Māori perspectives on the environment and wellbeing

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Abbreviations

BOPRC	Bay of Plenty Regional Council
DOC	Department of Conservation
GHA	Glenn Hawkins & Associates Limited
MCH	Ministry for Culture and Heritage
MfE	Ministry for the Environment
MoF	Ministry of Fisheries
PCE	Parliamentary Commissioner for the Environment
RLC	Rotorua Lakes Council
TALT	Te Arawa Lakes Trust
TAML	Te Arawa Management Limited

Glossary of Māori words

ao	world
Aotearoa	Land of the long white cloud, New Zealand
atua	god
hākari	feast
hapū	subtribe, pregnant
hauora	health
Hawaiki	ancient homeland of the Māori people
hui	meeting
iwi	tribe, bones
kāinga	village, home
kaitiaki	custodian, steward
kaitiakitanga	stewardship, guardianship, custodial
komiti	committee
kuia	elderly woman, grandmother, female elder
mahire whakahaere	business plan
mana tangata	power and authority of people, status accrued through leadership
mana whenua	tribal authority over land
mana	prestige, power, authority, respect, dignity
manaaki	care for
Māori	Indigenous people of Aotearoa New Zealand
marae	village courtyard and surrounding buildings
mātauranga	knowledge
mauri	life principle, life force, vitality, ethos
moenga rangatira	chiefly marriage bed, children born of chiefly descent lines
ōhanga	economic
oranga	wellbeing
Pākehā	New Zealander of European descent
papakāinga	village
Papatūānuku	Earth mother, wife of Ranginui
pepeha	tribal saying
pitomata	potential
pūmanawa	talent
rangatira	chief, leader
rangatiratanga	chiefly authority, self-determination
Ranginui	Father sky, husband of Papatūānuku
raupatu	confiscation
reo	language, voice, Māori language
take ahi kā	keeping home fires burning, sustained settlement
take raupatu	conquest
take tuku	gifting land
tangata whenua	people of the land, Indigenous people
tangata	person, man
tapu	sacred, prohibited, set apart
tauiwi	European, foreigner

tiaki	care
tikanga	customs
tino rangatiratanga	chiefly authority, Māori sovereignty, Māori self-determination
Tiriti o Waitangi	Treaty of Waitangi
tuakiri	identity
utu	reciprocity, balance
whairama	prosperity
whakapapa	genealogy
whānau	family, extended family
whenua	land, placenta

1. SUMMARY

A te ao Māori world view on the environment derives from mātauranga Māori (Māori knowledge), which provides a metaphysical explanation of the universe in which humans are descendants of Ranginui (Sky Father) and Papatūānuku (Earth Mother). In this view, human approaches to environmental management are modelled on the guardianship provided by the gods of the elements, the children of Ranginui and Papatūānuku. This approach is also conditioned by the principle that all things, animate and inanimate, are related and, therefore, an interdependency between human and nonhuman actors arises as to their wellbeing.

A te ao Māori world view sees wellbeing as multidimensional (spiritual, physical, psychological and social), dependent on leaders and groups who collectively engender wellbeing defined in Māori terms as mauri ora and hauora, and is enhanced through fulfilling cultural roles and whakapapa-based affiliations. Thus, there are multiple views of what wellbeing is and ought to be, including health, leadership, affiliation, and identity. Māori wellbeing varies depending on the extent to which people identify as Māori and have access to te ao Māori. Importantly, human wellbeing and environmental wellbeing are mutually and simultaneously beneficial, where a healthy environment contributes to healthy people and economies.

Te Arawa Lakes Trust represents a distinctive approach to managing environmental and human wellbeing, defined by a centuries-long association with the land, an Indigenous philosophy of water, embodied by the trust's governors, managers and staff. The trust's approach is a lived philosophy, factored into decision-making through analysis and debate. Te Arawa identify synergies between cultural and commercial imperatives in decisions about the environment and wellbeing, but are somewhat constrained by resource limitations.

2. INTRODUCTION

2.1 Purpose

The purpose of this report is to provide te ao Māori perspectives on the environment and wellbeing as a contribution to the Parliamentary Commissioner for the Environment (PCE) report on wellbeing and the environment and its implications for public policy.

2.2 Rationale

The PCE commissioned this research as part of an investigation into the extent to which environmental information is integrated into the government's wellbeing budgets. The PCE investigation was prompted by the inclusion of wellbeing in national fiscal processes, in particular, by the Treasury emphasising linkages between the environment and wellbeing in this context. In the course of understanding wellbeing, the PCE were particularly interested in understanding this from a te ao Māori perspective, as wellbeing is not generic across cultures and the Treasury have taken steps to incorporate a Māori world view into their policy settings.

2.3 Kaupapa Māori research

The goal of this research is to deliver a Māori perspective on the relationship between the environment and wellbeing. Māori perspectives span metaphysical and physical knowledge, whose cultural logic permits scaffolding of other knowledges onto a Māori frame. However, this research is based on kaupapa Māori research philosophy, ethics and methods (Smith, 1997; Smith, 1999). Kaupapa Māori research is research by Māori, with Māori, for Māori in which Māori language, culture and knowledge are accepted as legitimate purposes, methods and contexts for research and transformative outcomes are effected through its performance (Smith et al., 2012). In practice, this involves partnering with Māori on research, consulting Māori cultural advisors to ensure research accords with Māori values, aspirations and practices; that the benefits and potential harm are transparently addressed; and that tikanga, te reo Māori, kaupapa Māori, and mātauranga Māori underpin the research (Hudson et al., 2010; Martin & Hazel, 2020). The research is

conducted in line with university, Māori and Te Apārangi research ethics. The report draws on theoretical, empirical and analytical research emphasising Māori perspectives.

2.4 Positionality

The perspective in this paper originates from the positionality of the researcher who identifies as Tūhoe, Ngāti Awa, Whakatōhea, and Ngāti Kahungunu, was born in Whakatāne and raised in Rotorua, and adheres to kaupapa Māori theory in Indigenous management and entrepreneurship research. Principles of Indigenous data sovereignty, which provide for Indigenous ownership, governance, and management of mātauranga Māori developed during research should be considered (Te Mana Raraunga, 2016). All sources of published and unpublished literature are appropriately credited. The case study organisation has final say as to what information about them and their approach is shared and own that section of the work on the case study. It is for them to use as they wish. They consent to grant the researcher use of the case study to form part of this report. The report is subject to independent peer review by appropriate Māori scholars to ensure the research is robust. Te reo Māori terms are translated and explained upon first appearance.

2.5 Research design

A qualitative research approach was used. This involved three main methods: (1) a critical review of available literature on the environment and wellbeing from a Māori perspective; (2) a case study of a Māori organisation that exhibits characteristics of Māori knowledge and practice in their management of the environment and wellbeing; and (3) incorporation of feedback from the case study organisation and the PCE. Given the project's small scale, the priority was on 'desk-research', examining existing scholarly, government, industry and Māori literature. The intention was to identify key themes, concepts and practices relating to environment and wellbeing from a Māori perspective and how these function in organisational and decision-making contexts.

2.6 Case study selection

The second part of the research involved partnering with a Māori organisation as a case study that demonstrates features of environment–wellbeing from a Māori perspective and how this manifests in decision-making, resource allocation and measurement. General criteria for case study selection were identified by the PCE, with the priority being to identify use of an explicit wellbeing

framework in a Māori organisational context. We approached and engaged with several Māori organisations about their potential and interest in being a case study for this research. Of these, Te Arawa Lakes Trust expressed strong interest in participating and aligned with the principles of case study selection identified by the PCE. This case study will contribute to a report for the PCE into the extent to which environmental information is integrated into the government's wellbeing budgets. The case study research was conducted with the agreement of Te Arawa Lakes Trust. The research involved a review of public documents and interviews with the chairperson of Te Arawa Lakes Trust, chairperson of Te Arawa Management Limited, the chief executive and several managers. The case study represents an initial assessment of the issues. Because of time and resource limitations, the perspectives of hapū and organisations that Te Arawa Lakes Trust works with, including councils, agencies, firms, schools, suppliers, and others have not been canvassed. Their views remain for future work.

2.7 Structure of this report

This report has three main parts: (1) a review of the literature associated with te ao Māori perspectives on the environment and wellbeing; (2) the Te Arawa Lakes Trust case study; and (3) a discussion of the implications of the literature and the case study.

3. TE AO MĀORI PERSPECTIVES ON THE ENVIRONMENT

3.1 A Māori world view

A Māori perspective of the environment derives from te ao Māori—a Māori world view (Durie, 2017; Royal, 2005). A Māori world view is an understanding of the world that is to be found in the accumulated knowledge handed down from one generation to the next (Mead, 2003), evident in mātauranga Māori (Māori knowledge) (Mead, 2012), tikanga Māori (Māori culture) (Mead, 2003), te reo Māori (Māori language) (Higgins et al., 2014), kaupapa Māori (Māori philosophy) (Smith, 1992), and te ao Māori (the Māori world as a lived reality) (Durie, 2017). A Māori world view provides a metaphysical explanation of the universe and the place of humanity within it. This is denoted in the tradition of the long embrace of Ranginui (Sky Father) and Papatūānuku (Earth Mother), which enveloped the world in eternal darkness (te pō) (Taonui, 2012). These primordial parents were separated by their children—the gods of the elements, which ushered in the world of light (te ao mārama), making the physical world known and knowable (Best, 2005; Marsden, 1992).

Humanity, in this view, traces its origin to Tānemahuta, god of the forests, birds and people, who breathed life into Hine-ahu-one, the earth maiden (Nicholson, 2019). Māori developed a complex knowledge system of the spiritual and material worlds over time, which was maintained as an oral literature through repeated recital of whakapapa (genealogy) in performative (waiata, karakia, pūrākau) and artefactual (whakairo) forms, affirming a relational, reciprocal and collective existence as representative of a good life (Best, 2005; Hēnare, 2011). This knowledge system was applied to existential preoccupations—food production, clothing and adornments, dwelling construction, health and wellbeing, fighting and warfare, land and water use, and tribal organisation. The enactment of this knowledge occurred within a code of ethics, values, and systems of organising, managing, and living modelled on the principles of Ranginui and Papatūānuku, and the guardianship and provisioning of their children, the gods of the physical and spiritual elements, numbering 70 in several traditions (Best, 1976; Buck, 1958).

3.2 Environment and human relationships

At the core of a Māori world view is that all things, animate and inanimate, are related—all trace their descendancy from Ranginui and Papatūānuku, creating an interconnectivity, an

interdependence, and an intertemporality between all things for all time (Mika & Scheyvens, 2021). This degree of unity and fluency between the spiritual and material worlds can be difficult to comprehend, but its pragmatism and ontological durability are evident in the navigation and migration of Polynesian ancestors throughout the Pacific, eventually finding their way to and from Aotearoa over several centuries from as early as 950 AD (Buck, 1958; King, 2003). Fundamentally, then, the relationship between people and the physical environment is not one of permissible domination, exploitation, and exacting claims on sections of the land because of an assumed superiority of human consciousness and toil; quite the opposite. In te ao Māori, the environment is respected and engaged as kin, an ancestor, an elder in the hierarchy of genealogical time and space, acknowledged as both a spiritual and physical being whose needs and preferences trump those of humanity because it was here first (Kruger, cited in Mika, 2021). Thus, a cautious and caring relationship with the environment evolved through the use of tikanga (Māori values) and ritenga (Māori customs) to ensure reciprocal relations of enjoyment, use and protection of the natural environment transpired (Raerino, 1999; Rout et al., 2020). Some of the principles of a Māori perspective on the environment include: whanaungatanga (affirming relationships) (Bishop, 1996; Gillies et al., 2007), kaitiakitanga (guardianship and stewardship) (Hutchings et al., 2020; Kawharu, 2000), manaakitanga (generosity and caring) (Mika, 2014; Papakura, 1991), rangatiratanga (chiefly authority) (Durie, 1995b), and hau (reciprocity) (Hēnare, 2018; Nicholson, 2019).

3.3 Colonisation and Māori development

As a consequence of colonisation, significant loss of land, culture, institutions and authority resulted in a separation between Māori knowledge and the environs from which it was developed, applied and transmitted through the generations (Hikuroa, 2017; Mead, 2003). This in turn resulted in a diminishment of Māori environmental knowledge, institutions and practice, and its substitution with non-Māori environmental knowledge, institutions and practices (Reid & Rout, 2016). The Māori renaissance of the late 1960s and 1970s, which saw Māori agitation and efforts for national recognition of Māori rights and interests, Māori identity, language and culture, Māori land rights, Māori disparities, and Māori self-determination, has caused two major developments with implications for the environment (Awatere, 1984; Walker, 1990). First is that Māori ought to have a say about what happens on their traditional lands consistent with the treaty. In policy terms,

this is reflected in recognition of kaitiakitanga interests in the Resource Management Act 1991, among other environmental legislation (Crengle, 1993; Joseph et al., 2018). Second, that Māori knowledge should inform that perspective. On that front, Māori environmental scientists and Māori environmental practitioners (kaitiaki) have been working earnestly to restore mātauranga Māori about the environment, with some important contributions in land and oceans policy, but the road has not been without difficulty (Ahuriri-Driscoll et al., 2007; Harmsworth & Awatere, 2013; Hutchings et al., 2020; Maxwell et al., 2020; Rout et al., 2019; Simmonds et al., 2016).

3.4 The Māori environmental economy

There has been increasing interest in applying economic concepts to understand and evaluate the natural environment, its condition and its dynamics. Two such approaches are environmental economics and ecological economics. Environmental economics is a subfield of economics that examines the economic effects of environmental policies, with a focus on efficient resource allocation and how policies address environmental damage (CFI Education, 2021). Ecological economics differs from this approach because it views the economy as a subsystem of the environment and focuses on sustainable development (van den Bergh, 2001). Few scholars have written about either concept from a Māori perspective. Researchers associated with Ngā Pae o te Māramatanga, New Zealand's Māori Centre of Research Excellence—have, however, focused on conducting research on whai rawa—Māori theories of economy and enterprise—over the last five years (Ellis, 2021). This includes research on Māori agribusiness and these entrepreneurs' efforts to incorporate Māori values in the sustainable management and development of farming ventures (Rout et al., 2020), and research into kaitiaki-centred business models that are evolving among Māori marine-based enterprises (Reid & Rout, 2020).

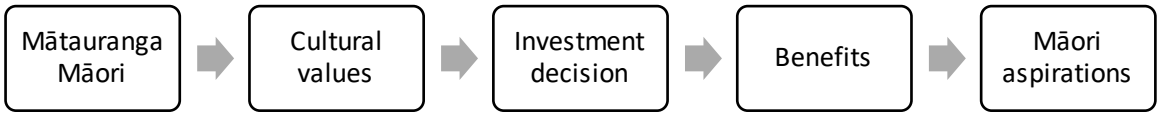
This research led to an invitation to offer a Māori perspective on the concept of environmental economics. In response to the invitation, Rout et al. (2021, in press) use institutional economics as their framework for analysis, arguing that Māori have an inherently environmental approach to economics because of the Māori view of "humans as embedded within the nonhuman community of nature that is both material and spiritual, living in a unified socio-spiritual-ecology" (Rout et al., 2021, in press, p. 1). The nature of this relationship is at once social, spiritual, economic, and ecological. They argue that kaitiakitanga (an ethic of guardianship) is at the heart of Māori relationships with the environment. They discuss mana (power, authority, dignity), tapu (sanctity)

and mauri (life force) as constitutive of a socio-spiritual-ecological framework underpinning what they term the Māori environmental economy, which focuses on balanced wellbeing of human and nonhuman communities. This unified socio-spiritual-ecology was recently explored in Indigenous tourism research on Te Awa Tupua—the Whanganui River (Mika & Scheyvens, 2021).

4.5 Māori enterprise perspectives on the environment

In a study of how Māori asset holding institutions give expression of kaupapa Māori values and move beyond profit maximisation toward maximising community wellbeing and minimising externalities in their entrepreneurial activity, Awatere et al. (2017) found that six factors assisted: (1) kaupapa Māori informed strategy and policy; (2) connectedness between iwi and whānau; (3) kaupapa Māori advocates; (4) kaupapa Māori attuned leadership; (5) embedding kaupapa Māori; and (6), kaupapa Māori evaluation. The challenge for Māori entrepreneurs is "carrying out investments that are consistent with core kaupapa Māori values, such as kaitiakitanga (sustainable resource management), manaakitanga (reciprocity) and whanaungatanga (community connectedness)" (Awatere et al., 2017, p. 3). At a broad level, a model of kaupapa Māori-informed investment decisions is outlined in Figure 2.

