Hei Whenua Ora:

Hapū and iwi approaches for reinstating valued ecosystems within cultural landscape

Susan Margaret Smith

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Hapū and iwi approaches for reinstating valued ecosystems within cultural landscape

A thesis presented in partial fulfilment of the requirements
for the degree of Doctor of Philosophy in Māori Studies,
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ABSTRACT

The thesis focussed on whānau and hapū and how as a Māori community, they came together to exercise kaitiakitanga (active guardianship) over their fragmented ecosystems within agricultural and cultural landscapes. The research centred on key areas within an ancestral coastline remaining predominately in tribal tenure, between the Waiwiri Stream and Waikawa River in the south-west coastal region of Horowhenua, North Island. The region was once an extensive coastal forest, a series of dune lakes, lagoons and dune wetlands within a larger tribal region under the guardianship of hapū Ngāti Te Rangitāwhia, Te Mateawa, Ngāti Manu and Ngāti Kapumanawawhiti ki Kuku who affiliate to the iwi, Ngāti Tūkorehe.

The research investigated intricate and complex environmental problems, assessed the extent of ecological decline in particular areas, and considered how well kaitiaki (as caretakers of the natural environment and their cultural landscapes) were dealing with the impact of fragmented systems with associated effects on their human condition. The methodological considerations aimed to achieve ecological and cultural restoration goals in a whole-of-person, whole-of-system context. What emerged from the action research process (grounded in a kaupapa and tikanga Māori epistemology of knowledge development supported by cross-indigenous perspective and international standards for ecological and human wellbeing) suggests that the restoration of fragmented ecological systems is interdependently related to the healing of a community, and reconnection with their natural and cultural landscape.

Certain aspects of collaborative scientific endeavour documented water engineering activities that accelerated ecosystem decline. Such approaches to knowledge development also collated hydrological data on water quality and assessed remaining indigenous biodiversity for the extent of decline in the region. Narratives of place, within a braided cultural landscape concept underpinned a knowing of place and peoples' place within it as informed by both resident Māori and non-Māori recollections of encounter and change within lands and peoples. The visual and documentary component as complimentary research methods or catalysts for action, also detailed the projects. The combined expertise, knowledge and methods supported the commitment this thesis has, as a locally generated, iwi and hapū led research and practically orientated endeavour. It drew heavily on Māori concepts, local experiences and aspirations for environmental rehabilitation, with key case studies for rivers, coastlines, wetlands, with strategies for interrelated archaeological areas

of significance. The approaches articulated new ways of doing things for remaining natural areas within a revered Māori cultural landscape.

The thesis determined that iwi and hapū with long standing relationships with their natural environment are able to determine and effect significant ecological improvements, where sustainability of both the environment and people, can be enhanced. This is achieved through planned actions, shared vision, co-intelligence and co-management strategies. Active kaitiakitanga can therefore compliment developments while recognising economic and cultural imperatives – all for the sake of future tribal generations and the wider community.

HE MIHI

. Te ngākau pūaroha ki ngā ōhākī
'E kore koe e ngaro- te kākano i ruia mai i Rangiātea
Puritia! Puritia! Puritia!

E ngā atua Māori, mō ōu whakaaro whānui mā a tātou, tēnā koutou.

E ngā mana, e ngā reo, e ngā iwi o te motu, tēnā koutou.
E ngā matāwaka, whītiki! Whītiki! Whītiki!
Te hunga ora ki te hunga ora, te hunga mate ki te hunga mate.

E kui mā, e koro mā a Tūkorehe ki a koutou kua ū mai nei ki tēnei mahi nui, ki te atawhai, ki te manaaki i ngā taonga i tukua mai e ngā tūpuna o te takiwā nei a Kuku, tēnā koutou.

E whaea mā, e matua mā, e ngā whānaunga katoa, e hoa mā, e kohikohi ana, e mahi tonu ana me te kaupapa nui mō Te Taiao.

E tāku hoa rangatira a Richard... Kei whea i ngā kupu mā tou manaakitanga? Ka nui te aroha ki a koe, tāku hoa rangatira.

Ko te tūmanako kia whakawhānuitia i ōu mātou tirohanga i roto i te whakatakotoranga kaupapa nei.

Nō reira, tēnā koutou, tēnā koutou, tēnā koutou katoa.

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There are many I can thank. In particular I express my gratitude to Mrs Maire Rahapa Rehia Johns for your knowledge and constant wise counsel; Mrs Ruhia Martin for your experiences of growing up in Kuku and your never ending support; Mr Martin Wehipeihana for your unwavering commitment to the environmental work of Ngāti Tūkorehe; Ms Jodie Cook for your administration and organisational support and to officials from Nga Whenua Rahui and Mātauranga Kura Taiāo for getting our Tūkorehe projects started. To my parents Mr Adrian and Mrs Netta Smith, thank you for your love and encouragement from a distance.

During the course of the research exercise many thanks goes out to all kaumātua and active kaitiaki of Kuku. Particular thanks also to Mr Henry and Rex Perenara; Te Rau Kawakawa o Te Ora; Lucas Associates; Mr and Mrs Neil and Margaret Candy; Mr Edward O'Conner; Hon Douglas Kidd; Mr John Wehipeihana; all members of Te Hākari Management Committee 2002-2006; all Trustees of Te Iwi o Ngāti Tūkorehe Trust (2005–); Mr Tana Carkeek; Mr Ron Halford; the Board of Tahamata; Ms Paula Loader; Mr Phillip and Mrs Pamela Putu; Mrs Myra Reid; Mr Sean Ogden; Mr Witana and Mrs Fiona Kamariera; Ms Moira Poutama; Dr Anthony Cole; Dr Tanira Kingi and his students; Dr Murray Williams, Victoria University and his students; Mr Caleb Royal; Mr Pataka Moore; Mr Te Waari Carkeek and Ms Ariana Te Ao Marere; Ms Susan Forbes; Mrs Lorraine Nikera; Mrs Nolene Wevell of Horizons Regional Council Archives; Horizons Regional Council and representatives; Dr Olivier Ausseil; Dr Mark Gyopari; Historic Places Trust Pouhere Taonga; Mr Brent Packer, and all the kaitiaki students since 2002.

Finally, I wish to thank my partner Mr Richard Anderson. There have been times of elation and challenge for us during the course of project implementation. Despite some difficulties, the active re-instatement of health to waterways, lands and affiliated peoples took precedence. All proactive and dedicated kaitiaki of Kuku know that there is a lifetime of work before us.

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CHAPTER ONE

> '... the job of the kaitiaki is to keep the things of Creation safe. The return from this is the relationship you get with the thing you are protecting and the knowledge and learning that comes from that. When the world was created, everything was given full wairua and mana, like the trees for example, so that everything is its own master. So if people want to exercise kaitiaki, they will first need to understand the value of all things, and the wairua of all things... they will know the effects and consequences of doing things to trees, or whatever. For us this does not mean being in charge...you don't go and tell the pipi how to live, you allow it to have the opportunity to live the way it knows best, and that is what kaitiaki is... it is about knowing the place of the things in this world, including your place in this world. When you get to that point, you realise that the thinking of all things is the same."[1]

This statement, articulated from a cultural world-view for a contemporary Māori and wider society, states quite simply the necessity for human kind to relinquish control or 'being in charge' of the natural world. It is important to understand the importance of 'wairua and mana'[2] within everything, and to acknowledge the relationships that exist between humanity and the environment for health and wellbeing. This statement signals to local kaitiaki or ecological guardians in tribal regions to know their locale, their place, their place within it and the unique environmental and spiritual values that support it for the future generations' physical, economic and cultural welfare.

The main proposition for this thesis is that the restoration of fragmented ecological systems is interdependently related to the healing of a community and especially iwi and hapū relationships with the natural and cultural landscape.

The research question, derived from the proposition, focused on whānau and hapū and asked how a Maori community might reunite with its natural environment in order to exercise kaitiakitanga in modern times, promote sustainability, and strengthen tribal identity through a grounded relationship with Papatūānuku.

The research and activity centres on an ancestral area within a southwest coastal plain in the Horowhenua region that was once an extensive coastal forest, a series of lakes, lagoons and dune wetlands. The area of research interest falls within a larger tribal region under the guardianship of hapū Ngāti Te Rangitāwhia, Te Mateawa, Ngāti Manu and

1 Paul Moon, 2003, *Tohunga Hohepa Kereopa*, David Ling Publishing Ltd: Auckland, 131.

2 In this context, wairua and mana may refer to the essential essence or spirit, and integrity.

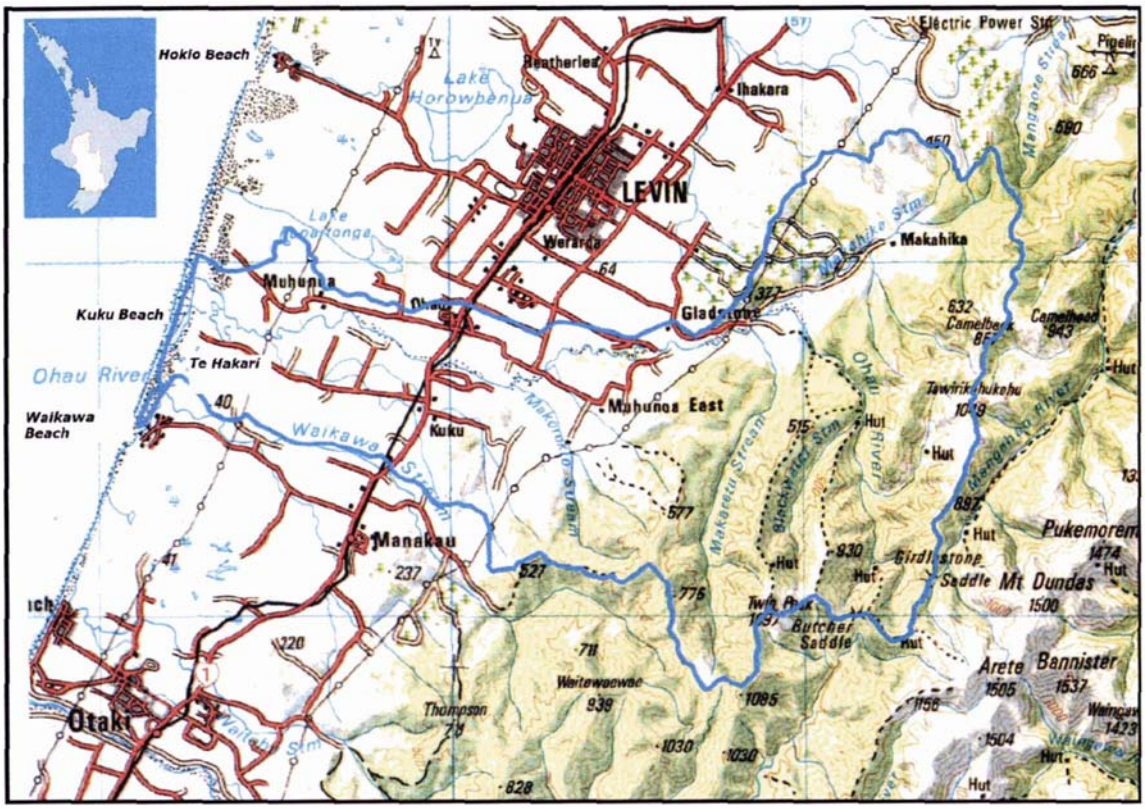

Figure 1.1: Ōhau River Catchment

Taken from Horizons Regional Council, 2002, *The Ohau River and its Natural Resources,* Horizons Regional Council, Palmerston North

Ngāti Kapumanawawhiti ki Kuku who affiliate to the iwi, Ngāti Tūkorehe. The region of cultural landscape is bounded by the Tasman Sea, with the dynamic Ōhau River, estuary and prevailing winds blowing across the adjacent sandy fore dunes populated with marram grass and remnant sand binders. The coastal plain then stretches inland to the Mangananao, Tikorangi and Kuku stream confluence that flows into the Ōhau River. The coastal land extends between the Ōhau and Waikawa Rivers, incorporating the Ōhau River meander known locally as the 'loop' and southwards to Te Hākari dune wetland system within the Tahamata[3] farming area. The contiguous dune wetland extends south

3 Tahamata Incorporation is a tribal farm established in 1974. It is led by a chairperson, a board of directors, and supported by a farm manager and sharemilker, while providing Māori shareholder dividends. There are a range of names that highlight hapū and iwi occupation since 1823. Certain papa kainga, areas of resource use, different events and periods of occupation were commemorated by specific names.

across the Tahamata boundary fence to the Waikawa River. This area is interrelated to the neighbouring tribal area of Ngāti Wehiwehi.[4]

This coastal, riverine and palustrine region has witnessed a complex Māori history of warfare and conquest due to consequences over land that arose from the migrations from Kāwhia Harbour by Ngāti Toarangatira that began in 1819.[5] A later series of induced migrations south for Ngāti Raukawa affiliates also translocated iwi and hapū from their original homelands around Maungatautari, Waikato.[6] Around 1823, hapū and iwi were allocated lands in the Horowhenua region at the behest of other related and significant leaders.[7] To this day, Māori shareholders have retained ancestral lands in tribal tenure where persistent, embedded cultural markers still exist (albeit tenuously) within agriculturally modified landscape. When hapū Ngāti Te Rangitāwhia, Te Mateawa, Ngāti Manu and Ngāti Kapumanawawhiti ki Kuku affiliates of Ngāti Tūkorehe, established their customary mana whenua obligations over the coastal land and its resources from 1823, they enjoyed decades of relatively natural pristine fullness within the coastal plain to the sea.

The early occupants would have witnessed quite different ecological systems between the coastal plain and river systems to sea.[8] They would have seen an area of dune land streams, dune wetlands and water courses where pukio, upoko tangata, wīwī or sea rush, oioi or jointed wire rush, raupo and kapungawha or lake club rush softened the wet edges of deep,

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4 Beyond the southern boundary of Tahamata the wider area of Kuku is some 7,557 acres within an area bounded by the Tasman Sea in the west, to the Waiwiri Stream to Lake Waiwiri in the north, to the east by the Makorokio Stream. The name of the stream signifies the long hard-fern [*Blenchnum procerum*] as referenced in G. Leslie Adkin's reprinted publication, *Horowhenua: its Maori place-names & their topographic & historical background*, page 208. The Makorokio Stream lies beyond the ridge-line of Ōtararere and Pukeatua, and then traverses across the ridgeline to Poroporo that lies before the foothills of the Tararua ranges. The Tararura ranges are encompassed by Mt Dundas to Mt Waiopehu. The southern tribal boundary is deemed artificial as it appeared on the Climie surveyed map in 1879. In 1878-1879 the Public Works Department surveyed various routes for a railway from Wellington north to Waikanae. It was surveyed by James Daniel Climie and Henry Westcott Climie. According to researcher John Wehipeihana, the Climie Line was taken as a mesh block boundary by the Department of Statistics in 1911, where it was retained despite all other mesh block changes. The Climie line marked the southern boundary of the Whirokino Riding, Horowhenua in which the region of Kuku district is located. The iwi designated southern boundary is the Waikawa River. Beyond the river, the closely affiliated Ngāti Wehiwehi hold mana whenua of the Manakau to Waikawa coastal area.

Derived from John Rodford Wehipeihana, 1964, *Sequent Economies in Kuku: A Study of a Rural Landscape in New Zealand*, Master of Arts in Geography, Victoria University: Wellington, 1b. Aspects about boundaries also derived from Draft Ngāti Tūkorehe Claim to Waitangi Tribunal, 2007.

5 Charles Te Ahukaramū Royal, 1994, *Kāti au i konei: A Collection of Songs from Ngāti Toarangatira and Ngāti Raukawa*, Huia Publishers: Wellington, 17. Ngāti Toarangatira began a long and arduous journey south, via Taranaki, Whanganui and Rangitikei, known in Maniapoto country as 'Te Heke Tahutahunui', and after Taranaki 'Te Heke Tātaramoa', a name coined after the bramble bush that commemorated the difficulty of the journey experienced.

6 Particular migrations of relevance to Ngāti Raukawa affiliates included 'Te Heke Whirinui', 'Te Heke Karitahi' and 'Te Heke Mairaro'. The names for each migration respectively refer to the unusually large weaving on the edges of woven mats; the people on the next migration carrying single cartridge rifles, (as kariri means cartridge) and the third migration literally meaning the migration from below. Ibid, 19-20.

7 Waitohi (Ngāti Raukawa and Ngāti Toarangatira) was the sister of Te Rauparaha and Nohorua. She was a leader in her own right. She was influential in allocating lands for people. Her views were heeded by Te Rauparaha during the troubled times of the southward migration and the resettlement that followed it.

Oliver, W. H. & Teremoana Sparks. 'Waitohi ? - 1839'. Dictionary of New Zealand Biography, updated 7 April 2006 URL: http://www.dnzb.govt.nz/ The migrations are explained further in Chapter 2.

8 These tribal groups range from Kāti Mamoe, Rangitāne to Muaūpoko encounters and existence within the region.

meandering waterways.[9] As the dunes increased with age further inland, the soils matured accordingly. Ancestors would have walked back and forth along walking tracks between damp raised grounds of wind resistant trees growing on older dunes with developed soils, across moist flats with frost resistant species, through to a dune land cover of kowhai, ngaio, koromiko, maukoro or scented broom, tree tutu and toetoe[10]. In passing through this low level forest on the way to sea, they would have passed through shrub land on dunes, over grasslands to the fore dunes, and onto the sea. Between the dunes there were often flat sand plains and hollows created by wind scouring where the soil was damp.[11] These damp raised grounds would have been cloaked in lush cloaks of manuka, koromiko, karamū, hukihuki or swamp coprosma, toetoe, tī kouka and harakeke. Inland, resplendent lowland terraced forests comprised large totara, titoki, with groves of kohekohe and matai. They too were interspersed with smaller trees like manuka, poataniwha, makomako, kaikomako, mapou, kowhai, kawakawa, mahoe or whitey wood, wharangi and kohuhu.[12] Each forested area teemed with a diversity of birds including kereru, kaka, tui, and parakeets.[13] Walking tracks linked younger dunes and the dry sand plains. Tracks led to papa kainga with extensive gardens that were cultivated in clearings in the dune land to lowland terrace forests. The papa kainga were organised in close proximity to abundant resources from sea, rivers, streams and forests.

