise Indigenous rights to country and also Indigenous rights to care for country. Ranger programmes are an example of Indigenous led approaches to land and sea management.

In Aotearoa, Māori have their own understandings and ways of regulating waterways (Te Aho, 2018). Through connection to Ranginui and Papatūānuku, Māori whakapapa is personified in the environment (Phillips & Mita, 2016; Walker et al., 2019). Therefore, to strengthen our relationship as Māori to Ranginui and Papatūānuku, we are obligated to care for the natural environment. Rivers are genealogically connected to Māori who are linked to certain areas, therefore are bound through whakapapa (Williams et al., 2018). This in turn reflects the need to acknowledge a Māori worldview as relational (Thomas, 2015; Te Aho, 2018). Freshwater is a significant taonga to Māori as it holds cultural, social, ecological and economic importance (Williams et al., 2018). Te Aho (2018) highlights the importance of freshwater to Māori through the whakataukī “Ko au te awa, ko te awa ko au”. This whakataukī can be translated to “I am the river, and the river is me”. Although this whakataukī is closely related to those who whakapapa to Whanganui Awa, it has been used amongst other Māori to express their connection to their awa.

### 3.4 Mātauranga Māori

One way that te ao Māori can be understood is through mātauranga Māori. Mātauranga Māori can be recognised as a continuum of Māori knowledge (Clapcott et al, 2018) that connects the past, present and future. Mātauranga Māori can also refer to Māori knowledge and principles (Mead, 2003). However, scholars have argued that this definition is too simplistic (Clapcott et al., 2018). Knowledge and mātauranga are mistakenly used interchangeably, mātauranga is underpinned by a Māori way of knowing, being and doing. Hikuroa (2017) defines mātauranga Māori as “the pursuit and application of knowledge and understanding of Te Taiao, following a systematic methodology based on evidence, incorporating culture, values and worldview.” ( p. 5). He also argues that mātauranga Māori consists of knowledge generated through approaches similar to that of scientific technique. However, mātauranga Māori is different from scientific methods as it includes Māori values that are formed through a Māori worldview. Māori relationality to the environment is guided by mātauranga Māori. Some Māori are intricately linked to the land that they are genealogically connected to (Tipa & Nelson, 2008). Mātauranga has developed over generations and this links Māori to the environment and determines how they understand the environment (Harmsworth & Awatere, 2016). This relationship to the land is also based on kin-centric values (Whaanga & Wehi, 2017). This connection between Māori and the environment reflects the unique ways that Māori care for the environment. Mātauranga includes past, present and future knowledge. Contemporary mātauranga has influenced and resulted in Māori frameworks addressing environmental issues (Harmsworth et al., 2016). This shows how historical mātauranga is used to inform modern approaches to natural resource management.

### 3.5 Values and principles

Values and principles shape people's ways of thinking and doing. Societies reflect the values that are upheld; therefore, western societies promote western approaches to managing and protecting the natural environment – values that are anthropocentric, capitalist, and individualistic (Gratini, Sutton, Butler, Bohensky & Foale, 2016). Some Indigenous scholars have argued the need for values-based

frameworks to guide natural resource management (Gratini et al, 2016; Harmsworth, Awatere & Robb, 2016; Artelle et al., 2018; Tipa & Nelson, 2008). Gratini et al (2016) call for the recognising of Indigenous values as human values, in the sense that values that include Indigenous influence can promote eco-centric ways of caring for the environment. However, Indigenous values are distinct to Indigenous people because we come from the land to which we connect to. For some Indigenous people, their sense of identity comes from the environment in which they are genealogically from. For Māori, we use environmental markers such as mountains, rivers, and oceans to express where we are from (Roberts et al., 1995), which is commonly known as a pepeha. Indigenous values reflect Indigenous worldviews, and these worldviews should be implemented in natural resource management approaches. Yet, it is important to distinguish Indigenous values from those of non-Indigenous values as it is the promotion of non-Indigenous values that have resulted in the current state of the environment. Harmsworth et al., (2016) highlight how values-based frameworks informed by Māori values can provide the basis for environmental standards. In this sense, a values-based framework would be guided and enacted through tikanga.

Values are reflected through the relationships between the more-than-human and human (Artelle et al., 2018). In other words, how we choose to care for the environment is a reflection of the values that we have. For Indigenous people, water is recognised as a life force, which guides our relationships to and with water. These understandings reflect our interactions with water and how we determine how to care for water. Therefore, values in natural resource management need to be made explicit and Indigenous values can guide these values-based approaches.

Ki uta ki tai is a framework that reflects a Māori way of seeing the environment. Ki uta ki tai - From the mountains to the sea acknowledges the interconnectedness between people and the environment (Kainamu-Murchie, Marsden, Tau, Gaw & Pirker, 2018). Māori values inform a ki uta ki tai framework as the management and protection of the environment is holistic. This approach differs from mainstream management as it includes ecosystems across lands and waterways, rather than singular sites of interest.

## 3.6 Key Māori principles and values

### 3.6.1 Tikanga

A Māori worldview is often determined by, and through, an ethic of what is right and wrong. This is commonly referred to as tikanga. Tikanga as defined by Mead (2013) is:

“... the set of beliefs associated with practices and procedures to be followed in a conducting affairs of a group or individual. These procedures are established by precedents through time, are held to be ritually correct, are validated by usually more than one generation and are always subject to what a group or an individual is able to do” ( p. 24).

Tikanga also includes the values and principles that influence ways of thinking and therefore behaviour.

Tikanga can also be known as Māori law (Ruru, 2018). However, defining tikanga as such limits its understanding and applicability. Scholars have argued for tikanga-based frameworks as a means of improving natural resource management (Te Aho, 2018; Harmsworth et al., 2016; Williams et al., 2018). Tikanga influences how tangata whenua relate to the environment, and in turn reflects respect for Papatūānuku. If we ignore tikanga in relation to Papatūānuku, the mauri of our environment cannot be enhanced. Tikanga-based frameworks can offer spaces for meaningful relationships between the Crown and Māori to be sustained (Harmsworth et al., 2016).

There have been attempts to include Māori ways of thinking in legislation for protecting the natural environment. Te Urewera Act 2014, Te awa Tupua (Whanganui River Claims Settlement) Act 2017 and Te Anga Pūtakerongo - Record of Understanding are examples of legal personhood being given to the more-than-human. Legal personhood was given to Te Urewera (forest), the Whanganui Awa and Taranaki Maunga, meaning they have rights as a legal person (Ruru, 2018). These natural features are recognised as tūpuna (ancestors) to those who connect to them. This legislation reflects Māori ways of understanding the environment

through the personification of natural features (Ruru, 2018), like Papatūānuku and Ranginui. This approach to natural resource management is the first of its kind in Aotearoa, and globally. However, there has also been conflict in relation to the collaborative management of the areas that have legal personhood between the Crown and mana whenua. In an attempt to understand Māori ways of seeing and being in the environment, Māori values have to be reflected upon.

### 3.6.2 Kaitiakitanga

Many scholars have come to define kaitiakitanga in diverse ways (Roberts, Norman, Minhinnick, Wihongi & Kirkwood, 1995; Kawharu, 2010; Walker, Wehi, Nelson, Beggs & Whaanga, 2019). Kaitiakitanga is considered a core value to te ao Māori. Through whakapapa to Papatūānuku and Ranginui, Māori are considered as kaitiaki, and in some ways obligated to be kaitiaki as means of upholding connections to whakapapa. However, with the inclusion of kaitiakitanga in policy such as the Resource Management Act 1991 (RMA), the meaning of kaitiakitanga has been simplified (Ruru, 2018). The Resource Management Act (RMA) 1991 defines kaitiakitanga as “...the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Māori in relation to natural and physical resources; and includes the ethic of stewardship” ( p. 44). Although this may be a reflection of a Māori understanding of kaitiakitanga, kaitiakitanga in policy is formed through the lens of Pākehā law. In this sense, understanding what kaitiakitanga is to Māori has become simplified but also complexified as there is no one understanding of kaitiakitanga or what it means to be a kaitiaki.

In ‘Ko Aotearoa Tēnei: A report into claims concerning New Zealand law and policy affecting Māori culture and identity’ (Williams, Kearney, Maaka, Ringwood & Walker, 2011a; Williams, Kearney, Maaka, Ringwood & Walker, 2011b) kaitiakitanga is defined as:

“...the obligation, arising from the kin relationship, to nurture or care for a person or thing. It has a spiritual aspect, encompassing not only an obligation to care for and nurture not only physical well-being but also mauri” ( p. 23).

This definition makes explicit reference to the spiritual world of kaitiakitanga. Kaitiakitanga in policy only includes caring for the physical environment. However, kaitiaki uphold the mauri of all beings (Phillips & Mita, 2016). Kaitiakitanga is practiced in the physical and spiritual world, which also means that kaitiaki can be from the spiritual world, or as some scholars define as the more-than-human (Ko Aotearoa Tēnei, 2011; C.Thomas, 2015). For example, ‘Te mana tuku iho o Waiwaia (Ngā Wai o Maniapoto (Waipā River) Act, 2012) states that: “The obligation to the care and protection of te mana tuku iho o Waiwaia extends to instilling knowledge and understanding within Maniapoto and the Waipā River communities about the nature and history of Waiwaia” ( p. 4). For Ngāti Maniapoto, Waiwaia is a taniwha (water spirit) who is a kaitiaki of the Waipā River (Maniapoto Māori Trust Board, 2018). This shows how kaitiakitanga establishes a connection between the spiritual and physical worlds.

Although kaitiakitanga has been included in such policies above, Pākehā law does not necessarily give space for Māori to enact kaitiakitanga. As a result of Pākehā law, some Māori do not have access to their ancestral lands. Furthermore, urbanisation for Māori communities has created further barriers to enacting kaitiakitanga (Paringatai, 2014). Therefore, kaitiakitanga as stated in Pākehā law and te ao Māori cannot be practiced. Through practicing kaitiakitanga, Māori can uphold their connection to place, and in some cases, connection to their Māori identity. Place-based knowledge has developed over space and time, and kaitiakitanga is practiced in relation to those who hold the ancestral knowledge of place (Williams et al., 2018), who can be referred to as mana whenua. Mana whenua enact kaitiakitanga as a response to the specific mātauranga that the land holds in which they are from. Due to this specific place-based knowledge, scholars have argued that kaitiaki can only be practiced by those who are connected to the land through whakapapa (Mutu, 2010). This means that only Māori of a particular locality over which they have mana can be kaitiaki (e.g., Kawharu, 2000).

### 3.6.3 Mauri

As mentioned above, practicing kaitiakitanga involves the maintaining of mauri. Mauri is vital to te ao Māori as it informs Māori ways of thinking and seeing (Pohatu,

2011). Mauri can be simply understood as a life force that binds and sustains the spiritual and physical worlds (Marsden, 2006). Mauri restores, maintains, and enhances life. Therefore, without mauri, the spiritual and physical worlds are fragmented and as a result life cannot exist (Hikuroa, Clark, Olsen & Camp, 2018)

Māori scholars have referred to mauri as a means of measuring sustainability (Morgan, 2006; Hikuroa et al., 2018). The initial mauri model by Morgan (2006) aimed to measure the mauri of whānau (economic wellbeing), the mauri of community (social wellbeing), the mauri of hapū (cultural wellbeing) and the mauri of the ecosystem (environmental wellbeing). It is clear that mauri is essential to the wellbeing of the environment, but also to people. In this sense, mauri is influenced by human interactions with the environment. How we treat Papatūānuku is reflected in the current state of our waterways in Aotearoa. Measuring mauri has provided a holistic way of determining and understanding environmental factors from an Indigenous point of view.

### 3.7 Social dimensions of river restoration

Historically, research on river restoration has often focused on physical attributes of the river. Most recently, there has been a rise in research looking at the social dimensions of river restoration (Salmond et al., 2014). For example, geomorphic focused studies have extended ways of thinking to include Indigenous relations to water (Salmond et al., 2019).

Water is a core component of social life and relationships. This move towards recognising the importance of social attributes associated with water shows the need for repairing human relationships with water. It also highlights the need for Indigenous ways of seeing and caring for the environment to be included in river restoration frameworks. Indigenous people have been significantly impacted by the treatment of their lands and waterways, yet are being relied upon to fix environmental problems. Many Indigenous communities have developed distinct management practices to sustain resources.



Scholars have argued that river restoration has the capacity to not only restore rivers but to restore communities (Fox et al., 2017; Salmond et al., 2014). In this sense, relationships between humans and rivers can be repaired and therefore allow for the decolonising of river practices and management (Fox et al., 2017). This is why it is important to recognise the significance of cultural practices associated with river restoration.

### 3.8 Freshwater governance in Aotearoa

As reflected in past attempts of freshwater management, Indigenous realities are often overlooked in regard to the management of water (Hikuroa et al., 2018). Although there is not one Māori worldview, fundamental principles and underlying values establish a Māori identity, which in turn establishes the right for Māori management of river resources (Williams et al., 2018). As discussed above, Te Aho (2018) highlights the need for prioritisation of tikanga when addressing freshwater management decisions. Not only does this acknowledge Māori as legitimate decision-makers, but it validates Māori knowledge of river restoration. When working with Māori, practices must aim to decolonise Pākehā approaches in order for Māori to lead the discussions (Thompson-Fawcett, Ruru & Tipa 2017). Attempts have been made to govern freshwater through collaborative approaches between the Crown and Māori. The Waikato-Tainui Raupatu Claims (Waikato River) Settlement Act 2010, Ngāti Tuwharetoa, Raukawa, Te Arawa River Iwi Waikato River Act 2010 and Ngā Wai o Maniapoto (Waipā River) Act 2012 are examples of co-governance agreements in Aotearoa between Māori and the Crown. These agreements have recognised hapū and iwi as kaitiaki of their awa and have also recognised the life of the rivers themselves. The above acts provide the grounds to form agreements that incorporate Māori knowledge and worldviews that reflect their connection to their awa. However, as discussed above these agreements leave little room for Māori enactment of values and principles due to Māori tikanga being incorporated in Pākehā law. To address these contradictions some Māori have taken it upon themselves to develop river restoration projects that are whānau and hapū specific.