Figure 1 Kaupapa Māori-informed investment decisions



Source: Adapted from Awatere et al. (2017, p. 3)

In one case study, Whakatōhea Māori Trust Board revised its investment policies to prioritise integrated wellbeing, intergenerational equity, and balance growth and cash flow (Awatere et al., 2015). The new policy prioritised investments that offered growth, lower risk, commercial merit, local enterprise, and collaboration. Thus, investments are assessed against Whakatōhea values and its strategy, followed by an assessment of their financial merit. There is typically tension between social, environmental, commercial and kaupapa Māori outcomes. Trustees rely on agreed strategies and plans as the "primary framework for making investment decisions" (Awatere et al., 2015, p. 55) and acknowledge tensions between commercial realities and kaupapa Māori values.

4.6 Post-settlement governance entities and the environment

The theory of post-settlement governance is that they function best when there is structural division between political, commercial, and social functions (Mika et al., 2019). The idea that separating governance and commercial decision-making improves the economic performance of firms is a principle of corporate governance that has since been applied to Māori enterprise (Meade, 2004; Mika, 2005). Similarly, in North America, Jorgensen and Taylor (2000) found that separating political and economic activities of Native American tribes improved the success of tribal enterprise. A further principle of corporate governance is the separation between governance and management where board's direct and managers do (Mika, 2005). The relationship between governance and management is not usually this clear-cut, but a healthy tension is the norm. Post-settlement governance design tends to focus on adhering to prescribed legal forms and culturally matched representative models rather than managerial considerations of organisational efficiency and effectiveness (Cribb, 2020). As a consequence, implementation can be somewhat of an afterthought. Post-settlement governance entities must contend with these and other design and operational considerations to achieve their fundamental purpose—multigenerational and multidimensional wellbeing.

5. TE AO MĀORI PERSPECTIVES ON WELLBEING

5.1 Māori wellbeing

Wellbeing is an essential concept of te ao Māori—a Māori world view. Māori perspectives on wellbeing are many and varied. These include, for example, a health perspective that sees wellbeing as having spiritual, physical, psychological and social dimensions (Durie, 1985); a leadership perspective that sees the role of Māori leaders in modelling and engendering wellbeing (Spiller et al., 2020); a kaumātua perspective that sees the wellbeing of elders as contingent upon performing valued cultural roles (Hokowhitu et al., 2020); a relational perspective that sees wellbeing as given effect by affiliation with whakapapa-based social groups (Tūhono Trust, 2017); a cultural perspective that sees wellbeing as subject to Māori engagement in Māori society, culture and language (Kukutai et al., 2017; Stats NZ, 2020); and an identity perspective that sees wellbeing as related to how Māori see themselves (Houkamau et al., 2019).

The commonality across these perspectives is that wellbeing is multidimensional, it originates from an identity as Māori, which has collective, individual, spiritual and material elements, and is reinforced and reproduced through affiliation with and engagement in te ao Māori. Wellbeing from a Māori perspective is also heterogeneous, that is to say, there is a diversity of perspective and experience shaped by context and circumstance described as the lived realities of being Māori (Durie, 1998b, 2003, 2011). Greaves et al. (2015) illustrate this heterogeneity in the six Māori identity signatures she and her colleagues reveal in their study of Māori who share similar views about being Māori, which Houkamau and Sibley (2019) use to extend their research into Māori identity and economic choices. At one end of Greaves' spectrum are traditional essentialists (22.6%) who strongly identify with and highly value being Māori, and at the other end are the dissociated (6.9%) who identify as Māori, but are disconnected with te ao Māori. Wellbeing from a Māori perspective is also at once both means and ends; in other words, wellbeing has an enabling effect, causing those experiencing wellbeing to effect wellbeing in others, and to measure wellbeing by the extent to which it amasses in others. Moreover, wellbeing is also systemic and interdependent in nature, where human wellbeing and environmental wellbeing are mutually and simultaneously reinforcing.

5.2 A Māori health perspective

Sir Mason Durie has written extensively on Māori perspectives of health, challenging the narrowness of the biomedical model to be more inclusive of Māori aspirations and capabilities for health and wellbeing (Durie, 1985, 1998b, 2001). Arising from Māori health discussions in the 1970s, Durie (1985) conceived a model of health with four dimensions that would later become known as te whare tapa whā, comparing "health to the four walls of a house" (Durie, 1998b, p. 69). All four elements—taha wairua (spiritual dimension), taha hinengaro (physic dimension), taha tīnana (physical dimension), and taha whānau (family dimension)—are "necessary to ensure strength and symmetry"(Durie, 1998b, p. 69). Thus, wellbeing in Durie's (1998b) view, emphasises balance between spiritual, mental, physical and relational elements.

Durie's subsequent work turned to defining, influencing and measuring Māori wellbeing across a vast array of Māori development activity (Durie, 1995a, 2006), premised upon several recurring themes: the continuing potency of a Māori world view (Durie, 2003); the importance of Māori self-determination in enabling Māori self-development (Durie, 1995b); the contingency of Māori wellbeing upon Māori identity and access to te ao Māori (Durie, 2001); promoting understanding of the treaty and recognition of Māori rights and interests (Durie, 1998a); and the promotion of a positive vision of life as Māori grounded in Māori knowledge, Māori aspirations, Māori realities, Māori language and culture, Māori institutions, and Māori potential (Durie, 2016). While Durie's scholarship is clearly built on a Māori foundation, he does not advocate for separate Māori development, but rather a pluralism in which Māori self-determination is allowed to prosper and sustain a Māori way of thinking, being and doing as Māori, enabling Māori to fully participate "as Māori in te ao Māori (the Māori world) and in te ao whānui (wider society)" (Durie, 2006, p. 5).

Durie (2006) argues that both universal and Māori-specific indicators can be used to measure Māori wellbeing at the level of the individual, collective and population. While many aspects of Māori wellbeing are generic, similar to those of non-Māori, it is useful to devise Māori-specific indicators and measures because "[p]articipation *of* a Māori is different from participation *as* a Māori;" the latter implies "a secure cultural identity" (Durie, 2006, p. 8). While the focus of Durie's attention is on collective human capacity, particularly, the capacity for whānau to care, protect, empower, plan and act as whānau, the condition, scale and access to te ao tūroa (the Māori estate) is also essential for Māori wellbeing over time. This includes a regenerated land base, access to a

clean and healthy physical environment, whose quality, sustainability and usage incorporates Māori values, ethics and aspirations, including sustainable harvest. An essential principle of indigeneity is that "human wellbeing is inseparable from the natural environment" (Durie, 2006, p. 12). This is reflected in enduring relationships between tangata (people) and whenua (land) celebrated in ritual, knowledge, ethics, balanced usage, and a unique language, constitutive of an ecological orientation. Thus, Māori-specific measures of Māori wellbeing mean giving weight to social, cultural, economic, environmental dimensions of wellbeing.

5.3 A Māori leadership perspective

In a timely treatment, Spiller et al. (2020) share insights from their research into the distinctive dimensions of Māori leadership and integrated decision-making and how these characteristics deliver Māori economies of wellbeing. Informed by a rich array of Indigenous data, they devise a model using the kauri tree as a metaphor for levels of leadership and decision-making comprising time beings (the roots), banding together (the trunk) and branching out (the branches and leaves). They find that Māori leaders are oriented by tikanga (Māori culture, values and customs), culturally grounded in te ao Māori (a Māori world view, and Māori society), possess relational skills and endeavour to keep communities cohesive, hold to an intergenerational vision, and display financial and nonfinancial acumen and intelligence (Spiller et al., 2020). Moreover, Spiller et al. (2020) identify five qualities of Māori leadership, the first two being kia hauora—be healthy and kia hono—be connected. A healthy leader makes good decisions, grows others, models healthy living, manages stress, shows kindness, generosity and love, is steadfast under pressure, is self-aware and self-regulating as to their egos, and shuns bullying. Importantly, these are traits that Māori expect of their leaders, thus, the list offers aspirational characteristics affirming a Māori leadership style. A connected leader serves their community, builds whanaungatanga (kinship relationships), is team oriented, inclusive, engaging of whānau, supported by their people, listens to all and walks in several worlds.

Spiller et al. (2020) characterise making decisions from a Māori perspective as affording weight to both kauae runga (the upper jawbone, a metaphor of the spiritual realm—heaven in a non-Māori view) and kauae raro (the lower jawbone, a metaphor for the physical realm—earth, in a non-Māori view). Knowledgeable people making inclusive, transparent decisions, involving several generations, without hierarchy, applying right and proper processes, future-focused, resilient,

considered, presenting ideas for collective consideration without predetermination, are other characteristics of Māori decision-making (Spiller et al., 2020).

Allied to their concepts of leadership and decision-making is the idea of Māori leaders as paradigm warriors, because they activate a knowledge code of collective intelligence, cultivate ties of affection, which bind the people and the Earth through ancestral connections founded on love and dignity, and are comfortable with tension as a paradoxical precursor to enlightened outcomes (Spiller et al., 2019). As their primordial ancestors once did, paradigm warriors see beyond present circumstance and "fearlessly pursue enlightenment" only settling on a new reality when it serves "the wellbeing of both people and planet" (Spiller et al., 2020, p. 15). Importantly, decision-making which relies on the collective intelligence of preceding generations and is framed around the wellbeing of coming generations, "cannot be reduced to a cognitive process bounded within … rational choice…intergenerational trade-offs must tap our emotional capacities" (Honey-Rosés et al., 2014, p. 676, cited in Spiller et al., 2020, p. 20). Rational decision-making tools are viewed as "aides with limitations, not replacements" for te ao Māori decision-making approaches, including hui (meetings), kōrero (discussion), wānanga (deliberation), maramataka (lunar calendar), and pūrākau (stories) (Spiller et al., 2020, p. 22).

A concern about how Māori leadership and decision-making approaches could lead to a more equitable sharing of the fruits of a growing Māori economy led Spiller et al. (2020) to propose their model of Māori economies of wellbeing, which they call Ngā hono ōhanga oranga. This model has five main principles: (1) ngā hono—relational elements of wellbeing; (2) ōhanga—an ecosystems view of ohaoha (economic activity); (3) oranga—economic activity whose focus is enhancing mauri ora (health and wellbeing); (4) ora—Māori values as the transformative centre; and (5) whakapapa—relational contexts and meanings (Wolfgramm et al., 2019). A Māori wellbeing economy is indicated by being whānau-centred, delivering collective benefits for whānau, empowering whānau, enabling whānau wellbeing, intergenerational, holistic, sustainable, abundant and prosperous, not just in monetary terms, realising potential, elevating Māori identity, and being connected to land and having unity of purpose (Spiller et al., 2020). Māori identity, whānau relationships and connections to health were considered more important than financial and business indicators of Māori wellbeing. Cultural competency in te ao Māori and resilience as Māori were identified as important capabilities to support a Māori economy of wellbeing.

5.4 A kaumātua perspective

Kaumātua as respected older Māori women and men (Waldon, 2004) hold a cherished place in Māori society as bearers of knowledge, support and leadership for whānau (families) and hapū (subtribes) (Davies, 2006; Higgins & Meredith, 2013), but such social standing is at risk of being lost because of changing demographics and declining access to cultural knowledge and cultural settings in which to deploy it (Durie, 1999). Durie (1999, p. 102) argues that the "cultural strength and enrichment [of Māori people] will…depend on the active participation of its relatively small elderly population" as much as the vitality and efforts of its youth. Hokowhitu et al. (2020, p. 3) cite Durie (1997, p. 1142) whose survey of 400 older Māori found that "a Maori view of wellbeing is closely linked to an ability to fulfil a cultural role." Hokowhitu et al. (2020) studied whether Indigenous cultural revitalisation would increase the wellbeing of Indigenous communities. Hokowhitu et al. (2020, p. 4) grounded their research in a Māori view of wellbeing, which incorporates "dynamics of individual perspectives, participation in Māori community, and interconnectedness among spiritual, cultural, whānau (extended family), community, and material wellbeing." Hokowhitu et al. (2020, p. 10) argue that a strengths-based view reframes aging away from being a burdensome and deprived populace to comprehending older people as "highly valuable members of society" who, nonetheless, may be disadvantaged by colonisation and structural discrimination in health. When kaumātua are unable to perform expected cultural roles, their health and wellbeing is affected, but so is the health and wellbeing of whānau and hapū (Waldon, 2004). Mika (2016, p. 166) argues that the "[t]raditional knowledge, wisdom and support provided by Kaumātua is helping Māori entrepreneurs revitalise the Māori economy." This occurs in several ways—in formalised roles as advisors, particularly in Māori land-based enterprises and post-settlement governance entities (PSGEs), to be consulted in strategic decisions, or employed a cultural advisors, or engaged as entrepreneurs in their own right (Mika, 2016).

5.6 Tūhono—an iwi identity perspective

Tūhono Trust (Tūhono) is a charitable trust established under the Electoral Act 1993 to assist Māori to register with their iwi and to assist the 120 iwi the trust works with to develop reliable membership registers. Tūhono exists to promote Māori wellbeing and identity as a public benefit, promoting a vision for Māori called te pae tawhiti, which the trust believes Māori share, focusing on three elements: tuakiri (identity), oranga (wellbeing) and pitomata (potential) (Tūhono Trust,

2017). Tūhono has three main roles: (1) administering a Māori affiliation service; (2) research services; and (3) development services. Tūhono research on social licence and sharing information on wellbeing found that "individual and collective wellbeing are equally important for Māori" (Tūhono Trust, 2017, p. 4). Affiliation with whakapapa-based social groups generates a more "collaborative sense of origin and wellbeing," in which individual wellbeing is conditional on collective wellbeing, and as a consequence, Māori were more willing to share information with their iwi than with government (Tūhono Trust, 2017, p. 15). In 2019, Tūhono reported findings on Māori wellbeing from a survey of 744 Māori (Tūhono Trust, 2019). The study found that, among other things: all dimensions (health, whānau, culture, environment, young people, employment, housing) of wellbeing are important to Māori (96 percent); the treaty (54 percent), and more so, Māori values (81 percent) are bases for Māori wellbeing; and whānau are central to enduring wellbeing (93 percent). In 2020, Tūhono developed a conceptual framework and survey questions on Māori wellbeing called Ngā whetū oranga. This framework identifies 10 domains, 45 subdomains and 8 dimensions of Māori wellbeing (Tūhono Trust, 2020b). The survey of 924 Māori found that 81 percent of participants agreed that the 10 domains of Māori wellbeing in the Ngā whetū oranga framework were key aspects of Māori wellbeing, with participants rating their personal wellbeing at 7 out of 10 (Tūhono Trust, 2020a).

Of the 924 participants, 92 percent agreed that "[a] positive nurturing kāinga environment influences the wellbeing and quality of life of the whānau and its individual members," (p. 1) while 94 percent agreed that "[p]rotection and sustainability of the environment is essential for individual and collective wellbeing" (p. 3) (Tūhono Trust, 2020a). Participants rated the importance of the taiao or the environment at 8.5 out of 10 (Tūhono Trust, 2020a). Some of the comments that reflect this view were: "preserving and giving back to the land is equally important;" "respect for the land the sea etc, as they provide us with a life and the food;" "[t]he environment sustains us – whenua (like the placenta) nourishes and sustains us. What we put in, we get back" (Tūhono Trust, 2020a, p. 36).

5.7 Te Kupenga—a statistics perspective

Te Kupenga is Stats NZ's survey of Māori wellbeing covering 8,500 adults (aged 15 years and over) who identify as Māori (Stats NZ, 2020), and was initially run in 2013 with 5,500 participants (Statistics NZ, 2013). The survey produces statistics on four areas of Māori cultural wellbeing: (1)

wairuatanga—spirituality; (2) tikanga Māori—Māori customs and practices; (3) te reo Māori—the Māori language; and (4) whanaungatanga—social connectedness. In 2018, Te Kupenga found that 7 out of 10 Māori (69 percent) said that "the health of the natural environment was very important," with 96 percent of Māori saying they recycled packaging, and nearly one-third of Māori (32 percent) actively engaging in environmental restoration activities (Stats NZ, 2020, p. 1). In terms of connection to te ao Māori (the Māori world): 9 out of 10 Māori (89 percent) said it was "at least a little important for them to be involved in things to do with Māori culture;" 86 percent of Māori indicated they knew their iwi, with most (97 percent) having been to a marae in their lives; and around three-quarters of Māori (73 percent) said daily use of te reo Māori was of "some importance;" almost three-quarters of Māori (74 percent) "rated the wellbeing of their whānau highly (at 7 or above out of 10)" (Stats NZ, 2020, pp. 3-4).