In occupying these areas, hapū generated an intimate closeness with the environment and shaped the landscape through their human actions and influences over time. They lived, procreated, died and sustained themselves by their seafaring, fishing, gardening and housing skills using natural resources, consistent with Pacific island living adapted over generations to suit the temperate climates of Aotearoa New Zealand. They entreated spiritual entities and their associated environmental properties. They supported themselves with knowledge systems based on generations of understanding brought about from talking about place, observing place and developing place in a detailed way.[14] These ways of knowing were prerequisites for maintaining a healthy environment and its customary knowledge rights.

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9 Pukio [*Carex secta*], Upoko-tangata or umbrella sedge [*Cyperus ustulatus*], wīwī or sea rush [*Juncus gregiflorus*], oioi or jointed wire rush [*Leptocarpus similis*], raupo as bull rush [*Typha orientalis*] and kapungawha or lake club rush [*Schoenoplectus validus*].

10 Kowhai [*Sophora microphylla*], ngaio [*Myoporum laetum*], koromiko [*Hebe stricta*], maukoro or scented broom [*Carmichaelia odorata*], tree tutu [*Coriaria ruscifolia*].

11 Kapiti Coast District Council, 1999, *A Guide to Growing Native Plants in Kapiti*, Natural Textures Information Graphics: Paraparaumu, 5.

12 Manuka [*Leptospermum scoparium*], koromiko [*Hebe stricta*], karamū [*Coprosma robusta*], hukihuki or swamp coprosma [*Coprosma tenuicaulis*], toetoe [*Sortaderia toetoe*], cabbage tree [*Cordyline australis*], harakeke [*Phormium tenax*], tōtara [*Podocarpus totara*], titoki [*Alectryon excelsus*], kohekohe [*Dysoxlum spectabile*], matai [*Prumnopitys taifolia*], poataniwha [*Melicope simplex*], makomako/wineberry [*Aristotelia serrata*], kaikomako [*Pennanatia corymbose*], mapou [*Myrsine australis*], kowhai [*Sophora microphylla*], kawakawa [*Macropiper excelsum*], mahoe/whitey wood [*Melicytus remiflorus*], wharangi [*Meleicope ternata*], kohuhu [*Pittosporum tenuifolium*].

13 Bruce McFadgen, 1997, *Archaeology of the Wellington Conservancy: Kapiti-Horowhenua A prehistoric and palaeoenvironmental study*, Department of Conservation: Wellington, 16.

14 Tove Skutnall-Kangas, 2000, *Linguistic Genocide in Education- or Worldwide Diversity and Human Rights?* Lawrence Erlbaum Associates Inc: Mahwah, New Jersey, 94.

Figure 1.2: Aerial views of tribal region, showing the coastline, Te Hākari dune wetland and waterways, 15 December 2003.

Aerial Photography by Lawrie Cairns, Palmerston North

Their interactions with resources through shell fish gathering, freshwater fishing for eels and fresh water fish, fishing activities at sea, and for gardening were essential activities that made sense of their local world. They used the Māori moon calendar or maramataka and star lore as an illuminating ecological knowledge guide for symbiotic environmental care and sustainable resource use. They seasonally harvested to the lunar cycle, then dried and stored abundant resources from the sea, the coastal dunes, the rivers, streams and wetlands for sustenance over the non-seasonal months. They snared birds within the coastal forests, and also from the foothills and mountain forest regions. Their activities for human wellbeing were integral within an epistemology of knowledge development that provided the means to nurture, sustain and protect hapū in their region.[15]

15 Maui Solomon, 1998, *Understanding Indigenous Cultural and Intellectual Property Rights: Implications for Environment Risk Management*, Conference presentation at ERMA New Zealand 1998 Conference, Thursday 18 June 1998, Waipuna International Hotel, Auckland, 5.

It has been well noted in scholarly text, that Māori tribal identity and the wellbeing of iwi, hapū and whanau was inextricably intertwined with the natural environment, through cultural places and landforms, natural resources and taonga species.[16] These land, sea and water based taonga signified both value and relationships, where natural or cultural taonga in landscape were treasured because of the associations they accumulated. In this way, 'any ecosystem with particular species that were significant for food or other purposes, and which were known to have qualities considered to be vital to those species' life-sustaining processes, were likely to have had taonga status in the customary Māori landscape. A swamp or coastal foreshore ecosystem that possessed such qualities, or a river ecosystem, or a forest, could be considered, with the people it sustained, to be a living being and be termed a taonga.'[17] In relation to this, hapū inherited their mana for lands through their close associations with the intrinsic power that the land produced. This sustained their lives and contributed to their well being and security.[18]

During the course of this research, kaumātua of Tūkorehe confirmed that there had long been both cultural and common sense protection measures for sensitive sacred and natural areas, for related biodiversity, resources at the beach and within the coastal waterways. Narratives of occupation and settlement recounted how inter-tribal contest secured customary land tenure from the beach, the adjacent flood plain and dune systems. For this reason, these areas were regarded as restricted to human access and resource use within the vicinity. As people who knew the coastal environs well when seeking sustenance or at seasonal harvest, kaumātua accounts also recalled long observed and consistent protocols.

> "You only go out there... if you're going out there to get pipis or toheroas, the old people used to say now you only go out there and get what you need."[19]

Any catches, gathered shellfish or 'hauling' for fish at sea or the estuary were taken well into the dry sands or better still, taken home to prepare and cook. By not cleaning catches or cooking gathered food on the beach, this was a cultural precaution, a sign of respect to those subjugated by earlier battles to maintain the region. In other ways it also made good sense not to foul areas of resource collection. Other anecdotal information offered

16 Ronda Cooper & Rachael Brooking, 2002, "Ways Through Complexities" in Kawharu, M. (ed.) *Whenua Managing Our Resources*, Reed Publishing Ltd Books: Auckland, 195.

17 Geoff Park, 2002, *Effective Exclusion? An exploratory overview of Crown actions and Māori responses concerning the indigenous flora and fauna, 1912-1983*. Waitangi Tribunal Report: Wellington, 181.

18 Wharehuia Hemara, 2000, *Māori Pedagogies: A View from the Literature*, New Zealand Council for Educational Research: Wellington, 78.

19 Personal communication with Mrs Maire Rapaha Rehia [Hummer] Johns (nee Seymour) and Mrs Ruhia [Buddy] Martin (nee Holder), on 7 May 2000 (conversation recorded by Clinton Putu, interviewed by Mr Gary Wehipeihana, Mrs Yvonne Wilson Wehipeihana and Huhana Smith). Further conversations were conducted on 21 September 2005 at "Te Rangitāwhia" cottage, Kuku.

included certain tī kōuka [*Cordyline australis*] marked sites where warriors fell. Tī kōuka were thought to contain the bones of revered ancestors. Similarly, it was alleged that more plantings adjacent to dune systems on both sides of the Ōhau River marked other burial areas for those overwhelmed in battle.

Resource use precaution at Kuku beach included a rāhui or ban on cooking any catches of shellfish such as tuatua or kahitua [*Amphidesma subtriangulatum*] on the foreshore of the beach. These protocols issued from an ecological worldview where humans were just one aspect of a larger family that extended to animals and plants in an all-encompassing genealogy. In this way ancestors were not only human ancestors but also the antecedents of the entire natural world.[20] Codes of behaviour for resource use at the beach noted how inappropriate or disrespectful it was to cook the related catch near the inter-tidal zone where other shellfish remained in the sand. This caused the residual shellfish to sense the situation, to move away and not return.[21] One elderly informant ran into trouble with her father when as a young girl she and her sisters cooked their whitebait catch, on the Ōhau River beach area. With the anger and distress levelled at them for their transgression, they vowed never to do so again. Such encounters were regarded as an external knowing or being present in the moment of experience,[22] which informed their understandings and respect for the beach and environs forever.

From the notion of restricted sites, to a protection of indigenous biodiversity perspective, Kuku Beach remains sensitive with nesting grounds for a diverse range of sea and estuarine birds, particularly poaka or Pied stilts [*Himantopus himantopus*], torea or Pied oystercatchers [*Haematopus ostralegus*], karoro or Black-backed gulls [*Larus dominicanus*] and Red-billed gulls [*Larus novaehollandiae scopulinus*]. Kuku Beach and Ōhau River estuary are important resting grounds for taranui or Caspian tern [*Sterna caspia*] and kuaka, Siberian godwit [*Limosa lapponica*] after their major flight migrations arriving in late winter to mid spring. The beach area is a place where kōtuku or white heron [*Egretta alba*] feed, as do kōtuku ngutu papa or Royal spoonbill [*Platalea regia*] during the summer months. Kōtuku ngutu papa, remain at the estuary and the wetland into early winter, then return to the Wairau region of Te Wai Pounamu or the South Island to breed. They return to the Kuku coast again in summer. Those present in late winter, or those who

20 Charles Te Ahukaramū Royal, 2004, *Mātauranga Māori and Museum Practice*, Discussion paper prepared for National Services Te Paerangi, at the Museum of New Zealand Te Papa Tongarewa, 21.

21 Like many others referred to as 'the old people', Rameka [Tumeke] Wehipeihana (1879-1968) also relayed to his grand daughters Ruhia Martin (nee Holder) and Netta Smith (nee Holder) the need to respect resources during their summer bach stays. They stayed in a whānau bach south of Te Hākari stream outlet during the seasonal shellfish harvest excursions they took as young children to young adults with their parents and grandparents, during the 1930s into the early 1940s.

22 Manulani Aluli Meyer, 2003, *Ho'oulu Our Time of Becoming: Hawaiian Epistemology and Early Writings*, 'Ai Pōhaku Press Native Books: Hawai', 63.

During the course of the research endeavour, these forms of encounter were deemed valid ways of knowing place. By speaking about such relationships again and recording them, their capture helped rebuild relationships with natural and cultural resources and renewed awareness to environmental concerns facing the region.

Figure 1.3: A Four Wheel Drive Club using the sensitive dune environs for inappropriate recreation.
Photograph by Huhana Smith, 10 August 2005

feed over spring into summer are the younger non-breeders. Added concerns for cultural and natural landscape, and associated biodiversity at Kuku beach grew when increased access to the beach environs and Ōhau River estuary led to greater numbers of larger, recreational 4 x 4 vehicles or trail bikes. These vehicles mounted risks to oystercatcher and black-backed gulls' nests in the foreshore sand dune systems. Such increased vehicular access compressed the wet inter-tidal sands, which put toheroa [*Amphidesma ventricosum*], tuatua or kahitua [*Amphidesma subtriangulatum*] beds in the foreshore region and kōkota [*Amphidesma australe* or *Paphies novaezealandiae*] beds alongside the Ōhau River, under pressure.[23] Similarly heavy 4 x 4 vehicles contributed to an over-extraction of shellfish and the lighting of fires for domestic or inorganic rubbish disposal.

The coastal area supports unique estuarine bird life, fresh water-based and marine resources. Increased numbers of vehicles, however, have impacted upon their nests within the dunes. Such ecological sensitivity extended into the neighbouring Te Hākari dune wetland, home to several endangered, indigenous bird species including matuku, the Australasian bittern

23 *The New Zealand Water Care Code* notes that driving on wet sand damages shellfish beds. It recommends that people do not drive on beaches unless it is permitted and only if necessary. URL http://www.doc.govt.nz/Explore/NZ-Water-Care-Code.asp
Kapiti Coast District Council suggests that vehicles should not be repeatedly driven back and forth over the same stretch of wet sand to avoid potential damage to shellfish beds or be driven onto the dune area as these areas are fragile and contain breeding birds and erosion control plants.

Figure 1.4: Baby banded kōkopu. DOC

Figure 1.5: Banded kōkopu. DOC

Figure 1.6: Inanga. DOC

Figure 1.7: Kōkopu. DOC

Figure 1.8: Short fin eel. DOC

Figure 1.9: Short fin eel.

Figure 1.10: Variable oystercatchers, Pied stilts and Godwits.

Figure 1.11: Kingfisher and Royal spoonbills.

Figure 1.12: Black backed gull and Royal spoonbills.

Figure 1.13: Royal spoonbills at Te Hākari wetland.

Figure 1.14: Australasian bittern. DOC

Figure 1.15: Spotless crake. DOC

Figures 1.16: Ōhau River beach environs, with Kapiti Island in the distance, 2 June 2006.
Photograph by Huhana Smith

[*Botaurus stellaris poiciloptilus*] and puweto or spotless crake [*Porzana tabuensis plumbea*]. The wetland was once a superb breeding ground and habitat for inanga [*Galaxias maculatus*] in both adult and juvenile, or whitebait forms [*Galaxias fasciatus*], and for tuna or eel [*Anguilla dieffenbachii*]. The wetland was a likely suitable area for endangered native fish species such as banded kōkopu [*Galaxias fasciatus*] and giant kōkopu [*Galaxias argentus*].[24] These species were all still valued as varieties in need of protection and care, as was the associated knowledge about them within their surrounding environment.[25]

Important Māori expressions of belonging or tūrangawaewae[26] continue to emphasise ancestral connections and intergenerational responsibilities for lands, rivers, streams, wetlands, healing springs and fresh water springs within Kuku. This is evident in the encompassing pepeha that identifies natural markers as tribal boundaries:

> Taku turanga ake ki runga ki ngā maunga titohea o te takiwā nei, ko Tararua, Ōtararere, ko Poroporo, ko Pukeātua, ki ngā wai ora, ki ngā wai puna, ki ngā wai tuku kiri o te iwi, ko Ōhau, Ko Waikokopu, ko Kuku, ko Tikorangi, ko Mangananao, ko Te Mateawa, ko Te Rangitāwhia, ko Ngāti Manu, ko Patumākuku, ko Ngāti Kapumanawhiti o te rohe ki te iwi nei o Ngāti Tūkorche.[27]

During the development of this study certain intricate problems and questions arose over contemporary iwi and hapū interrelationships with the natural environment. Initial research concerns wondered how well kaitiaki were dealing with fragmented ecosystems and what impact this was having on their human condition. As dramatic changes to lands and waterways had systematically fragmented genealogically related peoples over time, further successive divisions and land title transfers eroded more in-depth knowledge about the wider tribal region. As key informants in generations passed away, knowledge, observations and experience of place declined, resulting in generations becoming increasingly separated from intricate relationships to ancestral place. When only small, impacted upon natural remnants remained in an agriculturally adapted and modified southwest coastal plain, what became clear was how far the changes rendered significance in cultural landscape, as almost invisible. The worst effect of this loss was

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24 See Appendix I.

25 With help these rare species are expected to thrive again when the wetland area and adjacent forest are returned to better health. Ongoing and well-regulated pest management and monitoring regimes need to control introduced predators.

26 Literally meaning place to stand. The term is used to acknowledge relationships to a collective tribal base.

27 Composed by Sean Ogden and derived from second round funding application for *Te Hākari Wetlands Restoration, Poutu-te-rangi 2005*. This expression of belonging to place covers a wider region of responsibility than what is highlighted within this thesis.

Te Iwi of Ngāti Tūkorehe Trust embraces another expression of belonging, of kaitiakitanga and governance over tribal grounds or turangawaewae. 'Mai i te take o te maunga ki te hukahuka o te tai, ki te rohe e mōhiotia ana nō Tūkorehe, mō āna uri, me āna moetanga katoa.' Loosely translated as 'From the mountains to the froth of the tides, for the area known, named and claimed from Tūkorehe, for his descendants and all their associated dependants'.

seemingly manifest in contested genealogies, and variances or contradictions in peoples' narratives or understandings of their relationships to lands. There were very real difficulties and tensions witnessed between closely related peoples. Long-standing land ownership conflicts over coastal parcels of land led whānau within hapū to pit themselves against each other and to challenge other whānau in the Māori Land Court.

The situation at Kuku motivates...

The motivation for this thesis originated from many concerns for the region. Broadly speaking, the thesis was inspired by the anxieties of particular kaumātua and local tribal members about the situation they could observe, sense, feel and experience in respect of declining environmental integrity of the ancestral landscape at the coast at Kuku. The coastal area had not only been ecologically important and resource rich to them, but also well regarded as a cluster of inter-woven narratives around ancestral conquests, occupation, special burial areas and related spiritual entities in natural areas. They recalled inter-generational protocols that were observed to protect these special areas.

Within forty years, intensified agricultural activities, and local and regional authorities' modifications to natural water way systems in the coastal region had combined to create a tenuous balance between the cultural and spiritual needs of hapū and iwi as shareholders of Māori lands and waterways, and the economic operations of a tribally based, large-scale, dairying operation with a sharemilker and farmhands. The farm functioned within a heavily modified, agricultural landscape, with restrictive flood protection mechanisms for the lower reaches of the Ōhau River or the 'loop', as it was locally known. Particular informants voiced their concerns that cultural signifiers or entities within lands and waterways were under threat between the Ōhau and Waikawa Rivers at the coast. Indigenous resources or local delicacies had disappeared from coastal waterways and dune wetlands once considered vital to the tribe. By the 1990's, last vestiges of other natural food resources had deteriorated so rapidly from ongoing inappropriate or unsustainable actions, that they were virtually non-existent.