### 3.9 River restoration projects

River restoration projects among Māori and Pākehā have been increasing throughout Aotearoa in recent years. There has been a move to understanding freshwater and the impacts of our human actions to freshwater. Some Māori have decided that they want to replenish their awa according to their own values and principles. This by Māori, for Māori approach reflects the relationship that Māori have with water and also the obligation that some feel towards repairing the state of their waterways (Fox et al., 2017). As discussed by Fox et al., (2017) Māori approaches to river restoration include spiritual and physical elements. Therefore, Māori river restoration includes enhancing the physical and spiritual relationship between the human and more-than-human. In this sense, river restoration is transformative and also political (Salmond et al., 2014; Fox et al., 2017). River restoration by whānau and hapū groups allows Māori to assert their cultural knowledge and rights specific to their awa.

### 3.10 Social enterprise and diverse economies

Social enterprises have been a vehicle for Māori to practice river restoration in ways that reflect Māori values and principles. Social enterprises are organisations that have cultural, social, or environmental missions, as well as making a profit (Gibson-Graham et al., 2013; Henare, 2011). Literature on Indigenous entrepreneurship situated in business studies has demonstrated the similarities and differences between social entrepreneurship and kaupapa Māori entrepreneurship (Henry, 2007; Henare, 2011). Bargh (2011; 2014) criticises much of this work (Māori entrepreneurship in the business studies literature) as it sometimes collapses Māori ways of doing things into western ideas of entrepreneurship, rather than the other way around led from a Māori way of doing things to better understand Māori ways and/or its relation to non-Māori concepts (see also Reihana, Sisley & Modlik, 2007). Bargh draws from Gibson-Graham's (2006) idea of diverse economies. A diverse economies framework resists the dominant western definition of economy and instead acknowledges the unseen practices that exist in the economy (Gibson-Graham et al, 2013). This approach challenges 'the economy' as being simply capitalistic, and instead argues that 'the economy' is diverse and includes various

forms of non-monetised activity (Bargh, 2012). A diverse economies approach acknowledges the importance of communities and community well-being (Gibson-Graham, 2006). Bargh (2014) argues that Gibson and Graham's diverse economies framework can provide broader insights of Māori economies. However, Bargh and Otter (2009) challenge Gibson-Graham et al., (2013) community enterprise assumptions of starting anew as this can involve the removing of histories. They look to whakapapa to inform connections to place and people.

The Māori economy is of growing popular interest in regard to the New Zealand economy and the greater global economy (Amoamo, Ruwhiu & Carter, 2018). Māori entrepreneurialism and economic systems are linked to Māori traditions; therefore, Māori economic identity has existed since pre-colonial times (Amoamo et al., 2018; Bargh, 2011). Although some Māori challenge the colonising nature of corporate systems (Bargh, 2011), continuous marginalisation by the Crown has significantly impacted Māori socially and economically (Bargh, 2018).

Māori economic culture and traditions are often seen as non-western and therefore undeveloped (Bargh, 2011). Amoamo et al., (2018) argue that the Māori economy has been defined and determined through dominant western capitalist understandings of the economy. They instead suggest that the Māori economy needs to broadly address and include Māori realities, which extends to social and cultural practices that are essential to a Māori economy. This structure can then place importance on Māori people, rather than simply the economy (Amoamo et al., 2018). This broader understanding of a Māori economy can provide a diverse approach to addressing environmental issues (Bargh, 2014). An emphasis on the relationship between people and the environment suggests new ways of understanding differently, and addressing, 'the economy'.

In reference to Māori communities, this importance may apply to the well-being of those who are connected through genealogy to land (Bargh, 2011). In this sense, a diverse economies approach acknowledges the intersections of Māori culture, land and economy. This in turn disregards the prior understandings of Māori notions of economy being under-developed and uncivilised and instead recognises the role of traditional practices in contemporary Māori economies for a wider concept of Māori

worldviews. Gibson and Graham et al., (2013) suggest that an approach that privileges a diverse economy can provide space for change. Social enterprises highlight the importance of acknowledging diverse economies, and therefore the identifying of successes other than monetary profit. Ruwhiu, Amoamo, Ruckstuhl, Kapa and Eketone (2018) argue that “success for Māori SMEs (small- to medium-sized enterprise) tempers decisions around financial growth with consideration of factors derived from socio-cultural norms” ( p. 17). This shows the importance of navigating both an economic and social world in relation to social enterprise. This thesis takes inspiration from those Māori scholars who have worked through a diverse economies approach to better situate it within Māori worlds.

### 3.11 Summary

My approach to this research is informed through colonial politics and diverse ways of understanding Māori views of the world. Reviewing existing understandings of Māori principles and values provides the foundation needed to identify how Māori values are enacted in our everyday lives. Te ao Māori is guided through tikanga, and tikanga informs how kaitiakitanga is practiced, through understanding Māori values and principles, we come to understand the aspirations of river restoration efforts from a Māori point of view. A diverse economies approach provides a framework that is more open to Māori ways to doing social enterprise, whereby you can register the various values/performances/practices of what PRC are doing as a marae-based enterprise.

## Chapter Four: Methodological framework

### 4.0 Introduction

This research is an ethnographic inspired approach, which involved interviews, auto-ethnography (diary entries), and active involvement in marae activities (participant observation). My approach to the research was influenced by a desire to foster personal relationships with the Kaitiaki. This approach provided me with the space to respond ethically to the place I was researching in and the people with whom I was interacting. The research was conducted on marae grounds; therefore, the marae guided and led my methodology. I was also inspired by research methodologies including Kaupapa Māori theory and critical geography (for example, Gibson-Graham et al., 2013; Hoskins, 2012; Smith, 1999).

### 4.1 Qualitative approach

Standard approaches to research on river restoration have historically relied on quantitative measures (see Paterson-Shallard et al., 2020). I chose a qualitative approach because I felt multiple voices needed to be heard; in particular, Māori voices. Qualitative approaches provide the space for holistic understandings of individuals' ways of seeing the world. This can also allow for individuals' experiences to be explored and multiple meanings to be recognised (Winchester & Rolfe, 2016; Ritchie, Lewis, Nicholls & Ormston, 2013).

#### 4.1.1 Case study approach

My decision of selecting PRC as a case study was influenced by the project being a part of a larger study – 'Rethinking the future of freshwater in Aotearoa' lead by Dr. Karen Fisher and Dr. Meg Parsons, a successful Marsden funded project. The overall project "seeks to explore how diverse knowledge systems and practices might inform effective freshwater management now and in the future" (Fisher & Parsons, 2015, p. 1). I was awarded a scholarship as a part of the overall project.

Early on in my candidature, the research team went on a road trip to visit and re-visit sites of interest for the overall project. This road trip included a visit to Mangatoatoa Pā and also a tour of the PRC nursery. We also met with Kaitiaki and were lucky enough to discuss some of their mahi that day (20/02/2019). It was this initial visit where I met one of the kaumātua of the marae, who is also mentor to the Kaitiaki. I introduced myself to the kaumātua and spoke about my whakapapa to Ngāti Whātua and Te Rarawa. This kaumātua began talking about the relations between Ngāti Maniapoto and Ngāti Whātua as a result of historical wars. At this point, I became very uncomfortable as the story was developing into one of conflict between the two iwi to which we both whakapapa. However, to my surprise it was a story of partnership between the two iwi, that resulted in a win in battle (refer to Battle of Hingakākā).

This story resonated with me as it highlighted the importance of sharing whakapapa to find those connections with other hapū and iwi across the motu. Although it was my first time hearing the story, I felt that choosing PRC was an appropriate choice for my own research, but also the larger research project. Through the telling of this story, I also felt a sense of acceptance by the kaumātua to continue building a relationship with them.

A case study approach was chosen to investigate how Indigenous social enterprises engage in river restoration projects. I focus on PRC as a case study as it possesses particular qualities of interest – values-based approach to river restoration (Mauri, Kaitiakitanga, Whanaungatanga, Maramatanga, Rangatiratanga, Koha). This research looks at PRC through a social enterprise lens, that is, as a marae-based enterprise. Pūniu River Care's river restoration efforts are explicitly underpinned by Māori values, principles, knowledge and practices.

I chose this case study approach because I wanted to work with one group and gain an in-depth understanding of the experiences of those involved with the case study. Case study approaches allow for detailed focus on one particular group (Yin, 2017; Hardwick, 2016). I was aware that it would take time to build the relationship between the Kaitiaki and myself; however, I was willing to put in the effort as PRC was a case study that could demonstrate a diverse range of approaches and

projects in relation to river restoration. Also, the focus of this research was on Māori approaches to river restoration.

Due to the nature of the work that the Kaitiaki are involved in, and also the nature of the relationships that needed to be built before conducting formal research, a case study approach was an appropriate option. There were many complexities involved in developing relationships with the Kaitiaki. Due to the parameters of a master's thesis, I wanted to make sure that the focus was on building meaningful and respectful relationships with the Kaitiaki, rather than extracting information from multiple case studies and individuals. As a result of my approach, I was able to see and experience the importance of space and place to the Kaitiaki of PRC. The Kaitiaki expressed their relationship with the whenua through their interactions with te taiao. A relationship-focused case study approach allowed for Kaitiaki to express their opinions perspectives and beliefs and to reflect on the practical and hands-on acts they perform as kaitiaki.

#### 4.2 Mixed methods approach

Māori worlds are interconnected and complex, therefore a mixed methods approach was needed to do justice to this complexity. Being Māori does not automatically bestow someone with the right to engage with other Māori. There needs to be ongoing negotiation based on respectful relationships. This takes time and if time is not given to those who need it, it is unlikely that respectful relationships will result. Kaupapa Māori methodologies influence my approach to the research as the methods employed do meet the needs of Māori communities. However, not all communities are the same and that is why diverse methods need to be used. Furthermore, aspects of Kaupapa Māori have become restrictive for researchers (Royal, 2012), therefore, I have been influenced by Kaupapa Māori methodologies, rather than actively defined my work as a Kaupapa Māori methodology. Mixed methods approaches allow for multiple ways of seeing and being in the world to be identified (Creswell & Clark, 2017). This means that embracing a Māori worldview meant that I needed to embrace multiple forms of information.

The multiple ways by which I have come to gather information include:

- Formal interviews
- Whanaungatanga
- Wānanga
- Waiata
- Pūrākau
- Tikanga sessions
- On-site days
- Off-site visits to significant sites
- Karakia
- Swimming in the awa
- Eating tuna from the awa

#### 4.2.1 Adapting photovoice for Māori research

The initial plan for this research was to conduct a photovoice methodological approach following Mark and Boulton's (2017) indigenised photovoice method. Māori knowledge and narratives have been sustained through traditional storytelling methods such as pūrākau (Lee, 2009; Hikuroa; 2017). Photovoice is a qualitative research method where storytelling is practiced through the involvement of pictures to aid in storytelling (Mark & Boulton, 2017). This kind of methodology responds to criticisms of extractive research methodologies that essentialise Indigenous peoples and treats them as objects to be studied (Parsons et al., 2017). Mark and Boulton (2017) challenge the traditional practices involved with photovoice and instead suggest Māori-voice. Māori-voice privileges the people involved in the research, by privileging their knowledge and voice within the research. They argue that by privileging the voice of the storyteller, notions of power associated with the researcher are diminished and instead the storyteller is the source of expertise. Māori-voice places less importance on the photos themselves (training for camera use, content of photo) and focuses on the transference of knowledge through Māori storytelling. Three cultural adaptations have been made to photovoice in order to develop the approach (see Table 4.1):



- Cultural adaptation 1: Whakataukī (proverb) → Initial interview focusing on participants narratives
- Cultural Adaptation 2: Mahi whakaahua (storytelling through photos) → Minimal training on how to use the camera. Attention focuses on empowering participant to take photos of their personal experience
- Cultural Adaptation 3: Pūrākau (meaning making of the photos) → Participants tell stories about their own photos in a Māori-centred way

Table 4.1 Adapted theoretical framework and methodology of Māori-voice (Mark & Boulton, 2017)

<b>Theoretical Framework</b>	<b>Methodology</b>
Whakataukī (proverb): Ko te kai a te Rangatira he korero [Speech is the food of chiefs]	Interview One: Participants tell their stories about PRC
Mahi Whakaahua: Ko te korero ma ngā pikitia [Storytelling through photos]	Photo-taking: Participants receive camera; they take photos representing their experiences associated with PRC
Mahi Whakaahua: Ko te korero ma ngā pikitia [Storytelling through photos]	Interview Two: Participants share the stories of their photos

Scholars have argued that photovoice allows commonly minimised voices to be heard and seen in ways that represent them on their own account (Jackson, Pollino, Maclean, Bark & Moggridge, 2015; Maclean & The Bana Yarraliji Bubu Inc., 2015). However, in my experience, the photovoice method provided boundaries for those involved in practical hands-on work. The Kaitiaki and I were excited about the photovoice approach and how their photos could provide an inside point-of-view of their experience of the Pūniu awa. Yet, we found that the camera hindered their work practices and in some ways became a barrier to them completing their mahi. Although photovoice centres participants' point-of-view, it can also be in conflict with their everyday practices. Photovoice as a decolonial tool is well-intentioned;

however, in my case, photovoice was not practical due to the hands-on mahi that Kaitiaki needed to do (e.g., use of camera while planting not practical).

After realising the difficulty of conducting photovoice with the Kaitiaki, the approach to the research had to change. It was my responsibility as a researcher but also as a person who the Kaitiaki trusted to create another space where they would feel comfortable sharing their experiences. Indigenous researchers often talk about an ethics of care and responsibility to participants (Ayre et al., 2018 & Bawaka Country, Suchet-Pearson, Wright, Lloyd & Burarrwanga, 2013; Watson, 2012). This influenced my approach to the research and my focus then changed to what do the Kaitiaki want to do and how do they wish to engage with me as a researcher. The Kaitiaki and myself discussed what could work for them and on their terms. In the end, we found that interviews would work better for the Kaitiaki as these interviews could also be done while the Kaitiaki were working. The research evolved and relationships needed to evolve with that.

Due to my experiences on my own marae, and other marae, I learned to adapt to the space I occupied while at Mangatoatoa Pā. The marae is a ritualised space, even if I do not know the specific rituals related to the place I am in, I am aware of broader rituals and protocols. I recognise the marae as a living force, which also provides a guide for me and the interactions I have with people on the marae. In this sense, I know that certain practices need to be played out, and I chose to immerse myself in those practices because of my own upbringing/experience. To put it simply, this just meant “chipping in” (e.g., weeding, seeding, counting trees in nursery etc.), and therefore whakawhanaungatanga. Acts associated with these practices facilitated building rapport with the Kaitiaki, which eventually led to a point where formal interviews were appropriate and safe for Kaitiaki and myself.