Kukutai et al. (2017) interrogate self-reported measures of whānau wellbeing that Te Kupenga uses. Whānau they define as "whakapapa-based relationships of mutual obligation… [which] include intergenerational relationships [that] may extend beyond one household (Kukutai et al., 2017, p. 3). Whānau wellbeing (whānau ora) is defined as a "collective state of wellbeing" entwined with individual wellbeing, collective whānau strength and potential for whānau-led problem solving (Kukutai et al., 2017, p. 3). Kukutai et al. (2017, p. 3) also note that "potential predictors of whānau wellbeing are strong reciprocal relationships between whānau members and traditional lands and waters, as well as the knowledge and practices that underpin those relationships." Ratings of whānau wellbeing are high, with almost three-quarters of Māori saying "that their whānau were doing well (7-8) or very well (9-10)" (Kukutai et al., 2017, p. 4). Kukutai et al. (2017) find that older and younger Māori report more positive wellbeing, women more than men report higher levels of wellbeing, and economic security (income and housing adequacy) may guard against low whānau wellbeing, but have less bearing on higher levels of whānau wellbeing. However, the two factors that influence whānau wellbeing are "the quality of whānau relationships and individual life satisfaction" (Kukutai et al., 2017, p. 5). Whānau wellbeing is holistic and interconnected, requiring social, human and economic interventions, and longitudinal data to influence and measure (Kukutai et al., 2017).

In a policy project called Ngā Tamariki o Te Kupenga, Smith et al. (2020) apply exploratory factor analysis (EFA) to a combination of data from Te Kupenga, Ministry of Education and the

Integrated Data Infrastructure (IDI) to assess the relationship between Māori students' connection to te ao Māori, their educational outcomes, and whānau wellbeing. Smith et al. (2020) identify five dimensions of cultural identity from Te Kupenga: (1) te reo fluency and use at home; (2) tūrangawaewae—strength of identity as Māori and being Māori; (3) tikanga—frequency of engagement in Māori culture; (4) wairua—importance of and engagement in spirituality and religion; and (5) mahi marae—frequency of contribution to marae functioning. They further identify from Te Kupenga data six Māori identity signatures, indicating categories of Māori who share similar patterns of association with te ao Māori.

5.8 Te tuakiri Māori—an identity economics perspective

Te tuakiri Māori me ngā waiaro ā-pūtea—the Māori identity and financial attitudes study (MIFAS), developed by Houkamau et al. (2019), is the first large-scale survey of Māori (7,019 participants) to explore the connection between Māori cultural identity and economic decision-making. The MIFAS uses several theories in its approach, including: Māori economic theory (Māori values influence Māori economic priorities) (Hēnare, 2001), the Māori potential thesis (Māori must achieve success *as* Māori) (Durie, 2011), social identity theory (a person's self-concept is partly determined by their social group) (Tajfel & Turner, 1986); and identity economics (people consider financial and identity implications when making economic choices) (Akerlof & Kranton, 2000). The MIFAS uses a measure of Māori identity called the Multidimensional Model of Māori Identity and Cultural Engagement (MMM-ICE) (Houkamau & Sibley, 2010), comprising eight dimensions: (1) group membership—being Māori is important and valued; (2) interdependent self-concept—being Māori is defined by relationships with other Māori; (3) cultural efficacy and active identity engagement—personal efficacy to engage with other Māori; (4) spirituality—Māori spiritual beliefs; (5) socio-political consciousness—history affects present and defends Māori rights; (6) authenticity beliefs—being Māori requires displays of Māori identity; (7) perceived appearance—appearance indicates Māori identity; and (8) whānau efficacy—whānau can resolve challenges together (see Houkamau et al., 2019). The MIFAS was developed over three stages, interviews with 25 Māori business leaders, a review of Māori economic development literature and a pen and paper questionnaire consisting of 340 items sent to 100,000 Māori on the electoral roll, returning 7,019 completed questionnaires giving a 7 percent response rate (Houkamau et al., 2019). Of the total participants, 98 percent were born in Aotearoa,

61.8 percent were female (4,335), with a mean age of 48.85 years, ranging from 18 to 83 years of age (Houkamau et al., 2020). The average yearly household income was $89,057, while professionals (21.5 percent) was the most prevalent occupation (Houkamau et al., 2020). Most participants (4,241 or 60.4 percent) were in a "serious romantic relationship…, mainly with a Pākehā (2,626, or 55.7 percent) (Houkamau et al., 2020, p. 9).

Three main findings are evident: (1) Māori who value Māori identity strongly (particularly spirituality, socio-political consciousness, whānau efficacy and authenticity beliefs) "were more likely to endorse attitudes that aligned with the normative or traditional values" (p. 13); (2) Māori who are actively engaged in Māori identity and culture "prefer employment that promotes Māori values and development," suggesting that, given a choice, Māori would opt for employers who value and respect Māori culture (p. 13); (3) interdependence is linked to preferences for relationships over performance, but "expressions of individualism and collectivism may be socially and situationally contingent for Māori" (p. 14) (Houkamau & Sibley, 2019). Results also indicate protecting iwi assets is favoured when higher levels of socio-political consciousness, stronger authenticity beliefs, greater commitment to Māori spirituality and higher levels of whānau efficacy were present (Houkamau & Sibley, 2019). Using MIFAS data to explore the spirituality of Māori regard for the environment, Lockhart et al. (2019) found that "socio-political consciousness correlated positively with valuing environmental protection, whilst spirituality correlated positively with valuing unity with nature," indicating that the Māori affinity for land is embedded in both spirituality and socio-political awareness.

5.9 He ara waiora—a tax policy perspective

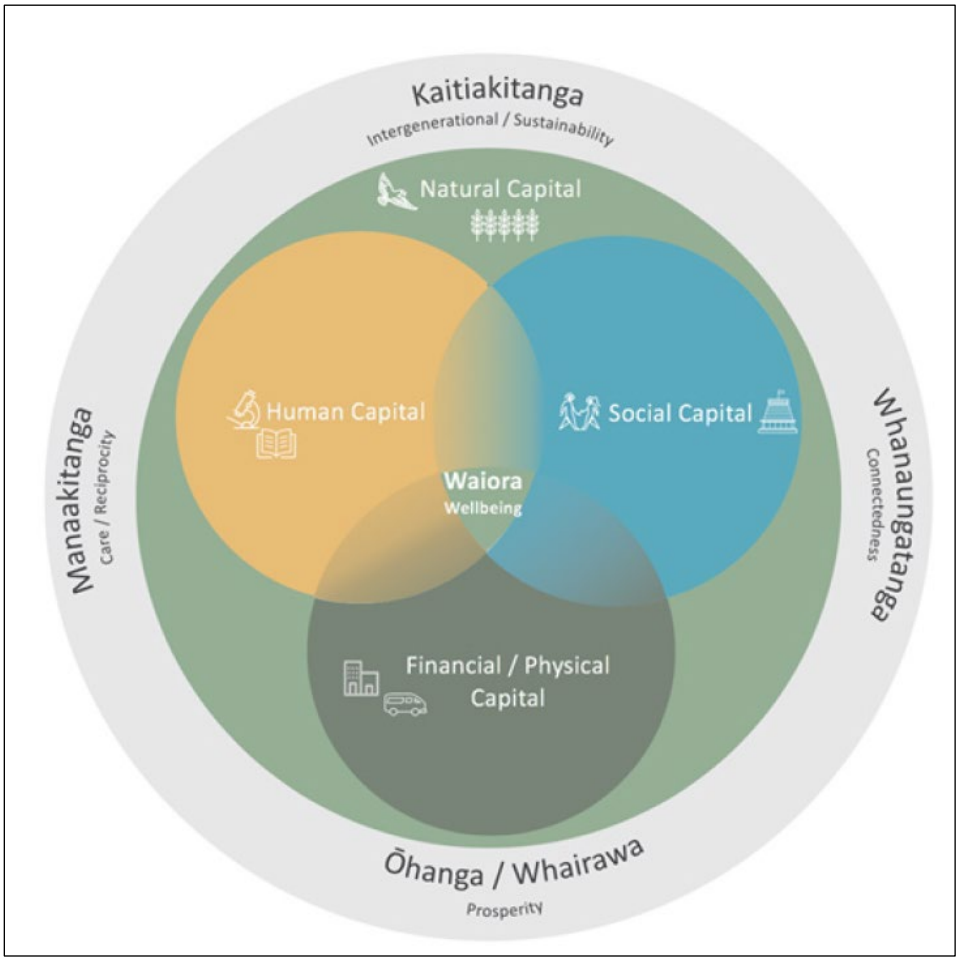
The government has become increasingly interested in the concept of wellbeing because of the limitations of traditional measures like gross domestic product and the desire for an integrated approach to development (Ng, 2017). The Living Standards Framework was developed to consider the impact of government policies on intergenerational wellbeing (Treasury, 2018). The framework draws on the OECD's configuration of four forms of capital—social, human, natural and financial—around which to organise indicators of sustainable intergenerational wellbeing to facilitate cross-country comparisons (Treasury, 2018). While the Crown-Māori relationship is integral to the living standards framework, "[the Treasury] is yet to fully develop a good description of the wider system that delivers wellbeing" (Te Puni Kōkiri & New Zealand Treasury,

2019, p. i). Te Puni Kōkiri and New Zealand Treasury (2019) recommend seeing wellbeing in context, applying an indigeneity lens, and taking an holistic view to effect change in Māori wellbeing. An indigeneity lens encompasses te Tiriti o Waitangi, a te ao Māori perspective and whānau-centred thinking, and seven domains and indicators for Māori wellbeing (Te Puni Kōkiri & New Zealand Treasury, 2019). The Tax Working Group's exploration of te ao Māori perspectives on tax reform is an example of this approach.

In December 2017, the government appointed the Tax Working Group to "look at the structure, fairness and balance of New Zealand's tax system" chaired by Sir Michael Cullen (Robertson & Nash, 2017, p. 1). The Tax Working Group published its initial report in September 2018 (Tax Working Group, 2018a), and its final report in February 2019 in two parts: the first deals with substantive recommendations (Tax Working Group, 2019a); the second addresses capital gains tax (Tax Working Group, 2019b). The Tax Working Group engaged with Māori, among other groups (Tax Working Group, 2018b). One question the Tax Working Group posed is "[h]ow could tikanga Māori support a future-focused tax system?" (McMeeking et al., 2018, p. 5). Consequently, the Tax Working Group incorporated wellbeing and te ao Māori perspectives in its review of the tax system (Tax Working Group, 2019a). A policy framework called 'He ara waiora—A pathway toward wellbeing' was developed by the Tax Working Group drawing on the four capitals of the Living Standards Framework (Treasury, 2018), te ao Māori concepts of wellbeing (McMeeking et al., 2019), and tax policy design principles (Tax Working Group, 2019a).

He Ara Waiora is based on four tikanga (cultural) principles: (1) manaakitanga (care and respect); (2) kaitiakitanga (stewardship, guardianship); (3) whanaungatanga (relationships and connections); and (4) ōhanga, whairama (prosperity) (McMeeking et al., 2019). O'Connell et al. (2018) engaged a group of te ao Māori academics and experts, including the late Mānuka Hēnare who suggested that these tikanga ought to be integrated into a framework to provide guidance on how policy is designed, implemented and evaluated. O'Connell et al. (2018) drew on earlier work of Hēnare (1988, 2001) to construct a framework to support He Ara Waiora. This framework is shown in two parts (Figure 3 shows He Ara Waiora and Figure 4 shows the integrated framework).

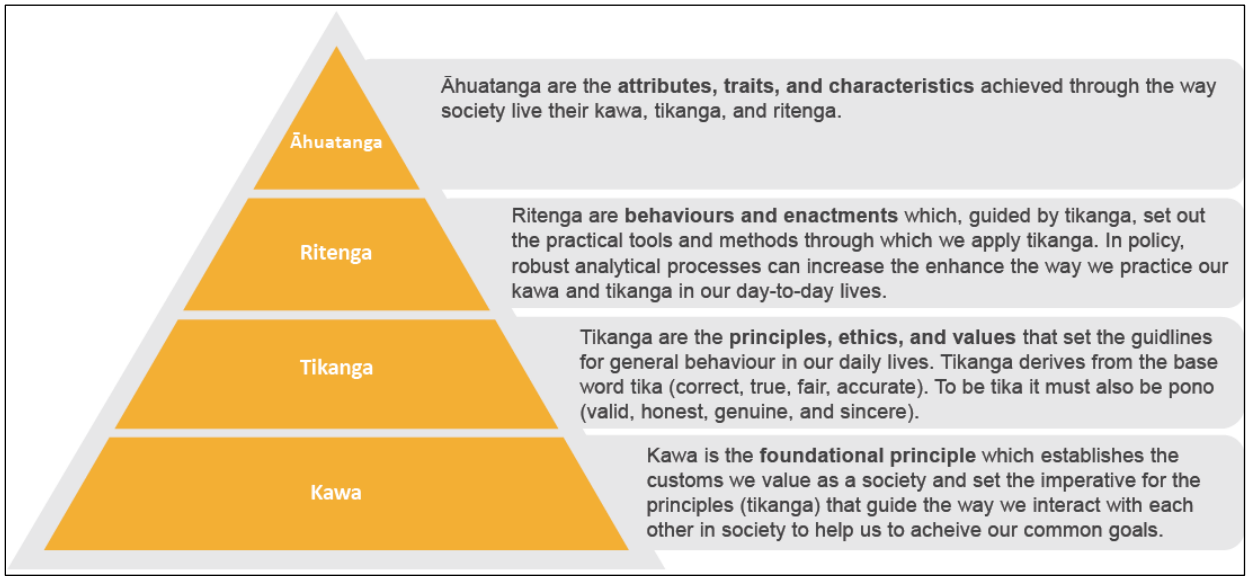
Figure 2 He ara waiora – A pathway towards wellbeing



Source: O'Connell et al. (2018, p. 7); Tax Working Group (2019a, p. 27)

According to McMeeking et al. (2018, p. 6), "waiora anchors the framework in a conception of human wellbeing, that is connected to the four capitals within the LSF and expressed through four tikanga derived values of wellbeing." A tikanga framework based on Hēnare's work for policy is favoured because it will likely result in "more durable and equitable policy outcomes for all New Zealanders…, is a meaningful and appropriate reflection of Te Tiriti o Waitangi" (McMeeking et al., 2018, p. 7); and it represents a "proactive mechanism that enhances the way Treaty and UNDRIP [United Nations Declaration on the Rights of Indigenous Peoples] principles are given effect" (McMeeking et al., 2018, p. 11).

Figure 3 Integrated framework



Source: Tax Working Group (2019a, p. 27); O'Connell et al. (2018, p. 11)

The Tax Working Group considered that waiora could be reflected in kawa (a moral imperative for behaviour) and the 'āta noho' principle from the preamble of the Māori text of te Tiriti o Waitangi (the Treaty of Waitangi) (Tax Working Group, 2019a). In the context of te tiriti, Hēnare explains āta noho as "continued life as Māori" (Hēnare, 2011, p. 261). The Tax Working Group expressed a desire for He Ara Waiora to be developed further in terms of its influence on the Living Standards Framework and its evolution as a tikanga Māori framework of understanding wellbeing (Tax Working Group, 2019a). McMeeking et al. (2019) developed He Ara Waiora version 2.0 to provide a more comprehensive conceptualisation of wellbeing from a Māori perspective, showing in particular: (1) wairua (spirituality) is at the centre of wellbeing; (2) te taiao (environment) is a determinant of human wellbeing; and (3) waiora (wellbeing) is relational, dependent on the all elements.

Figure 4 He Ara Waiora version 2.0

Source: McMeeking et al. (2019, p. 5)

6. CASE STUDY—TE ARAWA LAKES

Mai Maketū ki Tongariro. Ko Te Arawa te waka. Ko Te Arawa māngai-nui ūpoko tū-takitaki.
From Maketū to Tongariro. Te Arawa the canoe. Te Arawa the determined people.

(Tapsell, 2017, p. 2)

6.1 Overview

This is a case study about Te Arawa philosophy and practice of environmental and human wellbeing, particularly in relation to wai (water) as a contribution to an investigation of the New Zealand Parliamentary Commissioner for the Environment on the extent to which environmental information is integrated into the government's wellbeing budgets. The case has three main parts: (1) an overview of the origins of Te Arawa Lakes Trust (TALT), its governance, management, and approach to decision-making; (2) an overview of Te Arawa Management Limited (TAML); (3) findings from interviews with TALT and TAML chairs and managers.