The disquiet from kaumātua and kaitiaki also focussed on the changed state of coastal and inland sites of original occupation, regarded as wāhi tapu. Particular and known significant areas had been overwhelmed by economic objectives that belied any inherent sacredness and failed to appreciate the relationship between economic growth and cultural integrity. This included inappropriate forestry[28] upon known burial grounds adjacent to original pā sites or the use as rubbish tips[29] of previous watercourses renowned for their delicacies.

28 A pine forest was planted around April 1994. Concerns were raised with the then farming consultant and board members. Despite the airing of concern for a known burial ground, the forest remained.

29 The tip in the former water course was closed to the dumping of inorganic refuse in 1999.

Another key area of inter-tribal importance was littered with the refuse of dilapidated camps from successive fishing or white-baiting seasons. Some kaumātua were uneasy that the people who violated the land and its coastline were not intimately or genealogically linked to the area. They felt that such misusers did not know how to treat the area with appropriate respect, as taught to them by their kaumātua, 'the old people.' Those elders who passed away in the 1960s or mid 1970s and even before these times were often referred to as the 'old people'. They were regarded in this way because they seemingly existed between the worlds of modernity and change, and those worlds still governed by Māori ways of knowing and belief. Most importantly they were first language users, acutely aware of changes and impacts on their world around them. In the 1970s, as spouses died those left behind lamented that they had no one to really speak to anymore in their first language, te reo Māori. [30]

There were aired worries about white baiting in unsuitable areas or non-compliant areas, and before season,[31] which impacted on breeding stocks of inanga for others. The concerns extended to avoiding fees at public refuse tips, and using the Ōhau River beach environs as private dumping grounds for inorganic or domestic refuse. Such activities suggested a shift away from the kawa or sustainable resource use protocols once strictly observed and unchanged. Before intensive waterway modifications in the region, great supplies of fish and shellfish seasonally fed peoples of the region, especially those who could no longer manage to get to the river and beach. The harvest afforded opportunities for a range of dried foodstuffs, prepared, stored and used over the non-seasonal months. Despite the land tenure changes in the area across the Ōhau River, specific iwi informants were convinced that locals and current landholders must know more about culturally valuable areas in order to protect the knowledge, spiritual and physical environment. To this end, the current landholders like Mr Hugh and Ms Frederica Acland were treated to a more in-depth view of cultural place and were made more aware of the significance of the area like Tirotirowhetu Pā. They sensed the importance of the wider area, especially the need to protect the middens in the dunes. The Aclands had already planted wide areas of harakeke at the river, to protect the riparian zone.

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30 Personal communication with Mrs Maire Rahapa Rehia Johns and Mrs Ruhia [Buddy] Martin in 2002 and 2005.

31 According to Mrs Maire Rahapa Rehia Johns the Māori season for white-baiting in the Ōhau River began with either the new moon or full moon in August. The start of the Māori season depended on which moon came first in the month each year. Coincidentally if the coastal lupin or gorse were flowering then the white bait were running. Before intensive changes to what now is predominately an agricultural scape, the flowering of raupo or harakeke in the wetland would have been another natural indicator. Furthermore, fish would be readily available at this time but still dependant on the right fishing moon. The Ministry of Fisheries or the Department of Conservation white baiting season is demarcated by one date, 15 August 2006. Their season in all areas of New Zealand except the West Coast of the South Island and the Chatham Islands, the season is open between 15 August and 30 November (inclusive). The Chatham Island's season runs from 1 December to the last day of February (inclusive). The taking of whitebait at other times is prohibited. Fishing is only permitted between 5am and 8pm OR between 6am and 9pm when New Zealand Daylight Saving is being observed.

Action over coastal subdivision

Further fears for the coastal and wider Ōhau region arose secondary to the pressure of encroaching change that accompanied increased demand for coastal lifestyle property at Waikawa, a beachside community clustered at the mouth of the Waikawa River, south of Kuku, and other large-scale housing developments just north at Ōhau. Selling tracts of neighbouring iwi coastal land or individual's support of such developments had enabled and exacerbated change for the region. Local district authorities then sanctioned large-scale coastal and adjacent inland areas for housing subdivision. It would appear that financial pressures on local governments (who often had limited ratings bases from which to fund a wide range of functions and responsibilities) led them to minimise their processes and costs. In this way new economic energies enabled resource consents for subdivision to be more

Figure 1.17: Waikawa Beach township with some adjacent areas demarcated for subdivision. Dune system coastal developments extend to the extreme right of the photograph.

Aerial Photograph by Lawrie Cairns, Palmerston North. Image produced for Horizons Regional Council, 2005

readily passed by the local council.[32] There was an increase in resource consent applications that were processed without public notification. This exacerbated pressures on iwi and hapū to reach consensus and submit detailed oppositions to subdivision developments, in time. Some representatives within local authorities considered legitimate hapū and iwi concerns for natural and cultural integrity in landscape as tactics that deliberately frustrated or inhibited council or other local operations. At times working relationships between iwi, hapū, local councils and developers were difficult to maintain.[33] Potential coastal development proposals therefore escalated in both northern and southern neighbouring areas of the Horowhenua coast. According to the Horowhenua Development Plan 2007–2027, increased coastal development is proposed for Waikawa Beach, Hokio Beach, Waitarere and Foxton beach settlements adjacent to distinct dune landscapes. The Kuku/Ōhau coastline is a coastal buffer between Waikawa and Hokio.

Just getting on with it

When first grappling with the complexity of localised natural and cultural resource restoration in 1997, from late February to April 1998, the New Zealand Historic Places Trust He Pouhere Taonga and the Department of Conservation Te Papa Atawhai convened a series of meetings and hui on marae to review historic heritage management.[34] Considerable concern for cultural and natural landscape issued from the lack of better protection models with greater Crown support for Māori over their land and water-based cultural heritage in Aotearoa New Zealand. The initial promotional flyer for the Historic Heritage Management Review stated that the New Zealand heritage system was not working because the activities in the system were carried out by different organisations, under different laws. The legislation was unclear with insufficient statutory mandate for local government and inadequate central funding government. There needed to be greater clarity on the roles of *all* organisations involved in the system.[35]

For Māori cultural landscape as land and water-based heritage, the situation was more alarming. Despite government obligations, conservation of Māori heritage had not received adequate attention. There had been a lack of both national direction and local control in the conservation or care of Māori cultural landscape. Protection of wāhi tapu as sacred places such as cemeteries and battle sites had become the crucial test for the effectiveness of New Zealand's heritage system. The system had not met the expectations

32 Ronda Cooper, 2002, *The Importance of Monsters: A Decade of RMA Debate*, Parliamentary Commissioner for the Environment Te Kaitiaki Taiao a Te Whare Pāremata: Wellington, 17.

33 ibid, 17.
This statement refers specifically to non notified consents for major subdivisions in the district.

34 This review eventuated from the Parliamentary Commissioner for the Environment's 1996 report (the PCE Report), which found that there was a particularly poor commitment to Māori cultural heritage.

35 New Zealand Historic Places Trust, February 1998, Historic Management Review Flyer.

of Māori.[36] When apprehensions were voiced at the series of heritage hui around the country and from the national hui at Turangi in June 1998, it was clear that iwi and hapū were more than willing to initiate the active care and protection required for their cultural and ancestral landscapes.

The thesis therefore emanated from ongoing lack of national direction and calls for local control of Māori cultural and natural landscape protection in tribal districts. Short of providing resources, legislative and policy support, central government had no role to play in local heritage management. It became clear, however, that the papatipu, the people on the ground should define their heritage sites and manage them accordingly.[37] Whether the system devised for active protection and management of sites was to be a partnership or co-management project with other entities, the final modelling decisions resided with iwi, hapū or whānau to articulate the best ways forward for their tūrangawaewae. Māori had the right to assert and determine the best management strategies for their affairs encompassing multiple expressions of tino rangatiratanga, kaitiakitanga and the maintenance of ahi kā.[38]

Rationale for the thesis

If local Māori cultural identity was bound by vital relationships with lands and healthy ecosystems, could the goals of Māori cultural affirmation, social wellbeing, balanced economic growth, co-management projects for mutually beneficial partnerships, and programmes of Māori self-determination[39] be possible, without achieving the goals of effective ecosystem restoration and environmental sustainability on tribal lands? The restoration problem was complex. What could be done to address this complexity? This thesis sought better ways forward in very practical terms, in order to arrest cultural disintegration and ecosystem degradation within a special coastal area.

The thesis assumed that a locally based hapū and iwi environmental worldview provided the most valid basis on which to address the problems of ecological degradation and to heal dysfunctional relationships experienced between related peoples. For these reasons, the research project was grounded in a kaupapa-based epistemology that recognised and

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36 ibid.

37 *Historic Heritage Management Review Māori Consultation Round Key Points: Preliminary Report*, Historic Places Trust Pouhere Taonga: Wellington.

38 Tūrangawaewae – literally 'place to stand' or tribal land area
Tino rangatiratanga – Iwi and Hapū led ability to self determine tribal futures in tribal regions
Katiakitanga – the care, guardianship of local resources and the interactions with for sustainable futures
Ahi Kā – metaphoric homes fires to be kept alight as symbol of long term occupation and resource use rights.

39 Based on notes taken during discussion for Masters class, 50.701 *Tinorangatiratanga: Politics of Māori Self-Determination* on Monday 12th October 1998, Massey University, Palmerston North.

reflected localised systems of understanding of hapū and iwi of Ngāti Tukorehe augmented by environmental ethics and other experiences of place.

The thesis drew upon Western scientific expertise and knowledge to document the water engineering activities that accelerated ecosystem decline, to collate hydrological data on water quality in dune wetlands and to assess remaining indigenous biodiversity for the extent of decline. The thesis also drew on other narratives within a braided cultural landscape concept, which referred to a knowing of place and peoples' place within it as informed by both Māori and non-Māori recollections of encounter and change within lands and peoples. In this way, some local non-Māori residents' testaments indicated the respect they gave to Māori cultural understanding of place at Kuku. The combined expertise and knowledge has been used only to the extent that it complements the commitment this thesis has to a locally generated, iwi and hapū led research and practically orientated endeavour. The thesis drew heavily on Māori concepts, experiences and aspirations for environmental rehabilitation, and comes to rest on case studies and other strategies that rearticulate new programmes for remaining natural areas within the Māori cultural landscape.

As outlined, there are multiple pressures facing the Kuku area and even though kaitiaki have activated ecological projects, they have probably never faced problems of such complexity that threaten the health and wellbeing of hapū and iwi, upon lands held in Māori tenure, or within areas where their rights as kaitiaki continues. In recognising this complexity and acknowledging that there is little in way of theory that provides solutions to these actual problems, a conscious decision was made to shape a localised model based on resident iwi, hapū and whānau approaches. Therefore the research attempts to understand aspects of customary and remaining local knowledge, and then to reapply it in a different context to what ancestors may have faced in the past. For this reason, this project involves research for which the current state of knowledge is minimal. The project builds upon well-established oral narratives, whakapapa, dialogue analysis that finds meaning in language, synthesis of research and other relevant information, to prepare a local model that also responds to global environmental aspirations. The process of combining these different ideas, influences, or objects into a new whole is based on the experience of hapū and iwi participants undertaking active revitalisation of fragmented ecosystems within cultural landscape.

The methods applied

The following methods addressed the challenges of this research project.

- The co-created solutions and action came about through extensive dialogue, consultation with kaumātua, and co-intelligence strategies developed with participating external specialists, local entities, other ecologists, environmentalists, post-graduate students and indigenous scholars.
- The current state of the ecological and cultural landscape was assessed by a series of meetings with a variety of stakeholders, principally iwi and hapū, but also local and regional authorities, farmers and government agencies.
- The oral interviews conducted with kaumātua and other key informants drew on their cultural memory about remaining indigenous biodiversity, natural integrity, the use of local resources within the coastal environment, and the spiritual entities they knew about within areas of significance. In compiling these oral narratives, the remaining customary knowledge was rearticulated for contemporary realities.
- The ecological and cultural survival context was assessed through objective documentary and visual evidence provided by aerial photos and historical photos, from which subjective contextual interpretation was derived.
- The educational environmental and cultural heritage meetings with external entities helped rebuild collective understandings over complex ecological rehabilitation tasks facing hapū and iwi participants of Ngāti Tūkorehe.
- The specific wānanga called for taonga species such as harakeke, investigated new sustainable directions for the versatile natural resource with potential to develop renewed, sustainable and beneficial industries.
- The solutions that emerged from the pilot projects for the lower reaches of the Ōhau River, for Hei Whenua Ora ki te Hākari/Te Hākari Dune Wetland Restoration Project, included a remnant forest restoration project for eco-sourcing and propagation needs known as Wehipeihana Bush and the development and establishment of the 'native by nature'[40] Tikorangi nursery project.
- The collective understanding of options for ecological restoration was rebuilt by collaborative research projects for wetlands, coastal hydrology and indigenous biodiversity.
- The further co-created solutions to environmental problems were discussed and debated amongst participants of Te Hākari Management Committee meetings

40 'Native by Nature' marketing idea for Tikorangi Nursery was coined by Mr Witana Kamariera, project manager for Te Hākari Dune Wetland Project 2006-.

(2003-2006)[41] and Te Iwi o Ngati Tūkorehe Trust, with structural arrangements finalised for tribal entities in 2006.

A kete or toolkit employed in research

The following table contains a kete or 'woven basket' of research activities that lists and briefly describes the different types of aims, theory, methods and resources employed when executing this research initiative.

Table 1.1: A summary of, aims, theory, methods and resources associated with the kete employed in this research project

Aims	Theory	Method	Resources
Focus on interdependencies	Augmented by environmental ethics	Oral narratives	Visual artworks
Focus of interrelationships	Recognised localised systems of knowledge	Whakapapa	Digital documentary images
	Place-based education	Dialogue	Conceptual aids (metaphor, allegory)
		Assessments	Local knowledge archive
		Active revitalisation of fragmented ecosystems	Reports
		Co-created solutions	Objective documentary and visual evidence
		Co-intelligence strategies of related people	Creation of support projects (i.e. propagation nursery)
		Encouragement of constructive working relationships	Kaupapa
		Restoration of symbiotic relationships	Tikanga
		Tangible hand's-on activities	
		Re-creating healthy ecosystems	
		Collective planning	
		Collective decision making	
		Knowing of place	

41 An Environmental Committee as a branch of Te Iwi of Ngati Tūkorehe Trust was re-established in 2007.

		Articulation and capture of cognitive maps	
		Reasoning	
		Intuition	
		Sharing of perceptions	
		Narrative	
		Consultation	
		Participation	
		Cultural memory	
		Hui	
		Oral interviews	
		Subjective contextual interpretation of visual resources	
		Environmental education	
		Cultural heritage meetings	
		Wānanga	
		Collaborative research	
		Contemporary paintings	
		Oral interpretation of visual media	
		Synthesis	
		Complex activities	
		Action research context	

The tools listed within the kete have primarily emerged from a Māori epistemology of knowledge development. Many of these tools are similar to methods, resources and aims used by western trans-disciplinary researchers. Indeed, trans-disciplinary researchers involved in what they refer to as joint-problem-solving research, also recognise the highly context dependent and dynamic manner in which research methods of this kind are applied.[42] As developed throughout the thesis there have been attempts to highlight how the research process has not been linear in nature with a clearly defined starting and end point. This not only reflects a philosophical perspective related to a Māori conception of continuous time, but a deeper respect for the highly dynamic nature of the complex socio-bio-cultural-ecological system that forms the focus of this study. Another important distinction in this research approach follows that a mātauranga Māori approach to

42 Barasab Nicolescu, 2005, 'Transdisciplinarity- Past, Present and Future', Presentation at Second World Congress on Transdisciplinarity, 6th-12th September in Brazil. Sourced from reading material provided for FRST funded research project *Ecosystem Services Benefits in Terrestrial Ecosystems for Iwi* led by Dr Anthony Cole, currently of Te Wānanga ō Raukawa, Ōtaki.

Figure 1.18: Kaumātua of Ngāti Tūkorehe in front of Tūkorehe meeting house, November 2006
From left to right Standing: Mr Gary Wehipeihana (1943–2006), Mr Eric Gregory, Mr Philip Putu.
Back row: Mr Robert Wehipeihana, Mrs Wikitoria Chambers, Mrs Mere Wehipeihana, Mr Martin Wehipeihana, Ms Pirihira Lewis (slightly obscured)
Front row: Mrs Ruhia Martin, Mr Mannix Ruihi, Mrs Carol McDonald, Mrs Sally Meta, Ms Te Rau o Te Rangi (Sis) Lewis, Mrs Mary Wehipeihana, Mrs Maire Johns, Mrs Bella Price (1915–2007).
Photograph by Richard Anderson

science, is not based on the dualistic assumptions of a western scientific epistemology. The distinctions or separation between professional scientist and non-scientific stakeholder, theory and practice, subject and object, start and finish, subjective and objective, past and present are subsumed by an holistic approach that considers a whole-of-person, and a whole-of-system theory of knowing. There is a need to re-engender the role of human interdependencies and inter-relationships[43] to each other, to the natural, spiritual and cultural in landscape, and to allow dynamic movement between them. Such thinking is central to a Māori environmental worldview.