#### 4.2.2 Semi-structured interviews

Interviews are commonly used in qualitative research to gain an in-depth understanding of things (Dunn, 2016). As stated previously, this thesis is a part of a wider research project. The ethically approved research questions were used to guide questions specific to my research (see Appendix C). This research does not

seek to directly answer Theme 1: Governance. However, the themes pointed to in these questions have informed and influenced ideas around Theme 2: Knowledge and approach to restoration, which my project addresses.

In approaching this research, I sought to undertake interviews; however, the transactional and extractive nature of interviews did not fully capture the relational nature of the research. As a young researcher, I have been trained to learn about methods (such as interviews) and data (interview transcripts) but the reality of doing research with Māori challenged my understanding of what counts as research and how to do it. While I did conduct a set of 'formal' interviews, this represents only one form of interaction and engagement undertaken in my research. I felt uncomfortable not knowing when the interviews started or ended. For example, when talking to the Kaitiaki while out weeding, I would realise that the conversation we were having should have been recorded. However, during those times, I would reflect on what the Kaitiaki said and note it down to ask them later. Yet, most times, I did not have the resources to be recording the information or even noting the information down while working with the Kaitiaki. Furthermore, there were times when the Kaitiaki spoke to me about certain things because it was appropriate at that time. Formal interviews do not always provide a space where individuals can express themselves spiritually.

The semi-structured interviews were still an important part of the research as it allowed the Kaitiaki to share their own point of view and to be listened to. This is a significant part of the research process as the Kaitiaki and myself further developed our relationship through whanaungatanga. Whanaungatanga can refer to the creation of relationships through sharing experiences (Mead, 2003).

Whanaungatanga was a significant aspect to the gathering of field work. This entailed making multiple visits down to PRC and offering my time to do volunteer hours. These volunteer hours allowed me to talk to the Kaitiaki in spaces that were safe for them. At times, I would often find myself outside of my comfort zone as the practical mahi I was doing was something I had never done before. For example, learning how to re-pot plants, weeding and identifying plants. At times when I needed support, the Kaitiaki would explain to me some things they learnt when they first began their mahi at PRC (e.g. have a spare pair of clothes on rainy days). To get to

this point, there needed to be reciprocal exchanges between the Kaitiaki and myself. This mostly relied on my relationship with the Kaitiaki individually.

Through these experiences with the Kaitiaki, our reciprocal relationship solidified to the point where I felt comfortable about interviewing the Kaitiaki, as I knew our time spent on the pā created a relationship that was trustworthy. Time and vulnerability were needed to get to the point where I could interview the Kaitiaki. The relationships I built with the Kaitiaki was a result of experiencing their everyday life with them at PRC.

Reflecting on my first visit to PRC, the sharing of whakapapa allowed myself and the Kaitiaki to come to an understanding of self and our connections to each other through our tūpuna. Through the sharing of our whakapapa, we were able to identify close relationships between Ngāti Whātua (where I am from) and Ngāti Maniapoto (where PRC is based). This shared connection resulted in an open and welcoming invitation to complete the mahi that I needed to do with the Kaitiaki. The change in demeanour from both sides allowed Kaitiaki and myself to open up to each other and share the history of ourselves. I often reflect on this meeting and the constant interchanging of insider and outsider perspective. I am an insider because I am Māori, yet I am an outsider because I am from Ngāti Whātua. This was a constant battle within myself, yet the Kaitiaki accepted me for who I am and where I am from.

In the interests of the Kaitiaki, the interviews were conducted by the awa, or at the PRC nursery. Having a korero by the awa created an environment where the Kaitiaki could reflect on their relationship with the awa, whilst also being with the awa. Conducting the interview by the awa felt as if the awa was also a part of the korero. For other Kaitiaki, they chose to do their interview in the office, more so for practicality.

The interviews were semi-structured and I chose this approach as it provides more space for organic conversations and flexibility (Dunn, 2016). The Kaitiaki decided they wanted to be interviewed with other Kaitiaki. Most of my time spent at PRC was at the nursery, and with the nursery group. Therefore, the invite was open to any Kaitiaki but I formed closer relationships to those in the nursery team. The interviews

are not the primary driver of gathering information, but it is the people upholding mana/tikanga about what to share and not to share. In a Pākehā sense, this could relate to ethics. Yet, the relationships that I formed with the Kaitiaki went beyond the space of formal interviews, therefore beyond ethics.

#### 4.2.3 Kaitiaki who I worked with closely

**Kaumātua:** This kaumātua has been involved with PRC since its beginnings on the marae. He is considered to be a significant pillar to the PRC structure and considered a mentor by those at PRC. His aspiration is to share the knowledge of Ngāti Maniapoto with the Kaitiaki in order to instil and practice the te reo me ona tikanga of Ngāti Maniapoto. I worked with this kaumātua because of my initial visit to PRC and also because of the importance of getting a kaumātua perspective of being a Kaitiaki at PRC (verbal consent received, therefore used 'Kaumātua' in place of name).

**Ngaire:** Has had a lot of experience in all aspects of working at PRC and is also seen as a mentor to other Kaitiaki due to her leadership qualities. I worked with Ngaire because her mentorship guided the practices I experienced at PRC. Ngaire is not only a mentor to other Kaitiaki, but also to myself during my time at PRC.

**Kellie:** Based in the nursery team but has also had a lot of experience working across PRC. Kellie is a mentor to other Kaitiaki and was one of the first Kaitiaki to show me the work that is done at PRC. I worked with Kelly because she often reflects on her journey through learning about Māoritanga and how her position as a Kaitiaki is a part of that learning process.

**Tumanako:** Tumanako has whakapapa to the pā, and a natural part of being a marae-based enterprise is a whānau-centred approach. Tumanako began as a planter but has had experience in all aspects of the nursery such as seed collection, germination, propagation and plant maintenance. I worked with Tumanako because he provides a rangatahi perspective of being a Kaitiaki and also a tane point of view.

**Raniera:** After seeing the mahi that Raniera's older brother was doing at PRC, he decided he wanted to work there as well. Raniera turned up to mahi every day for a month and was given a job as a planter. Raniera took some time off mahi and went back to PRC to be a part of the nursery team. I worked with Raniera as he also provides a rangatahi and tane point of view, and has also had a different journey joining the PRC team compared to other Kaitiaki.

**Rachel:** Began working at PRC as a Kaitiaki after finishing her university study. Rachel was looking for other work and began doing some handy jobs around the PRC office in Te Awamutu town centre. A Kaitiaki role opened up and Rachel decided she wanted to become a part of the nursery team. I worked with Rachel as she was one of the newest Kaitiaki at PRC at the time of doing my research. She offered a new and fresh perspective of what it means to be a Kaitiaki, even in a short-term contract.

#### 4.2.4 Diary

Due to the nature of working with the Kaitiaki and in a sense following in their everyday, I chose to keep track of daily activities using a diary. In the diary I would note down questions I wanted to ask the Kaitiaki once they had finished their mahi, I would collect notes from conversations I had with Kaitiaki, and I would also reflect on my experiences being with the Kaitiaki and conducting the mahi that they do.

#### 4.3 Thematic analysis approach

Both the interviews and the diary entries were analysed using a thematic analysis approach. Thematic analysis is a method for identifying codes and generating themes within the data (Braun & Clarke, 2006; Maguire & Delahunt, 2017). Table 4.2. is an adapted thematic approach that I followed which was influenced by Braun and Clarke's (2006) six-step phases of thematic analysis:

Table 4.2: Adapted Six-step phases of thematic analysis (Braun & Clarke, 2006)

<b>Thematic analysis phase</b>	<b>Description of phases</b>
1. Familiarisation of data	Familiarise self with data Gather all data Transcribing Ideas for possible codes
2. Generating initial codes	Assigning codes to data Identify interesting points Relevancy between codes
3. Search for themes	Codes into themes (actively interpret) Subthemes
4. Review of themes	Review and refine themes Codes to support themes Identified broad codes, left some out
5. Define and name themes	Descriptive themes How each theme relates to the RQ's Gaps in themes
6. Produce report	Themes as basis of results Examples of themes selected

As discussed above, there were a number of ways in which I learned about PRC and the mahi of the Kaitiaki. The information ('data') I assembled from these methods included interview transcripts, photographs, and reflections (by the Kaitiaki and me) in the form of diaries and notes captured either at the time, or at a later point as I was analysing my experiences. These 'data' formed the body of information with which I worked through each of the steps above. The themes that were identified in the analysis included emphasis on practicing Māori values, Māori approaches to business, meaning through mahi and connections to place.

#### 4.4 Positionality

I am of both Māori and Pākehā whakapapa, and have also had the privilege of knowing where I am from and growing up on my marae. I found that working with the Kaitiaki and being on the marae was a space where I felt comfortable most times; yet it was not easy as I had to adapt research methodologies to engage ethically and effectively in Māori worlds. My personal experiences on my own marae influenced the way I interacted with the Kaitiaki and also with the whenua. I knew my place as an outsider of Ngāti Maniapoto, but also my place as an insider as Māori (Fisher, 2015; Webber, 2008). Times of discomfort often came from struggling with speaking te reo and also learning about the kawa (marae protocol) of Ngāti Maniapoto. The Kaitiaki have specific times of the day in which they have tikanga sessions. During times of tikanga, we would share our pepeha, and as much as we could about ourselves in te reo. Although during these times I felt discomfort, it was the most special part of being with the Kaitiaki. To hear how proud they are of being Kaitiaki, to hear them share their whakapapa to te awa Pūniu, those are the moments where I felt most privileged. To hear that korero from the Kaitiaki themselves, and most importantly to hear them all say it individually made me realise that the mahi they are doing is not just because it is their job. It is because it is for their whānau, their hapū, their rohe, their iwi.

#### 4.5 Ethical considerations

As this thesis fits within a broader research project, ethical approval was sought from The University of Auckland, Human Participants Ethics Committee (UAHPEC) – ethics reference number: 016840. I amended the overall projects' original ethics to cover my plan for engaging with those involved in my research project. Amendments were made for my project to include the use of photo-voice and observations.

The data that was collected for my project will be stored with the overall project data. This will be stored at The University of Auckland for six years. Those who were involved in the research were given the opportunity to have their contribution to the project returned. However, the offer was declined at that time.



It is important that when doing research with Māori, that the researcher must consider the use of Māori frameworks (Smith, 1999). This is something that I addressed when trying to build relationships with the Kaitiaki. For example, groups formed when doing particular tasks such as putting stickers on the pots and taping sections of pots. At times, I usually needed help from another Kaitiaki for a job, then one Kaitiaki would join me. This allowed me to not only have a relationship with certain groups (e.g. the nursery team), but I was also able to form relationships with some of the Kaitiaki individually. These times were also very important to me as I got to learn about the Kaitiaki whānau and what their mahi means to their wider whānau.

#### 4.6 Conclusion

This chapter has detailed the methodological framework that I used in this research. There is a growing body of literature supporting the use of Indigenous-centred approaches to methodologies. My experience during the research process shows that multiple and diverse methodological framings are needed to ethically respond and relate to those involved in the research. This chapter also highlights the importance of reflective and reflexive understandings of self. This ensures that respectful relationships are enhanced throughout the research process.

I also make note to the significance of understanding self in the research process. I live in both te ao Māori and te ao Pākehā and these ways of seeing and being influence how I relate to other beings. The next few chapters outline how these methodological frameworks were used to explore kaitiaki active experiences in marae-based river restoration projects.

## Chapter Five: Marae-based restoration and values

### 5.0 Introduction

In this chapter, I focus on the values articulated by PRC as fundamental to their operations and consider how these influence their restoration efforts. As a marae-based enterprise, PRC has had to navigate economic development aspirations (te ao Pākehā) alongside their desire to uphold Māori values and principles (te ao Māori). I argue that the location of PRC at Mangatoatoa Pā is, therefore, crucial for balancing these two worldviews as it grounds all transactions in tikanga and mātauranga. Furthermore, the performance of tikanga and emphasis on mauri and kaitiakitanga further embed te ao Māori values in the everyday mahi of PRC.

This chapter outlines the business model of PRC and how this model guides PRC's river restoration approaches. The chapter then highlights the importance of values to PRC, in particular tikanga, mauri and kaitiakitanga.

### 5.1 Business model of Pūniu River Care

There are some key differences in the business model of PRC compared to other mainstream business models. Pūniu River Care's approach to river restoration and more broadly business is distinctly Māori. Pūniu River Care's structure looks similar to that of other business structures (see Figure 5.1). However, the differences are reflected in the values that guide their river restoration efforts.

**Whakatakotoranga**  
PŪNIU RIVER CARE STRUCTURE

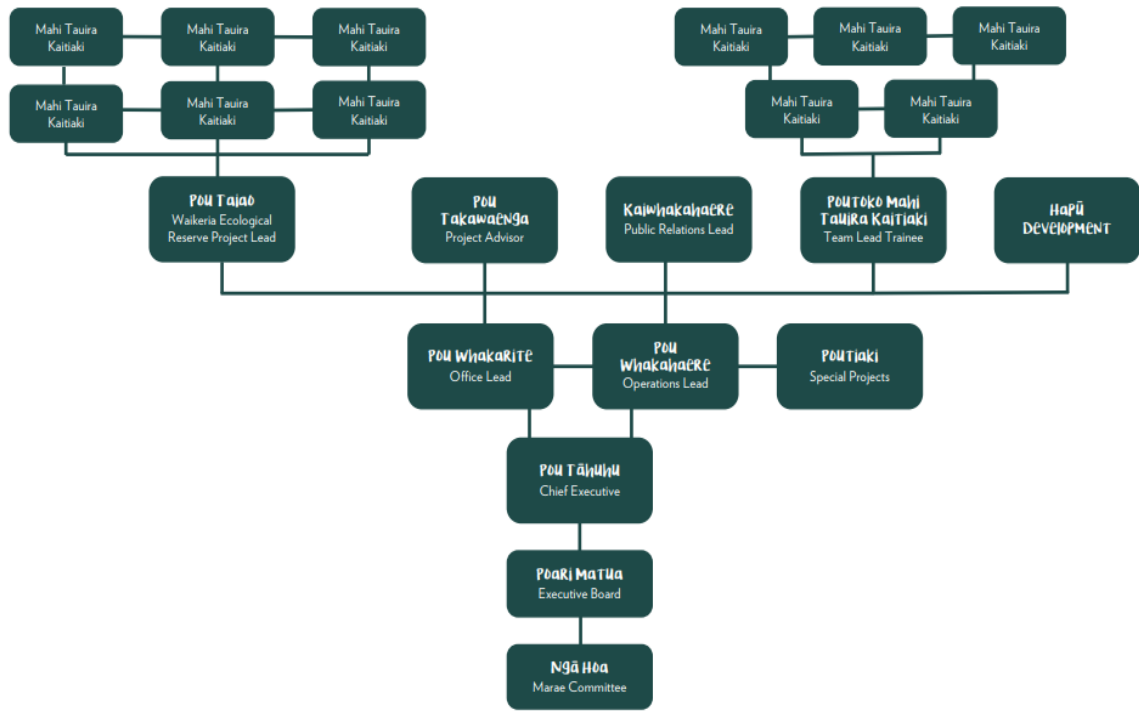


Fig. 5.1: Pūniu River Care’s business structure (Source: Pūniu River Care, 2020)

Evidence from this research indicates that PRC values - ngā uara (mauri, kaitiakitanga, whanaungatanga, maramatanga, rangatiratanga and kohā) - are the foundation of the success of their business model. Although other Māori organisations may also have their own values and principles informing their kaupapa, PRC make an effort to implement te ao Māori in all aspects of mahi. When asked how PRC is different to other places the Kaitiaki have worked, they would reflect of the values of PRC. Ngaire explained: *“I think that’s what makes us different from other organisations doing the same mahi is tikanga is always really present in our mahi.”* Tikanga has allowed Kaitiaki to understand the requirements of the space they work in, and what is expected of them as Kaitiaki. Tikanga is present in every day mahi that the Kaitiaki practice as it guides their interaction with the awa, whenua and marae.