6.2 Origins of the Te Arawa people

Te Arawa are the Māori people whose ancestral lands are in the Rotorua district (Rotorua Museum, 2021). Te Arawa trace their origins to the original crew of the Te Arawa canoe led by Tamatekapua that set out from Hawaiki, the Polynesian homeland of the Māori people, before settling at Maketū in the Western Bay of Plenty (Tapsell, 2017). Te Arawa explored and settled many parts of the central North Island region between Maketū and Tongariro. While Te Arawa were instrumental in the formation of the Rotorua township and tourism with the signing of the 1881 Fenton Agreement, colonisation severely affected Te Arawa with the loss of life through disease and warfare, the loss of lands through the Native Land Court, and the impact of the 1886 Tarawera eruption. Moreover, Te Arawa rights and interests in the township and its geothermal resources were taken by the Crown (Tapsell, 2017). In 2013, 43,377 people identified as Te Arawa (Statistics New Zealand, 2013).

6.3 Te Arawa Lakes Trust

Te Arawa Lakes Trust is the custodian of 14 lakes in the Rotorua district by way of a relatively recent treaty settlement, but it is an organisation with a 100 year history of providing leadership

and support to the Te Arawa people through the formation of Arawa Māori Trust Board in 1922. Te Arawa Lakes Trust has been recognised for its innovative approach to environmental policy and practice (New Zealand Planning Institute, 2020), its engagement with the community and the impact on the environment (Bay of Plenty Regional Council, 2019), and its leadership and support for whānau during Covid-19 ("Coronavirus: Te Arawa launches Covid-19 support hub amid calls for 'extraordinary effort from all of us'," 2020). Accolades are not the goal, but they are an indication that the trust has developed an effective philosophy, practice and context for doing what is right and what is needed within a constrained fiscal environment and getting the best out of its people, both those governing and those working inside the organisation.

With all its trustees and directors, and most of its staff being of Te Arawa and living and working within the Te Arawa rohe, the organisation's approach to the environment, wellbeing, and its commercial and noncommercial decisions and activity occurs with an implicit knowledge and understanding of Te Arawa history, aspirations and circumstance and potential, guided by a powerful and clear statement of philosophy and values in Te tūāpapa o ngā wai o Te Arawa. As a consequence, the trust's people "live and breath" Te Arawa values and aspirations in their actions.

While the treaty settlement provides a legislative mandate, a structure and some resources to carry out its role in relation to the people and the lakes of Te Arawa, there are challenges around resourcing, policy, politics and perception that the organisation must contend with to achieve its goals. This case study provides a brief perspective on its organisational strategy, structure and activity and how these are given effect by its governors and managers for the benefit of the environment and the wellbeing of the people—whānau and hapū of Te Arawa and the people inside the organisation and associated with it.

Figure 5 Te Arawa Lakes Trust logo

	The tohu represents Te Arawa people united by the settlement, moving forward together with purpose and confidence. The tohu uses the tapatoru (triangle), kuratau (v shape), kowhaiwhai (unified base)

Source: Te Arawa Lakes Trust (2021)

6.4 Post-settlement governance

Te Arawa Lakes Trust (TALT or the trust) is the post-settlement governance entity for Te Arawa, which was established following settlement of historical claims (Wai 240) relating to 14 lakes on 18 December 2004 (Office of Treaty Settlements, 2004) (see Figure 5). The trust was established 12 October 2009 to receive and administer settlement assets, specifically title to 13 of the 14 lakebeds of the Te Arawa lakes (see Figure 6), $2.7 million in cash, and $7.3 million to capitalise the annuity Te Arawa receive from the Crown, $400,000 to purchase 200 fishing licences, and other forms of cultural redress. Under the settlement, the Crown retains ownership of the water column and airspace and neither the Crown nor Te Arawa own the water. TALT replaced the Arawa Māori Trust Board, which was established in 1922 to receive and administer an annuity of £6,000 the Crown agreed to pay Te Arawa as part of an out of court settlement in which Te Arawa agreed that the Crown owned the lakebeds, and the Crown recognised Te Arawa to fishing rights and burial reserves in the lakes (Office of Treaty Settlements, 2004). Under the settlement, the acknowledgements and the Crown apology for breaches of the treaty and the negative impact of this on Te Arawa was a key feature. The Rotorua Te Arawa Lakes Strategy Group comprises two members from each of Te Arawa Lakes Trust, Rotorua Lakes Council, and Bay of Plenty Regional Council.

6.5 Te Arawa Lakes Trust structure and purpose

Under the trust deed, the purpose of the trust is to receive, manage and administer the trust fund on behalf of and for the benefit of the present and future members of Te Arawa, including: (a) the promotion amongst Te Arawa of the educational, spiritual, economic, social, health and cultural advancement or wellbeing of Te Arawa and its whānau; (b) the maintenance and establishment of places of cultural and spiritual significance to Te Arawa; (c) the promotion amongst Te Arawa of mental health and wellbeing of the aged or those suffering mental or physical sickness or disability; and (d) any other purpose beneficial to Te Arawa (Te Arawa Lakes Trust, 2009).

The trust may convene Ngā Koeke o Te Arawa to advise trustees on tikanga, reo, kawa, kōrero and whakapapa of Te Arawa, but no such advice is binding on the trustees. The trust may appoint a chief executive officer and delegate appropriate powers and authorities. The trust must establish Te Arawa Management Limited (TAML), which is owned 100% by the trust. TAML's role is to

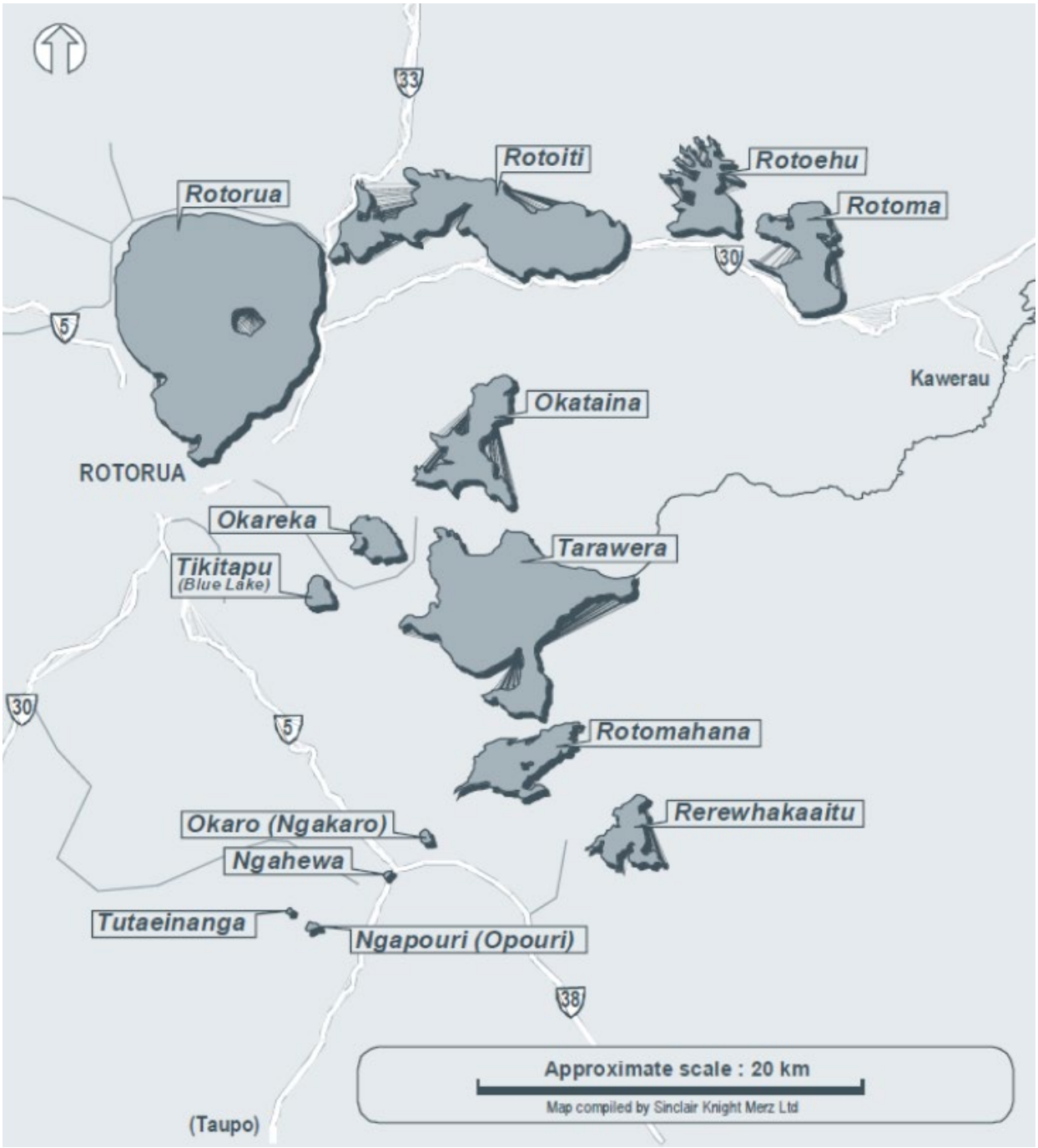
use and administer on behalf of the trust assets of a commercial nature and undertake all commercial activities of the Te Arawa Group (TALT, TAML and their subsidiaries) and undertake delegated community development activities. The trust must prepare an annual plan and a five-year strategic plan. The trust must prepare an annual report within four months after the end of the financial year. TAML must prepare a statement of intent, a five-year plan and an annual plan.

The trust must maintain a register of Te Arawa members, with members choosing one hapū for trustee elections and providing details of whakapapa. Each of the three tūpuna rohe—Te Kawapuārangi, Te Ure o Uenukukōpako, Tūhourangi—is entitled to elect three trustees to the trust board who hold office for three years. Trustees must be a registered member of Te Arawa and cannot be an employee. The trustees of TALT are:

- Sir Toby Curtis, Chairperson, Te Kawatapuārangi Rohe
- Willie Emery, Te Kawatapuārangi Rohe
- Roana Bennett, Te Ure o Uenukukōpako Rohe
- Kingi Biddle, Te Ure o Uenukukōpako Rohe
- Geoff Rolleston, Deputy Chairperson, Te Ure o Uenukukōpako Rohe
- Nuki Nicholson, Tūhourangi Rohe
- Niwa Nuri, Tūhourangi Rohe
- Rangitihi Pene, Tūhourangi Rohe

On 18 April 2021, trustee Willie Emery passed away. The trust board has three subcommittees: (1) Audit, Finance and Risk, which met nine times, to assist the board fulfil its obligations; (2) Komiti Taiao, which met eight times; (3) Te Komiti Whakahaere (Te Arawa Lakes Fisheries Management Committee), established under the Te Arawa (Lakes Fisheries) Regulations 2006. Te Komiti Whakahaere has responsibility for sustainably managing five taonga species: kōaro, tuna, īnanga, kākāki, and kōura (Te Arawa Lakes Trust, 2018).

Figure 6 Lakes covered by settlement



Source: Office of Treaty Settlements (2004, p. 3)

6.6 Rotorua Te Arawa Lakes Strategy Group

The Rotorua Te Arawa Lakes Strategy Group was originally a joint committee established under clause 30(1)(b) of Schedule 7 of the Local Government Act 2002 to "preserve and protect the Rotorua lakes and their catchments" (Office of the Auditor General, 2016, p. 20). The Rotorua Te Arawa Lakes Strategy Group (the strategy group) was accorded legislative recognition through the Te Arawa Lakes Settlement legislation (Te Arawa et al., 2004) to coordinate policy, management and action to improve the health of the Rotorua Te Arawa lakes comprising two members each from Bay of Plenty Regional Council, Te Arawa Lakes Trust and Rotorua Lakes Council (Bay of Plenty Regional Council, 2021). Under deed of settlement, the purpose of the strategy group is "contributing to the promotion of the sustainable management of the Rotorua Lakes for the use and enjoyment of present and future generations, while recognising and providing for the traditional relationship of Te Arawa with their ancestral lakes" (Te Arawa et al., 2004, p. 21). In 2013, a review of the strategy group's terms of reference included a change to the name of the group from "the Rotorua Lakes Strategy Group to the Rotorua Te Arawa Lakes Strategy Group" to better reflect the interests of Te Arawa in the lakes (Office of the Auditor General, 2016). To the nation, the lakes are regarded as important assets; to Te Arawa the lakes are a taonga, with the health of water essential to the wellbeing of the people (Office of the Auditor General, 2016). Water quality of the lakes has significantly deteriorated because of sewage discharge, land use practices, nutrients in sediments, nutrient rich groundwater (Office of the Auditor General, 2016).

A memorandum of understanding was implemented between the strategy group and the Crown in 2007, the focus on how all four partners could improve Rotorua lakes' water quality. Sir Toby Curtis is the strategy group's independent chair and the TALT's representatives are Roana Bennett and Nuki Nicholson. The Rotorua Te Arawa Lakes Programme—the work of the strategy group—is partly funded by the Crown, through a grant of $72.1 million from the Ministry for the Environment, to achieve water quality targets for the four priority lakes (Rotorua, Rotoiti, Rotoehu, and Ōkāreka) (Bay of Plenty Regional Council, 2020; Office of the Auditor General, 2016). The Bay of Plenty Regional Council and Rotorua Lakes Council "matched this funding for a total programme cost of $144.2 million, with additional funding for the protection and restoration of the other eight lakes" (Office of the Auditor General, 2016, p. 55).

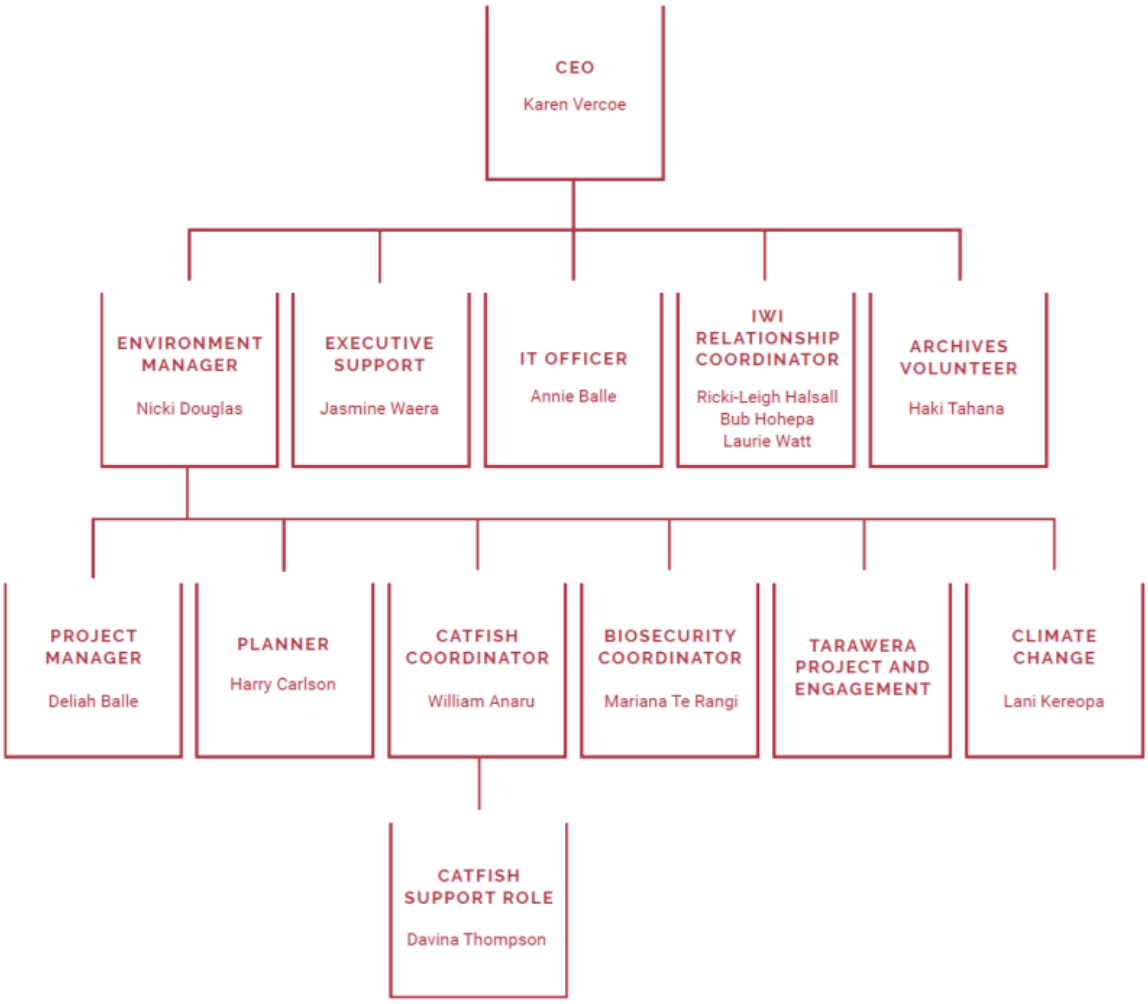
Work by the strategy group included Waitangi Stream erosion protection, Lake Ōkāreka outlet, and 78 hectares of land use changed to trees (Bay of Plenty Regional Council, 2020). Council monitoring of lake water quality indicates that four of the 12 Rotorua Lakes have reached their Trophic Level Index targets and 79% of monitored river and stream sites meet national swimmability requirements (Bay of Plenty Regional Council, 2020).