The potential of local contributors' knowledge about place also gives rise to positive activities that enhance the environmental changes underway at the coast. When kaumātua retold stories of their or their elders' encounters with local taniwha or spiritual guardians,

43 Huhana Smith, 2007, 'Hei Whenua Ora ki Te Hākari Reinstating the Mauri of Valued ecosystems – history, lessons and experiences from the Te Hākari Dune Wetland Restoration project', Research report number: HSC1007/01, for FRST funded research project *Ecosystem Services Benefits in Terrestrial Ecosystems for Iwi*, through Te Wānanga ō Raukawa and Massey University, Palmerston North.

they highlighted a value system based on sustainable resource use and protection of place, in the belief that spiritual entities within specific areas and dialogue around them, guided their practice. Kaumātua were taught to respect resources within the natural environment. Such reciprocated respect for what sustained them as part of the collective are Māori values that have been fundamental in forming principles and guiding philosophies for culturally based sustainable management strategies. Even though research around two complex, concurrent action projects (with a proposed archaeological strategy) underway may be described as pre-mediated, the overall research project results from a series of sequential events and accumulated concerns. In complex reality it is never possible to exhaustively trace out cause and effect relationships. In this way responses to environmental decline were made with the needs of the present within a highly dynamic unfolding Māori worldview, foremost in mind.

Due to the complexity of this research, another more personal method was employed based on the creative and artistic intelligence of Ngāti Tūkorehe. A series of contemporary paintings provided a metaphorical approach that articulated and communicated the problems of environmental and cultural landscape decline, visually. Many of the site-specific oil paintings on canvas were supported by the cultural memory of kaumātua, informants and their oral interpretations. Synthesis played an essential role in combining the developments present within the knowledge generated.

It is appropriate before the chapter outline, to state what this thesis does not cover. While considerable effort has been dedicated to knowing the extent of ecosystem decline for a revered ancestral landscape, this investigation does not aim to devalue the development and financial accomplishments of Tahamata Incorporation, a successful Māori farming enterprise acting on behalf of its tribal shareholders. The coastal farm has functioned on behalf of shareholders and Tūkorehe marae since 1974. Tahamata was one of the areas named within the coastal landscape of research interest, and when operating under its inherited name, the farm existed upon the former entrepreneurial trading and horticultural activities of ancestors. From 1823 historic cultivations in the region produced kumara and taro, such as the Tutangata-kino[44] cultivation, which was situated within a sharp bend in the lower reaches of the Ōhau River. Later the extensive gardens produced potatoes introduced by whalers in 1830. From 1839, ancestors dealt in harakeke, pigs and potatoes for the markets appearing in a burgeoning Wellington. By the mid 1840s wheat fields were evident at bush-screened bends in the river, away from the normal fords,[45] which was the

44 Recorded by G. Leslie Adkin from Arapata Te Hiwi (1860-1942). Tutangata-kino was a native cropping ground on the lower course of the Ōhau River, within a sharp meander or loop.

G. Leslie Adkin, 1986, *Horowhenua: its Maori place-names & their topographic & historical background*, Capper Press: Christchurch, 375.

45 John Rodford Wehipeihana, 1964, *Sequent Economies in Kuku: A Study of a Rural Landscape in New Zealand*, Master of Arts in Geography, Victoria University: Wellington, 17.

coach road access way across the Ōhau River. In 1974, Tahamata was celebrated as the first Māori farming incorporation in the Horowhenua region that brought shareholders or tribal descendants, and the Tūkorehe marae together.[46]

In continuing the theme of where this thesis does not venture, whakapapa or genealogical information is only provided as context or as essential expressions of whanaungatanga between a wider cosmology, peoples, environmental properties and land. As a vital and respected knowledge and reference system, this thesis does not assume an authoritative voice on behalf of the tribe. Whakapapa systems of understanding complement the more extensive knowledge and research work of recognised tribal and inter-tribal adept. Those particular kaumātua and knowledge holders are mandated to retain a high level of whakapapa understanding, and disseminate it accurately and accordingly from the paepae at Tūkorehe marae, across marae of the region and the country. Similarly, and as requested by certain elders, intricate whakapapa knowledge with detailed charts of lateral relationships between peoples, are kept to a minimum. This restriction extended to not pinpointing actual localities of particular taniwha, spiritual entities or sacred areas. A balance between the need to retain knowledge about places, and to be silent about the greater detail, was respected, as there was a general reluctance to disclose too many specifics around certain Māori locations.

Finally this thesis is not an exhaustive or definitive record of historical interactions between peoples, the coast and its resources. Everyone who resides in Kuku, who is connected to the area by whakapapa or long-lived experience, carries within them the capacity to remember futures by recalling the past.

Chapter Outline

Chapter 2 expands on the nature of local Māori knowledge, its foundations, scope, and validity to the research proposition. The methods are expanded, as is the action research strategy that engaged with current global environmental problems, concerns and issues. This approach teased out real world practical issues, or the needs and problems that arose during the development and implementation of practical ecosystem restoration projects. A select series of paintings and documentary photographs are also introduced as a complementary research method or catalyst to action. They detail the natural revitalisation projects and interpret the research data generated. The visual component also explored the ideas of revitalisation, relationships to the natural environment and cultural landscape, and aspects of local tangible and intangible knowledge of place.

46 Personal communication and notes taken in 1995, with Mr Ian Joll, first farming consultant for Tahamata Incorporation.

Chapter 3 analyses a Māori environmental worldview and the encompassing acts of kaitiakitanga[47] within a customary context. It offers a view into Māori systems of reference like whakapapa and other cultural templates, where potential, creativity and promise are key aspects of Māori customs, values and attitudes. Historical insights into the coastal region explore how iwi and hapū then negotiated a diverse range of meanings, between customary and contemporary Māori environmental world-views and aspirations for change. In dealing with fragmented ecosystems at Kuku and impacts on the human condition, what might a Māori customary and contemporary continuum actually mean within an agriculturally modified environment? How are intricate relationships to areas retained, maintained and sustained for hapū, for their mana, identity, and activities in the present, when only remnant natural references remain?

Chapter 4 examines a range of site-specific observations and the additional visual information about significant place within cultural landscape that re-emerged as part of the oral archive research process. The chapter explains a cultural landscape approach within a braided cultural landscape concept or the notion of knowing place and peoples' place within it, as informed by both Māori and non-Māori recollections of encounter and change within lands, waterways and peoples. It is well recognised that there has been loss of intricate tribal knowledge and disassociation to cultural or heritage landscape wrought by overriding economic purposes. There have been detrimental effects on known burial grounds, original occupation areas and significant springs, and unmitigated forces on other cultural markers. This chapter develops a bio-cultural diversity[48] concept that recognises inter-linkages between linguistic, cultural and biological diversity. It then explains how iwi and hapū have built upon the notion of bio-cultural diversity in landscape, to assist their movement towards alleviating ecosystem decline, and ancestral landscape degeneration.

Chapter 5 overviews key governmental attempts to protect Māori heritage, natural and cultural landscapes in Aotearoa New Zealand. The chapter interweaves some national attempts such as the Historic Heritage Review 1996, the Taonga Māori Review 1998, the Historic Heritage Think Tank of 2003, to the later concept of heritage landscape. Domestic legislation and key policies are a way of aligning iwi capacity with a national good, however the shifts and changes in political decisions often mean that iwi and hapū must envisage, catalyse, activate, and realise the challenges of ecosystem restoration and ancestral landscape protection, with strategies they devise for their unique regions, for themselves.

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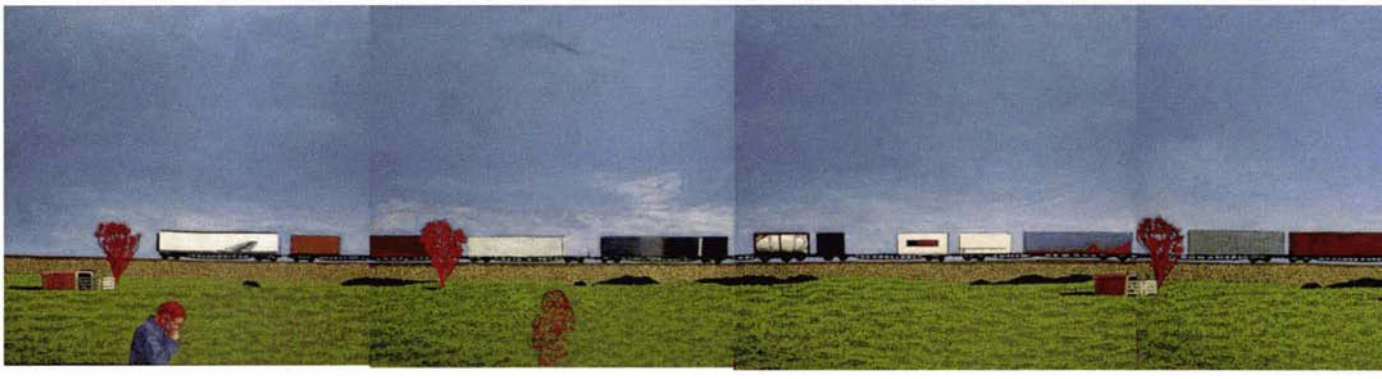
47 M. Roberts, W. Norman, N. Minhinnick, D. Wihongi, & C. Kirkwood, 1995, 'Kaitaikitanga: Māori perspectives on conservation', *Pacific Conservation Biology*, Vol. 2, 8.

48 Tove Skutnall-Kangas, 2000, *Linguistic Genocide in Education- or Worldwide Diversity and Human Rights?* Lawrence Erlbaum Associates Inc: Mahwah, New Jersey, 65.



Chapter 6 documents the implementation of the practical projects, where the case studies emerge as solutions for the lower reaches of Ōhau River to sea and other braided waterways; and for Te Hākari dune wetland restoration. The case studies synthesised the research results, explored the likely causes of bias and conflict, the validity of research assumptions, the problems associated with measuring and recording results and how they were dealt with. As the governing and administrative body for all Tūkorehe providers, Te Iwi o Ngāti Tūkorehe Trust is also described as the overarching entity dedicated to ensuring that its environmental and cultural landscape arm creates distinct, well-planned, locally based programmes for all environmental activities within the tribal region.

Chapter 7 overviews relevant international law and standard formation around cultural heritage support and protection. In particular the ILO Convention No 169, the Declaration of Indigenous Peoples Rights deliberation and the Millennium Assessment 2000 launched in 2005, are aligned with key prespectives from entities with environmental responsibilities.

Chapter 8 discusses the methods applied and the development of sustainably managed tribal economic bases within a wider bio-cultural diversity protection perspective. It expands on the community coming together for the purpose of healing interrelationships to the natural environment, for enhancing valued natural assets handed down generations within tribal place, and for maintaining and sustaining cohesiveness with each other. The chapter summarises the range of activities undertaken that emphasise the difference that iwi and hapū can make in protecting and enhancing cultural landscape and biodiversity, according to their local schema. Esoteric knowledge experts would reinforce that Māori carry within them all that is required to heal, as the concept of land and its importance lies in people's heads[49] and hearts. In drawing together like-minded iwi and hapū representatives, and committed others, ecosystem restoration activities reiterated that the wairua of Papatūānuku[50] is within people. In revitalising and retaining improved local

49 Paul Moon, 2003, *Tohunga Hohepa Kereopa*, David Ling Publishing Ltd: Auckland, 123.

50 Papatūānuku is the ultimate mother, the nurturing earth for humankind.

Figure 1.19: Mā Runga Tereina / By Train, 2003
Oil on canvases, 457mm × 3658 mm.
Collection of artist

understandings about place and resources, all activities have indicated how important whakakōtahitanga or coming together with one accord has been.

Ways of knowing place and knowing your place within it

From 1995, local people began to earnestly address their concerns and actively reinforce inter-generational responsibilities to tribal locale for the sake of future generations. As active participants became increasingly aware of the issues facing the region's unique environmental and spiritual values, Te Hākari dune wetland's progress became the vehicle or hub for other physical, environmental, economic and cultural welfare projects.

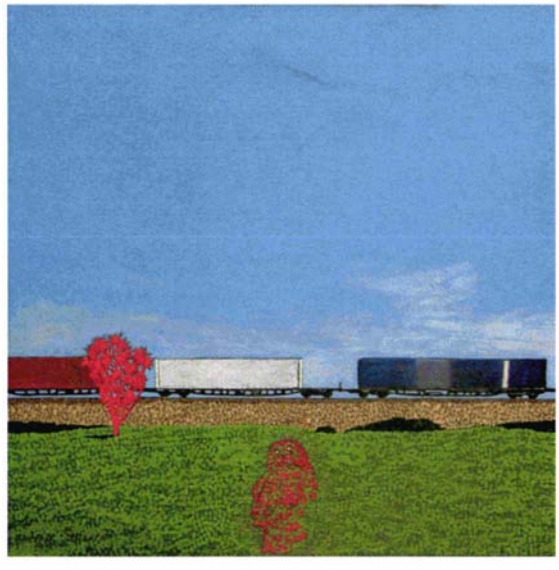


Figure 1.20: Mā Runga Tereina / By Train, 2003
Oil on canvas, 457mm × 457mm. Canvas from series of eight showing red ruru or owl in green grass.
Collection of artist

During the course of developing the research further, other forms of knowing helped guide the investigation, which could only be regarded as acquired experiences. One particular experience was had on the 10 November 2001, the evening of the annual general meeting for the Tahamata Incorporation. Te Hākari wetland proposal, first presented that day, sought Tahamata Board and shareholder support to covenant the area through Ngā Whenua Rāhui, a contestable Ministerial fund established in 1991 to help activate the objectives of the

Indigenous Forest Policy.[51] Te Hākari wetland presentation was well discussed, before it was approved for the covenant to proceed with almost unanimous Board and shareholder support.

That evening, a special visit affirmed all initial actions taken for Te Hākari dune wetland and its associated ecosystems within the coastline. On twilight, a ruru or peho[52] flew into the backyard and landed on a pole overlooking the vegetable garden. This ideal perch was situated not far from the back door of a late 1880s cottage, originally built for tohunga Heremia Terapata Rangitāwhia.[53] The ruru has long been considered kaitiaki or guardian for immediate and extended whānau in the region. Many an immediate whānau story vouched for the abilities of the ruru to guide, to look out for personal safety, to warn, to avert dangers, and to signal imminent death especially if encountered or heard screeching during the day. On this calm evening the ruru was a silent and knowing presence, and was addressed with appropriate respect. It was intuitively felt that the ruru embodied an ancestral interest in the work towards ecosystem restoration for tribally significant areas. In relating the visit to key elders the next morning, the ruru was read as an endorsement of all the collective, organisational effort made to launch Te Hākari Dune Wetland Restoration project, the first major rehabilitation development for a site well regarded as taonga under threat.

At that moment of encounter in November 2001, the ruru was understood as a symbol of ancestral encouragement to embark on the restoration of key ecological systems for the enhancement of a local Māori community, their relationships with the natural and cultural landscape, and their interpersonal relationships with each other. The sanction was there to proceed well but to do so cautiously.

51 In 1998 the scope of the fund was widened to include non-forest ecosystems. The purpose of the fund is to protect indigenous ecosystems on Māori land that represent the full range of natural diversity originally presenting the landscape by providing incentives for voluntary conservation. The fund, administered by the Nga Whenua Rahui Committee and serviced by the Department of Conservation, receives an annual allocation of funds from Government. For further objectives of New Zealand Indigenous Forest Policy see Appendix V.

52 morepork [*Ninox novaeseelandiae*]

53 Heremia Terapata Rangitāwhia (1861-1937) was also known as Gerry Rangitāwhia. With Arapata Te Hiwi (1860-1942) they were key informants for Lesley Adkin.

CHAPTER TWO

> "Why is constructive change so excruciatingly slow? Why do we need to reinvent the wheel with every new study? When the critical issues for iwi, hapū and councils have already been spelled out a dozen times, why do we need further surveys and analysis before we can move forward? Why not just get on with it?" [1]

Method and Methodological Considerations

Action Research and Visual Components

The research for this thesis explored how iwi and hapū-led initiatives for ecological systems encouraged collective movement towards constructive change, so that tribal knowledge and interrelationships between peoples, in their broadest sense, might be enhanced, and aspects of the natural environment might be restored. Current research in this subject area is limited. There have been other regional projects that investigated pro-active strategies based on local knowledge for assessing and rehabilitating stream ecosystems, addressing the depleted state of eel stocks in wetlands and waterways from Manawatū to Horowhenua, and to Kapiti coastal regions[2] conducted through Te Wānanga o Raukawa, Ōtaki.[3] There are however, few resources that support the range of active strategies attempted within Kuku, Horowhenua. There are complex needs for disjointed ecosystems and their impacts on tribal lands and peoples.

A number of Māori scholars and indigenous scholars have written in recent times on holistic approaches to cultural and natural landscape maintenance. Their contributions are considered in relation to how hapū and iwi of Ngāti Tūkorehe have revitalised and developed their own knowledge, directions and methods in a context that builds on the characteristics of a Māori environmental world view. The approaches and activities used by hapū participants from Ngāti Te Rangitāwhia, Te Mateawa and Ngāti Kapumanawawhiti ki Kuku and iwi, Ngāti Tūkorehe, to restore, revitalise and protect remaining natural and cultural features within tribal land, sea and waterways, assisted in dealing with the operational and theoretical complexity of the research problem.

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1 Ronda Cooper, 2002, *The importance of monsters: A decade of RMA debate*, Parliamentary Commissioner for the Environment te Kaitiaki Taiao a te Whare Pāremata: Wellington, 15.

2 The area covered was from from Bulls to Ōtaki.

3 Ngāti Raukawa researchers Mr Caleb Royal and Mr Pataka Moore received Foundation for Research Science and Technology research funds to assess state of eel stocks across a tribal region. The three pronged project involved collecting narratives from elders about the customary eel resource, assessing current stocks and habitats and producing a management plan for the lower North Island region.