This values-based approach adopted by PRC Kaitiaki also reflects the importance of a whānau. One of the Kaitiaki compared working at PRC to working with their own

immediate whānau. The kōrero below reflects the importance given by PRC Kaitiaki to the sense of whanau and whanaungatanga in performing their PRC mahi:

*Tumanako: Another one of my work experiences was working for my parents. And then in that sense it's kind of similar to here because you know you're dealing with family; family understands what you have to do... And it's the same here, they've designed this framework in a similar way where you take care of your family.*

*Rachel: You're kaitiaki here, and you're kaitiaki at home.*

*Raniera: [It's a] whanau-based job.*

In this kōrero, Kaitiaki recognise PRC's values and principles as respecting whānau relationships and, more broadly, Māori relationships. The values and principles that PRC include in their mahi are also like the values that some of the Kaitiaki reflect at home:

*Rachel: The values of this company are completely different to any other company that I've worked for. So you know their values, well you've got whanaungatanga and mauri and all that. But their principles say like if your whanau is sick, you've got tamariki that are sick you know there's no pressure to come into work. There's no pressure that no one else can pick up the slack. It's real understanding... You know around here; it would be common knowledge. It's just yeah more sustainable for your body and mind. The company really does contribute to your hauora.*

As evident above, Rachel's enthusiasm for the PRC model comes from the principles that underpin it and the sense that these are "common knowledge" at PRC. In this sense, health and wellbeing goes beyond the employee and includes the consideration of their whānau. While this may be a common understanding for some Māori, mainstream business models are dominated by Pākehā worldviews, which do not necessarily reflect the importance of whanaungatanga and

manaakitanga. These are values which not only provide a foundation for PRC, but are also practiced in relation to others.

As shown above, PRC acknowledge the health and wellbeing of the Kaitiaki and their whānau. The business model at PRC is distinctively Māori and represents Māori ways of being with the environment. When asked to reflect on the business model, the Kaitiaki expressed the cultural importance of the framework:

*Tumananko: I reckon the future of this is, heaps of this, heaps of this framework, this business design. Every hapū has their own nursery.*

*Rachel: It's a Māori model and it's mean. I reckon other races would thrive, but they just never use these types of models because they don't know these ways. It's like why aren't people using this way already. Why is it not mainstream?*

The Kaitiaki highlight the success of the model for their mahi, but also suggest the mainstreaming of such models. For PRC, their model emphasises the awa and their people. The focus of their business is not motivated by profit or treating the awa as a resource to be exploited. This way of thinking differs from mainstream capitalist ways of using the natural environment. The business model that PRC has works for the Kaitiaki because Māori principles and values are driving the kaupapa (Paterson-Shallard et. al., 2020; Ruru, 2018). The values and principles are also driving how the Kaitiaki interact with te taiao. Although this framework may work for non-Māori, there are risks in including Māori understandings of the environment in forms that privilege Pākehā leadership. Pūniu River Care's approach to river restoration is by Māori and for Māori.

For the Kaitiaki, working for PRC is more than working for a business. It is a part of their daily lives and, importantly, a part of their Māori selves. The Kaitiaki have responsibilities to themselves, as well as their uri, their tūpuna and the awa:

*Kelly: You know it's so deep, so much deeper than just planting plants. And putting them out on the mat. It's like acknowledging Papatūānuku, being*

*one with her. Cleaning her waterways. Not just for her, but for our children to come, for generations to come after that. And that's like at home as well. So you know we nurture our families, and our kids. We try and lead by example for our generations that we've made.*

PRC challenges capitalist-centred ways of managing business through their focus on Māori values. This is also reflected in Bargh (2020). By enacting and practicing kaitiakitanga, Kaitiaki are agents of change whose actions are shaped by and which bring into being the relational narratives associated to Papatūānuku and Ranginui. Caring for Papatūānuku has influenced the Kaitiaki's understanding of the impact their role has on the environment. This was apparent in talking with Shannon, who explained: *"People have to have meaning and have a purpose, and something, so if we can give them that, that's good. It can enable them to be involved in something that's bigger than themselves, is important."* Through their mahi, PRC provides Kaitiaki with the opportunity to be a part of a kaupapa that not only provides benefits today, but also in the future.

## 5.2 Tikanga

Tikanga is upheld by the Kaitiaki in all aspects of their mahi. Ngaire emphasised tikanga when explaining why she understands PRC to have a unique approach to river restoration, compared to other groups: *"I think that's what makes us different to other organisations doing the same mahi is tikanga is always really present in our mahi."* The presence of tikanga in the mahi practiced by PRC has provided the foundation for how the Kaitiaki relate to and care for the Pūniu awa. Tikanga-based frameworks for natural resource management establish what is appropriate conduct (Harmsworth et al., 2016). The focus is then on how Kaitiaki engage with each other, the awa, and at times outsiders. These tikanga-based frameworks help with navigating collaborative relationships, whether that be with council or Papatūānuku. As Mead (2006) argued, Māori values are central to tikanga. Tikanga sets aspirational/desirable goals, whereas state law sets the bare minimum standards for

Pākehā (before penalty is imposed). The Kaitiaki understand tikanga to be a guide in their practices in relation to the Pūniu awa.

The Kaitiaki reflected on the importance and presence of tikanga in their mahi. The Kaitiaki would often speak of the role of kaumātua on the marae. Kaitiaki were reminded of tikanga in their everyday through discussions with kaumātua: “[It’s] instilled the karakia, tikanga, just being based at the marae and out of respect of the whenua that we’re on.” (Ngaire). In this sense, the Kaitiaki refer to tikanga as the foundation for the way they interact with the marae. This is similar to Chan et al., (2016), who explain how people’s relationship to nature is an outcome of their interaction with nature. Working on the marae grounds also comes with a need to understand the tikanga of the marae. Kaumātua play a key role in transferring knowledge about the marae and sharing it with the Kaitiaki. The Kaitiaki refer to tikanga in terms of the protocol of the marae, not necessarily law/governing principles; thus, tikanga in this case refers to the right way to do something. There are spiritual elements attached to this understanding of tikanga in that if something is done wrong, spiritual retribution may result. Therefore, certain protocols and practices need to be completed when on the marae.

To understand the tikanga of the pā, stories would be shared to transfer the knowledge from kaumātua to Kaitiaki. When asked what the Kaitiaki do to adhere to marae protocol they would reflect on the history of place:

*Ngaire: Acknowledging our tūpuna and acknowledging the tupuna whare everyday. All of the people that fought for their land and look they fought for their land and this is what we are putting on it. That's why a lot of us love our job so much. Because it's so meaningful. It's so Māori.*

Through these reflections on the past, kaumātua have been able to share the importance of the whenua that the Kaitiaki work on and the significance of their continued mahi today. Because PRC works from Mangatoatoa Pā, and therefore at the marae, their location influences their everyday mahi life. The marae is symbolic of the Kaitiaki understanding of a Māori identity. The Kaitiaki have access to this Māori-world through their access to care for te awa Pūniu and through these

practices, they are exposed to the history and whakapapa of Mangatoatoa Pā and, therefore, their own whakapapa. This means the marae is a symbol of those in the past, present and future (Teddy et al., 2008) whereby the marae represents the connection the Kaitiaki have to the whenua they work on and how they connect to the awa they care for. This attachment to place (Teddy et al., 2008) instil Kaitiaki with greater confidence about where they are from and, for some, their identity has been strengthened through support from kaumātua and uri o Ngāti Maniapoto: *That's like pepeha you know. Learning both sides of your pepeha. So you have that grouping that you need out in the big world. So you can be confident in yourself to do your mahi*". (Kelly). Understanding the importance of tikanga on the marae has allowed Kaitiaki to connect to the Mangatoatoa Pā and other marae in ways that had not been possible before. This is a result of the Kaitiaki's continued and repetitive care for the awa, whenua and, therefore, the marae.

### 5.3 Mauri

Another value of importance to Kaitiaki is mauri. Kaitiaki would often refer to the state of their mauri when I engaged with them. When asked to reflect on this, Kaitiaki explained how they began their day at mahi: *"Recite our whakataukī. Get our mauri for the day. Our maramataka for the day. And yeah, always start our day off with mauri aye mate"*. (Kelly). The morning routine the Kaitiaki are referring to includes karakia, whakataukī, pepeha, mihi, maramataka, daily notices, waiata and haka. Kaitiaki begin most days, if not every day, like this together. This morning routine has enhanced the Kaitiaki journey by providing opportunities for learning more about the te ao Māori. The Kaitiaki morning routine also symbolises the importance of Māoritanga for PRC as a whole. These practices uphold the mauri of the Kaitiaki and those who are invited to be a part of the Kaitiaki morning routine. This is similar to Pohatu's (2011) claim that "[Mauri] It informs how and why activities should be undertaken and monitors how well such activities are progressing towards their intended goals" ( p. 1). These cultural practices provide the foundation for PRC and for the roles of Kaitiaki. For Kaitiaki, exposure to such cultural practices enhances the mauri of the awa, whenua as well as the Kaitiaki themselves. The teachings that are received from kaumātua are acknowledged through Kaitiaki practices.



The Kaitiaki spoke about ways of restoring their mauri when times were feeling low. When asked what the Kaitiaki do to enhance their mauri, they would refer to the ways in which they relax:

*Rachel: When the mauri is down. You can feel that. Everyone's holding their head down, everyone's slow, no one's talking. You know there's no banter going. And then, when the afternoon rolls around... You've run out of mauri; you've run out of energy and you're just there. You could be better recharging, sitting down and having a korero.*

*Melanie: How do you recharge that mauri?*

*Rachel: The moon comes back around. When the good moon comes then we're all pai ana*

*Raniera: The other way is going for a swim.*

Going for a swim in the awa is a frequent occurrence for most Kaitiaki during the earlier months. During my time at PRC, I was lucky enough to visit during the summer and experience this myself with the Kaitiaki. Being in and around the awa involved banter sessions (as explained by Rachel above), searching for tuna and kākahi, and plenty of 'bomb' competitions. Through my interactions with the Kaitiaki, the importance of the maramataka to their mauri became clear. Researchers have looked at the effects of maramataka and self to explain its influence on physical and spiritual wellbeing and the ways in which maramataka affects when things occur (Roberts, Weko & Clarke, 2006). This finding confirms existing research on maramataka and acknowledges its application in guiding restoration practices amongst Māori.

As discussed above, Kaitiaki expressed the importance of mauri and their personal wellbeing. Mauri is central to Māori wellbeing and there is a need to rethink wellbeing through understanding how mauri can affect the human and more-than-human. Kelly and Ngaire reflect on the times where they essentially need the awa:

*Kelly: It would be nice to swap out to other teams just to talk to different people. Look at the awa. Go feel the awa.*

*Ngairé: Like this summer we've just been at the nursery and wooh.*

*Kelly: All you wanna do is sit by the awa.*

The Kaitiaki discussed their mauri in terms of their physical self and the spiritual world being in connection with each other. In statements such as those above, Kaitiaki acknowledged the state of their mauri and the influence this has on the mauri of those around them. This also shows how at times the Kaitiaki are so busy that they can not connect with the awa in ways that they wish to. This brings to light the challenges in focusing on enhancing the mauri of the trees and therefore connections with the awa are not prioritised. Through replenishing their own mauri, the Kaitiaki form a stronger connection between the spiritual and physical world. The Kaitiaki actively seek out being with the awa to also enhance the connection they have with the awa. Importantly, the Kaitiaki also acknowledge the need for respecting other beings mauri. Pohatu (2011) refers to this as 'Te whakakoha rangatiratanga' - respectful relationships. Te whakakoha rangatiratanga involves understanding the state of others around you and recognising how your actions may affect others. Kaitiaki have come to have a richer understanding of mauri and its impact on self and others, whether that be physical or spiritual.

A clear example of this being practiced is the Kaitiaki relationship with the plants. When asked how they uplift mauri of those around them, they discussed the sharing of mauri with plants:

*Kelly: And we put all of the mauri into our plants.*

*Ngairé: If there's one little one dying. We pick it up and give it a hongiri.*

*Kelly: Yeah that's right, bringing it back [to life].*

When some Kaitiaki come across a plant that is not doing well, they attempt to give that plant another life. They do this through giving the plant a hongī. This practice reflects the giving of life through hā - the breath of life. Through giving the plant a hongī, the Kaitiaki restore mauri between themselves and the plant. The mauri is then transferred from one being to another. This echoes Morgan (2006) and Hikuroa et al., (2019), who argue that mauri provides life and therefore it must be protected. Kaitiaki have an understanding that mauri connects and sustains life, and their practices reflect this understanding. Phillips and Mita (2016) have argued that it is important to look after the mauri of the natural environment, but the mauri that resides in kaitiakitanga also needs to be taken care of. Through planting and restoring the awa, the Kaitiaki are restoring the mauri within themselves and the mauri of the awa. Through the restoration of the awa, the Kaitiaki have been able to see changes in the awa and in their personal lives. Many of the Kaitiaki have seen tuna and kākahī, and some Kaitiaki have even been able to gather a kai from the awa. In this sense, the mauri of the awa and the mauri of the Kaitiaki is reciprocal. Through the healing of the awa, the Kaitiaki are able to begin their personal healing (Phillips and Mita, 2016). The mauri of the Pūniu awa is upheld through kaitiakitanga, and therefore, the mana of the people is upheld.