6.7 Management of Te Arawa Lakes Trust

Under the trust deed, the trustees are empowered to appoint a CEO to "manage the day to day administration of the [t]rust including without limitation the implementation of the [t]rust's planning, reporting and monitoring obligations" (Te Arawa Lakes Trust, 2009, p. 8). Further, the CEO is responsible for employing all other trust employees and exercising "powers and discretions" the trustees delegate to the person. TALT is led by chief executive officer (CEO) Karen Vercoe, and her management team indicated in the organisation chart in Figure 7. A key responsibility then of the CEO is supporting the trustees to develop a strategic plan, preparing a business plan and associated budgets, and implementing these plans and allocating resources in accordance with board policy and decisions.

TALT does not receive ongoing funding to fulfil its legislative requirements. Instead, the trust is self-funded through an annual distribution from TAML, the trust's commercial subsidiary. Key tasks for the trust in relation to the lakes include effective representation on the Rotorua Te Arawa Lakes Strategy Group, which was established under the settlement with government funding of $73 million, refreshing relationship protocols, advocating for Te tūāpapa o ngā wai, and supporting hapū aspirations. Moreover, the trust produced information sheets on the status of each of the 14 Te Arawa lakes using scientific information and mātauranga. Te Arawa has a register of 20,198 iwi members. In terms of whanaungatanga, the trust set about upgrading the database that holds the register. Four projects (climate change, koura survey, cultural health index and catfish) were progressed with hapū. The trust has adopted an organisational excellence framework, which requires self-assessment and continuous improvement across seven areas of the organisation. In addition, an environmental outcomes framework ensures the trust is measuring and achieving outcomes. The trust invests in building the capability of its staff.

Figure 7 Organisation chart



Source: Te Arawa Lakes Trust (2020a, p. 14)

6.8 Organisational planning

In 2017, the trust's business plan noted a refocussing of core activity "back to our Te Arawa Lakes Settlement Assets, specifically our [l]akes and our people" (Te Arawa Lakes Trust, 2018, p. 4). A three-year environmental work plan was devised to keep operations focused on three priorities: (1) our lakes—ngā roto moana o Te Arawa; (2) our people—whanaungatanga; and (3) our organisation—rōpū whakahaere (Te Arawa Lakes Trust, 2018) (see Figure 8). The plan acknowledges that the settlement legislation is a "powerful instrument," enabling Te Arawa to care for their lakes, restore water quality and monitor the lakes to ensure they align with the Te Arawa

cultural values framework—Te tūāpapa o ngā wai o Te Arawa (Te Arawa Lakes Trust, 2019, 2020b). The trust's role in relation to the people was to support their aspirations for the lakes, advocating, sharing information, monitoring and directly supporting members. A focus on business excellence, holistic growth and organisational systems would provide quality back-end support for front-end projects. The trust's strategic statements are articulated in Table 1 and its guiding principles in Table 2.

Figure 8 Business plan

Source: Te Arawa Lakes Trust (2018, p. 10)

The trust's guiding principles express a way of doing for Te Arawa as elements of organisational culture. These multidimensional, interrelated and interdependent principles are intended to guide decisions and collective action within the trust and with partners and stakeholders.

Table 1 Strategic direction

Strategy	**Statement**
Vision	Ka eke ki ngā taumata o Matariki—Ascend the high points of Pleiades.
Mission	Ka rongo te ao i te mana o Te Arawa—The authority of Te Arawa is readily recognised by all.
Strategic actions	(1) Te mā o te wai e rite ana kia kite i ngā tapuwae a te koura The quality of the water is such that you can see the footsteps of the Koura. (2) Whakapakari ake i te waka kia pae ki uta—Te Arawa Lakes Trust is well equipped for the journey ahead.

Source: Te Arawa Lakes Trust (2018, pp. 6-8)

Table 2 Guiding principles

Principle	**Description**
(1) Hunga tiaki—sustainable protection of taonga	This principle has a focus on the future, care, conservation, protection, and the maintenance of relationships, responsible use of resources, and an active approach to interacting with resources in a manner firstly beneficial to the resource, then the people.
(2) Whanaungatanga—relationships and interrelationships	This principle binds whānau, hapū and iwi and affirms collective values, reflected in protocols and management committees established for the betterment of people, place and purpose.
(3) Orangatanga—state of wellbeing and health	This principles centres on the meaning of good health and vigour as having balance and the sustenance to perform correct functions for livelihood and existence; for example, nutrient imbalances cause departures from an original state.
(4) Wairuatanga—spirituality	This principle acknowledges a belief system that spiritual links between people, place and purpose, reflected in the relationship of

Principle	Description
	people to maunga (mountains), awa (rivers), moana (seas, lakes), marae (village meeting space), tūpuna (ancestors) and atua (gods). This is evident in karakia given and received to express gratitude, knowledge, thanks, and intent.
Whakapapa—genealogy	This principles centres on the maintenance of ancestral relationships between Te Arawa whenua, moana, atua, acknowledging connectedness between spiritual and physical elements when synthesising knowledge. This is reflected in the acknowledgement of the spiritual, cultural and economic importance of the Te Arawa lakes and their taonga (resources) to Te Arawa in the settlement.
Mana whenua—whānau, hapū, iwi determination of resources	This principle upholds recognition of mana whenua status through ancestral right of occupied lands. This principle establishes where one belongs, where one counts, where one is important, and where one can contribute and is essential to Te Arawa wellbeing. An example of this the mana whenua status of Ngāti Whakaue and Tūhourangi over lands on which SCION's (a Crown research institute) premises sit.
Manaakitanga—contribution, hospitality, mutual respect, support, encourage, generous, enhancement, and maintenance of integrity	This principle relates to the ability to care and provide welfare being integral to achieving aspirations, working together, maintaining integrity, and acknowledges the mana of others. An example of this is when hākari (feasts) are plentiful, delicious and hospitality is memorable.
Rangatiratanga—leadership, guidance, direction, integrity, honesty	This principles recognises values and attributes that build lasting foundations for mutual benefit, respect and purpose, in the present and future, though, for example, organisational mission and vision.
Kanohi ki te kanohi—face-to-face interaction,	This principle denotes making contact, meeting, discussing, expressing, sharing, hui, interacting on any issue. These interactions

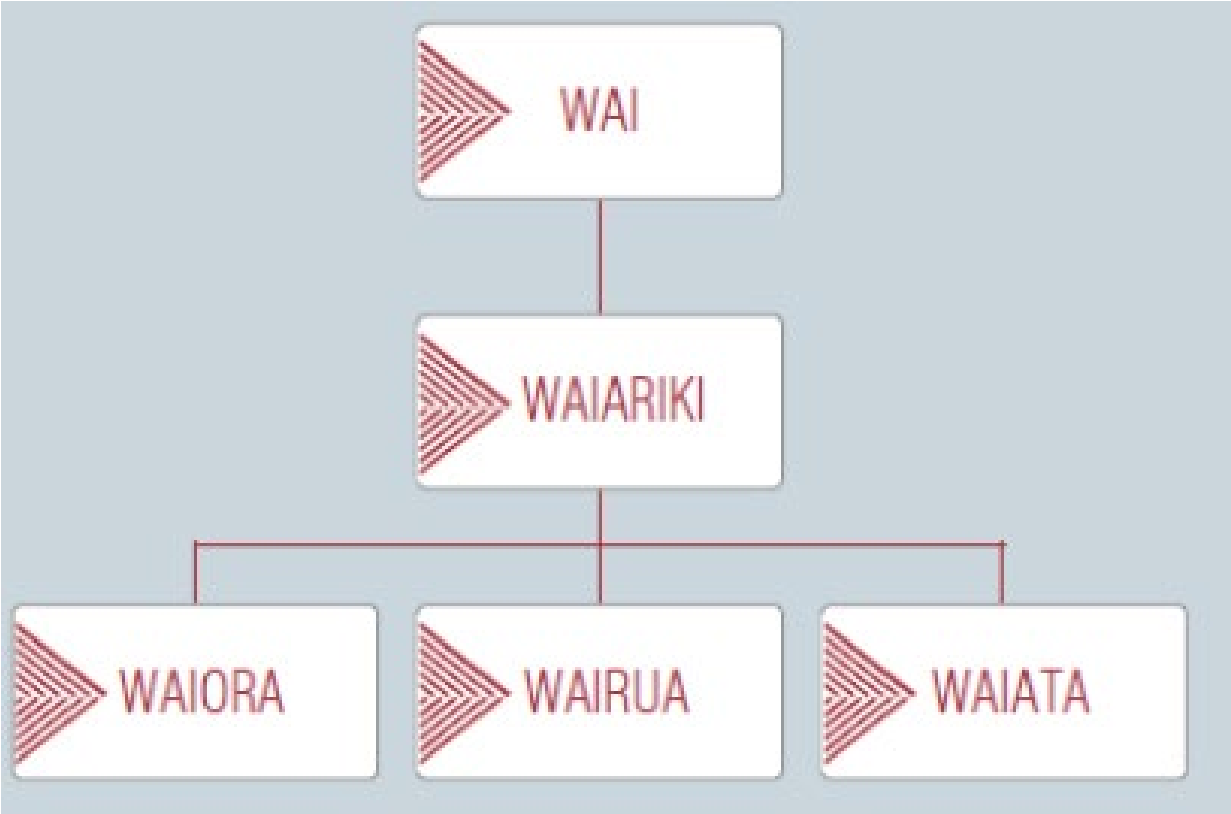
Principle	Description
applicable to people and place	provide time to mingle, to understand and clarify perspectives and knowledge. This process has scope to establish, maintenance and end relationships. An example is attending site visits with consultants.
Tikanga—being responsible for the safekeeping and wellbeing of others	This principle provides for a process deemed appropriate for a given occasion. An example is the use of the trust's policies and guiding principles to establish a safe working environment for all.
Mauri—essence, life giving	This principle encapsulates vitality and liveliness, and can attracted, deterred, maintained, enhanced, diminished through one's conduct. An example is the diminishing wellbeing of the lake and what can be done to improve this.

Source: Te Arawa Lakes Trust (2018, pp. 6-8)

6.9 Te tūāpapa o ngā wai o Te Arawa

Te tūāpapa o ngā wai o Te Arawa is the cultural values framework articulating long term aspirations for ngā roto moana o Te Arawa. The framework provides an "intrinsic link between our wai and ourselves…" [and' ensure congruency of our organisation and our people with our [l]akes" (Te Arawa Lakes Trust, 2018, p. 9). Te tūāpapa expresses a way of being for Te Arawa (see Figure 9). Te whakapapa o te wai describes wai as central to life, symbolising the lifeblood of Papatūānuku and the tears of Ranginui. Wai is the element that binds physical and spiritual elements (Te Arawa Lakes Trust, 2018). Wai ariki and waiāriki acknowledge the connection of the people with the gods of the natural world and with each other. All things, both animate and inanimate, are connected through whakapapa and have mauri (life force) (Te Arawa Lakes Trust, 2018). Wai ora—waiora give and sustain life; wai rua—wairua refer to the flow of life, spiritual attributes of wai; whereas wai ata—waiata refer to the rhythm of wai transmitted through waiata, including whenua (land), hītori (history), wāhi tapu (sacred places), kai (food), ngā īngoa (names), kōrero (stories), ngā taniwha kaitiaki (spiritual water guardians) (Te Arawa Lakes Trust, 2018).

Figure 9 Te whakapapa o te wai—Guiding Te Arawa values



Source: Te Arawa Lakes Trust (2020b, p. 12)

6.10 Organisational performance

In 2020, Te Arawa Lakes Trust was at the forefront of the tribe's response to COVID-19, which had a significant impact with the loss of tourism and employment. The trustees mandated the CEO to lead the Te Arawa response, forming a hub to bring people together to provide support, with significant in-kind support (Te Arawa Lakes Trust, 2020a). In February 2020, Lake Ōkaro was returned to Te Arawa ownership from Rotorua Lakes Council. TALT was able to secure a three-year funding commitment from the Ministry for the Environment to help the trust meet its statutory obligations. The trust has initiated research on representation models to ensure "all of Te Arawa are represented" on the board (Te Arawa Lakes Trust, 2020a, p. 20).

In 2020, TAML purchased Maketu Pies, which was in receivership, and are now working to turn this business around. Additionally, TAML purchased a gold kiwifruit orchard, and sought to diversify its assets. Perrin Ag provide oversight of farming operations, APL manage residential and commercial properties, GHA provide accounting and Craig Investment Partners and Milford Asset Management manage share investments.

Te Komiti Whakahaere (komiti) role is to implement the mahire whakahaere (fisheries management plan) and bylaws defining restrictions and methods of harvesting taonga species (Te Arawa Lakes Trust, 2016). The purpose of the mahire is to realise a vision where "Te Arawa taonga fishery is health, plentiful, sustainably managed, and Te Arawa have undisturbed possession and access to Te Arawa taonga fishery, mō ake tonu atu" (Te Arawa Lakes Trust, 2020a, p. 23). New bylaws for Te Arawa fisheries were implemented in March 2020. Instances of illegal taking of taonga species have been identified and reported to the Ministry for Primary Industries.

Operationally, the trust was able to work remotely through Covid-19 because of an upgrade in its computer systems and business continuity planning. The trust led the establishment of the Te Arawa Covid-19 hub, coordinating volunteers, delivering kai and care packages. Under strategic goal one, protecting the taiao, the trust funded 283 fishing licences for beneficiaries, completed Te Arawa fisheries bylaws, and were involved in the Fast Track Consents Bill process, huihuinga Rotomahana, working with scientists. Under strategic goal two—strategic leadership, the trust participates in the National Iwi Chairs Forum, focusing on freshwater and climate change, developing a data hub to collect and use Te Arawa data and information, developing government relationships, which have generated new funding, and securing marae renovation funding.

TALT has been recognised for its successful Te Arawa Catfish Killas programme, which recruited 1,500 volunteers and culled 180,000 catfish from Te Arawa lakes, winning several significant awards (Te Arawa Lakes Trust, 2020a). Also recognised were the trust's planning document—Te tūāpapa o ngā wai o Te Arawa and He mahere taiao mō ngā wai o Te Arawa (Te Arawa Lakes Trust, 2020a).

7. FINDINGS—GOVERNANCE AND MANAGEMENT PERSPECTIVES

This section sets out the findings from interviews with governors and managers of Te Arawa Lakes Trust and Te Arawa Management Limited based on questions, which focus on:

- The person and how they came to be in their roles with the organisation
- The organisation, its origin, role, function, size and scope
- The organisation's understanding and approach to wellbeing; and
- The relationship between the environment and wellbeing.

7.1 A governance perspective

On the human condition

Presently, a large proportion of children are not attending school and most are likely Te Arawa. The state is not solving this problem. The state system fails Māori by 70% each year, and it continues. Schools blame families for this. Yet, with kura kaupapa and kohanga there is 100% attendance and 100% success. Despite success in mainstream education, "as Māori I was short-changed by 75% in education." This is because all such education was in the Pākehā language and reinforced the notion and belief that to be successful, one had to be proficient in the English language, knowledge and culture. It is imperative for Te Arawa that the children are taught the language of their ancestors so they become fully developed as adults in their world, and from there, they can become anything they choose in the Pākehā world.

On te taiao—the environment

From a traditional perspective, the environment was not seen as something different to and separate from people [P1]. When the people went pig hunting, they would catch dinner and use punga (tree fern) for shelter, taking care when turning the leaves over. Karakia (incantation) would be delivered when hurting a tree, another karakia uttered for growth, and karakia said for cutting trees. When people prayed, they did not need to explain that as people we were part of the environment, which carried an obligation to look after it. When trees were cut for the rebuilding of Te Arawa marae, more attention was given to the karakia than the cutting. Thus, "nature was part of us even though it had been removed from its natural environment. Like trees taken for marae, karakia was

made for human use, but they were still part of us, the timbers." [P1] When viewed this way, human relationships with the environment intimate an existential unity between human and environmental wellbeing. The nature of this relationship is changing as people shop for food and materials rather than grow it and gather it. With the lakes and rivers, whānau had their favour locations. Users had an implicit obligation not to disturb the river or lake so people downstream would be able to collect kai.