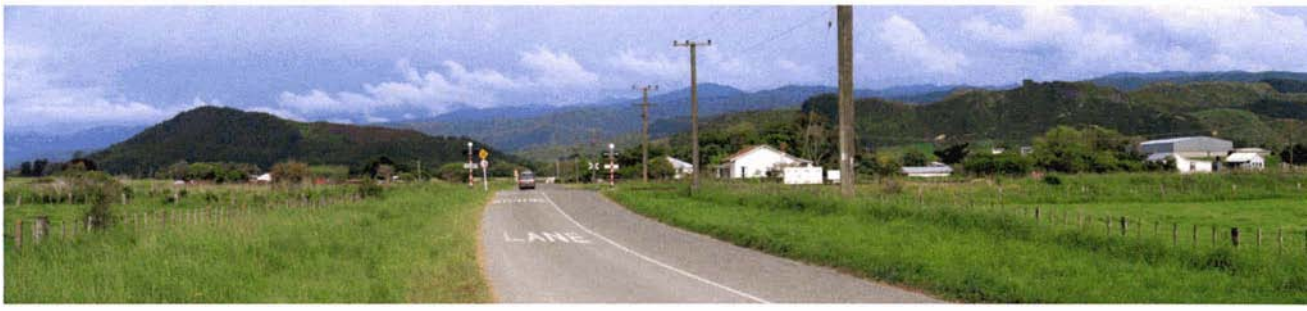

Figure 2.1 (top): An overview of the Kuku region looking towards the mountains
Key signifiers in the Kuku landscape include Ōtarere hill with marae in foreground on left; the Tararua mountain range rising behind; Poroporo ridgeline on the right across to Wehipeihana Bush remnant on the far right ridgeline. The 1880's cottage and studio are located below the large Cool Store shed in background.

Panoramic photograph by Huhana Smith, 2005

Figure 2.2 (above): An overview of dune systems, across the dynamic Ōhau River estuary to sea.

Panoramic photograph by Huhana Smith, 24 April 2007

As tribal members had once been in full dialogue with what Kuku and its natural resources had to teach,[4] their distinct and close relationships with place allowed for a knowing of all aspects of the environment, ranging from the rational to transcendental,[5] to the immanent. As the ruru experience highlighted, many accounts of such relationships recognised a spiritual, philosophical and metaphysical attitude that was often beyond the material world. While having conversations with family kaitiaki or guardian birds may appear esoteric to the uninitiated, in a local, rural community with a long-term Māori presence, such relationships between the human, natural or spiritual entities were experienced and expected. These stories of encounter were acknowledged as 'messages' or 'signs' to be heeded as guides in life, even for Tūkorehe tribal members growing up in a farming community in a small southern rural district of Savernake in southern New

4 After Manulani Aluli Meyer, 2003, *Hoʻoulu Our Time of Becoming: Hawaiian Epistemology and Early Writings*, 'Ai Pōhaku Press Native Books: Hawai', 63.

5 ibid, 63.

South Wales, Australia. The region was a close physical equivalent of the semi-isolated, small community rural life of Kuku, Horowhenua. The writer's mother and aunt[6] living in Australia offered stories of their grandparents and great-grandparents, other relations and their own experiences back in Kuku. Their stories of ancestral deeds or related exploits of aunts or uncles, grandparents, even great grandparents and great-great grandparents, revealed intriguing traits of authority, leadership and humility. Furthermore, their simple stories of guardian birds as protector, cultural indicator or ancestral guardian, fuelled an imagination for an alternative belief system where the material and spiritual were entwined – a way of knowing in dream or waking state, which had long been considered important for the extended family.

When the ruru visited the cottage just after the launch of Te Hākari dune wetland restoration project, much energy had already gone into developing the environmental projects, with future plans signalled for the hapū and iwi enhancing and managing the whole Kuku coastline as a natural buffer and community asset.

6 The writer's mother Netta Smith (nee Holder) was born in 1929 as the fourth child of Arthur Herbert Holder (1898-1971) and Parewai Wehipeihana (1900-1948). Moana Kathleen Lloyd (nee Holder) was born in 1922, the first child of Arthur and Parewai. Aunty Nonie as she was known, passed away in 1997. The sisters had moved to Australia in the mid 1950s. As Aunty Nonie could more readily afford to travel back to New Zealand than her sister Netta, she visited her father, step mother Kuini Holder and grandparents Rameka [Tumeke] (1870-1969) and Ani Wehipeihana [nee Richardson] (1878-1975), more frequently.

This chapter expands on the nature of similar local Māori knowledge in Kuku, its foundations, state, scope, and validity to the research proposition. The research methods are then explained as complex activities within an action research strategy. The research methods teased out the needs and problems that arose during the development and implementation of ecosystem restoration projects. Research and action for ecosystems were well integrated so that change was considered an integral part of the process.[7] As action research is cyclical, the process involved feeding back into the initial findings in order to generate further possibilities for change. This activity was present in the regular committee of management meetings held from June 2003- May 2006 where many tasks were addressed and readdressed against the initial objectives of the Te Hākari dune wetland project. The strategy encouraged active participation with each partcipant setting out to positively initiate change and reinstate integrity to ecosystems in decline. In doing so, many reclaimed a greater sense of ownership and direction over tribal place particularly at the coast and the decisions required for protection and rehabilitation of the environment.

A series of contemporary paintings completed during the initial course of studies, are also introduced in this chapter. They are included as metaphorical approaches that helped articulate and communicate the problems of environmental and cultural landscape decline, through a visual medium. Many of the site-specific oil paintings on canvas were inspired by the experience, cultural memory and oral interpretations from kaumātua and other informants about tribal place, and the need to protect related cultural signifiers for future generations.

Methodology: Understanding Māori knowledge

At Kuku, as certain knowledge about entities within a spirit world remained in the cultural memory of elders and others, their experiences supported the position that Māori continued to believe that certain trees, or spots, or other objects had guardian spirits dwelling there. According to Māori scholars, this did not mean that the spirit was the spirit of the tree. Rather a spirit could use a tree or place, a river, or even a person as a 'home'.[8] Certain kaitiaki may be described as tribal taniwha or spiritual entities or beings, ancestral guardians or other local spiritual keepers.[9] Local kaitiaki, taniwha or guardian entities took various forms at the coast and further inland in other waterways traversing Kuku. The taniwha ranged from an inverted log with exposed roots that could move upstream and indicated an abundance of kaimoana, a taniwha in an area known as 'The Deep' in a

7 Martyn Denscombe, 2003, *The Good Research Guide - for small-scale social research projects*, Open University Press, Maidenhead, Berkshire, England, 74.

8 Rev. Māori Marsden, 2003, in *The Woven Universe - Selected writings of Rev. Maori Marsden*, (ed.) Te Ahukaramu Charles Royal, Estate of Rev. Māori Marsden, Te Wānanga o Raukawa: Ōtaki, 44.

9 Merata Kawharu, 1998, *Dimensions of Kaitiakitanga: An investigation of a customary Māori principle of Resource Management*, Unpublished PhD. Thesis in Social Anthropology, Oxford University, England, 12.

bend in the Ōhau River[10] to a flounder with specific facial features. Other taniwha were a fresh water crayfish in particular waterways or a large eel that cried out at times of weather disturbances at sea from its wetland home.[11] Some informants knew of the dangers of the last three and spoke of experiences with the wailing eel as a sure sign of danger - a portent that the adjacent beach environs would be imminently unsafe for humans, due to tidal-like waves coming to shore.[12] The inverted taniwha log moves with roots exposed along the south-west coast and comes up the Ōhau River. When sighted it indicated an abundance of kaimoana or seafood. Although there were reported sightings at Ōtaki beach in late 1990s, local Tūkorehe elders who had experienced this taonga insisted that the taniwha was only shared by coastal hapū of Tūkorehe and hapū of linked tribes in the Wairapapa. What was described or experienced at Ōtaki beach was not the kaitaiki the elders knew. As in Kuku, probably every tribe, sub-tribe and family had their kaitiaki, each with special stories about them and the signs by which they were recognised.[13]

Taunahanahatanga is another way of knowing place based on intial encounters with land, through naming and claiming, recorded events or circumstances at times of critical encounter. The term refers also to the experience of occupying, associating and interacting with lands. In talking further with key kaumātua, certain metaphors were used to ground the tribally based self-determined, cultural and environmental landscape model for the coastal region. In looking to the notion of knowing place, Mrs Maire Rahapa Rehia Johns[14] explained *her* understanding of how the region came to be named. She referred to 'Kuku' as the action of 'holding fast' to what was considered valuable or important. She actioned a closed fist movement and explained that as child and young woman, local tohunga both Heremia Terapata Rangitāwhia (1861-1937) and Arapata Te Hiwi (1860-1942) relayed stories of a tree log in the upper reaches of the Kuku stream, near the foothills of the Tararua ranges. The log was in the shape of a person with branches crossed in front, like arms. The branches terminated in fist-like nodules, indicating a closed fist, not in domination but as an incentive for 'kia mau, kia ū ki ō tātou taonga, holding on to, holding fast to what we have'- the signifiers or identifiers still present within the region of Kuku.

In another recorded conversation Matehaere Patuaka (1927-1997), a respected elder and local mentor, also explained how *he* understood Kuku got its name. As a great-grandson

10 Based on information transferred from Karanama Lewis to Neil Candy, local non-Māori farmer. Personal communication with Mr Neil Candy, 5 September 2005.

11 As requested by informants and other community members, greater details of these entities have been restricted.

12 Based on personal communication with Mrs Rita Tawhai and Mrs Maire Johns, in 2002 and 2005 about a tidal wave incident at Kuku Beach which happened in the 1960s while people were out white baiting.

13 Cleve Barlow, 1991, *Tikanga Whakaaro: Key concepts in Māori culture,* Oxford University Press: Auckland, 35.

14 The youngest child of Whareao Seymour and Delia Richardson. Delia was a younger sister to Ani Wehipeihana (nee Richardson) who was the writer's great grandmother.

of Patuaka Tauehe,[15] he maintained that 'Kuku' was a name bestowed upon the region based upon the action of a bivalve shellfish closing tightly. With his palm facing upward he too imitated the closed fist action, akin to the closing of a shell. He emphasised that this action was related to law making, or 'the deal done' when the fist closed. 'Kuku' in a localised context not only referred to the mussel shell[16] or the native pigeon[17] but to the verb 'kuku', as an act. At the time of our conversation he recounted how:

> "Kuku was because of when they were making laws in the area here. All of these people were involved in that law making. The government of the day came here, to keep in their own mind that the law was how the people wanted the law to be. So, in the Māori terms they used the word 'kuku', in fact it was a clenched fist, to say yes, that the way it is... kuku. So that's what kuku meant here... and they had a marae out there past your grandfather's[18] place... and they called that the Kuku marae... where the law was made to appease the Māoris, that this is how it was going to be."[19]

Kuku papa kainga was most likely occupied by Tūkorehe affiliates from around 1852 into the 1870s. There is understanding that the occupation of this place and other nearby areas were long and continuous *before* hapū of Tūkorere usurped tribal ownership. The meeting referred to by Mr Matehaere Patuaka at site *may* have coincided with the series of Ngāti Raukawa Kingite gatherings at Katihiku and at Pukekaraka in Ōtaki from June to September 1863. These meetings discussed a range of issues from the advisability of sending war parties to fight at Waitara or Tataraimaka, Taranaki, to empathising with Te Atiawa tribes over the brewing land war troubles, to the concerns had for Hauhau activities in Whanganui. The local narrative mentioned by Matehaere at Kuku papa kaianga *may* have had associations with then local government agencies' concerns over who supported the Māori Kingitanga movement. At Pukekaraka the 'Kingite flag fluttered in defiance for the Queen's law' and Kingite's there 'made their own laws and drilled their own soldiers

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15 Patuaka Tauehe was the tohunga whakairo or carver responsible for the ancestral meeting-house 'Tūkorehe' 1892-1894 at Kuku, south of Levin. The conversation with Uncle Mat took place in 1995 at their home in Kuku with his wife Moana Tutaki, Yvonne Wilson and Museum Studies student, Ross Bythell present.

16 'Kuku' is also the name for sea-mussel, but this does not apply, for the district has a sand beach. There were, and are no 'rock-shell-fish' (e.g. paua, mussel and the like) on the sandy Kuku coast.

Quote taken from John Rodford Wehipeihana, 1964, *Sequent Economies in Kuku: A Study of a Rural Landscape in New Zealand*, Master of Arts in Geography, Victoria University, Wellington, 30b.

17 G. Leslie Adkins, 1948, *Horowhenua: its Māori Place Names and their Topographic and Historical Place Names*, Department of Internal Affairs: Wellington, 200.

18 Arthur Herbert Holder (1898-1971), husband of Parewai Wehipeihana (1900-1948), eldest child of Rameka [Tumeke] (1870-1969) and Ani Wehipeihana [nee Richardson] (1878-1975). Ani Richardson was the eldest child of Unaiki Keremihana, (formerly of Kuku, Ōtaki and Ōhakea, near Bulls) and Thomas Fraser Richardson of Bulls.

19 This contextual information was sought from The Estate of W.W.Carkeek, 2004, *The Kapiti Coast: Maori History and Place Names of the Paekakariki-Otaki District*, Reed: Wellington, 134-141.

Figure 2.3: Kuku urupā in distance adjacent to Kidd family farmhouse, October 2005.
Photograph by Huhana Smith

in defiance of Government authority.'[20] According to other stories by Mr Mataharere Patuaka and Mr Hare Hemi Wehipeihana (Uncle Windy), the carved poutokomanawa or central heart support pole in Tūkorehe meeting house was dedicated to historic ways of law making where people had to listen to how 'laws' were being made in the region. Tohunga whakairo Patuaka Tauehe presented carved ancestors with their hands clasping their necks so as not to speak, with heads cocked to one side as a bird does, as if listening intently to how the laws were being made by Māori in the region. They also talked about the carved image of Potatau Te Wherowhero, the first Māori King. He is featured inside the ancestral meeting house on the poutuarongo or back wall support panel. This indicated how significant Ngāti Tūkorehe support for the Kingitanga was when the house was built and carved from 1892 and opened in 1894.[21]

In garnering more about taunahanahatanga, the marae that Matehaere referred to "out there past your grandfather's place"[22] was known as Kuku papa kainga. It was an inland settlement for Ngāti Tūkorehe, occupied from around 1852 to the late 1870s within a large ancestral block of 5245 acres that was surveyed and apportioned as Ōhau No 3, in 1873.[23] Kuku papa kainga was a thriving unfortified settlement with pear and apple orchards and other extensive cultivations adjacent to where the current Kuku Beach Road continues to the river beach. It was situated around the Kuku to Mangananao, Tikorangi confluence of streams. It was a well-managed area rich with local resources including fresh water species such as banded kōkopu [*Galaxias fasciatus*], Giant kōkopu [*Galaxias argentus*], inanga [*Galaxias maculatus*] in both adult and juvenile, or whitebait forms [*Galaxias fasciatus*], and tuna or eel [*Anguilla dieffenbachii*] shellfish and fresh water kōura or freshwater crayfish [*Paranephrops planifrons*]. The pā was adjacent to the contiguous dune lake system down the coast, an area most likely linked to a larger Te Hākari dune wetland.

20 ibid, 136.

21 Based on personal communications with both informants since 1993.

22 Grandfather was Arthur Herbert Holder (1898-1971), husband of Parewai Wehipeihana (1900-1948).

23 Taken from Certificate of Title under the Land Transfer Act dated 27 August 1889. It was from 7 May 1873 that the parcel of land was surveyed and comprised 5245 acres, one road, seventeen perches situated in the provincial district of Wellington, known as Ōhau No. 3. The district is on the public map of Block Waitohu Survey District and Blocks V and IX Waiopehu Survey District, deposited in the office of the Chief Surveyor of Wellington.

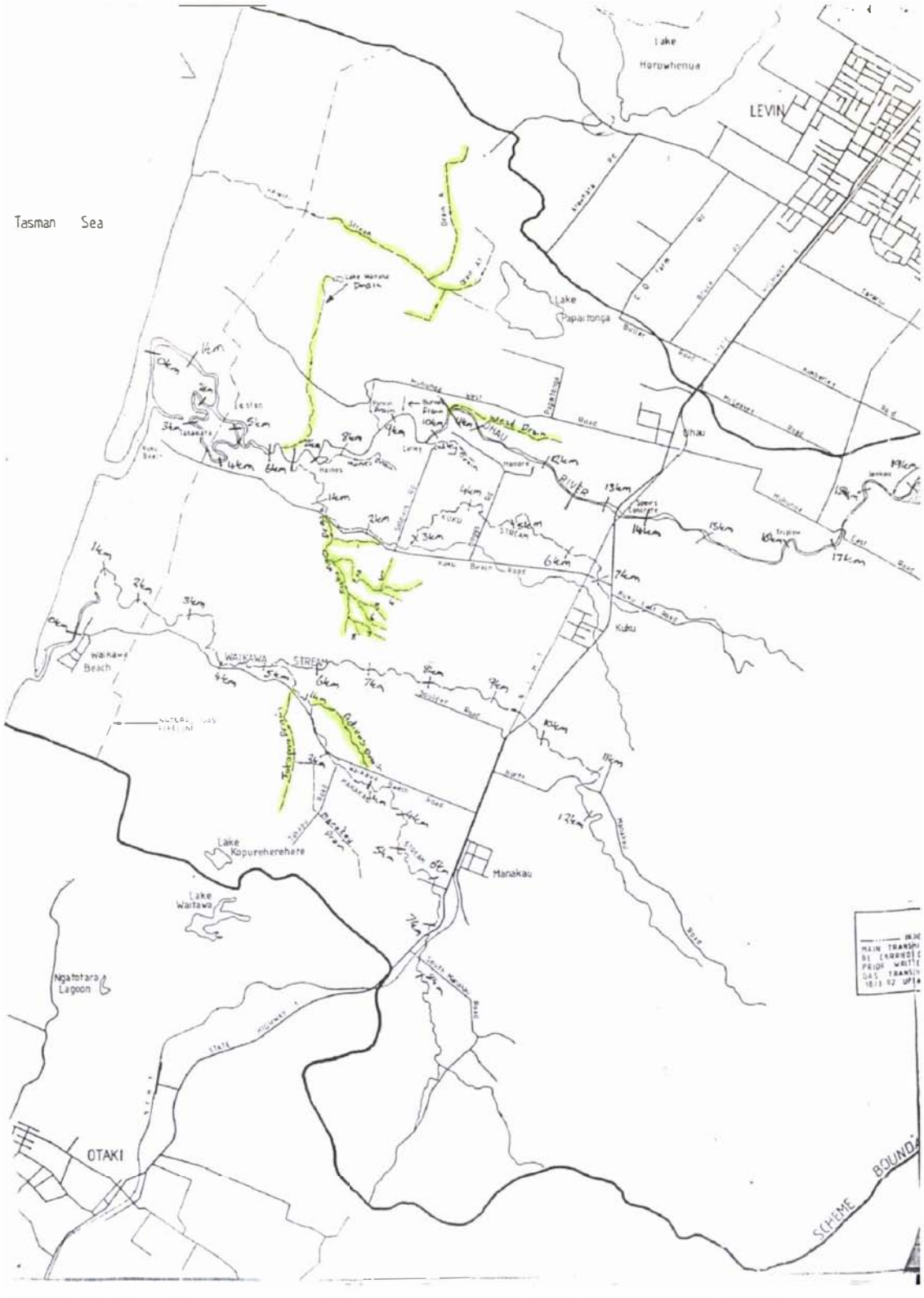

Figure 2.4: Section of waterways map taken from the Ōhau Manakau River Scheme Catchment area, showing highlighted stream systems and springs, despite being called drains in places.