## 5.4 Values as the base of interaction with the awa and plants and each other

### 5.4.1 Kaitiakitanga

Kaitiakitanga is commonly understood as an obligation to care for our whakapapa and, therefore, to care for Papatūānuku. Notions of obligation were expressed by Kaitiaki when defining the impact of their role:

*Rachel: Instead of looking at the impact us humans have had on our environment, our world, so far, if something did change. If we aren't kaitiaki, who's going to be? Who's going to fix it? Even just a little step like this can make a huge difference and keep growing.*

In Rachel's description of what kaitiakitanga means to her, she expressed a sense of "If not us then who?" approach to her role. Pūniu River Care have given the

opportunity for members of the community and hapū to be active kaitiaki of the Pūniu awa. The approach PRC has taken in terms of replenishing the Pūniu awa has shown how Māori restoration projects can actively practice their obligation to be kaitiaki. As reflected through the Kaitiaki understanding of kaitiakitanga, this practice is an honour not a burden. It is an honour for some of the Kaitiaki as they have been put into positions where they can actively care for Papatūānuku. This also opens space for those who do not have physical connections with their rohe, to care for their place of attachment.

Furthermore, Kaitiaki referred to practicing kaitiakitanga at home:

*Ngairē: Kaitiakitanga would be like looking after the seedling, watering it, nurturing it, and all that sort of stuff.*

*Kelly: And that's like at home as well. So you know we nurture our families, and our kids. We try and lead by example for our generations that we've made.*

Kaitiakitanga links the past, present and future through the environment and through tangata whenua. Kaitiaki acknowledge the fact that kaitiakitanga also involves being kaitiaki of their whānau. The Kaitiaki actively apply the values of PRC in spaces other than their mahi. This shows the importance of the rituals practiced at PRC and the influence they have on the everyday life of Kaitiaki.

It is also important to acknowledge there are challenges associated with regenerating relationships with natural resources due to the damage that ecosystems have been subject to (Walker et al., 2019). In the case of the Pūniu awa, the Kaitiaki have been able to replenish their relationship with the awa as there are still signs of a “working” ecosystem (tuna and kākahi). Furthermore, Kaitiaki attachment to the awa has also supported the re-establishing of relationships with the awa, and therefore whakapapa. This reflects Mutu’s (2010) interpretation of kaitiakitanga being that of a spiritual as well as physical responsibility. The Kaitiaki and their practicing of kaitiakitanga has shown the relationship between ecosystem health and Māori health.

#### 5.4.2 Values

PRC values reflect the importance of Indigenous and spiritual values in caring for the environment. The PRC values are linked to the whenua, whakapapa and narratives of Mangatoatoa Pā. This shows how the wellbeing of the awa is indivisible to the wellbeing of the Kaitiaki and uri o te awa Pūniu. For some non-Māori, understanding Māori values can be complex. This is important to recognise because, although values may seem complex, it should not diminish the importance of its inclusion in frameworks. Taylor et al., (2020) calls for a re-balancing of values and a need for tikanga and mātauranga to influence water management frameworks. This is similar to Paterson-Shallard et al. (2020) discussion of how incorporating values and mātauranga are difficult within existing systems, but they acknowledge attempts to prioritise and privilege Māori knowledge.

Therefore, restoration projects that involve Māori need Māori leadership in forms that provide decision-making power and influence. This then provides a strong foundation for how awa are cared for since this also means that mana whenua considerations are being addressed. As Harmsworth (2016) argued, Māori-led frameworks provide deeper understandings of a Māori world, yet bi-cultural capacity can be built from these understandings and meaningful collaborative relationships can result. Pūniu River Care's approach to river restoration is bi-cultural in the sense they exist within Pākehā policy and legislation, yet they are influenced and guided by Māori values.

The Kaitiaki recognise the importance of enacting the PRC values at mahi, but also throughout life. The values at PRC have simply become a way of being for some Kaitiaki:

*Kelly: Like we have those values instilled in us everyday. So we're sort of living them, you know what I mean... And that's like at home as well. So you know we nurture our families, and our kids. We try and lead by example for our generations that we've made.*

This observation by Kelly shows how the PRC values are not only values for practicing at work, but also provide guidance in the Kaitiaki personal lives. It could be

argued that these values are foundational values for Māori, but the way that PRC defines these values is specific to their mahi. This is paralleled in the ways in which the Kaitiaki define these values for themselves:

*Ngairé: Rangatiratanga, self-determined to take the lead for a sustainable world. The tree stands - Kia tu rangatira ai. The tree will stand strong. And be there for the rest of its life. And taking the lead so like yeah, just like at home. We're all parents, we're trying to do the best that we have do for our uri.*

*Kelly: And being proud of it I guess as well.*

*Ngairé: Being proud. Staunch. Letting go of all your fears. Kia niwha. Stand strong pretty much and true to who you are.*

*Kelly: That's like pepeha you know. Learning both sides of your pepeha. So you have that grounding that you need out in the big world. So you can be confident in yourself to do your mahi.*

Some of the Kaitiaki highlight how their confidence in self comes from understanding their whakapapa. Pūniu River Care also place importance on understanding the whakapapa of their plants. This is particularly apparent in how the Kaitiaki care for the awa whereby it is not simply about growing trees and planting them by the awa. This sentiment was expressed in an interview with Shannon:

*"I think there's just a relationship with people and plants, with our values...the journey of the tree and where it ends up, the same as a person. The journey of a person and where we're wanting them to end up, in terms of ending up as a rangatira, so then they take leadership, and then are able to lead a lot more other people."*

For PRC, whakapapa extends to acknowledging the whakapapa of the seed and following its journey from a seed to a tree. This journey is also reflected in the

understanding of how Kaitiaki evolve once they have joined the PRC team and how they grow as being a part of the team and as a kaitiaki for the Pūniu.

PRC model was created in a way so that enacting the values are a part of the everyday for Kaitiaki. Kaitiaki know that the values are the foundation of PRC: *“I think the system here is fully designed with the intention of implementing those values. And I think we hit most of them on the head.”* (Tumanako). The values are specific to how PRC relates to the Pūniu awa, and how that influences other relationships. This is intentional as it also reflects the space in which PRC perform. Due to PRC being on the marae, certain values need to be upheld for tikanga to be upheld. This reflects King et al., (2018) argument that understanding the marae is also about understanding the environment in which it is situated. This involves acknowledging the history of Mangatoatoa Pā and how it influences those who are on the marae today.

Tikanga is the foundation of Kaitiaki practices as their mahi is on the marae grounds. From the practice of tikanga flows the doing of restoration. Tikanga is the spiritual dimension which flows through all things, connecting the marae and workplace. Tikanga is practiced on marae, and therefore values associated with caring for the environment are grounded in the marae (Johnston, 2018). The marae is central to how the Kaitiaki interact with the whenua as values practiced on the marae are also practiced on the whenua.

## 5.5 Conclusion

This chapter explored how PRC articulate ngā uara and how their values influence their relations with other human and more-than-human beings. As highlighted by Te Aho (2018), balancing different ways of seeing and doing is a significant challenge in freshwater management. This is often a result of conflicting values and/or lack of Māori ways of understanding the environment. Tensions between decision-makers and Māori develop in response to the inability of some non-Māori to understand tikanga.

PRC are an example of Māori and Pākehā worldviews working together in a productive tension. Pūniu River Care have created a space for tikanga to thrive, and essentially for Māoritanga to thrive within the organisation. This has been a result of the foundational values – ngā uara that guide PRC's interactions with human and more-than-human beings. Kaitiaki have been given the opportunity to care for te awa Pūniu, and for some Kaitiaki, this has meant more care for their own wellbeing.

Although PRC have found ways in which Māori and Pākehā values can co-exist in river restoration projects, there was an acknowledgement that there is potential tension in terms of commercial motivation and the values espoused by PRC. With changing beliefs comes changing understandings of values. However, PRC show that their values are fundamental to their practices and how they interact with others. Pūniu River Care is an enterprise that has had significant impact on providing for Mangatoatoa Pā, and surrounding marae in the hapū.

This chapter shows how grounding business aspirations in cultural values can exhibit far greater benefits than simply monetary benefits. The Kaitiaki o Pūniu awa enhance their relationship with the awa through understanding what it means to be a kaitiaki. This shows us how diverse ways of caring challenges dominant colonial understandings of river restoration. In the next chapter I will provide detail of key encounters and sites in which PRC embodied and practiced ngā uara.



## Chapter Six: Embodying and practicing ngā uara

### 6.0 Introduction

In this chapter, I explore how PRC's values are embodied and practiced by Kaitiaki. Whereas the previous chapter engages at the organisational level of the PRC, this chapter goes deeper by focusing on the individual and how they have changed themselves as a result of working for PRC. This chapter also highlights the reciprocal nature of change to show how the wellbeing of individuals affects the wellbeing of the awa and vice versa. As a set of foundational values, ngā uara shape how PRC Kaitiaki perform their roles and broadens the scope of what is considered important for river restoration beyond mere technical or economic factors. Building on the previous chapter, in this chapter I focus on the ways in which ngā uara are embodied in the restoration mahi undertaken by Kaitiaki employed by PRC, and how the embodiment of ngā uara by kaitiaki influences their ways of knowing and being in everyday life beyond PRC.

### 6.1 Seeing ngā uara in practice: Key sites and moments of interaction

I draw the information from this chapter from key sites and interactions that I had with the Kaitiaki and also te awa Pūniu. The key sites includes the nurse, the awa and the kitchen. The nurse was a key site of interaction because this is where I got to learn about the practical nature of the mahi that the Kaitiaki are involved in. The awa was also a key site as the Kaitiaki often spend time swimming and gathering kai from the awa. Another site of interest was the kitchen at the nursery. This is where most of the Kaitiaki have their lunch and it is also a space where the Kaitiaki gather to korero and have their tikanga sessions.

#### 6.1.1 Encounters in the nursery

Although the Kaitiaki made clear the spiritual nature of their mahi, it is also important to note the demanding physical aspects of their mahi. During my encounters with the Kaitiaki in the nursery, there were no complaints about the nature of the work.

However, because of my own personal difficulties with lifting and transporting the plants, I wanted to ask the Kaitiaki if they faced any challenges while at mahi:

*Kelly: You do that really hard mahi and then you feel so rewarded and then you get up and you come back and do it the next day you know. You could be so sore and like so tired but you've got a reason to get up.*

*Ngaire: Hard out. I feel like that too. Every morning. Like I'll wake up and be a little bit tired. But I'm going to go to work because I love my job.*

*Kelly: Yeah we love our mahi. And you're planting 300 a day by yourself. You know, that's a hard day. But it's also a good day when you've accomplished it. You actually feel so uplifted.*

The Kaitiaki reflected on their times planting as a means of expressing the labour-intensive side of being a Kaitiaki. Most of the Kaitiaki at PRC are young (age 18 to early 30s) and have the ability to carry out the physical aspects of the job. The Kaitiaki also have a saying to reflect what they mean by their hard mahi:

*Ngaire: And it's not just my hands that are dirty. It's ringa raupa. And that's a big difference. Ringa raupa is calloused hands. Hard working hands. Not just dirty nails and blisters.*

*Kelly: Well tough hands.*

The Kaitiaki explained that ringa raupa referred to hard-working hands, which reminded the Kaitiaki of their efforts in caring for the awa. In this way, the calloused hands of the Kaitiaki are a physical embodiment of kaitiakitanga, which reflects the nature of physical labour attached to practicing kaitiakitanga. As shown through the Kaitiaki discussion, the physical difficulties of the job did not diminish the passion felt by Kaitiaki that comes from caring for their whenua.

### 6.1.2 Taste-testing the awa

In discussions with the Kaitiaki about their understanding of the health of the awa, they often referred to the improving health of the awa. When I asked the Kaitiaki about their methods of testing the health of the awa, I was intrigued that one of their ways of testing the mauri of the awa was through tasting the kākāhi and tuna. The Kaitiaki would also make comparisons between the mahinga kai in the Pūniu by Mangatoatoa Pā and also in other sites:

*Ngaire: My tane is from Owairaka marae which is just up the road. And they've got the Pūniu behind their marae. So we all go swimming out there and it's paru. But it's swimmable. The tuna don't taste the same as tuna that I've eaten, well especially where I'm from. You can taste the dirt. And that taste is also in the freshwater mussels, that were found just planting on Puniu awa. We came across freshwater mussels and picked and brought them back to the Pā here and ate them. They taste like dirt. Still nice but there's signs that the water is getting cleaner..*

*Mel: Does that make you still want to eat it?*

*Ngaire: Oh I'll eat it but...*

*Kelly: It's not the delicacy it once was.*

*Ngaire: Not the Pūniu ones but the other ones, all good.*

Currently, PRC do not practice quantitative water quality testing. Kaitiaki have chosen to experience the mahinga kai from the Pūniu to determine their own ways of testing the awa. This has been practiced by those who carry the traditional knowledge of the awa and have also engaged with the awa over many years. The kaumātua share the stories of the state of the awa when they were younger and how it has changed over time. Through eating the mahinga kai from the Pūniu, the Kaitiaki challenge accepted water quality testing methods. Other Māori environmental groups carry out their own methods of addressing water quality, which

demonstrate that these methods can offer diverse insights into river systems (see, for example, Harmsworth et al., 2011; Taylor et al., 2020; Tipa and Nelson, 2008). The PRC Kaitiaki approach to water testing is mauri-focused in that the mauri of the river is emphasised, rather than using standard testing to determine the mauri of the awa. The Kaitiaki explained that they simply feel the mauri of the awa and know the state of their awa.