Such practices are less evident nowadays because the connection to the environment has become somewhat esoteric—"it no longer part of our daily lives." [P1] The same living association with the environment has changed, "we don't rely on our environment to help sustain us; instead, it's there to help beautify our existence. The bush gave us kai, now you go to the supermarket and buy what you need." [P1] "The children are not growing up with an appreciation of the environment, the rivers, as the source of our existence. Instead, it is there, separate from us. When growing up, it was part of us." The people could simply not live without considering the spiritual and physical connection to our environment. When trees were cut down the old people would ask for shoots to ensure new trees grew in their place. Small kaimoana (freshwater fish) would be thrown back to feed people in the future. The environment was inseparable from the people.

On wellbeing

"When I was young, there was no access to doctors, no transport to get there. Now, you can go here or overseas to get health care." [P1] Wellbeing was achieved through human relationships with the environment, but because people are not relying it, whānau are no longer teaching the children about kai (food) from the environment, and sharing kai. As people started to acquire their own vehicles, sharing of kai started to dissipate and whānau would have to buy their own. The way that young people are coming to have a relationship with the environment is when they learn about Ranginui (Sky Father) and Papatūānuku (Earth Mother) and this knowledge becomes ingrained in their thinking. Through this knowledge, people desire a new relationship with the environment and lifestyle in keeping with this traditional way of thinking—planting gardens and harvesting kai. A close relationship with Papatūānuku is formed; a good crop was a sign of a good relationship. "The environment is an element that we learn and might talk about but it's no longer the element that we live with" [P1].

On trade-offs

On the question of how TALT's reconciles its role as a kaitiaki and its obligation to produce commercial returns, the view expressed is that "we don't have anything to reconcile." [P1] When tourists come, they know not to ruin the environment. They know that what is here is available for them to enjoy. If anything the presence of tourists has helped to maintain the sparkle of the environment." "All the forests are kept wonderful so tourists walk through them, and they do so because everyone is looking after it" [P1] People—visitors and home people—are conscious of the fact that "you leave [the environment] in a state so others can enjoy it as much as you" [P1]. Several aspects of the environment have been upgraded that would otherwise not have been touched had it not been for tourists. Thus, tourism has helped us become more caring more protective of our environment [P1]. Te Arawa have had this relationship with tourists for over a hundred years. The environment is kept clean and tidy for tourists and for us to enjoy; it is something that tourists are made of and Pākehā and tourists do this [P1].

On the lakes

What TALT has learned over the last 15 years in relation to the lakes, is to give it back to hapū. The trust engages in a process that allows it to do this. For example, the trust expects that Ngāti Rangiwewehi will look after the creeks, rivers, and shoreline by Ngongotahā. The trust's advice to council to engage tangata whenua (local people) and hire them to look after the land. If council wants to ensure water quality is maintained, give this responsibility to whānau who are from there to care for the water. Council funds that TALT might receive for environmental matters is passed onto hapū. Ultimately, the trust's role should cease as hapū develop their capability for environmental management.

With the 14 lakes, each should be viewed as a bank for Te Arawa. Each of the lakes has the potential to generate economic returns that can be used to support development of the people and maintain the quality and condition of the lakes. This ensures equitable wealth distribution from these taonga. In the future, certain lakes might be designated for kōura farming (freshwater crayfish), another for īnanga (whitebait), another for tuna (eel), with pūhā (sowthistle) and watercress, and processing onshore. However, it the people of the lakes who will decide what they want to do.

On decision-making

Consideration is being given as to how much land should be planted in pine and in natives if we want to retain the beauty of the past. Native trees should stand for ever, whereas pine should be harvested [P1]. The return from natives is for tourists and for the home people to enjoy. Tōtara, rimu, and kauri are planted for the health of the environment, and to produce other types of food and beverage.

On the future

In the long term, each hapū will look after their lake or lakes, but also have some kind of venture so they can look after the lakes and keep people there. Hapū must be able to generate revenue, otherwise, it becomes difficult to look after the lakes and sustain communities. It could be viable for two or three hapū to work together in establishing such ventures, because the only one getting a return on the lakes is the council and Te Arawa receives nothing. We are aware of this because we forced our way into the governance of the lakes.

7.2 A managerial perspective

On the organisation

TALT is a post-settlement governance entity (PSGE) for Te Arawa in relation to the lakes. TALT was the Te Arawa Māori Trust Board (TAMTB), but this was disbanded upon settlement. TALT is charged with ensure that the settlement is enduring, that we grow and care for settlement assets. The TALT trust deed is consistent with the TAMTB, but with the addition of the lakes. TALT is focussed on the lakes and water, but given its history, it is the entity people approach regarding Te Arawa tribal matters. TALT's turnover is around $7 million annually. Overall, TALT and TAML has $60 million in assets under management, employs around 25 full time equivalent (FTE) employees, and around five contractors.

Planning and resource allocation

A review of the TALT's strategy aligned it with the trust deed, focusing on the lakes and hapū. This strategy forms the basis of the business plan, budgeting and resource allocation. TALT allocates roughly 70% of its resources to environmental work. Major decisions are made by the

board, while subcommittees focus on risk and financial performance. Komiti Taiao specifically looks at taiao issues, specifically freshwater matters, including legislation. An executive committee comprising all the chairs of the boards and subcommittees meet on substantive issues. A human resource committee monitors the CEO. The CEO is responsible for writing the business plan. TALT has two main areas of focus—influence policy reform and whakamana hapū to do their own environmental work. TALT developed a Te Arawa values framework, which is used to ensure alignment with environmental issues.

Resource allocation occurs through budget-setting. To be sustainable, TALT must cover its costs through income generating activity. The priority for the CEO is keeping running costs low so more funds can be reinvested in environmental monitoring CEO for example. The budget is allocated on a 60:30:10 split between te taiao, hapū and overheads. Once the budget is set, it is reviewed by an external accountant, and unless there is a significant variances, there are not issues. TALT uses results-based accountability (RBA) to monitor whether or not the trust is doing what it said it would and achieving its intended outcomes. These monthly reports from staff provide a basis to ascertain whether the TALT is making a difference for whānau and for the environment.

On wellbeing

TALT's focus is on the wellbeing of the assets. The trust's attention on the wellbeing of its people is improving, with coaching and mentoring helping to achieve work-life balance.

On the environment

TALT's employees are active in everything to with water, whether that is water run-off, policy reform and legislative change. Te Tūāpapa o Ngā Wai o Te Arawa, provides guidance on the tribes approach to managing water and environment. The trust invests around $3 million annually on the environment including wetlands, biosecurity (weed control), biodiversity (reintroduce indigenous species), and climate change (a new strategy, that is broadly accepted). Hapū have input on all plans. TALT is starting to receive revenue to meet the costs of discharging its statutory obligations on environmental management, which includes advice on strategy and policy across all councils—district and regional—from a Te Arawa perspective. The priority for TALT is to support hapū to fulfil their aspirations for the lakes. TAML, for instance, is managing commercial leases on the

lakes, whereas previously it had no say. TALT's environmental plan runs over three years, but it is 95% achieved and must be updated.

The initial treaty settlement with TALT provided no resources for the trust to meet its statutory obligations toward the environment. As a consequence, TALT had a passive relationship with councils because the trust had insufficient capacity to do otherwise. TALT renegotiated its treaty settlement and now receives resourcing for the environment team to do this work. TALT's priority has now shifted to gaining the trust of the councils. A professional relationship with the councils is now possible from being funded to perform environmental management functions. TALT meets with council chairs, chief executives and senior staff, and with senior central government agency officials, particularly, the Ministry for the Environment (MfE), Department of Conservation (DoC), Ministry for Culture and Heritage (MCH), and Ministry of Fisheries (MoF). Similarly, strong and active relationships with hapū are maintained. Hapū are involved in all aspects of the trust's work, including decision-making, providing feedback and open communication with hapū.

On wellbeing-environment links

The Catfish Killas programme has demonstrated what is possible when the people are fully engaged in the work of the trust. Hapū are aware of the damage these fish do and work with the trust to eradicate catfish, including the schools, which contributes to students' learning. Administered through TAML, the trust provides free fishing licences for all whānau who want one, which supports whānau wellbeing in terms access to kaimoana. Hapū are involved in restoring wetlands and other areas around the lakes, building their capability as kaitiaki, engaging rangatahi, purifying the water and regenerating taonga fish species. Water's value is increasingly recognised, but it must be protected from exploitation. On settlement TAL received the 14 lake beds, but not the water below or air column above them. During settlement negotiations, water ownership was to be resolved post-settlement, but water reforms may negate ownership rights and interests in water.

7.3 An environmental perspective

Managing environmental management in the TALT means "boots on the ground doing mahi with team members, looking at land agreements, stakeholder agreements to enable our people to work with others, partnerships and relationships." This approaches helps with understanding and

maintaining Te Arawa rights and interests. Environmental management of the lakes is also about managing the water health and quality of the tributaries. There are around 30 staff engaged in environmental management activity, including operational teams working on the land and the lakes, planners, and hapū working with councils to check biosecurity risks, resource management and council planning, and keeping the iwi informed. TALT also provides training to develop iwi members' skills for te taiao mahi (environmental work).

Environmental management

Environmental management work is guided by te whakapapa o te wai (the genealogy of water), which is—wai (water as a multidimensional element, connecting past, present and future), waiāriki (water of the gods and the various forms of water), waiora (wellbeing from water), wairua (two dimensions of water, internal and external, spiritual elements of water) and waiata (identity transmitted through narrative) (Te Arawa Lakes Trust, 2020b). The elements of wai represent values of Te Arawa, providing guidance for TALT to reinvest in the environment and the people. An example is hapū, TALT and partner collaboration for by-laws, which were introduced to stop illegal taking of taonga species. Jobs for Nature funding from DoC has enabled teams of 10-14 whānau members being trained, supported and paid to work on their whenua. Whānau are working on land on which they might have grown up.

Wellbeing

Wellbeing has been at the forefront of TALT's care of its people particularly during Covid-19. There are monthly wānanga, shared ka, checking in on each other, and ensuring healthy and safe use of technology, and a work-life balance. There is considerable wellbeing to be gained from the ngahere (bush), including spiritual and physical healing. Massey University is studying the healing effects of the ngahere.

Environment-wellbeing

The principle is that if people look after the environment, it will look after the people. Financial resources are important, but money does not solve all problems. While providing meaningful work is important, "investment te taiao is forever"—a focus on benefits for mokopuna rather than "one-hit wonders" is a more enduring approach [P3]. "Mokopuna decisions is ultimately how we make

decisions. We must be better ancestors now for our mokopuna. The oldest [grandchild] was always raised by the grandparents. The reason for that is that knowledge would stay with the whānau for the next 80 years" [P3]. However, technological contributions over the next 100 years to environmental wellbeing must be explored.

Resource allocation

Resource allocation is a human decision conditioned by relationships and passion for kaupapa. Social pressure, whether positive or negative, is always present, particularly regarding resource allocation decisions. When challenged on such decisions, one response is to ask critics whether or not the decision would have been different had they been in the decision maker's position, or to ask them what they are doing to help [P3]. Some are doing a lot and care very deeply, but for some it comes from a minority who may not know, so keeping people informed is key.

Success

Success in TALT's work can be measured by the quality of relationships retained at the end of a project, by achieving goals, generating new opportunities, by being productive, by attracting new partners because of the results that are being achieved, by the growth in the team. All of TALT's work is by landowner agreement. When this is not achieved, this is a sign that the plan or the implementation is not working and needs to be change. Without the environment, humans would not be present. "The trees are our lungs! More people need to click to this" [P3]. Mauri of the people and mauri of te taiao are measures of wellbeing—both talk, but it requires one to listen with their whole being [P3]. Other measures of success are increasing the percentage of lands planted in native species, more people are becoming "environmental warriors" investing in rather than extracting from the environment. Another traditional practice is designating lakes as having particular purposes, some for kai (food), some for swimming, would help accelerate the restoration of lake quality, which some agencies and council officials comprehend. Use of the maramataka to schedule pest control activities is another example of traditional knowledge being enacted in modern environmental management practice. Māra kai (community gardens) is also something TALT is supporting because it addresses food sovereignty and food security. Climate change is another major focus for TALT, with priorities formed from the voices of the iwi under the group Te Urunga o Kea (2019). The challenge is to draw on the passion of the hapū and conduct the

necessary research to support each of the eight pillars of the climate change strategy. The spiritual dimension is important. The trust brings its ancestors who have gone before into its work, karakia to the water, land, people help people to learn the history and practice this.

Decision-making

TALT has three main priorities in environmental management: first, "growing the capacity of our hunga tiaki in te taiao;" second, "protecting our taonga and our relationships with them from other people wanting to do that for us;" and third, influencing policy and legislative reform [P5]. There are two aspects to capacity building—hapū voice and hapū mahi. "Often our job is getting the voice of our people, our hapū to the [decision-making] table so they can share their own voice, so it influences policy. Sometimes we do this for them, but we try not to" [P5]. TALT allocates mahi (work), tools and resources to hapū to do the mahi, both work on the land and policy work. Environmental work has been limited by resources, somewhat mitigated by having good relationships with council and the Crown.

Hunga tiaki—guardians of the lakes

Te Arawa decided that they wanted a delivery role as kaitiaki; that any work on the lake should go to hunga tiaki (guardians of the lakes). Delivery capacity gives effect to mana whakahaere (governance) status and aspirations of the lakes. Another initiative is a framework, which views the roles of hunga tiaki, as a spectrum ranging from delivery where mana whakahaere interests are established, co-design of work to be done with others; and power sharing. The approach is evolving, but has governance support. The immediate priority is on delivery because whānau need work because of Covid-19. However, a sustainable framework requires complete power-sharing, which hinges on relationships, a work programme and resourcing, allowing agility in how TALT responds to environmental and human development needs. While settlement has framed the special character of TALT around the lakes, its trust deed allows it to deliver on purposes that matter to hapū. Tikanga and kawa need to be applied to situational contexts, where staff "live the business plan" [P5].

Partnership-based approaches

TALT's aspires for "its people to be hunga tiaki, making decision on their own whenua, living their best life and doing the work that is needed" [P5]. Te tūāpapa o ngā wai provides a framework for achieving wellbeing described in these terms. Te tūāpapa becomes a framework to respond to contentious decisions of councils and the Crown, but also a standard against which TALT can assess its performance. The challenge is for external agencies to integrate rather than treat te ao Māori perspectives as an "add on" to their institutions [P5]. Policy formulation is relatively straight forward, but implementation is a weakness, because it is tainted by misinformation and miseducation, and insufficient elevation of Māori voices and capability. For instance, when agencies engage external contractors who have no affiliation to the lakes to do any kind of work on the lakes, the question arises, "why is someone other than Te Arawa deciding what happens on our lakes" [P5]. Jobs for Nature funding, work and outcomes demonstrate what a partnership-based approach can look like and achieve.

In 2014, the Crown received $140 million to implement the Te Arawa Lakes strategy, but they made a decision to focus on only four lakes. TALT has argued for an approach that addresses the whole environment and all lakes not just the four. TALT prioritise the lakes and the relationship between the people and the lakes. The hau kāinga (home people) and their ability to exercise their mana whenua interests is paramount. Consent applicants are encouraged to come to TALT. While TALT provides advice, council decides on consents; an unequal sharing of power. There are also some members of the wider community who cannot accept Te Arawa own the lake beds. New Zealand history instruction in schools will alleviate this attitude somewhat. TALT aspires to capture quantitative and qualitative data on the environment.

7.4 An operations perspective

Operational management focuses on wetland restoration and biosecurity of activity on, in and around the Te Arawa lakes, but the environmental enhancement work spans the rohe mai Maketu ki Tongariro. The Catfish Killas programme has been successful in getting schools involved to address a significant environmental challenge. In the first two months, five schools were engaged. Now 28 schools and 2,000 volunteers help catch catfish. Only two lakes have catfish. The success of this initiative has been recognised in major awards—the supreme award in biosecurity, a first

for an iwi, and the bicultural award of the Society of Local Government Managers. Catfish and boat ramp inspection work is funded by Bay of Plenty Regional Council. The wetland restoration work involves weed control, weed removal, planting work, clearing of weeds, īnanga monitoring, catching catfish. Whānau who live around the lakes monitor whether or not this activity has been effective. TALT has a strong mātauranga approach to the environment, doing what has been passed down from tīpuna (ancestors), which is guided by atua (the gods). For instance, TALT is trailing use of a weed mat made of harakeke, which combines science and mātauranga. Environmental monitoring includes sampling the water, whānau monitoring taonga species, as well as use of council environmental and cultural monitoring.