Horizons Regional Council, Palmerston North

Figures 2.5 and 2.6: Meeting held at Tūkorehe pā, with Masters student Ms Paula Loader, key Tahamata representatives, Te Hākari Management Committee, and kaitiaki students from Patumakuku, a private training establishment, based in Levin.

Photograph by Huhana Smith, June 2003

As indigenous scholarship informed the research experience, the 'verb-centred' or *possible* metaphorical naming of Kuku aligned with other observations made by indigenous scholars on the rights and legal regimes around indigenous knowledge and heritage.[24] These scholars made it clear that certain introduced structures and methods of logical entailment and causality could not unravel indigenous processes of knowing. To this end, they regarded indigenous peoples' worldviews as cognitive maps of particular ecosystems.[25] As indigenous, customary or traditional knowledge is rooted in local culture, the knowledge is a source of 'knowing' cosmology as inseparable from the 'multiple tasks of living well in a specific place over a long period of time.'[26] In advocating certain elders' interpretations of place according to what had been transposed to them or garnered from their own cognitive maps of reasoning, intuition and perception over time, 'kuku' may be regarded as a localised metaphor for kaitiakitanga or active guardianship, by holding fast to integral tribal relationships to land. In this context, indigenous ideas towards ecological sustainability supported systems that were location-specific, where experiences about place were arrived at through unique relationships between particular social and ecological arrangements.

Ecosystem revitalisation relied on the potential that remained within local knowledge about place, and how its contributions could ensure ways towards environmental change for tribal land holdings. When elders retold stories of encounters with local taniwha,

24 Dr. Marie Battiste & James Youngblood Henderson, 2000, *Protecting Indigenous Knowledge and Heritage*, Purich Publishing Ltd, Saskatchewan, Canada, 40.

25 ibid, 40.

26 Madhu Suri Prakash, 1999, "Indigenous Knowledge Systems- Ecological Literacy Through Initiation into People's Science", in Semali L. M. & Kincheloe J. L. (eds.). *What is Indigenous Knowledge? Voices from the Academy, Indigenous Knowledge and Schooling Series*, Falmer Press: New York, 166.

spiritual guardians or the protocols observed around special places, they highlighted a value system that spoke volumes in terms of respectful interactions with the natural and cultural environment. Quite simply, concurrent respect that sustained resources sustained the collective. As Māori values are fundamental for forming principles and guiding philosophies for culturally based sustainable development,[27] the practical environmental projects helped re-edify closer relationships with lands and waterways. In this way too, current generations re-enhanced their understanding about how significant the cultural landscape they were dealing with, actually was.

Ahi kā: Understanding activity

As a Māori person's identity is closely linked to both place and ancestry, tenure rights of a Māori community are equated with occupation over many generations a state known as ahi kā or the keeping of metaphorical home fires burning on the land. In this way tribal places have been identified with the deeds of ancestors, frequently recalled in local place names, and knowledge of the landscape and resources of the ancestral estate. Imbued within this world-view was a sense of custodial occupation, that the environment should be maintained in a fit state for the next generations to come.[28] If custodians in tribal areas did not maintain a relationship with land, they risked losing ownership rights, ahi kā was extinguished. Their relationship to land could become ahi tere[29] or unstable. If more time elapsed the absent owner's rights of occupation could become ahi mataotao[30] or the cold or extinguished fire. To extinguish use rights by ahi kā custom, the rights of ownership had to be absent for about three generations. The absent owner(s) had to reach a point of no return, before their fires became mataotao. He, she or they could rekindle an ahi tere fire and thus their relationship to lands and resources, by returning to live in the tribal area. This meant that some balance was required between new owners and others who lost their rights.[31]

In Kuku, a legacy of Māori land fragmentation juxtaposed with the complexities of tribal land succession (that may have excluded family members from collective titles) eroded once robust or intricate genealogical relationships between related peoples. In the development of this study, resulting tensions over contested genealogies or variances

27 Garth Harmsworth, 2002, *Preservation of Ancient Cultures and the Globalisation Scenario,* School of Māori and Pacific Development and International Centre for Cultural Studies (ICCS), India 22-24 November 2002. Te Whare Wānanga o Waikato, University of Waikato, Hamilton, 5.

Garth Harmsworth, 2003, *Māori perspectives on Kyoto Policy: Interim Results Reducing Greenhouse Gas Emissions from the Terrestrial Biosphere (C●9X0212),* Discussion Paper for Policy Agencies, Landcare Research Manaaki Whenua, Palmerston North.

28 Evelyn Stokes, 2004, 'Contesting Resources Māori, Pākehā, and a Tenurial Revolution', in Pawson, E & Brooking, T., *Environmental Histories of New Zealand*, Oxford University Press: Melbourne, 36.

29 Toitu Te Whenua, 1959, 'The Struggle Against Fragmentation', *Te Ao Hou,* No 28, 43.

30 ibid, 43.

31 ibid, 43.

in versions of events around peoples' relationship to lands were witnessed. These long-standing grievances saw whānau pitted against whānau, with legal challenges taken through the Māori Land Court.

It has been noted that if pollution, contamination or desecration impacted on the mauri or life vitality of revered places within the natural environment, then this influenced the communities who were reliant on the land, often manifesting in disquiet, disunity or fragmentation amongst peoples.[32] During the course of these studies the decline in the mauri or environmental health of a region, was perceived as a source of manifested dysfunction between related peoples. In a customary context where whakapapa was the essential expression of whānaungatanga between a wider cosmology, peoples, environmental properties and lands, all entities are therefore interrelated and interdependent. Even though a whakapapa reference system orders and makes sense of such a complex mix of familial relationships, kaitiaki had to actively address the disjuncture experienced between genealogically related peoples. It is therefore incumbent on kaitiaki to protect cultural landscape, resources and the natural environment, to ameliorate the effects of pollution over the state of land health and ease the difficulties experienced between whānau and hapū members over land tenure. While the dynamics of whānau relationships will impact on decision-making and longer term planning, this thesis has been primarily concerned with wider hapū and community action.

Within the residual pūmahara or recollections of kaumātua there resided a sense of place based on the distinct and special, cultural and natural environment. As resource users' relationships with natural resources developed over time, an understanding and learning came from that relationship. Through the teaching of essential everyday tasks as day-to-day activities, individuals and families learnt through observation and practical experience the skills essential to the welfare of people.[33] They referred to a system, which codified knowledge according to its relatedness to environmental and life issues.

To this day however, only some kaumātua or resource gatherers retain memories of seasonal food collection practices and the protocols they associate with them. When fishing at the coast, they were guided by the maramataka or Māori lunar calendar and associated star observations. They dried and stored shark, shellfish and eel. They distributed fresh fish after 'hauling' to feed the elderly and the community. They showed their manaaki or care to their visitors, represented by plentiful local catches or gathered delicacies at the

32 Derived from a presentation by Professor Robert Jahnke, 2005 for *Taonga Tuku Iho: Heritage Aotearoa* paper, Massey University, Palmerston North.

33 Waitangi Tribunal, 1999, "Maori Education In New Zealand: A Historical Overview," *The Wānanga Capital Establishment Report*, Waitangi Tribunal, GP Publications, GP Print: Wellington, New Zealand.
URL http://www.waitangi-tribunal.govt.nz/reports/viewchapter.asp?reportID=39e13093-2f4d-4971-aca0-28e811572755&chapter=4

marae. Kaumātua and key resource users realised the loss and disappearance of the once bountiful fish, animal and shellfish supplies. This was especially evident when 'the cut' or river diversion went through, near the dynamic mouth of the Ōhau River, which had associated impacts on its adjacent blind creek.[34] Elders, including Harold Rowland (1915-2001) spoke of life long interests in waterways and their resources, and a desire that one day the whole coastline would be protected from inappropriate use.[35]

> 'I have fished at the mouth of the Ōhau River for as long as I can remember. My grandmother was Maraara Koronīria[36]... There were middens out on the corner of the river you can see the shells really high up... and where Māori used to heat rocks to cook them. The peraro was the Māori oyster and we used to get it often, but since the 'cut', I think it has disappeared. But who knows it may still be somewhere. The Blind Creek is where it used to be.'[37]

Figure 2.7: Peraro, or freshwater oyster.

Addressing the methods

As part of co-created solutions for taking action in Kuku, dialogue and consultation with kaumātua and other resource users was initiated by collating their residual knowledge about remaining biodiversity in the region. The archive recorded views of elders, hapū representatives and other community members about their relationships with lands, waterways and resources. In capturing aspects of their pūmahara of place about the Kuku south-western coastal region, the collated knowledge became the foundation on which to actively rebuild relationships with the natural environment and fragmented ecosystems. As people recalled vital information, their accounts inspired hands-on ecosystem projects to restore the natural features and qualities within ancestral landscapes.

Not all kaumātua had an intimate relationship or in depth knowledge of the cultural significance in the coastal plain, but some did. What expressions remained were collated into a tribal silent file[38], kept safe for people of the area. Some informants also offered experiences about Māori gardening and orchards at whānau homesteads that Kuku was once renowned for. Like customary food gathering, these recollections about natural food production also centred on the purpose of feeding, nurturing and sustaining peoples with

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34 Lucas Associates, 1998, *Kuku – Ōhau Ecological Situation and Opportunities in the Lower River- Preliminary Notes*, 6.

35 Personal communication with Harold and Joy Rowland's daughter, Mrs Pauline Moffat.

36 Daughter of tohunga Koronīria and Turuhira of Manakau (Koronīria may also have been referred to as Koronīria Rangiwhakaripa, a son of warrior chief Rangiwhakaripa and Mirika Powhirihau.).

37 Henry Perenara, 1996, *I've Been Thinking- Wetlands, Aquaculture, Kaumātua Flats, Kia Mohio- Kia Marama Information is Knowledge, Knowledge is Power,* Discussion Paper for Tūkorehe Marae Committee.

38 A silent file refers to a body of information that is not disseminated to the general public. It is a file of restricted knowledge about sites that are kept safe for tribal members to access.

home-grown, healthy produce. One informant spoke of the extensive orchard around her grandparents' family homestead.[39]

> "Well, Grandpa always used to say, you've got to grow things that you can eat... you can never eat flowers, but you can eat the fruit. [At the homestead in Kuku my grandparents] had 3 orange trees...five different kinds of lemons, peaches, apples and plums by the mile, all different kinds... and quinces... [They had] huge apricots, beautiful apricots...sweet as! We used to have Christmas dinner under the apricot tree every year... the apricots would be coloured but they'd be still sour and he wouldn't let us touch them. He said, "You can eat as many as you like when they're ripe, but you're not going to take a bite out them and then throw them away." And, you see, they'd be coloured then. It was a huge tree and we used to get millions off it."[40]

Co-created directions for taking action

This thesis addresses the environmental and associated human wellbeing issues that have accumulated for the region. Collective awareness about the impacts on waterway health at the coast to sea, the loss of understanding and respect about significant cultural place in landscape or the concerns over dysfunctional relationships between related peoples was amplified. The once significant contiguous dune wetland to the Waikawa River with its reduced vitality for local indigenous fishes, eel resources, invertebrate, bird life and weaving resources, catalysed kaitiaki to take action. Kaitiaki developed local Māori knowledge and how it might possibly contribute to improving the environmental conditions for lands and waterways, all the while re-enhancing iwi and hapū interrelationships, that re-nurtured community wellbeing.

In 1996, a local healing group called Te Raukawakawa o Te Ora, affiliated to the Ikaroa region of Māori traditional healers and Ōtarere Limited[41] instigated the first rounds of necessary dialogue around ecosystem decline in the coastal region. Their work began to reveal why local Māori and indigenous symbiotic relationships to the natural and cultural environment were important, and why local peoples' previous interdependency and relationship with the natural environment had to be revitalised for ultimate cultural,

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39 This narrative referred to the home of Tumeke and Ani Wehipeihana who lived on ancestral land, diagonally opposite the marae in a family homestead, off what is now State Highway One. While the house and orchard were removed in the mid 1980s, the account from Mrs Ruhia Martin (1924-) as the eldest generational descendant of her grandparents remaining, recalled the experience of successive Christmases where about forty immediate whānau members converged at the homestead to prepare and partake of dinner under the apricot tree. This event continued from when Ruhia was a child to well after having a family of her own. Like other Māori homes in the district, the whānau homestead was well remembered for its gardens and orchard.

40 Mrs Ruhia Martin's oral account on many subjects enhanced the understanding about a whānau locale once dedicated to healthy produce for healthy eating for a healthy whānau and tribal others. While Mrs Martin was forced to a wheelchair by stroke in 1999, at 83 in 2007 she still tended her garden, propagated plants and fruit trees for future orchards being returned to Kuku.

41 A local family business enterprise based around Māori Arts and Crafts in Kuku.

spiritual and physical health. This healing group (supported by interested others) began to develop plans and visions for the potential and future management of the lower reaches of the Ōhau River. As greater detail generated around the Ōhau River's 'loop', there were concerns about the serious decline in water quality and the ongoing biodiversity loss within the former river meander on Tahamata farm. From the activities of healers and environmentally minded others, an opportunity arose to commission a report that combined those initial conversations or worries about decline and loss of vitality, with necessary investigation conducted by external specialists.

The commissioned report aimed to establish protected areas of indigenous flora and fauna in the lower Ōhau River region; investigate ways towards regeneration, revegetation and reforestation of areas; look towards protection of areas of cultural significance, and seek ways to safeguard against the removal of Māori natural resources, particularly rongoa species without prior knowledge or participation of local Māori.[42]

Figure 2.8: Lower reaches of Ōhau River to Sea.
Aerial photograph by Lawrie Cairns, Palmerston North.
Image produced for Horizons.mw Regional Council, 2005

The group of active participants used further co-intelligence strategies to develop a valuable document that forged ways towards new strategies for ecological rehabilitation in the tribal coastal region. The outcome was a user-friendly *Kuku-Ōhau Situation and Opportunities in the Lower Reaches of the Ōhau River: Preliminary Notes* report by

42 Derived from the objectives of research funding application to Lottery Environment and Heritage, November 1996.

Lucas Associates[43], researched and compiled between August and November 1997 and issued in April 1998. It encouraged relationships with external specialists, local entities, landscape planners, ecologists and environmentalists. From these meetings (often at sites of environmental decline) attention was drawn to the state of the ecological and cultural landscape, particularly for the severed Ōhau River meander. Te Raukawakawa o Te Ora and Ōtarere Limited wanted to re-edify the obligations of kaitiakitanga, promote and maintain indigenous flora and fauna as valued taonga, and look after associated waterways or springs, for customary healing practices.

The report outlined a potential major project that aimed to restore the mauri or life essence to the nitrified and polluted lower reaches of the Ōhau River. In addressing the impacts of the council-instigated diversion for the locally known 'loop' and adjacent blind creek, the report clearly outlined the required activities for easing the problems facing the lower reaches of this river meander to sea. The report did not avoid signalling the extent of ecological degeneration in the lower reaches of the river. It framed the concerns for lands and waterways in a deliberately user and information-friendly format, so as to entice participants to restore health to areas, rather than alienate them to the labour intensive tasks ahead or to de-motivate them over the severity of the decline. The report carefully outlined recommendations or activities that could improve ecological health. It drew on the creative potential and promise derived from an interrelated environment and peoples' health perspective.

The *Kuku-Ōhau, Situation and Opportunities in the Lower River: Preliminary Notes* report also supported opportunities for further collaborative research opportunities. When key specialists like Charles Mitchell[44] investigated the situation for the indigenous fishes of the lower reaches, Don Jellyman of National Institute of Water and Atmosphere (NIWA) also commented on renewed opportunities for eels and their habitat. Gary Williams a local Manakau South water engineer, assisted with ideas for hydrology, fish passes or eel weirs. Each specialist combined expertise with iwi and hapū participants and other supporters' aspirations, to identify, encourage and implement better ecological opportunities for the depleted area.