Based on the current unswimmable status of the Pūniu as defined by Waikato Regional Council (2020), consumption of the mahinga kai from the Pūniu may not necessarily be safe. During my time at PRC, I had the privilege of trying some tuna from the Pūniu. However, due to my inexperience of consuming tuna, I enjoyed what I had and could not determine the quality of the tuna. The Kaitiaki consumption of the mahinga kai determines their understanding of the state of the awa. This is not to say that the Kaitiaki ignore the Council classifications, but the relationship between the Kaitiaki and the awa is beyond Council classification. Pūniu River Care have emphasised the importance of Māori values rather than the importance of technical standards in their mahi. The focus on technical standards associated with freshwater has resulted in Māori values and principles being ignored in freshwater management frameworks. This also raises the question as to how Māori values can be practiced with technical standards such as water testing etc. Lyver et al., (2019) have shown how biocultural approaches can contribute to more effective conservation frameworks. This approach acknowledges that social-ecological systems, which in turn provides space for Indigenous worldviews to be acknowledged. Further resources and expertise need to be offered to restoration projects in order to ensure safe relationships between themselves and their waterways. Moreover, water quality testing should not be left up to those Māori communities who are looking after their awa in other ways. Instead, the resources and expertise need to be made available as it is clear that current material expressing the state of our rivers is not translated into tangible information for kaitiaki. The focus on replenishing our waterways should be on the long-term health and wellbeing of the people who interact with the awa, and the awa itself.

The above discussion draws attention to the significant work of Māori restoration groups and Māori agency. However, due to the nature of cumulative effects on the

Pūniu awa, these issues cannot be addressed with riparian planting alone. The Kaitiaki reflected on the interconnections of waterways and how these waterways are impacted by their mahi at Mangatoatoa Pā:

*Ngairi: I'm from the Coromandel and our awa is like frickin clear. It's nice. And I grew up in that. And then down Taihape the Rangitaiki awa.*

*Kelly: It's like pristine awa. I was bought up on the Clutha River which is in the South Island. It's one of the biggest awas in like New Zealand. And it's massive, beautiful, crystal clear water. And then you come down here and see these guy's awa.*

*Ngairi: And it's the Pūniu, the Waipā and the Waikato. They're all like...*

*Kelly: Yeah they're all really in need of cleaning. It's really sad. And they're so close to Tongariro. That's where it starts. That's like the purest water. Not that long, two hours down and it's paru. It's quite sad.*

*Melanie: Do you feel like your mahi here in the Pūniu is helping elsewhere?*

*Kelly: I think it is helping by acknowledging first. And then putting it out there to everybody. That something needs to be done. And I've found that just by being here, more and more roopu are getting on to that aye. They're seeing the effects of what our mahi does, and they want to jump on as well. I think the more the better.*

If river restoration enterprises like PRC were given increased support, an approach that addresses the cumulative effects experienced by our waterways could be developed for river restoration frameworks.

### 6.1.3 Tikanga in the kitchen

Due to the nature of working outdoors at PRC, at times when the weather was not suitable for working, the kitchen was a place where the Kaitiaki would gather to wananga with each other. When reflecting on my times with the Kaitiaki, being in the kitchen with them evokes fond memories as these were the times where I got to know the Kaitiaki personally. The Kaitiaki would often discuss how being a kaitiaki gave meaning to their mahi. When I asked the Kaitiaki what they meant by this, they would make reference to ngā uara (as discussed in Chapter 5). Kaitiaki engaged in a range of practices that do more than simply replenish the physical condition of the Pūniu river:

*Kelly: It's very very empowering like this mahi. I don't even know why. Just feel it.*

*Ngaire: We're all Māori, we all connect with each other. We all have the same stories. Like our tūpuna all have the same stories. All our tūpuna have been through the same thing.*

*Kelly: We all come from different places in Aotearoa as well. And somehow we can all connect and connect to each other.*

The Kaitiaki explained that their roles are inseparable from their tūpuna such that the mahi PRC perform is inherently intergenerational. The Kaitiaki embody the knowledge that is taught to them by kaumātua and enact it through ngā uara. The Kaitiaki are not only learning their knowledge from the kaumātua, but also through their interactions with the awa. Embodied interactions with the awa have been shown to inform Kaitiaki worldview. The Kaitiaki then share these experiences with each other and with those who visit PRC, like myself. Ngā uara amplified Kaitiaki feelings of interconnectedness and reciprocity between themselves and te awa Pūniu, and te taiao more broadly. This account of their experience mirrors Kawharu (2010), who argued that kaitiakitanga opens spaces for the next generations to access the environment in ways that positively affect their ways of life.

Another activity I was able to experience was seed preparation in the kitchen. This involved hand-processing seeds that had recently been eco-sourced by the Kaitiaki. Seed preparation involved some of the Kaitiaki sitting around a table together, sharing space and conversation with each other while working. The Kaitiaki were delicate with the seeds and treated them with respect. Although this job is usually for those in the nursery, some Kaitiaki from other teams helped with the seed preparation. It was in this space and these moments where I learnt what the meaning of koha is to the Kaitiaki:

*Ngairi: You plant the seed, you grow the seedling, you nurture it. You look after it. You plant it. Turns into a tree and then it gives you back the koha, it gives you the seed. So, you're always giving back. Regenerate.*

The Kaitiaki at PRC understand koha to be limitless generosity. The Kaitiaki look to the seed as an example of koha. Kaitiaki themselves can also be seen as enacting koha as a means of creating and sustaining life for the seed. The Kaitiaki enhance the mauri of the seed, without expectation that the seed will give back. This shows how the practice of kaitiakitanga is in a sense, a koha to Papatūānuku. The Kaitiaki nurture their relationship with Papatūānuku and continue to do so.

## 6.2 Conclusion

In this chapter, I explored how PRC's values are embodied and practiced by Kaitiaki. Whereas the previous chapter engaged at the organisational level of the PRC, this chapter goes deeper by focusing on the individual and how they have changed themselves as a result of working for PRC. This chapter also highlights the reciprocal nature of change to show how the wellbeing of individuals affects the wellbeing of the awa and vice versa. As a set of foundational values, ngā uara shape how Kaitiaki perform their roles and broadens the scope of what is considered important for river restoration beyond mere technical or economic factors. This chapter showed the ways in which ngā uara are embodied in the restoration mahi undertaken by Kaitiaki employed by

PRC, and how the embodiment of ngā uara by kaiktaki influences their ways of knowing and being in everyday life beyond PRC.



## Chapter Seven: Situating kaitiakitanga

### 7.0 Introduction

In this chapter, I focus on the intersection of place and kaitiakitanga. I argue that, while kaitiakitanga has increasingly become a taken-for-granted concept by some in Aotearoa, the meaning remains contested because of how it intersects with place. In particular, there has been a tendency to equate kaitiakitanga practices with specific locations and entities, such as rivers, forests or coastlines; however, there has been less attention given to how kaitiaki themselves are changed by their experiences and what happens when they take these practices with them elsewhere. Moreover, there is also a tendency for kaitiaki status to be regarded as the domain of mana whenua. While not disputing this distinction, the findings of my research demonstrate that kaitiakitanga practices shape how individuals who are not 'from there' self-identify and connect to the awa in a way that emphasises the relational and constitutive dimensions of place.

### 7.1 Kaitiakitanga as a job

Kaitiakitanga is a fundamental Māori value, however, in this section I decided to provide a discussion of the importance of the role of kaitiaki in practice. Kaitiakitanga is an ethical framework that is informed by values but for the Kaitiaki at PRC; being a kaitiaki is also a job. When I asked the Kaitiaki what does it mean to be a Kaitiaki, they reflected on their job title in their contracts to express their understanding:

*Kelly: On our contracts it says kaitiaki. Like as our job title.*

*Ngaire: Not just labourers.*

*Kelly: Not just a labourer. In our contracts it says our job title is kaitiaki o Puniu awa. You know so that gives you gratification*

*Ngaire: And then a bunch of kaitiaki is called Te Kāhui a Hiwa. And Te Kāhui a Hiwa is... A kahui is like a pod of whales. So we're a pod of kaitiaki. A Hiwa, Hiwa is a star in Matariki. And that star is the star that you send your wishes upon.*

*Kelly: Aspirations.*

*Ngaire: Yeah your wishes, dreams and aspirations. So that's Te Kahui a Hiwa.*

*Kelly: So you know it's like a deeper.*

*Ngaire: Yeah it's so deep*

*Kelly: It's very very deep. Like from the get go, you've been given this opportunity to be amazing. So you actually feel that.*

Although the Kaitiaki are paid for their mahi, their role as Kaitiaki goes beyond financial aspects. Pūniu River Care has given the Kaitiaki opportunities to grow as individuals but also as a group - "Te Kahui a Hiwa". The Kaitiaki also understand the overall importance of their role and how they are all interconnected. Such practices resemble what Chan et al., (2016) refers to as acts of caring for the environment. The Kaitiaki see themselves not only as Kaitiaki who work at PRC, but they also see themselves as kaitiaki outside of their mahi.

Each of the Kaitiaki discussed how kaitiakitanga is not just caring for the environment but it is also about caring for people. This resonates with understandings of kaitiakitanga posited by Kawharu (2010) in which kaitiakitanga is seen as a socio-environmental ethic and not purely within environmental terms. In this sense, kaitiakitanga includes relationships between others, whether human or non-human. For example, those who enter the space of PRC are cared for by the kaitiaki. I personally experienced this during my first few visits to PRC at Mangatoatoa marae. In order for me to be spiritually safe, and in accordance with marae protocol, the Kaitiaki accepted me onto the marae. Kaitiaki understood that they needed to uphold the mana of the marae, and certain protocols needed to be followed. All of the kaitiaki had a role to fill in these circumstances, whether doing the karanga, mihi, or waiata tautoko. Reasonings behind practicing these roles do come down to the need to fulfil tikanga. However, PRC take it upon themselves to learn the tikanga of Mangatoatoa Pā and actively carry out what is expected of them.

When I asked the Kaitiaki about their understanding of what being a Kaitiaki entailed, they emphasised a change in seeing and therefore caring for the environment:

*Tumanako: For me, well like my understanding is like a different mind state from what normal people... Usually people follow the pathway of school and then either work or university if you decide to do that. But not a lot of focus through growing up is focused on the environment and protecting your whenua. It's not just about coming to work and being a kaitiaki.*

The sentiment captured by Tumanako illustrates how Kaitiaki did not necessarily come from environmental-centred ways of thinking until they started working at PRC. Although being a kaitiaki is a part of being tangata whenua, many Māori do not have physical connection to their ancestral lands and, therefore, are not given the opportunity to enact kaitiakitanga. However, PRC has introduced new ways of thinking for kaitiaki and extended ways of thinking about the environment for some. This is a result of being able to care for whenua that you have a connection with, whether that be spiritually and/or physically. The Kaitiaki not only keep the ahi kā of PRC going, but also contribute to the ahi kā of Mangatoatoa Pā. Employment at PRC exposes the Kaitiaki to further Māori understandings of the world through caring for the whenua. In practicing kaitiakitanga, the PRC Kaitiaki actively restore the Pūniu awa while also restoring and enhancing their own knowledge about the awa, kaitiakitanga, and te ao Māori more generally. In this regard, physical interactions with the environment strengthen relationships between Kaitiaki and each other as well as between kaitiaki and the environment in a manner similar to that described by Walker et al., (2019). Kaitiakitanga can be practiced in diverse forms, yet it is the active physical connection between the environment and Kaitiaki whereby relationships between the human and non-human are restored. Although the Kaitiaki are employed to focus on the physical restoration of the awa, the research demonstrated how their acts of kaitiakitanga also contribute to the spiritual replenishment of self, whānau, hapū, iwi and uri.

Scholars have argued that kaitiakitanga can only be practiced by those who are genealogically connected to the land, therefore only mana whenua can be kaitiaki (Mutu, 2010). As highlighted earlier, through intergenerational transferral of knowledge between kaumātua and Kaitiaki, mana whenua hold context specific knowledge. Those who are mana whenua carry the whakapapa of the whenua; therefore, their care for the whenua is more than simply environmental management.

This raises the question, however, as to whether those kaitiaki who do not whakapapa to the whenua they care for are considered as kaitiaki.

Specific individuals within PRC have guided Kaitiaki through all levels of their mahi (physically, spiritually and mentally). These individuals have contributed, therefore, to enhancing the connection between the Kaitiaki and the awa. For example, the kaitiaki often refer to the teachings of kaumātua and how this contributed to their understanding of Māoritanga: *“[Our kaumātua] acknowledges our iwi all the time. Like even you when you come. He acknowledges mine and Kelly's iwi. All the time and it just makes me feel like I'm appreciated at my job.”* (Ngaire). This kaumātua in his role within PRC has been significant in that his knowledge of the awa has been shared with the Kaitiaki, influencing their relationship with the awa. For example, he would often speak about the state of the awa when he was young. His stories included descriptions of clear water, mahinga kai and swimming in the awa, which are helpful for comparing the previous state of the Pūniu awa to today. These reflections also present a vision to the Kaitiaki about what the Pūniu awa could look like in the future. A kaumātua point of view offered the Kaitiaki a sense of hope in relation to their efforts in restoring te awa Pūniu. The potential for these kinds of benefits to accrue to others is also evident in the research by Fox et al., (2017), who discussed how human-human relationships can be enhanced through connections to water. In the absence of such deep, historical knowledge, the Kaitiaki understanding of the Pūniu would not reflect their connection to the awa as it does today. This highlights the importance of traditional knowledge holders in restoration efforts. Furthermore, it also shows the importance of the transferral of knowledge through generations.

Through interactions with the Kaitiaki and the Pūniu, it is clear that whakapapa is central to Māori identity and PRC as an organisation. In most cases, Māori may prioritise the caring of their own places that they are genealogically connected to. In terms of PRC, the Kaitiaki who do not genealogically connect to te awa Pūniu still have a [spiritual] connection to the awa. This raises the question as to where rāwaho and mātāwaka stand in terms of being considered kaitiaki and what this means for kaitiakitanga. Throughout history, Māori have identified terms to define other Māori

who live outside of their own tribal area. Tawhai (2010) defines this as rāwaho and mātāwkaka:

“Rāwaho is a term loosely applied in certain contexts to those Māori living outside of their own tribal region. It reflects their position as Māori who are (1) resident ‘guests’ in relation to the mana whenua of their residential area, and (2) iwi members living afar in relation to their ahi kā. Other common terms associated with this state of being are taura here and mātāwaka.”( p. 77)

Understanding kaitiaki as simply guardianship and stewardship is not enough to explain the work done by PRC Kaitiaki, and how their identities as kaitiaki and Māori form. Kaitiakitanga is about whakapapa; how kaitiaki care for the environment is determined by the knowledge of the area some of which can only come from kaumātua. As such, mana whenua aspirations need to be prioritised to avoid losing context-specific mātauranga. Such a perspective emphasises the importance of considering differences between sites within which kaitiakitanga is performed, and the ways in which kaitiaki practices can reflect specific ways of caring for the environment.