7.5 A company perspective

Te Arawa Management Limited (TAML, or the company) was incorporated as a New Zealand limited liability company on 2 October 2006. TAML has one shareholder—Te Arawa Lakes Trust (TALT, or the trust). TAML was established pursuant to the treaty settlement between Te Arawa and the Crown for the 14 Te Arawa Lakes in 2009. TAML role is to administer commercial assets and undertake commercial activities for Te Arawa Lakes Trust and any other associated entity. It's main object is to apply its net profits for the "charitable purposes of the advancement of present and future members of Te Arawa within New Zealand" (Te Arawa Management Limited, 2006, p. 7). The company can achieve these objects by promoting educational, spiritual, economic, social and cultural advancement or wellbeing of Te Arawa and its whānau, establish and maintain places of cultural significance, promote health and wellbeing amongst Te Arawa, and other charitable purposes beneficial to Te Arawa. As a wholly-owned subsidiary, TAML distributes dividends exclusively to the trust at times and in amounts it determines appropriate, whilst ensuring it remains solvent after doing so. TAML must produce a five-year plan and an annual plan of its proposed activity and account for its performance at least annually.

Te Arawa Lakes Trust as the parent entity appoints or removes directors and selects the chairperson. No trustee of the parent can be a company director, ensuring separation between political and commercial functions, a long-standing principle of governance design in treaty settlements. TAML's board of directors comprises Mana Newton (Chairman), Tanira Kingi, Roana Bennett, Geoff Rolleston and David Tapsell. Ngata Tapsell is an observer on the board. All directors are of Te Arawa descent with credentials and experience in business, law and tribal

development. TAML's company objects are charitable in nature. TAML is managed by Cassandra Crowley who has a legal and accounting background.

In 2020, the chairperson reported two main priorities—diversifying revenues and improving long-standing assets, whilst responding to the impact of Covid-19. TAML purchased a gold kiwifruit orchard and Maketu Pies, a business that was in receivership in 2019. The company's main business assets are in kiwifruit, farming and food manufacture, all deemed essential services, which were able to continue during the lockdown, whilst keeping staff safe and in secure employment, and adhering to regulations. TAML manages residential properties on coastal lands, which are leased. TAML also manages funding used for supporting fishing licences.

A summary of the Te Arawa group's financial performance for 2020 follows (see Table 3).

Table 3 Te Arawa group financial performance for 2020

Financial information	FYE 30 June 2020 (NZ$)
Revenue	$9,762,460
Expenses	$8,361,242
Surplus	$1,401,218
Total assets	$80,346,631
Total liabilities	$20,385,105
Equity	$59,961,526

Source: Te Arawa Lakes Trust (2020a, pp. 29-30)

At 30 June 2020, total assets for Te Arawa group were $80.35 million (see Table 4). Equity has gone from $27.83m in 2014 to $59.96m in 2020.

Table 4 Te Arawa assets for FYE 30 June 2020

Asset type	NZ$ millions	Percentage
Kiwifruit	26.39	32.8%
Dairy farms	21.57	26.8%
Properties	20.08	25.0%
Investments	9.46	11.8%
Cash	1.67	2.1%
Other assets	1.18	1.5%
Total	80.35	100.0%

Source: Te Arawa Lakes Trust (2020a, pp. 29-30)

TAML outsources some aspects of asset management through partnerships with several professional services firms, including Perrin Ag for the farms, APL who manage the company's residential and commercial properties, GHA who manage its accounting function, and Craigs Investment Partners and Milford Asset Management who manage the company's share portfolio.

TALT's goal is to build a portfolio of $70 million in assets. TAML's chair was asked to assist TALT achieve this. One of the most significant outcomes of a growing Māori economy and treaty settlements is not the money or the settlements, it is that Māori are in a partnership with the government, and it's genuine. Treaty settlements will eventually change iwi fortunes because the resource allows for the exercise of kawanatanga (governance) of iwi within iwi rohe, which represents the partnership potential of iwi. As iwi ownership and control of assets like the lakes grows, Pākehā may be fearful that they will be excluded and react unfavourably [P6]. Growth of iwi assets and influence must be balanced, measured and inclusive; demonstrating an approach to coexistence that was lacking through colonial settlement giving rise to treaty settlements [P6].

TALT and TAML are separate legal entities, but the entities work to one strategy, devised by the matua (parent) board of TALT and its vision. While TAML is a commercial board, all directors, have Te Arawa whakapapa (genealogy). One of the consequences is that TAML sees investments differently. For instance, TAML bought Maketu Pies, a business that was in some difficulty because it because it had 40 jobs for the people at Maketu and it was inside the Te Arawa rohe [P6]. Such investments provide other advantages, including vertical integration opportunities for Te Arawa. An example of this is green jobs, which employ whānau to work on the whenua restoring wetlands. These jobs allow TAML the opportunity to consider owning and operating a nursery, which can then supply trees to Te Arawa. The goal here is to create social, cultural and environmental alignment so commercial investments produce multiple environmental outcomes. Māori social procurement in the Te Arawa rohe is necessarily framed around what it means to be Te Arawa and what Te Arawa considers is best for Te Arawa [P6]. This enables whānau and hapū of Te Arawa to pursue procurement opportunities in their rohe. This is a system of procurement commonly used by councils and council controlled organisations. For such a strategy to work, TAML must wait for economies of scale, timing and investment issues to be favourable [P6].

As a commercial entity, TAML is governed by the political decisions made by TALT, which have economic, social, environmental implications for investment and enterprise. The political

decisions of TALT affect how TAML fulfils its commercial role. There is an opportunity for Māori to demonstrate how to effectively care for vulnerable people and environments by directing public and private funding to this purpose. When the 'rules of the game' allow, it means Māori enterprises like TAML have the opportunity to socialise funds, which means that money is spent many times over to give it a multiplier effect measured in social, economic and environmental terms [P6]. The Covid-19 response and climate change are significant avenues for this to occur. When conditions are favourable, TAML envisages being in a position to invest in social enterprises, within circular economies [P6]. Such enterprises require partnerships with firms who willingly share the risks and benefits, and are supportive of Te Arawa owning and controlling its own enterprises and the vertical integration advantages within a given industry, sector or venture.

On inclusivity and equity

TAML must also ensure that commercial outcomes are favourable, equitable and inclusive of Māori and Pākehā, consistent with its history as tangata whenua of manaakitanga toward settlers and the formation of towns and cities. While Māori are the vulnerable communities of today, in time to come it may be Pākehā, and the kaupapa of aiding vulnerable people should not be removed because it's part of the whakapapa and legacy of Te Arawa [P6].

On wellbeing

Wellbeing is closely associated with tino rangatiratanga (Māori self-determination). Wellbeing is people making rangatiratanga (self-determining) decisions for themselves, which is enabled by whakapapa, and may relate to health, education, the environment, and relationships. A lot of pastoral care is required to help Te Arawa iwi members develop tino rangatiratanga thinking. Kaupapa Māori wellbeing frameworks grounded in the whakapapa and capability of the collective must support individual desires and achievement. An exemplary model of kaupapa Māori wellbeing is the Centre for Health set up by Dr Anna Rolleston in Tauranga. Dr Rolleston's vision is for a healthcare system that centres on individual choices of a preferred pathway to better health and wellbeing, within a supportive environment. The centre is based on community contributions; those who can afford to pay full price. Consultations are not confined to 15 minutes, but are based on an individual's life goals. Scaling such a kaupapa Māori approach to individual health and

wellbeing using iwi and other support would enable whānau to engage in tino rangatiratanga thinking on wellbeing.

On the environment

With TAML, te taiao is at the core of everything that the company does because it makes decisions that affect the environment every day. It is important and beneficial to have Te Arawa on both the trust and the company because it means that decisions that balance the company's obligation to maximise returns with environmentally favourable decisions like converting 10ha of farmland to wetlands are possible. TAML is exploring land use changes away from farming, reducing water use, carbon production, and leaching, and organic farming. Alternative land uses and land purchases within the Te Arawa rohe are possible because land assets are unlikely to ever be sold. While conventional farms rely on realising capital gains on the sale of the farms at some point, capital gain is not a driving imperative behind investment decisions for TAML.

On decision-making

TAML has a detailed investment plan based on commercial thinking, cultural and environmental impacts that accounts for the scale and impact of farming infrastructure. With farming units, for instance, there is a size below which it becomes necessary to convert the entire land area to an alternative use. The timescale for such tipping points and land use conversions needs to be aligned with the onset of increasing returns in other activities and enterprises such as horticulture. When aggregated across similar Māori enterprises, this kind of thinking and practice has the potential be a circuit-breaker in the typical cycle of buying farms, minimising costs, and selling at an increased value. This is a cycle which entrenches certain land uses, minimises investment in the environment, and extracts value upon exchange of the farm, which has environmental impacts and economic inequities. For TAML, long term thinking allows the company to step back and ask Papatūānuku what the best use for her is, and work to that end over time. Financial models are evolving to reflect this kind of logic and analysis. For example, the district has a big problem with water quality and access. As the iwi authority for the lakes, TALT will have a say about how this issue is addressed and TAML will have a role in supporting the trust.

Environment-wellbeing links

There is direct correlation between the environmental health and whānau health and wellbeing. Contrary to popular belief, scientific evidence suggests Lake Rotorua is completely swimmable, but the stigma of the common plea not to swim in it is difficult to change. When visitors and lake users do not come because of such perceptions, this has a material economic cost in lost spending, income and jobs and the ability for the community to live well.

Water rights

Water rights of iwi who own lake beds, including Tūwharetoa and Te Arawa, remain a site of contestation. The Crown has arguably unjustly treated Te Arawa by depriving them a share of income agencies derive from concessions for activity on the lakes because the activity is on the water, not necessarily the land. This means Te Arawa is without a reliable source of income to help meet its statutory obligations and aspirations to maintain the quality and condition of the lakes. There is a conundrum as to who pays for activity on the lakes. Because the lakes have a new landlord, it is easy to villainise Māori rather than the Crown about charging for the cost of being kaitiaki of the lakes.

One of the challenges is that the Te Arawa lakes were returned in less than pristine condition and without the necessary funds to improve these taonga. This contrasts with, for example, the Crown's investment of funding to the support the remediation of the Waikato awa through the Waikato River Authority. This creates both an environmental and an economic challenge for TALT, and therefore, for TAML. TAML's purpose is to generate commercial activity and returns consistent with who the organisation is, as a representative entity of Te Arawa, and its values and aspirations. This enables TALT to reinvest funds into te taiao—the environment, benefitting the iwi and Aotearoa New Zealand generally.

From saying to doing

The Resource Management Act has till now provided Te Arawa with a way to intervene in the process and to comment on the environmental effects. However, it has been somewhat "hoha" (annoying) because it functions like a "tick-box" exercise; it is compliance driven, reactive and serves the interests of resource users. TALT is transitioning to a hunga tiaki approach. This is

where the people of the lakes are actively engaged in custodiality, monitoring, and remediation of the lakes and surrounding lands. This approach is more participatory, action-oriented and self-determining. The approach is evident in the Catfish Killas and the jobs for nature programmes, which have been successful in engaging iwi and non-iwi members. Catfish Killas has captured the minds of tamariki and rangatahi; its building a brand and evolving a narrative reflective of the renown of Te Arawa for storytelling. The jobs for nature initiative is allowing whānau to "get back out on the land, and improve it; just seeing the team come back happy, because they're out there."

On transiting from current use to future use

Upon settlement, TALT succeeded the Arawa Māori Trust Board, and in doing so, acquired the former trust board's assets through a process of consolidation. Thus, TAML administers "legacy assets" including land at Maketu, and residential and commercial property. The company has since invested in dairy farming, kiwifruit, food manufacture, avocado, and property. While these are the current uses of land and activity of the enterprises on the land, there is a question about how the trust and company can transition to the best use of the whenua. This is not just an economic imperative, but it is a cultural imperative to deliver on the aspirations of iwi members for te taiao. As a consequence, the relationship between people and the assets under management is somewhat different and unusual for those unfamiliar with Te Arawa culture, customs and values. For instance, in the kiwifruit orchards, "we do karakia for sick vines, we sing to the plants, we try natural mātauranga solutions, eradicating pest trees for the benefit of the trees; we always looking at things through a Te Arawa framework. It's an internal sense of who we should be as Te Arawa." Commercial objects are simply about making money, TAML must also achieve environment aims otherwise the money is not worth it. To make money sustainably as Māori, the activity and approach must support the entirety of who we are as Māori and as a Māori enterprise.

TAML has an investment matrix with multiple bottom-lines it uses to assess its current enterprise and activity and the types of enterprise and activity it wishes to transition to. It aspires to achieve a diverse, resilient portfolio of assets, investments and enterprises. Using this framework, for example, enables the company to consider buying whenua that was the landing site of the Arawa waka at Maketu. Without the financial resources to do so, the company could not contemplate such as investment.

On decision-making

With the board of directors, they are all Te Arawa, and all very skilled, capable and knowledgeable. With this calibre of people, the iwi willingly engages them in the development of tribal assets. The directors instinctively think long term; an intergenerational mindset is there, but there is always humour in the process of decision-making, which is good. Information is presented by the manager to the board who never make decisions on the numbers alone. While the board is clear that their job is to make money, it is not at any cost. If a decision cannot be justified to whānau, then most likely the wrong call has been made. Decisions are professional and personal because the board are iwi members.

On wellbeing

Because the treaty settlement did not come with resources for the lakes, wellbeing is defined as sustainability of the Te Arawa group as a whole. The trust's priority is the mauri (wellbeing) of the lakes. If the lakes are perfect environmentally, but the people are disconnected from the lakes, then that is of no use. The office provides a way for Te Arawa iwi members to do work that is spiritually and culturally satisfying because they are contributing to the wellbeing of an environment and its people that they belong to, can return to, be rejuvenated by and enjoy. When you can live and work in an organisational environment on the land and waters from which you descend, then "we have something special" [P7].

The company invests in wellbeing through making decisions that transition land uses to what they ought to have been and can be still. For example, the company retired some of its farmland in Maketu to restore a wetland that leads to the estuary. Removing grazing pasture had a fiscal impact, but when the company considered what the land use should have been, whether or not it would help the tuna, the moana and that it was consistent with what the people wanted, the decision was made balancing elements of environmental, human and economic wellbeing. If strict use of commercial criteria (risk and returns) were used, the decision would have been different. With council support, the land is being returned to wetlands.

The involvement of whānau in all aspects of the operations, assets and activity of such initiatives is paramount. This is reflected in, for example, having whānau work on the dairy farm, stipulating that those with whakapapa to the land be given preference to work on commercial ventures that

operate on their lands, bringing in kura (schools) to help with environmental monitoring, and helping rangatahi become scientists. Thus, the company's practice is to invest in and employ Te Arawa people, Māori who live locally, then Māori from outside the rohe (region), which has been a successful procurement strategy with cultural, economic and environmental benefits. When whānau are involved, they feel better about what the organisation is doing and how well it is doing because are part of the activity. Moreover, the community is fiscally better off with the investment of resources in whānau through employment and enterprise, particularly in low income areas.

On the mauri of the lakes

Te tūāpapa o ngā wai o Te Arawa is an environmental framework founded upon the values, knowledge and aspirations of Te Arawa. TAML uses te tūāpapa as a decision-making guide in relation to wai (water). The framework underpins everything that TAML does. It means that "we're part of a connected ecosystem across species" and the "hunga tiaki is our heart" [P7]. The framework sets minimum standards of excellence in the quality of the lakes and the tribe's relationship with the lakes. It provides principles and boundaries as to what constitutes ethical investment in and use of the te taiao in and around the lakes. For instance, if TAML were offered a dairy farm, it would struggle to justify investing knowing the environmental impact. TAML also refers others to te tūāpapa o ngā wai, especially those seeking consents. The framework also clarifies the role of TAML in relation to the TALT and governance and management relationships. The te tūāpapa framework allows for whānau and hapū to work with TALT, or for hunga tiaki to work on their own. "Everything we do is about enabling hau kāinga in every respect." [P7]

Stakeholders

Stakeholders react in interesting ways to te tūāpapa. In commercial relationships, stakeholders may be somewhat bemused, wondering why TALT is not immediately converting to organic production, why people sing to the trees, why the company invests in Te Arawa people and enterprises when it may be less economically advantageous to do so. Other stakeholders are interested, want to understand more, and may express interest in partnering with TALT. Others have a different view, and will seek to try to limit the aspirations of Te Arawa. Local, regional and central government are key partners of TALT. One of the challenges is that relationships with these stakeholders still rely on personal relationships with key individuals, which can be

problematic when people change and leave. There is support among Pākehā for the role and work of TALT. There is also opposition and indifference. TALT and TAML can assist Pākehā to understand that Western science is catching up with mātauranga Māori and sharing evidence of this.