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43 Lucas Associates deal with landscape assessment, reporting and preparation of evidence, including local and regional council and Environment Court hearings. They deal with landscape, natural and amenity values of rural and urban areas, and sites, and work variously for individuals, landowners, community groups, iwi, councils and government departments. They facilitate community-based workshops ranging nationwide for town and/or country, with on-site preparation of community plans and documentation. They deal with biodiversity and land through the collation and communication of complex scientific data through the interpretation of land, geomorphology and biodiversity, enabling restoration via easy to understand field booklets, brochures and plans. They are strong advocates for sustainable management plans recognising natural and cultural values, land use practices and alternative markets, through enhanced landscape management.

Information derived from URL http://www.lucas-associates.co.nz/about.html

44 Fresh water fish specialist, especially for whitebait.

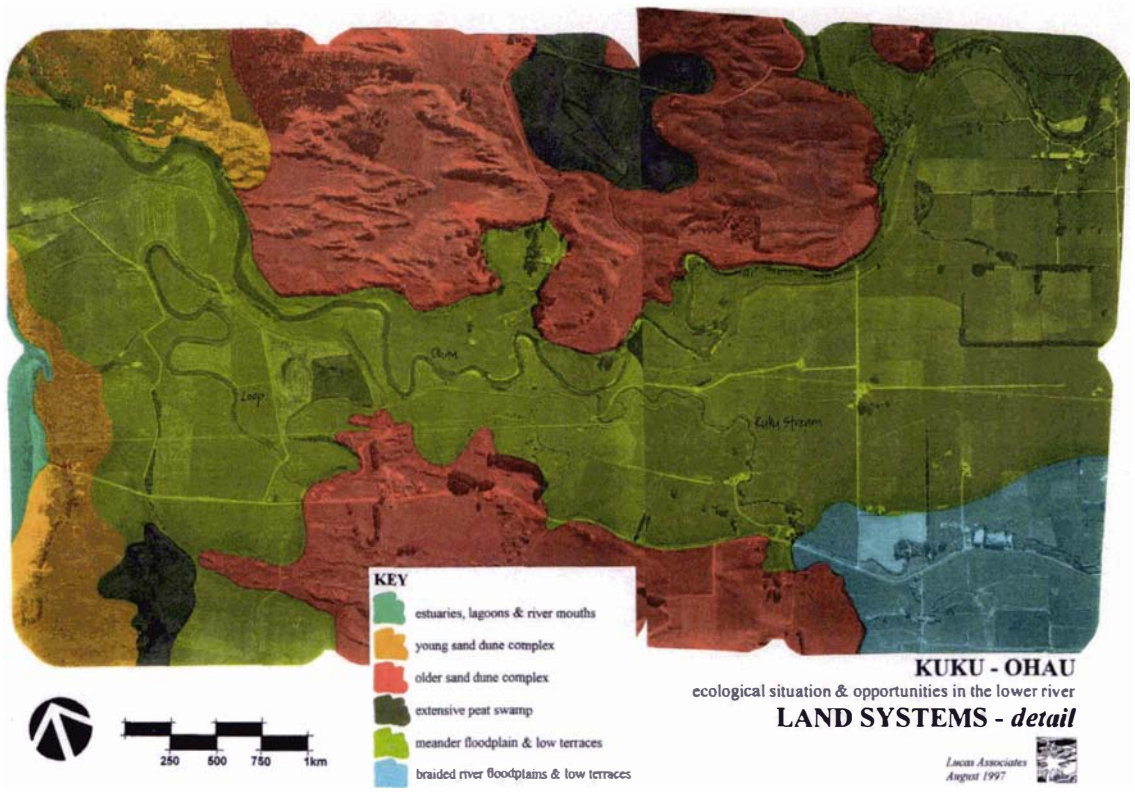

Figure 2.9: Kuku-Ōhau Ecological Situation and Opportunities in the Lower River- Land Use, showing where 'loop' is located and its proximity to Kuku Stream.

Reproduced with permission from Lucas and Associates, Christchurch.

The report addressed the issues and opportunities that resulted from river management, in particular the effects of the 'cut' and other associated works on the wider environment. It re-examined the Ōhau River as a former valued resource, capable of being restored and environmentally improved. Important objectives for change to the 'loop' included convincing local shareholders and the Board of farm management to the tasks at hand. By reinstating forest or river riparian habitat, they too were contributing to the symbiotic healing of lands and waterways, and improving peoples' overall wellbeing. It was recommended that those genealogically connected to the place, should pass on an environment enhanced by their presence and efforts. While the report recognised the constraints of land development and flood management, it suggested a programme of activities for a system no longer a river but a lagoon. The report disseminated ideas on the environmental potential for the area, and recommended that they be shared with other hapū, iwi, local Runanga and other councils.[45] Other opportunities (not detailed in the Lucas and Associates report) aimed to restore areas of cultural significance in the adjacent region, with particular respect paid to the adjacent wāhi tapu or sacred grounds.

45 Lucas Associates, 1998, *Kuku-Ohau, Situation and Opportunities in the Lower River: Preliminary Notes*, 1.

Meetings of hearts and minds over environmental health

From these concerns for the 'loop', a series of general meetings followed, convened for the purpose of seeking support for certain directions and informing people on the extent of environmental issues. The specific educational environmental and cultural heritage meetings with external entities helped rebuild collective understandings over complex ecological and rehabilitation responsibilities facing hapū and iwi participants of Ngāti Tūkorehe. This brought relevant expertise and entities together into the Māori marae-based environment to assess the current state of coastal, ecological and cultural landscape. Specialists and interested iwi and hapū members discussed concerns, even noting where local and national government agencies were not meeting resident Māori expectations for effective cultural landscape or ecosystem protection. In bringing local people and leading environmental experts together in this collaborative way, the meetings encouraged a renewed sense of local ownership over ways to proceed for the lower reaches of the Ōhau River to the sea, other significant waterways, Te Hākari dune wetland, and interrelated areas deemed sacred as wāhi tapu. Coming together in one accord underpinned decisions for action that sought better ways to protect or rehabilitate areas.

From March 1996 a series of ten heritage hui on wāhi tapu issues were held at marae stretching from Hawkes Bay, Mahia, Mohaka, Southern Wairarapa, Feilding, Tokaanu, South Taranaki, Waikanae, and Te Horo. They were held at the invitation of individual marae and hapū groups, and were known as Te Kupenga a Te Huki- Wāhi Tapu hui series. The first workshop was initiated at the request of Ngāti Pahauwera of Mohaka, Hawkes Bay region, who wanted information on heritage management issues in their tribal area. The hui at Te Huki marae, Raupunga developed a supportive network under a temporary accord known as Te Kupenga ā Te Huki.[46] The workshops then took on the name Te Kupenga and fostered active dialogue around heritage or cultural landscape protection amongst the communities of interest, particularly tangata whenua, planners, archaeologists and land users. They enabled tangata whenua as kaitiaki to be better informed of the New Zealand Historic Places Trust and Māori Heritage Council functions.

Te Kupenga meetings promoted greater awareness of local tangata whenua environmental values. They developed simpler procedures for dealing with the complex process of resource consents. They encouraged more meaningful consultation or positive dialogue between iwi and hapū, and other authorities. The hui series assisted in developing marae-based kaitiaki environmental and heritage management groups, where local people discussed

46 In 1996 Ngahiwi Tomoana, CEO of Te Runanga of Kahungunu suggested the name Te Kupenga A Te Huki for the meetings and workshops that were taking place in the wider Hawkes Bay area. Te Kupenga workshops encouraged Māori to take responsibility to protect their own cultural and natural heritage resources. In addition to local participants who attended the meetings, there were District and Regional Council staff, archaeologists and New Zealand Archaeologists Association (NZAA) members, Ministry for the Environment staff, Department of Conservation staff, members of the Resource Management Law Association, and other land users like forestry companies.

their particular cultural landscape issues followed up by field trips to local sites. The visits focused on ways of drawing attention to issues and impacts facing wāhi tapu, water health, a communities' health and other environmental priorities within predominately coastal regions.[47]

A Te Kupenga meeting was held at Tūkorehe marae, Kuku on the weekend of 8-9 July 2000. It overviewed a range of concerns, especially relevant to the wider coastal region. During the meeting Hutt Valley Regional Public Health Association spoke of wide-ranging roles in public health for the community. Their main priorities were to maintain water quality for drinking water safety. They had the authority to close areas if human health were at risk over unsafe water supplies. Water quality in the Kapiti and Horowhenua regions ranged from high nutrient loadings, domestic septic tanks or local dairy shed effluent disposal regimes, to the overuse of pasture fertilisers leaching into waterways or groundwater aquifers. In 2000 the Hutt Valley Regional Public Health conducted a collaborative research project with the Ministry for Agriculture and Fisheries, which agreed that fencing off tributaries and other waterways from pollution sources, decreased nutrient loadings and improved water quality for human health.

The direct effects of such reactive nitrogen on human health from intensive use of fertilisers or discharge from untreated sewage are very serious if nitrogen and phosphorus are discharged into rivers and coastal environments.[48] This can lead to nitrate contamination of the drinking water, certain types of cancer or 'blue baby syndrome', a condition where deoxygenated blood places stress on babies' hearts. The later is a serious health issue for both infants and the elderly. Nitrogen and phosphorus encourages blooms of toxic algae in coastal waters, with resultant harm to humans through respiratory and cardiac diseases. This is induced by exposure to high concentration of nitrous oxides, ozones and fine particulate matter.[49] If local and regional councils, farmers and other landholders protected indigenous forest cover or planted extensive riparian areas alongside waterways, then significant buffer zones would limit the dangers of farm runoff into waterways.

It was clear at the 2000 hui that the practice of retiring riparian areas or stream and river banks on farms with native vegetation would improve the condition of waterways and help balance the uptake of nitrogen. In better understanding the dangers of nitrification, immediate action for constructive change was required. At that time local entities were

47 Some of Te Kupenga meetings in the local Horowhenua and Kapiti regions were held during 1999, at Katihiku Marae at Ōtaki, Whakarongotai at Waikanae, Aorangi Marae at Feilding and at Tūkorehe Marae at Kuku.

48 Parliamentary Commissioner for the Environment, 2004, *Growing for Good: Intensive farming, sustainability and New Zealand's environment*, Parliamentary Commissioner for the Environment Te Kaitiaki Taiao a Te Whare Pāremata: Wellington, 86.

49 ibid, 87.

excruciatingly slow[50] in actioning such plans for the wider communities' waterways. These pressing issues over water quality and wetlands in the coastal region however, challenged iwi and hapū to take action for their ecosystems within Māori land holdings themselves, and to collaborate with sympathetic individuals and entities that also wanted to experience action and change, for the better.

Awareness of significant cultural landscape destruction

There were other significant concerns raised by neighbouring iwi and hapū, over their diminished or destroyed cultural sites though their concerns were often considered vexatious by local authorities. At that same Te Kupenga meeting in Kuku, participants listened to opposing interests over the former Lake Tangimate region on the Horowhenua dune belt, between Waitarere and Foxton. The Department of Conservation, New Zealand Historic Places Trust, Fish and Game and Horizons Regional Council representatives all agreed that great damage had occurred to the once significant and ingenious eel trapping area known as Tangimate. Ngāti Huia kaitiaki were responsible for this specialised eel trapping area in cultural landscape, and their concerns clashed with the perspective of current 'landowners'. Despite the region being regarded as one of the most remarkable group of whakamate[51] or artificial eel-trapping channel systems in Horowhenua,[52] systematic drainage regimes from the 1940s, caused Tangimate to shrink greatly. In 1981 when another prominent farming family applied for further water rights to the Manawatu Catchment Board to continue modifying sections of Lake Tangimate, the subsequent draining of the lake and excavation of 'archaeological' finds, reduced the original 100 hectares to a mere 2.5 hectares.

Lake Tangimate had become a severely fragmented ecosystem. The serious decline impacted on the human condition of kaitiaki, who felt compelled to try and revive guardianship obligations to restore the balance. Despite aspirations to improve the depleted Tangimate, their views were untenable to the current landholders and authorities, and effectively discounted. Ngāti Huia representatives had attempted to rekindle once intricate relationships with Tangimate, to save last vestiges of the former famed resource, its related mana, their own sense of identity, authority and obligations to guard it for present and future generations. Lake Tangimate was effectively disconnected – a former natural and cultural asset. The indifference kaitiaki experienced over its decline, indicated the burden they bore for the once culturally valued area. Despite the transfer of ownership

50 In 2007 there had still been no major improvement in the wider tribal region despite Fonterra's Clean Streams Accord implemented in June 2004. Tahamata had fenced off the dune wetland in 2002 and the 'loop' in 2005. Where Tahamata leased land those owners also needed to fence off the rest of the tributaries within the tribal region. Not many other farmers in the district have done the same.

51 According to Koro Joe Tukapua (?–2005) at Te Kupenga meeting at Tūkorehe marae, July 2000, the term whakamate meant to "remove the mauri, to put to death or to determine that everything that was in abundance had now gone".

52 G. Leslie Adkins, 1948 *Horowhenua: its Māori Place Names and their Topographic and Historical Place Names*, 357.

away from the tribe, kaitiaki were not released from exercising a protective role in their environment. Their tasks were made more difficult since others had an expressed interest[53] in Tangimate, and did not recognise their local Māori view or knowledge of the area. Kaitiaki were aggrieved that 'archaeological' finds still remained with the landholder, and that the landholders limited access to their remaining riparian tenure around the lake region. When kaitiaki learned that cultural material removed from the lake, had been assessed by conservation representatives from the Māori Heritage Unit without their or any local Māori involvement, they experienced first hand the difficulties of how local and national authorities had failed to meet their expectations of protection and support.[54]

The Lake Tangimate situation was attitudinally and tenurially complex with competing values for lands and waterways that kept kaitiaki and landholders apart. Despite airing their concerns to other authorities, Tangimate became an especially challenging situation in terms of both ecosystem and cultural site destruction. There were many difficult relationship issues to resolve between peoples.

Renowned tohunga and Muaūpoko elder of the time, Koro Joe Tukapua (?-2005) was present at that hui. He offered his view on how perpetual development on environmental and cultural issues could improve practices and relationships between peoples and their environment. He articulated how timely it was to identify the benefits for all involved in the Lake Tangimate situation. Potential collaborative research programmes or efforts that combined ecology, spiritual aspects for cultural material, farming interests, water health for biodiversity or wetland management, could achieve more positive outcomes for water health, cultural heritage protection and enhanced wellbeing – for all peoples associated and involved. Based on the depth and dimension of his Māori knowledge, 'Koro Joe' insisted that the situation for Tangimate was not to be oversimplified. A strategy had to be determined whereby both kaitiaki and landowners' needs were met. The farmer had much to gain by enhancing lands, restoring the lake system as part of an inter-connected waterway with associated health benefits. A restored and revegetated Lake Tangimate would become a potentially meaningful indicator of successful relationships brokered between both Māori and non-Māori interests.

The learning that emerged from that multifaceted meeting in 2000, indicated how vital it was for tangata whenua, local entities and communities to work collectively and

53 Mason Durie, 1998, *Te Mana te Kawanatanga: The Politics of Māori Sovereignty*, Oxford University Press: Auckland, 23.

54 The relationship that kaitiaki have with sustaining their environment is enshrined in Part 2 of the Resource Management Act, particularly Section 5, 6(e), 7(a) and 8. Resource management agencies are required to recognise and provide for the culture and traditions of Māori relating to ancestral lands, waters, sites, wāhi tapu and other taonga. They must also have regard to kaitiakitanga and take into account Treaty of Waitangi values. Māori expect that they will be included and actively involved in environmental management taking place.

Gail Tipa & Laurel Teirney, 2006, *Using the Cultural Health Index: How to assess the health of streams and waterways*, Ministry for the Environment Manatū Mō Te Taiao: Wellington, 1.

collaboratively for each distinct local region. By listening and paying greater attention to local Māori concerns about their aspirations and understandings of the environment in tribal areas, better overall community-based management programmes would emerge. As stated at that meeting, '*all* generations deserved a restored, respected and clean environment in which to live well'.[55]

Documentary and visual evidence

The ecological and cultural survival context for the Kuku coastal region, was assessed through objective documentary and visual evidence. This was achieved by commissioning aerial photographs, collating historical photos and creating a digital image file that chronicled each significant development for projects, particularly for Hei Whenua Ora ki Te Hākari/Te Hākari Dune Wetland Restoration Project, from which subjective contextual interpretation was derived. In December 2003, an aerial photographer flew over the coastal landscape. His high-resolution aerial photos helped bring the possibilities of interrelated ecosystem restoration projects into focus. The visuals consolidated the intentions and aspirations for ecosystem restoration. In natural colour they enticed more people to become involved in what was underway at the coast. The series of documentary images also became visual aids for communicating learning outcomes for both iwi and hapū and the kaitiakitanga students involved in Te Hākari dune wetland project.

The digital image archive captured many aspects of projects underway and became a visual record for future reference. The images encapsulated the relationships between all possible or potential cultural landscape and ecological projects across the coastal area. The visual devices (as panoramic images or large-scale aerial photographs) reconnected kaitiaki with their wider domain of accountability. The images created a 'big picture' vantage for all participants and aided in implementing the understandings gained about the practical and constructive actions taking place at the coast. In sharing these images with elders, resource users, active participants, kaitiaki students, and children of local kohanga reo or kura kaupapa as change agents, the collated visual information invited other participants to join in future activities. When presenting the project to various audiences,[56] such as iwi and hapū groups, interest groups, and indigenous communities, both nationally and internationally, the progressive visual 'road show' presented the best, updated information available about the project, backed by a wide range of quality images.

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55 Statement by Stephen Palmer, Hutt Valley Regional Public Health, derived from notes taken at 8-9 July 2000 meeting at Tūkorehe Marae, Kuku.