While not all of the Kaitiaki necessarily whakapapa to the Pūniu, their connection to the Pūniu awa is of significant importance. This is because those Kaitiaki who are employed by PRC are actively caring for the Pūniu, and the Pūniu is caring for those Kaitiaki. The Kaitiaki who do not whakapapa to the awa expressed their care for the Pūniu:

*Kelly: You feel like yeah this is home as well. Like we don't whakapapa to this marae but this is home. I see myself as kaitiaki of this marae. Yeah it's crazy. Like probably even more so than my own marae which is quite crazy. You know I've never done any sort of this mahi at my own marae. I feel like it's given me the tools so that I can be confident at my own pa. And karanga. Get up and do my pepeha.”*

This reflection by Kelly illustrates how kaitiaki who do not whakapapa to the Pūniu have created feelings of belonging through interacting with the awa. Most importantly, these Kaitiaki have been guided and supported from mana whenua to enhance their own Māoritanga through practices such as karanga, mihimihi and waiata. Exposure to such cultural practices has allowed Kaitiaki to go back to their rohe with a deeper understanding of themselves and being Māori. Some of the Kaitiaki who wish to care for the awa to which they whakapapa to discussed their plans of going home to begin that process. As explained by Kaitiaki above, their sense of belonging has come from the mahi that is practiced at Mangatoatoa Pā. The Kaitiaki who do not whakapapa to Mangatoatoa Pā have developed skills and knowledge from mana whenua of Ngāti Maniapoto, and it is this mātauranga that the Kaitiaki have chosen to take back to their own rohe.

Historically, mātāwaka connections with place would have occurred due to intermarriage. This has also been highlighted in discussion with the kaitiaki:

*Ngaire: My children whakapapa back to the Pūniu. That's their awa and I couldn't love my job anymore. I'm doing this for my kids, and for my partner and all of his family. They're so proud of us and our mahi. All my tane's whanau that I catch up with, they're like "Oh, how's mahi? You know your guys job looks so amazing. You guys are doing a really good job. Love your mahi and keep going. You're doing so much for our awa.*

This shows how kaitiaki have also established connection to place through their own uri. This sense of attachment to place is also similar to those Māori who grew up outside of their rohe. Kukutai (2003) and Hill (2012) reflect on Māori urbanisation and rise of pan-tribalism in urban communities. Pan-tribal marae provided spaces for Māori to be Māori outside of their rohe. These connections to place were in response to difficulties associated with rural to urban movements. However, little research has acknowledged the identities of those Māori who spiritually connect to place outside of their ancestral lands. Kainamu-Murchie et al., (2018) recommends the distinguishing of socio-cultural values through identifying those who are born in Aotearoa, mana whenua and mātāwaka to ensure that place-based mātauranga is upheld. For many Māori, spiritual and physical connection to the lands in which they

whakapapa to is not practically possible. This is why kaitiakitanga and the practicing of kaitiakitanga needs to acknowledge the role of mātāwaka.

For some, restoration values are also about repairing people's relationships to rivers. This is possible through the implementation of Indigenous knowledge in contemporary applications of care. An example of this is the Indigenous ranger programmes in which "caring for country" is practiced (Zurba & Berkers, 2014; Adone et al., 2019 & Reed et al., 2020). These programmes provide ways for Indigenous guardians to exercise their traditional approaches to natural resource management. In Aotearoa, private ownership of land makes it difficult for Māori to access their ancestral land. The Kaitiaki expressed their concerns in relation to others who do not have similar motivations to their own:

*Tumanako: Not all farmers are willing to buy into whatever it is you're trying to sell them. And so already there'll be sections of the river that you can't plant because some farmer doesn't get it, or he doesn't want to...*

*Ngaire: It's a New Zealand issue. It's about saving our environment. And it's coming from Government. For saving our whenua.*

PRC aim to get their partners and future partners to see the bigger issue, that being the state of our waterways in Aotearoa. This also raises questions about access to land and the right for Māori to enact kaitiakitanga. Reflecting on PRC's approach, the Kaitiaki have been able to move freely on the land, but private land ownership has created barriers for planting along the awa.

## 7.2 Connections to awa

As discussed above, the Kaitiaki often look to the Pūniu awa as a means of replenishing their spiritual wellbeing. When I asked the Kaitiaki about their relationship with the awa, they reflected on what the awa provides for them: *"I use the river to reset. So, when the head is heavy, I come down to the river by myself. Hopefully there's no one down here. And you know, spend time by myself and think, process."* Tumanako referred to the Pūniu as a place that offers a sense of spiritual

and physical wellbeing. The Pūniu provides a space for Tumanako to reflect and regenerate. This shows Tumanako's personal connection to the awa and the reciprocal nature of their relationship. Similar findings by Fox et al., (2017) suggest that the restoration of rivers can also enhance human-river relationships. This is also reflected in another Kaitiaki description of their relationship to the Pūniu: *"It's my second bed. A place you go to cool down, have a swim. Have fun with family and friends... Just it doesn't hurt you. It just provides you with the goods."* Raniera referred to the Pūniu as a safe space that provides balance. It is also a place where others can join and experience what the Pūniu can provide. These personal connections to the Pūniu show that if the awa is cared for, the awa will also care for those who look after it.

Another Kaitiaki also expressed their deep sense of connection to the Pūniu and how the essence of the awa is a part of their everyday life. Kelly explained:

*"I myself I'm quite a spiritual person. So, I do connect to the awa, the mauri wherever I go. But just making it part of your mahi as well is just really so much more special. Cause it's not really a job, it's like a mahi for life. I could do this for life. It's so rewarding".*

Kelly's spiritual connection to the Pūniu is something that goes beyond her physical connection to the awa. Kelly does not have to physically be with the awa to feel its mauri. The connection described by Kelly reflects discussions that emphasise the ways in which spirituality provides connection with elements of kaitiakitanga and which assert that Māori connection to the whenua is through spirituality (Lockhart et al., 2019; Walker et al., 2019). Kelly acknowledged that the mauri of the awa is a part of how she relates to the Pūniu. This is not to argue that only those who are spiritual have a connection to the awa, but it shows that through being a kaitiaki, this connection to the Pūniu is different to those who may not physically care for the awa in their everyday life.

Not only do the kaitiaki care for the awa through physical restoration, but the Kaitiaki also encounter the Pūniu in their everyday life through swimming in the awa. In this sense, the Kaitiaki practice their spiritual connectedness to the Pūniu by physically



engaging with the awa. I experienced this with the Kaitiaki during a swim in the Pūniu awa. The Kaitiaki showed me how they face the tide going out and ask the awa to “*take away their worries*’. If the Kaitiaki are needing support in other ways of life, they face themselves towards the tide coming in, and ask the awa to take care of them. Jokingly, the Kaitiaki would ask the awa to give them a winning lotto ticket. Experiencing this first-hand showed me that the Kaitiaki use the awa to not only cleanse themselves physically, but also spiritually. The Kaitiaki know that through their care for the awa, the awa will care for them. In this sense, the Kaitiaki are spiritually fulfilled when they physically interact with the awa.

### 7.3 Connection to awa through whakapapa

The kaitiaki reflected on how whakapapa guided ways in which they interacted with the environment. The care that the Kaitiaki have for the Pūniu is reflected in the way they treat the plants in the nursery. When asked how they Kaitiaki see the plants they explained:

*Kelly: We are mothers to every plant in this nursery.*

*Ngaire: I have 408, 000 children. That's how many plants we've got on the mat.*

*Kelly: That's how we feel. And then when they leave the nursery it's like \*acting out crying\*.*

*Ngaire: Bye my babies.*

*Kelly: And then you get a whole new set of babies next year.*

This shows how the Kaitiaki see themselves as a part of the whakapapa of the plants that they care for. Whakapapa binds the Kaitiaki, the plants and the Pūniu awa through their practicing of kaitiakitanga. In this sense, the Kaitiaki are also bound to Papatūānuku.

Narratives of the past, present and future are key to the practice of kaitiakitanga. The Kaitiaki would often express how their mahi has an influence on their future, and also the future of their uri:

Rachel: *Like you know you're going to have an impact, you're going to make a difference to our environment. There's going to be something done so that we leave something behind for our children, and our children's children.*

These statements indicated that the Kaitiaki recognised the importance of their role and the need for their role. Through their caring for the Pūniu, the Kaitiaki reflected on what future they want for their uri, and how they can provide a better future for their uri. In this regard, Kaitiaki discussed caring for the environment as deeply connected to caring for future generations in a manner similar to that elaborated by Jackson et al., (2018).

It is also important to acknowledge that some Kaitiaki do not understand their connection to the awa. When I asked the Kaitiaki about how they connect to the awa, Tumanako expressed how other influences have affected his relationship with the Pūniu:

Tumanako: *I haven't really thought about the river much since I was younger. I grew up around here and grew up in the river. When I started schooling away from here...I spent less time here. Spent less time connected. So, I don't know how to think about the river you know. I'm a little tainted by my taha Māori and taha Pākehā because of my schooling.*

Although Tumanako grew up in the rohe, his reflection expresses conflict between te ao Māori and te ao Pākehā. This shows how in some instances, Pākehā influence has created barriers for Māori to connect with Papatūānuku.

## 7.4 Conclusion

This chapter explored how conceptions of place intersect with kaitiakitanga. Through my experiences with Kaitiaki at PRC, it is clear that attachment to place informs the practicing of kaitiakitanga. Through interactions with the Pūniu awa, the Kaitiaki have enhanced their sense of self. Their identity as kaitiaki has been developed through

their care for the awa. For the Kaitiaki who whakapapa to te awa Pūniu, their connection with the awa is physical and spiritual.

The influence of kaitiakitanga on the subjectivities and identity of Kaitiaki was noted by those who whakapapa to te awa Pūniu as well as by those who do not. This emphasises the need for mātāwaka perspectives to be acknowledged as their perspectives provide a new way of understanding kaitiakitanga. This is not to argue that mātāwaka can be kaitiaki of whenua they do not whakapapa from, but there is a need to understand their sense of attachment to place. This can allow for some space for those Māori who are unable to go back to their rohe and care for their own whenua. As seen with the Kaitiaki at PRC, the skills they have developed while at PRC have enhanced their understanding of, and confidence in self to share the knowledge that they have learnt with those they whakapapa to.

With the development of new river restoration and management frameworks, understandings of kaitiakitanga need to be extended to reflect the Māori world that we are experiencing today. Mana whenua values and principles need to be prioritised to ensure that context-specific mātauranga is upheld. However, those who hold mātāwaka positions in Māori society need to be recognised for their mahi in sustaining the ahi kā of our marae across the motu.

Through practicing kaitiakitanga, the Kaitiaki explored links to the past, present and future. The Kaitiaki referred to the practices of their tūpuna to guide their restorative efforts today. However, through these practices, the Kaitiaki themselves are the tūpuna who will be followed by future generations. This shows how kaitiakitanga is practiced across space and time.

Overall, Kaitiaki have an understanding that if they care for the awa, the awa will care them. The type of care that the Kaitiaki are referring to is the practicing of kaitiakitanga. Kaitiakitanga is physical and spiritual in the sense that the Kaitiaki plant trees along the riverside to replenish the awa, but they also follow protocol and practice karakia in respect of the awa. Both the physical and spiritual care that the Kaitiaki practice enhances the mauri of the Pūniu. This reflects the reciprocal nature

of kaitiakitanga and the need for acknowledging the mauri of more-than-human beings in mainstream approaches to river restoration.

## Chapter Eight: Conclusion

### 8.0 Introduction

Through this thesis I have explored the question: *How do kaitiaki active experiences of river restoration broaden our understandings of cultural/spiritual dimensions of river restoration?* To address this question, I looked to my objectives to inform my approach:

- To consider how the values identified by PRC influence their restoration efforts as a marae-based enterprise,
- To explore how PRC's values are embodied and put into practice by Kaitiaki,
- To explore how conceptions of place intersect with kaitiakitanga.

To address these research objectives, theoretically I drew insight from a range of literatures which attuned me to the cultural politics of restoration and Māori values and principles. These were then brought into conversation with the idea of diverse economies in order to investigate the many practices and values created by the PRC as a cultural enterprise. Methodologically, I employed an ethnographic approach which was inspired by research methodologies including Kaupapa Māori theory and critical geography (for example, Gibson-Graham et al., 2013; Hoskins, 2012; Smith, 1999). A grounded approach provided me with the opportunity to gather information through multiple ways of knowing. Drawing together my own positionality as Māori with this mixed-methods approach gave me space to create and maintain meaningful relationships on the marae and with the marae with the Kaitiaki. This final chapter outlines the research findings and key empirical, theoretical and methodological contributions.

### 8.1 Synthesis findings

Chapter 5 highlighted Marae-based restoration and values and also revealed the challenges in aspirations for negotiating te ao Māori and te ao Pākehā ways of doing

business. Pūniu River Care exemplifies how the privileging of Māori ways of knowing can enhance approaches to river restoration. Through the teachings from kaumātua, Kaitiaki have come to understand the importance of instilling the PRC values in every day life at mahi. For some Kaitiaki, these values are upheld beyond PRC. Although 'public institutions' aim to include Māori values in legislation and policy, there needs to be further understanding of how Māori values are enacted. For example, Māori values have been translated into Pākehā concepts, and are therefore understood in Pākehā ways. This disregards Māori understanding of values but also ignores the differences between iwi, hapū and whānau values. There are foundational Māori values, but the PRC values show how broader understandings of Māori values can be contextualised and the influence of environment in how values are understood and therefore practiced. Furthermore, the location of PRC being on a marae further highlights the successes of on the ground-based projects. The marae influences PRC's everyday life through the prioritising of tikanga and upholding protocol of the marae. This ensures that those who work at PRC have an understanding of what is expected of them by being and working on marae grounds.