On measuring wellbeing

Annual general meetings (AGM) provide a useful gauge of the mood of the people. These events can be challenging. However, at the last AGM, there was an ovation for the diverse projects that TALT is undertaking, for the involvement of whānau and hapū, the wider community and the environmental, economic and social outcomes. Some of the aspects that iwi members were most pleased with, included the Jobs 4 Nature and Catfish Killers initiatives, statutory engagement with council, support for hapū to engage with these agencies, and the TALT's leadership on the response to Covid-19. Whānau lost jobs through Covid-19; if the lakes are pristine, but the people cannot live in the district and enjoy them, then the kaitiaki obligations of TALT to its people and the environment have not been met.

Kaitiakitanga has been captured and framed as purely conservational, but the concept has a broader meaning, encompassing guardianship, stewardship, involving working with the TAML boards on ways the land can be used to support both the people and te taiao [P7]. In relation to the lakes, for instance, while the government accepts that Te Arawa owns the lake beds, its behaviour suggests that it wishes to have "a foot of both sides" by prescribing conditions to which Te Arawa as a landowner must adhere. [P7] Through settlements, the Crown has made commitments in good faith, but seeks to constrain how PSGEs might exercise those rights. Yet, what the Crown fails to realise is that "there is no iwi that would exercise those rights in a way that would be inconsistent with the wellbeing of their iwi and the wellbeing of the country." [P7] This argument applies to the debate about water and how this should be used; "you cannot say that iwi wouldn't be the first to say that a decision is to the detriment of the water and the people."

Metrics

It is important to also clarify motivations and intentions for investments and establish the fiscal measures because these change when taking a longer term perspective to investment. TAML has an investment strategy that has different criteria and weightings, which guide investment decision-

making. For instance, if TAML was considering buying a business and the business was located within the Te Arawa rohe, it would receive a higher weighting than if it were located outside it. Investments must make sense with who Te Arawa is (alignment with the identity, values, aspirations, material assets and nonmaterial elements of Te Arawa) and with commercial standards and expectations. TAML assess and manage financial and nonfinancial returns in a nuanced way, including for example, balancing considerations such as employing whānau, improving the lakes, and the longevity and sustainability of taonga and legacy assets against financial considerations. Profit is important for growth, but cash flow is critical to generating dividends to sustain TALT operations. This might require a different accounting framework, one which adequately and appropriately accounts for taonga and heritage assets, which presently does not exist. The 14 lakes are not on the TAML balance sheet.

8. Discussion

8.1 World views on environment and wellbeing

World views shape ideas about the environment and wellbeing and what these two large concepts mean for people, organisations and the broader human and ecological societies we inhabit. There are differences and similarities between the world views of te ao Māori and te ao Pākehā with respect to the environment and wellbeing, as well as great diversity within these two world views. Making explicit the assumptions, values and belief systems of one's world view is, therefore, an important first step in understanding how a group of people see the environment and wellbeing. The second step is to examine how people organise themselves to enact their world view by looking at the power, structures, and systems employed to operationalise their ideas and intentions.

8.2 Te ao Pākehā world view of environment-wellbeing

A te ao Pākehā world view conceptualises the environment as an economic resource, an essential means of production, employed to support economic growth and wealth creation and which is distributed to the highest and best use through efficient resource allocation and market-based exchange. New Zealand's political and economic system is predicated on preserving this view of the environment through regulation because it contributes to economic growth. A te ao Pākehā world view also conceptualises the environment as aesthetically pleasing with significant amenity values, which is supported through public and private investments in social and physical infrastructure such as hunting and tramping associations, regional and national parks, ski fields, walkways and cycleways. The contestation between commercial and recreational uses of common pool resources like wild fisheries, water and the conservation estate illustrate the problem of competing rights, interests and usages of the environment and its parts. These contestations have, hitherto, been resolved through a combination of parliamentary and judicial law, governmental regulation and sometimes self-regulation, on a simple equation of maximising returns and minimising costs—financial and nonfinancial. However, such a simplistic formula for resolving accepted declines in the quality of the environment as an economic or social resource is wholly inadequate if the quality of life of future generations is to be at least as good as we now enjoy if not better. The living standards framework and its focus on what is needed to secure societal intergenerational wellbeing is an attempt at recalibrating the balance between economic and social

usages of the environment. The problem is that its success is predicated on achieving higher levels of economic performance from fewer natural resources through technological advancement rather than modifying societal expectations about what constitutes a good life. Another distinctive feature of a te ao Pākehā world view is the divisibility of the environment. In this perspective it is possible divide the environment, to section it off in ways that assume intangible boundaries are as good as tangible ones, where the activity and effects in one part can be separated from that in another part. A land tenure system of private and public property rights is constituted to make clear the boundaries, and the ownership and usage rights within them. An example of this is the separate treatment of land and water in science, policy and regulation; territorial authority boundaries is another. Yet, water and air flows from place to place and land moves, but more slowly. The beauty of divisibility is that it compartmentalises responsibility for the environment; its weakness is that creates inequities in access and use of the environment, and subverts attempts at shared responsibility across boundaries for positive activity and mitigating negative effects.

8.3 Te ao Māori perspective on environment-wellbeing

A te ao Māori world view conceptualises the environment as an ancestor, an elder relative known as Papatūānuku—Earth Mother—from whom humanity descends and upon whom humans depend for their wellbeing. Papatūānuku is both a spiritual and physical being to whom humanity owe an obligation to treat with care and respect by engaging in a reciprocal relationship of give and take and only taking what one needs, and sharing this with others of our kin. Each of the elements of the environment in this world view has a spiritual guardian responsible for the care and protection of all elements within its realm, including Tangaroa—god of the seas, Tānemahuta—god of the forests, birds and people, Tawhirimātea—god of the winds and weather.

Seeing the environment and its elements as a network of genealogical or whakapapa relationships that span the spiritual and physical worlds intrinsically conditions expectations, intentions and decisions about the kinds of usages of the environment that are acceptable and how nonconformance is addressed. There is evidence of a unified socio-spiritual-ecology in the relationship between human and nonhuman actors. This sense of indivisibility is explicitly revealed in tribal narrative such as “ko au te awa, ko te awa ko au—I am the river, the river is me” of the Whanganui iwi (Mika & Scheyvens, 2021, p. 3). It is also revealed in the Te Arawa philosophy of water, called te whakapapa o te wai (Te Arawa Lakes Trust, 2020b). Water in this

view is a source of spiritual and physical wellbeing, which underpins their view of the Te Arawa lakes as taonga—highly prized, to be cared for and used for the wellbeing of the environment and of the people. Taonga status does not, however, negate usage of the lakes for economic purposes, but such purposes are considered alongside rather than in opposition to the spiritual, social, cultural and environmental significance of the lakes because of the socio-spiritual-ecology in the philosophy and practice of te tūāpapa o ngā wai o Te Arawa. As Te Arawa Lakes Trust testimony shows, pristine lakes without provision for the people is inconsistent with their world view, which acknowledges the relational interdependency between environmental and human wellbeing. Thus, environmental wellbeing is contingent upon human intervention and human wellbeing is contingent upon environmental intervention. For example, lake use and structures are permitted, but are regulated and levies imposed to support oversight of human activity on the lakes. This role is performed by the Rotorua Lakes Council. Te Arawa Lakes Trust has a role in reviewing consents for such activity, but is not directly funded to do this work or share in the levies generated.

8.4 Post-settlement governance and management

Te Arawa Lakes Trust is a post-settlement governance entity (PSGE) with a legislative mandate, settlement assets, organisational structures and managerial capability by which to devise and enact its philosophy of the environment and wellbeing, which centres on the 14 lake beds it owns and the iwi members who live by the lakes and care for the lakes and their surrounds. PSGE governance and management structure influences decision making on the environment and wellbeing. As a PSGE, Te Arawa Lakes Trust is empowered to articulate and advocate a Te Arawa world view of the lakes and how they are to be cared for, their quality restored and their value and impact on the wellbeing of the people. Te Arawa Lakes Trust does this in several ways. First, the trust focuses on supporting hunga tiaki as the primary custodians of the lakes. Second, the trust appoints trustees, directors and employees who are of Te Arawa and carry within them an innate understanding of Te Arawa philosophy, practice and aspirations. Third, the trust has articulated an environmental philosophy predicated on Te Arawa values, knowledge, institutions, which it uses as a standard of excellence and statement of aspirations and expectations in advice to developers, policy makers, and others. Fourth, the trust works closely with its subsidiary commercial entity—Te Arawa Management Limited (TAML)—to generate the necessary income to fulfil its legislative mandate,

role and functions. Fifth, the trust relies on strategic relationships with central and local government to influence policy, funding and decisions on the environment and wellbeing.

8.5 Decision-making frameworks

The trust uses a form of functional management to achieve its goals around environmental and human wellbeing, underpinned by Te Arawa philosophy, knowledge, values and aspirations. Functional management theory says that planning, organising, leading and controlling are universal managerial practices that lead to organisational success. Decision-making about resource allocation across environmental, economic, social and cultural purposes is guided by organisational elements of strategy, plans, budgets, policies and systems, resolved by board-level debate and resolutions, managerial advice, analysis and execution, and the operational capability of the trust, which is extended by supporting and working with hunga tiaki, schools and the community. While investments are thoroughly analysed against weightings for cultural and commercial imperatives, decisions are reached by consensus as to whether or not Te Arawa values are fulfilled, and alignment with plans and budgets, and policy and procedural guidelines.

One of the impediments to exercising its mana whenua role in the lakes is that substantial government funding for lake quality improvement is allocated to regional and territorial authorities rather than the trust. Te Arawa Lakes Trust is part of the group governing these resources, but the presence and influence of Te Arawa in this institution and its processes is still evolving. The trust has demonstrated that it can achieve environmental and social gains, a high degree of engagement and value for money through its environmental policies and programmes, but is constrained by resource and capability limitations. An equitable share of the resources for the lakes is desirable as preconditions for environmental and human wellbeing. Thus, resource allocation within Te Arawa Lakes Trust as a PSGE is a human decision conditioned by relationships between the environment and people, the insights of hunga tiaki as lived experience and knowledge, the kaupapa or philosophy of Te Arawa, and science and policy.

9. CONCLUSION

The purpose of this report was to provide te ao Māori perspectives on the environment and wellbeing as a contribution to the Parliamentary Commissioner for the Environment's (PCE) work on the environment and wellbeing, particularly, the government's wellbeing budgets. The PCE is committed to incorporating Māori perspectives into its research and advice to parliament. A particular focus of this research was on frameworks for decision-making and resource allocation on the environment and wellbeing. This purpose and scope was achieved by employing a kaupapa Māori approach to the research, critically reviewing literature on te ao Māori perspectives of the environment and wellbeing, and partnering with Te Arawa Lakes Trust as a case study of a Māori organisation and its approach to the environment and wellbeing.

Sustainable land and water management were implicit in tribal customary practice, but this was disrupted by colonisation and is being restored through revitalisation of Māori language, culture, and knowledge and treaty settlements. The rejuvenation of te reo Māori and tikanga Māori provides a context for Māori approaches to social, cultural, economic, environmental and spiritual wellbeing. For instance, unified socio-spiritual-ecology is driving Māori approaches to managing tensions between environment and economy underpinned by mana, tapu, mauri and kaitiakitanga. The capacity of Māori enterprises to enact this socio-spiritual-ecological unity and achieve multigenerational and multidimensional wellbeing is constrained by the extent to which kaupapa Māori knowledge, leadership, systems and practices are embedded in the organisation.

A major finding is that te ao Māori perspectives on the environment and wellbeing are relevant, useful and impactful within Māori organisations, particularly post-settlement governance entities. They rely on governors who implicitly know tribal philosophy, language, culture and practice and managers who can effectively implement this through strategy, plans, policies and systems. There are, however, resource limitations which constrain use of Māori frameworks for decision-making on environment-wellbeing linkages. Strategic relationships with stakeholders, including central and local government, are employed to improve Māori voice and equitable access to resources for the environment and wellbeing. While this brief study represents a partial examination of the issues, it provides a useful starting point for advice on future research, policy and practice.

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Parliamentary Commissioner for the Environment
Te Kaitiaki Taiao a Te Whare Pāremata

Wellbeing and the environment: A te ao Māori perspective

Information sheet

1 March 2021 [version 5]

Introduction

The Parliamentary Commissioner for the Environment—Te Kaitiaki Taiao a Te Whare Pāremata (the PCE), the Rt Hon Simon Upton, is conducting an investigation into the extent to which environmental information is integrated into the government's wellbeing budgets. This investigation was prompted by government and Treasury emphasising links between the environment and wellbeing in national fiscal processes. The aim is to produce a report that informs future wellbeing budgets, with environmental indicators, frameworks and tools that link to wellbeing, and incorporate Māori perspectives.

Who is involved?

The PCE's investigation is being led by Dr Edwin Sayes, with support from senior advisor mātauranga Māori, Leana Barriball. The PCE has engaged Dr Jason Paul Mika, an experienced researcher, to write a report on Māori perspectives on the environment and wellbeing. As part of Dr Mika's report, the PCE is seeking to engage with a Māori organisation as a case study. The case study will focus on how the organisation approaches the environment in its planning, decision-making and resource allocation and how this links to wellbeing. The PCE invites you to consider being the case study.

What's involved?

We would like your permission and support to write a short case study about Te Arawa Lakes Trust's approach to wellbeing and the environment. We would like to name your organisation in the report with your agreement. Your organisation will receive a copy of the case study report for review prior to publication in Dr Mika's report and a summary of the PCE findings. The PCE's project team will be available to discuss the findings with you. The case study will involve interviewing two or three key people in your organisation, recording and transcribing the interviews, reviewing available documentation about your approach and writing a summary of the findings as part of the report.

Publications

Dr Mika would also like to publish a paper on the findings, with your consent, following the completion of this project.

Participant's rights

If you decide to participate, you have the right to:

- decline to answer any particular question;
- withdraw at any stage up to the time of publication of the final report;
- ask any questions about the study at any time during participation;
- not be named unless you give permission to the researcher;
- be given an electronic summary of the findings at the end of the project;
- ask for the recorder to be turned off at any time during the interview.

Project contacts

Researcher—Ace Consulting Limited

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Parliamentary Commissioner for the Environment

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Parliamentary Commissioner for the Environment
Te Kaitiaki Taiao a Te Whare Pāremata

Wellbeing and the environment: A Māori perspective

PARTICIPANT CONSENT FORM – INDIVIDUAL

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

Please tick the boxes that apply:

☐ I agree to the interview being sound and video recorded.

☐ I wish to have my recordings returned to me.

☐ I agree to participate in this study under the conditions set out in the Information Sheet.

Signature: ..... **Date:** .....

Full Name

Email:

Phone: .....

Parliamentary Commissioner for the Environment
Te Kaitiaki Taiao a Te Whare Pāremata

Wellbeing and the environment: A Māori perspective

Interview schedule

1 March 2021 [version 4]

About the participant

1. Can you please tell me about where were you born and raised, and how did you come to be in your current role with the organisation?

About the organisation

2. Can you please tell me about the organisation, its origin, role and function, size and scope?
   a. What are the main activities and processes of the organisation?
   b. What are some of the ways in which the organisation plans, makes decisions and allocates resources?

Wellbeing

3. How would you describe the organisation's understanding and approach to wellbeing? Can you please share an example of this.
   a. How do you define wellbeing?
   b. How do you plan for wellbeing?
   c. How do you make decisions in support of wellbeing?
   d. How do you allocate resources for wellbeing?
   e. How do you measure wellbeing?

Environment

4. How would you describe the organisation's understanding and approach to the environment? Can you please share an example of this.
   a. How do you define the environment?
   b. How do you plan for the environment?
   c. How do you make decisions for the environment?
   d. How do you allocate resources for the environment?
   e. How do you measure the impact of your activity on the environment?

Wellbeing-environment links

5. How does wellbeing relate to the environment? Can you please share an example of this.
   a. In decision-making, how do you integrate wellbeing and the environment?
   b. Where wellbeing and the environment seem to need balancing, how do you do this?
   c. How do you make decisions that have many objectives (e.g., social, cultural, economic, environmental and spiritual priorities)?