Chapter 6 showed the importance of not only understanding the PRC values but also in how embodying and practicing these values cultivates success on Māori terms. While Chapter 5 sought to identify the way in which PRC see themselves as an organisation, Chapter 6 demonstrated that by embodying the values of PRC, the Kaitiaki are able to look and care for those beyond themselves. This also reflects the Kaitiaki understanding that if they care for the awa, the awa will take care of them. There is a sense of trust between the Kaitiaki and the awa and this relationship is enhanced through the practicing of kaitiakitanga. Prioritising Māori measuring of the state of our waterways provides a further understanding of how humans relate to water overall. It is clear that water, more specifically freshwater, is integral to the identity of Kaitiaki. This ensures that methods of qualitative testing should not be the only source of information guiding river management and restoration frameworks. Cultural awa restoration calls for inclusion of quantitative elements too which recognise the multiple dimensions of awa health and restoration.

Chapter 7 demonstrated the nature of kaitiakitanga as a practice and its intersections with place. Kaitiakitanga is a concept and value that is often used to influence environmental management frameworks. The Kaitiaki showed how their enacting of kaitiakitanga goes beyond their days at mahi, and influences their time at home with their whānau. The role of being a kaitiaki has been situated in discussions of mana whenua status. This chapter showed that Māori are practicing kaitiakitanga in diverse and complex ways, and our understandings of kaitiakitanga need to reflect such. This chapter revealed how feelings of kaitiakitanga could be fostered for people who may not have direct mana whenua – this outcome of cultural empowerment is of considerable significance, especially to Māori seeking to nourish their relationship to te ao Māori. Kaitiakitanga influences individual's attachment to place. And it is through these repeated actions of care that Kaitiaki come to understand their identity through the whenua.

## 8.2 Key contributions

This research has generated a number of key contributions. In the following sections I share the key lessons from this thesis.

### 8.2.1 Empirical contributions

This research shows us that what PRC are doing on the ground does make a difference for the awa, the Kaitiaki and also the hapū. Pūniu River Care are not only enhancing the wellbeing of te awa Pūniu, but they are also enhancing the wellbeing of their people. The transformative nature of river restoration is reflected in the Kaitiaki through their spiritual and cultural wellbeing. Pūniu River Care has actively increased the cultural capital and capacity of the Kaitiaki, through including Māori values and principles as a part of the everyday for Kaitiaki. These routinised repeated practices are intentional in that the values of PRC have been a long-standing element of the organisation. The diverse values that PRC associate with themselves extends our understanding of Māori enterprises and the value thereof for fostering Māori aspirations and cultural outcomes.

Furthermore, understandings of what it means to be a kaitiaki and who can be a kaitiaki in place has been a central element throughout the research. The current

state of our environment and legislative frameworks have made it more difficult for some Māori to practice kaitiakitanga. My research shows the tensions between those who understand themselves to be kaitiaki of an area, but do not necessarily whakapapa to the area they actively care for. My research does not argue for a re-defining of kaitiakitanga but instead a re-imagining of what kaitiakitanga looks like for those who live outside of their ancestral homes. Matāwaka values need to be acknowledged in values-based frameworks, and these values need to be distinct to show the similarities and differences between mana whenua and matāwaka values. It is possible that these values will be similar, however, there needs to be an active distinguishing between the two as mana whenua mātauranga needs to be prioritised to ensure its continued transfer to future generations. Ignoring matāwaka practicing kaitiakitanga would also mean the ignoring of their attachment to place. Kaitiaki identities are rooted in their care for the awa, and we cannot ignore or dismiss their attachment to place. This approach can also be interpreted and applied across other diverse ways of knowing and being in place.

This research also brings to light how initiatives like PRC are doing and delivering more than what they are getting recognised for. For example, Pākehā metrics have been used to inform and measure success for enterprises such as PRC. Success is measured by economic aspirations being met. However, enterprises such as PRC provide much more and these particularities need to be recognised. For example, PRC are providing jobs for their whānau, where they can upskill themselves through tertiary related studies. Increasing Kaitiaki cultural capacity is also a main goal for PRC and this is not necessarily considered in funding applications. Tikanga-based ways of managing freshwater can provide a sustainable and holistic perspective that is needed for our waters (Te Aho, 2018; Ruru, 2018). Te Aho (2018) argues that inclusion of tikanga in legal frameworks has significantly changed approaches to current freshwater management. Yet, some would argue that mechanisms have not been put in place for tikanga to be implemented and therefore enforced (Ruru, 2018). Environmental replenishment projects that centre Māori cultural obligations allow for Māori aspirations to be achieved. The mahi of the PRC and its delivery of diverse values, especially from a Māori perspective, calls for an enriched metrics of how such enterprises generate success.



### 8.2.2 Methodological contributions

My research process makes significant methodological contributions as a result of the need for changing my methodological approach. Photovoice is a decolonial tool that many scholars have used to reflect minority voices. However, the practical nature of being with the Kaitiaki did not provide the most practical space to include my proposed photovoice methodology. This research shows the importance of working ethically and being reflexive as a researcher and providing space for those involved in the research to suggest changes if they are needed. I took it upon myself to let the Kaitiaki know what was not working in our approach to photo voice, and I also let the Kaitiaki decide how they wished to continue their time in the research project.

### 8.2.3 Theoretical contributions

This research joins the group of Māori scholars looking at the potential of diverse economy thinking in te ao Māori. My contribution is that I extend this mahi and bring such ideas to the work of Māori enterprises in the space of river restoration. This research extends the work of Bargh (2009; 2012) and Amoamo et al. (2018) in the sense that the focus of social enterprises and diverse economies is at the marae level. This research provides a local and ground-level perspective of Indigenous social enterprises and how these non-profit motivated business structures interact with social and environmental concerns.

Understanding river restoration through social enterprise lens highlights the importance of marae-based initiatives. These initiatives can help us better understand what values and success means for marae, whānau and hapū. This opens the concept of 'profit' (even in social enterprises) to be something much more than social and financial currencies, to also being deeply cultural i.e., what might count as cultural profit in a Māori social enterprise (river health, participation/awakening new life on the marae, kaitiaki-based labour opportunities). In this sense, enterprises such as PRC are challenging understandings of success and expanding ways in which government and non-government organisations may measure their success.

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## Appendix A: Consent form



**SCIENCE**  
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October 2019

### CONSENT FORM

#### Hapū/Iwi Representative

**THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS**

**Project Title:** Rethinking freshwater systems in Aotearoa New Zealand

**Name of the Researchers:** Principal Investigator: Karen Fisher; Co-investigators: Meg Parsons, Leane Makey, Heather Paterson-Shallard, Melanie Mayall-Nahi, Jack Barrett

**Researcher Contact:** [k.fisher@auckland.ac.nz](mailto:k.fisher@auckland.ac.nz)

I have read the Participant Information Sheet. I understand the nature of the research and that my participation in this research is voluntary and that I can leave the interview/photograph process at any time. I understand why I have been selected and I have had the opportunity to ask questions and have them answered to my satisfaction.

- I agree to participate in this research.
- I confirm I am 16 years or older.
- I agree to take photographs of my choice.
- I understand that the photography process will be completed in my own time.
- I give my permission for the photographs to be used during the research process.
- I understand that information will be securely stored for 6 years and then destroyed.
- I understand that the interview will take approximately one hour to complete.
- I agree / do not agree for the interview to be digitally recorded.

- I understand that I may choose to have the recorder turned off at any time.
- I understand that I have the right to withdraw from the research at any time without providing an explanation, and to withdraw data traceable to me until two weeks after my interview.
- I understand that I will be given the opportunity to edit my transcripts and must return it to the researcher within two weeks of receiving it with any alterations.
- I wish/do not wish to be identified by name.
- I understand that if a pseudonym or generic descriptor is used, I may become identifiable because of the information I provide.
- I wish to receive by email a copy of any summary findings .....yes/no

Signed:

Name: (please print clearly)

Date:

Email: (for receiving copy of results)

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS  
ETHICS COMMITTEE FOR 3 YEARS UNTIL 17-AUG-2020; REFERENCE NUMBER:  
01684



## Appendix B: Participant Information form



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New Zealand

October 2019

### PARTICIPANT INFORMATION SHEET

#### (Iwi/Hapū Representative)

**Project Title:** Rethinking freshwater management in Aotearoa New Zealand

**Name of the Researchers:** Principal Investigator: Karen Fisher; Co-investigators: Meg Parsons, Leane Makey, Heather Paterson-Shallard, Melanie Mayall-Nahi, Jack Barrett

**Researcher Contact:** [k.fisher@auckland.ac.nz](mailto:k.fisher@auckland.ac.nz)

This research is being conducted by researchers from the School of Environment, University of Auckland. Our research explores the history of usage and management of the Waipā river catchment. We are interested in understanding how local people think, feel, and engage with the Waipā River and its tributaries and how different perspectives are incorporated into river management and restoration projects. An important part is talking with local and regional councils, industry bodies, recreational organisations, local iwi, scientists and individuals about their experiences of the Waipā River and their preferences about river management and restoration.

#### The Project

This project investigates the Waipā River catchment to understand the history of human activities as well as current management approaches and efforts to improve river health. The aim of the study is to improve understanding about how different types of knowledge (including scientific, local, and iwi) can be incorporated into the river management and restoration projects.

#### Invitation to Participate

We would like to invite you to participate in our research because of your knowledge about and experience with Waipā River restoration efforts. We would like to learn more about your personal involvement with river restoration efforts. The photography process will be completed in your own time. The interview will take approximately 1 hour and will be conducted at a time and location of your choosing.

### **Project Procedures**

Participation in this research is voluntary. You have the right to withdraw from the research at any time, and the right to withdraw data traceable to you within two weeks of the interview. This research will include the method of photovoice, which involves participants taking photographs of their personal experiences of river restoration. Photovoice is a decolonising research methodology which aims to empower participants through allowing you to have control over what you wish to show. Participants will be given a camera each, then these photographs will be used in a follow-up interview. The photographs will be printed for the interview and will act as prompts. With your permission, the interview may be audio recorded to allow for transcription. This recording is optional and you may choose to stop the audio recording at any time. I (Melanie) will transcribe the recordings. If you choose, you may edit transcripts to ensure accuracy. Transcripts must be returned within two weeks of receiving them. A summary of the research will be made available to participants on completion of the research upon request.

### **Anonymity and confidentiality**

Information discussed in interviews, including personal information, will be held confidential and will not be disclosed by the researchers. Researchers will not disclose information about who participates in this research and who does not. If you wish to be identified by name, you may choose to do this by giving your permission on the consent form. If you do not wish to be identified by name, we will use a pseudonym or generic descriptor to identify you such as Local Government 1, Industry Body 2 or Consultant 3. Even if you are not identified by name, you may become identifiable because of the information they provide.

The information obtained in this research will be used for academic purposes only. All data collected during this research will be securely stored for six years after which time

it will be destroyed. All electronic data will initially be safeguarded by passwords and then deleted from all computerised storage spaces and hard drives, and hard copies will be stored in a lockable cabinet at the University of Auckland and destroyed by shredding.

### **Koha payments**

To assist with the project and your participation koha payments are available in the form of petrol vouchers, catering, non-alcoholic refreshments and venue/hire costs. A koha has been budgeted for marae and catering for hui/meetings.

### **Special relationship/conflict of interest**

Karen Fisher is affiliated to Ngati Maniapoto and has attended several hui related to the Waipā River, and other environmental issues, since 2009. She was a member of Mana Taiao in 2012 (an environmental advisory group to Maniapoto Māori Trust Board), a member of the Upper Waipā Fisheries Reference Group (2014) and a member of the Waikato River Restoration Forum Technical Advisory Group (TAG) (2015-2016). Through these activities, she has met a number of individuals involved in co-governance and co-management of the Waipā River.

### **Funding**

This research is supported by the Marsden Fund Council from Government funding, managed by Royal Society Te Apārangi.

### **Contact Details and Approval wording**

The Participation Information Sheet provides you with the information that enables you to make an informed decision about whether or not you wish to participate in this research. We recommend you keep a copy of this document for future reference. If you have any questions or concerns, please feel free to contact Karen Fisher, the Principal Investigator for this research.

#### **Principal Investigator:**

Karen Fisher, Senior Lecturer, School of Environment, University of Auckland,  
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APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS  
ETHICS COMMITTEE FOR 3 YEARS UNTIL 17-AUG-2020 ; REFERENCE  
NUMBER: 016840

## Appendix C: Interview questions

We are interested in learning about how you came to learn about the co-governance and comanagement arrangements, and what role you had in the lead-up to co-governance (e.g. attending hui and wananga organised by the MMTB or through your organisation). We are also interested in trying to understand what the key issues are moving forward and the challenges that need to be overcome to restore and maintain the Waipā River and the care and protection of the mana tuku iho o Waiwaia. We are interested in exploring how Maniapoto values, knowledge and interests are shaping management and restoration efforts within Maniapoto but also by Waikato Regional Council and the other councils.

### Theme 1: Governance

#### Co-governance and co-management

1. Can you please tell me about how you became aware of the co-governance and comanagement of the Waipā River?
2. How did you learn about the co-governance and co-management? (e.g. attending hui, wānanga; briefings)
3. Can you tell me about how you think the co-governance and co-management arrangements have influenced the way the Waipā river is managed.
4. What do you think are the biggest challenges to co-governance and co-management?
5. In your opinion, how do you think co-governance and co-management has affected relationships among organisations like local and central government, river iwi, industry sector and landowners?
6. What do you think are the key **principles or kaupapa** that should underpin co-governance and co-management of the Waipā? Tikanga, kaitiakitanga?

### Theme 2: Knowledge and approach to restoration

1. What do you consider to be the most pressing issues facing the Waipā River (both generally and specifically in terms of restoration)?
2. To what extent do you think issues are being addressed?
3. What aspirations do you have for the Waipā River?
4. Do you think the co-governance and co-management arrangements can help

- in achieving these aspirations?
- a. If yes, why? Can you give some examples?
  - b. If no, why not? Can you give some examples?
5. Do you have a sense of how mātauranga and science can be used to improve management?
  6. How is your approach incorporated into river governance, management and restoration practices?
  7. What role do restoration efforts play in achieving your aspirations for the Waipā?
  8. What kinds of restoration (or other) projects have you been involved with?
  9. What needs to be in place for your approach to restoration work?
  10. What indicators do you use to monitor the river?
  11. To what extent are you satisfied with the current responses to managing and restoring the Waipā River?
  12. What would you like to see being done in the future with regard the management and restoration of the river?

Approved by the University of Auckland Human Participants Ethics Committee on 17 August 2017 for three years. Reference Number 016840.