56 The large-scale image of the tribal region for Ngāti Tūkorehe and Ngāti Wehiwehi would also create an impact whilst submitting the local case on riparian and ancestral rights to the local coastline, at the Foreshore and Seabed Select Committee meeting at Parliament in September 2004.

Figure 2.10: Ōhau River, loop region and Te Hākari dune wetland as part of contiguous dune system to Waikawa River, December 2003.

Aerial photograph by Lawrie Cairns, Palmerston North

From the very beginning, the main purpose of the documentary images was to set the focus on making progress rather than simply defining and measuring environmental problems for certain areas. If the latter had been over emphasised, the tasks ahead may have been too overwhelming or daunting, or perhaps rejected outright by people feeling threatened or browbeaten to take action. It took time for every participant to see the interconnectedness of all possible and potential projects in the region. A certain balance was required between practical action, which had broad appeal[57] and purposeful analysis and information. The practical projects encouraged physical involvement in the labour required for ecosystem restoration, where every participant learnt new skills and gained new understandings each day they forged new directions for the region.

57 Ronda Cooper & Rachael Brooking, 2002, "Ways Through Complexities" in Kawharu, M. (ed.) *Whenua Managing Our Resources,* Reed Publishing Ltd Books: Auckland, 207.

Visual Component as Research Method

As a way of explaining ideas for areas requiring rehabilitation, a select series of paintings are revealed in this chapter as a complementary research method. The visual component referenced holistic relationships to the natural environment, by articulating a range of past, present and future relationships to the natural environment at Kuku. While the *No Queen's Chain* suite of 2000-2001 or the *Tirotirowhetu [Looking to Stars]* (2000-2001) series were personal calls to value sacred places and relationships developed over generations, they were also visual alerts to other authorities to recognise the intricate relationships Māori had experienced with lands and waterways.

The painting suite generated discussion over how a customary Māori environmental worldview could be reconciled with fragmented natural stands within Māori land holdings. In producing the series, questions arose as to what the Māori customary and contemporary continuum might mean for culturally significant regions with ecosystems in severe decline within agriculturally modified landscapes. How could once close relationships to areas be restored and sustained for hapū and iwi through activities in the present?[58] What would it take to affect effective ecosystem restoration in such changed landscapes? The combined canvases raised awareness about those who still valued, generational and sustainable resource use. Each canvas framed past iwi and hapū narratives about areas, but also present day interactions and use rights within the remnant natural regions, with a view to the future potential of ecosystem reinstatement. The series also highlighted the extent to which people had been divorced from their cultural identifiers. The paintings were creative attempts at devising better strategies for cultural landscape protection. Both artworks and documentary photographs had interpretative roles to play with the data generated. They aimed to clarify the often misunderstood, or over-looked approaches that Māori sought over resource management, especially when other authorities struggled with Māori concepts and ideologies about interconnected lands, peoples, waterways and biodiversity.

The suites on canvas

The initial *No Queen's Chain* series used a landscape genre- a prevailing tradition in a Western pictorial or scenic sense where 'the indigenous sounds as in art, literature, ecology and histories in New Zealand, were [often] overwhelmed by the coloniser's voice'.[59] When historic recognition maps or drawings were taken of coastlines from the sea, they were visual records of potential new frontiers. They identified safe landings and documented

58 Danny Kennan, 2002, 'Bound to Land: Māori Retention and Assertion of Land and Identity', in Pawson. E. & Brooking T., (eds.) *Environmental Histories of New Zealand*, Oxford University Press, Melbourne, 246-260.

59 Geoff Park, 1999, "After the Scene, After the Fever", in *Visions of Future Landscapes*, 1999 Fenner Conference on the Environment. Bureau of Rural Sciences and Australian Academy of Science: Canberra, 113.

Figure 2.11: *He whenua tuku iho - Land passed on* 2001, oil on canvas, 2135 mm × 200 mm.
Collection of Te Tima Whānau Trust, held at Te Rangitāwhia cottage, Kuku

resources that could be readily identified and appropriated for settlement. Colonial landscape painting developed from this form of naming and claiming of land, 'framed' through a presumed right of discovery.

Representational or western art conventions like landscape scenic paintings or other naturalistic imagery were genres that did not exist in Māori visual interpretations until the later nineteenth to earlier twentieth century when the painted meeting-house traditions of the East Coast and Poverty Bay regions, eastern Bay of Plenty, with Waikato, Wairarapa and Urewera regions of the North Island emerged. Customary personifications of Māori land and relationships to it usually took the form of stylised ancestral figures, often with Papatūānuku and Ranginui shown at the moment of their separation by their children. This cosmological event allowed light to enter the space between them, which gave rise to the growth of forests, animal and human life. This genealogical narrative was readily identified in elements like pare or the door lintel, and the pane, the overhead verandah extension of the tāhuhu or backbone of the house, where Papatūānuku and Ranginui in copulation, expressed the potential of procreation and promise of new generations to come.[60]

In deliberately using the landscape genre for this painting series, the panoramic images attempted to reframe ancestral landscape. They encompassed hidden narratives that existed intangibly within sites. While the Māori voice with more detailed information was silenced for the viewer in order to protect the intangible, the emphasis of image in *He Whenua Tuku Iho [Land passed on]* 2001,[61] concentrated on poor water quality issues in the lower reaches of the Ōhau River. The landscape genre supported a possible bi-cultural

60 Robert Jahnke, 1997, *The Iconography of Landscape – Study Notes*, for Toioha ki Āpiti Bachelor of Māori Visual Arts, Te Pūtahi ā Toi, School of Māori Studies, Massey University, Palmerston North. Carved ancestral figures are also conceptually anchored within the landscape through pepeha connections and the interrelatedness of humankind and the natural environment in cosmogenealogical narratives of origin.

61 *He Whenua Tuku Iho [Land passed on] 2001* was a painting that raised concerns for some relations. Not everyone was happy for significant precincts to be represented in this way. There was a certain amount of disquiet over the possible sale of these particular works in exhibition. While working on this painting a personal decision was reached that this panoramic image would not be sold at exhibition. To this end, the key work in the exhibition *He Whenua Tuku Iho [Land passed on]* was gifted to the family trust of 'Te Rangitāwhia' cottage to hang permanently on the wall of the front room of the 1880's cottage.

land ethic or collaborative ecosystem management[62] programme, where Māori and non-Māori approaches to ecosystem restoration could coalesce. The landscape method visually clarified the potential of hapū and iwi-led environmental initiatives for site-specific projects that aimed to reinstate inclusive values evident within interrelated Māori ideologies about lands and associated waterways.

The *No Queen's Chain* series of paintings offered the stories and experiences about place in a visual language that key informants valued. As elders identified site and place at the coast, it was their collective dialogue around sacred or special place that inspired the works. Even though some elders revealed that they no longer readily understood the mnemonics evident in customary whakairo or carving, or knew the detailed interpretation within the carvings at the whare tūpuna Tūkorehe, they still maintained a respect for the spiritual and physical arrangements of the whare in relation to the natural environment, and the kawa and tikanga of marae protocols as taught to them by their elders and mentors. Key informants felt comfortable with a perceptual or realistic representation of land referenced in the series, in the understanding that they were transferring knowledge about place to other generations, in turn. With a growing localised and collective effort underway to improve and activate environmental projects in the region, the research work percolated into further series of paintings, which were included in suites known as *Traffic* executed in 2002 and *Crossing Kuku* in 2003.[63]

As the protection of land and water-based cultural and natural heritage research interest began with the coastal region, the initial *No Queen's Chain*[64] suite of paintings revolved around the 'marginal strip', known colloquially as the 'Queen's Chain'. The paintings referred to the 20-metre strip of land that among other purposes 'allowed' New Zealanders free access to sea, lakes and rivers. At the time of investigation it was widely perceived that the Queen's Chain gave the public universal right to the country's waterways. With

62 Geoff Park, 1999, "After the Scene, After the Fever", in *Visions of Future Landscapes*, 1999 Fenner Conference on the Environment. Bureau of Rural Sciences and Australian Academy of Science: Canberra, 113.

63 While not completed in time for this thesis later works from The Weed Eaters series, 2006-2008 investigated both the impediments and positive aspects experienced in affecting environmental changes.

64 The initial suite was exhibited as *No Queen's Chain* and was held at Ferner Galleries June 19-30 2001 in Wellington.

environmental discussions and coincidental meetings organised around local issues and wāhi tapu issues for the coast, this suite is a personalised means of coming to terms with the complexity of Māori resource and ancestral or the management of cultural landscape.[65]

A Queen's Chain to the sea does not apply when adjacent to undivided Māori land. There was no Queen's Chain on the adjoining stretch of coast next to the consolidated shares of Māori land for Tahamata Incorporation to the sea. A chain would only exist if the land was sold and became general land. This explained why there may be a Queen's Chain adjoining coastal blocks owned by private landowners but no Queen's Chain on a block of Māori owned land along the same stretch of coast, lake or river. These facts were not widely known. Many people presumed that the chain extended along the full boundary of all waterways. Therefore the painting suite was concerned with the wider communities' presumption that the New Zealand coastline was public domain, where they could do as desired, within an expansive or personal backyard. There were added concerns that the fast changing community was very unaware of the cultural significance of lands to water for local iwi and hapū.

When an unforgettable meeting at Tirotirowhetu site with key informants and relations[66] in December 1999 activated the research endeavour, the visit also inspired the initial Tirotirowhetu [Looking to Stars] 2000-2001 series. The series acknowledged the site as situated close to the beach opposite a last meander of the Ōhau River.[67] Tirotirowhetu was the initial kainga or village for ancestors when they first settled the region allotted to them at the behest of Waitohi, in recognition of their translocation and support for the movements of Te Rauparaha.[68] The site was impressive with areas designated for the processing of shellfish and drying supplies in the heat of summer harvest. The shells were discarded to bleach in the sun, sand and salt as ahu otaota or shell middens. In some circles such places of harvest were considered Māori rubbish dumps. Tirotirowhetu was definitely a customary place for karakia, propitiation of atua and for observing celestial

65 In 1892 a law was passed that required reservation of waters adjacent to lands. This applied only to Crown Land to water. Many earlier dispositions of Crown land failed to include the Queen's Chain, leaving only 70% of New Zealand's major waterways governed by the Queen's Chain. Until the unpopular Foreshore and Seabed Act 2004 at no stage had New Zealand law previously established that the public had full rights of access to or use of all rivers, lakes and beaches, nor had the Crown control over the region and its resources.

66 Aunty 'Hummer' Johns, Uncle Gary Wehipeihana Senior (1943-2006), Peter Daly and Hugh and Frederica (Freddie) Acland.

67 G. Leslie Adkin was informed by tohunga Arapata Te Hiwi and Heremia Terapata Rangitāwhia. In many ways he was only told so much. The site he mapped in his *Horowhenua its Maori placenames & their topographic & historical background* publication differs to the site that elders know as Tirotirowhetu. They were assured that these tohunga as informants had protected the actual locale by not divulging complete details to Adkin.

After G. Leslie Adkin, 1948, *Horowhenua its Maori place-names & their topographic & historical background,* Department of Internal Affairs: Wellington, 369.

68 Tirotirowhetu site was managed according to tikanga by Pihana Potaua, Te Hiwi Pihana and Koronīria [Te Whakawhiti or Koronīria Rangiwhakaripa] from around 1840–. As knowledgeable leaders or tohunga, their responsibility was to perform the rites and rituals for peoples, places and resources. From notes and personal communication with Sean Ogden on 11 October 2005.

Figure 2.12: From Tirotirowhetu, across Tahamata farm to sea, 2005.
Photograph by Huhana Smith

and navigational indicators. It was a site of strategic vantage to sea and river for waka passage up river and up and down the coast.[69] The Tirotirowhetu series was devised as a personal call to hapū and iwi to value such sacred places imbued with ecological and cultural knowledge, especially the wisdom developed over generations of resource use.

The initial excursion to Tirotirowhetu came about from talking with elders[70] and listening to their recollections about its special-ness, its mana and authority as place. The landholders were also involved in the discussions at that time, so a date was set to share an experience of site. That morning kaumātua prefaced the excursion with a karakia at the landholders' Muhunoa West Road gate. This cultural activity acknowledged that the group were going somewhere special and sacred. The excursion began with a utility trip across the dunes of tree lucerne and pine forest. On reaching the boundary fence the group climbed over and moved carefully towards site. When the party drew closer to the deflated midden area, it was noted how strong the sensibility was, not unlike waves of energy coming off the dunes, rising to envelop the group. It was an uncanny but assuring experience for all involved. On reaching the midden there was a strong sense of industrious purpose to the locale, where the experience of place animated and excited the group, so much so that another karakia was offered in recognition of this. The kuia present on that excursion bent down to carefully gather shells and hangi or earth oven stones in her hands. She quietly acknowledged them before placing them back on the sand. She would later reveal that there were strong sensations coming from indefinable others asking her not to take the shells or stones away. She knew this already, as her family (like many others in the district) had long been aware of significance and respect required of Tirotirowhetu. She accepted the spiritual responsiveness of the place with her own karakia in mind. The landholders were similarly moved by what they could feel was happening in those moments of unforgettable encounter.[71]

69 From notes and personal communication with Sean Ogden on 11 October 2005.

70 Mr Hare Hemi Wehipeihana (1917-2002), Uncle Gary Wehipeihana Senior (1943-2006) and Mrs Maire Johns.

71 Many other local Māori resident from or living in Kuku would attest that the site was very special and they too had been told to respect the area at all times and not to remove any thing. A particular local story spoke of young children innocently removing items found at site and how on their return home they subsequently fell ill. Their aunt noticed some of the items in their house, interrogated them on where they found them and contacted their mother. The sisters convinced the sick children to return the items carefully to the area and never to take a stone or shell from the site again. Despite their queasiness, they did what they were told and were immediately relieved of what ailed them. This incident happened in the 1960s.

Figure 2.13: *Tirotirowhetu - Looking to the Stars* 2000-2001, oil on canvas, 910 mm × 610 mm.
Private Collection

Figure 2.14: *Kāti anō e mahue ana . . . All that remains* 2001, oil on canvas, 910 mm × 610 mm.
Private Collection

Figure 2.15: *Kore rawa mātou e wareware - we can never forget* 2001, oil on canvas, 1675 mm × 910 mm.
Collection of the artist

The effects of that visit to Tirotirowhetu stayed in the artistic imagination for some time. The whole Tirotirowhetu area was so sensitive, where respect for place was tantamount not only for its archaeological fragility but it obvious, inter-related spiritual integrity. The series not only honoured the site as sacred, but also the collective social memory of elders who reminisced on the importance of place, especially those present at the site as children at the times of seasonal harvest of shellfish, seafood or kaimoana. The influence of site combined to inspire three major works.

The images on canvas symbolised the indefinable significance of place and the nature of cosmological, customary and spiritual knowledge. They emphasised the learning that derived from inter-generational interaction with resources at times of collective effort for sustenance and wellbeing. Informants like Mr Hare Hemi Wehipeihana (1917-2002)

well remembered the tribe's collective fishing and shellfish harvest activities, and how their elders taught them to respect the area of Tirotirowhetu at all times- not to take a shell, a hangi stone as an earth oven stone or anything from the area.[72] Hare Hemi relayed experiences about the role children played at shellfish harvest times in summer especially as they were the ones responsible for carrying buckets of seawater for the adults to use for stringing shellfish on the pared central shaft of harakeke leaves. Those strings of shellfish flesh were washed in saltwater and then hung on erected driftwood structures to dry. As saltwater deterred flies it also preserved the drying shellfish flesh. The processed shells left from successive summer harvests accumulated in mounds by the Ōhau River and sea. Dried foodstuffs were important forms of stored sustenance prepared by Māori for the non-seasonal months.

> 'Shell fish was often dried and stored for future use... [using] the old process of drying pipis and stringing them out on long strips of thin flax for later use...at one time every house had its store of pipi maroke or dried pipi.'[73]

At the time of developing settlements for Ngāti Tūkorehe and affiliated hapū, waka or canoe travel by sea and rivers was the principle means of transport, besides walking along tracks that traversed the area. The name Tirotirowhetu harkens to the ancient Pacific tradition of using the lunar calendar or maramataka. This ecological reference system observed the 29-31 nights of the moon's monthly cycle and was a sophisticated knowledge system developed by ocean navigators within island cultures for localised conditions. The skill in calculating time by the moon included an acknowledgement of star movements and seasonal patterns that ascertained propitious times or weather conditions for fishing, planting or harvesting. The night skies were read for seasonal indicator stars and as practical guides for their cultural and philosophical significance.

Another informant recounted how they went out night hauling for fish at the foreshore. Their father would set the nets, have the family wait by a fire on the dry sand, and as soon as the full moon could be seen coming over the Tararua ranges, the time was right for the illuminator to light the way and for the men to bring in the nets. According to a torn-in-four, hand written list or 'Whakaaturanga i nga Pai me nga ra kino' found between the leaves of a family bible[74] the full moon was referred to as 'He rakau matohi, he ra pai

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72 The sensitivity of site has been backed up by many others not listed here, including Mrs Maire Johns, her sons Donny and Cyril and others of the Seymour or Tima family (who have now passed on, including Eunice and Pat Seymour Senior). Other families were aware of the site's significance, and certain people like Gary Wehipeihana Senior, Peter Daly, Sean Ogden and archaeologist/ecologist Susan Forbes.

73 The Estate of W. W Carkeek, 2004, *The Kapiti Coast: Maori History and Place Names of the Paekakariki-Otaki District*, 145.

74 The first Hare Hemi Wehipeihana was born in 1819 and died in 1890. On the death of his namesake, great uncle Hare Hemi (Windy) Wehipeihana's wife Mrs Ngaire Wehipeihana gave the bible of the first Hare Hemi to this writer for safekeeping. Within the leaves of that bible was the handwritten maramataka. The writer at present is unknown.

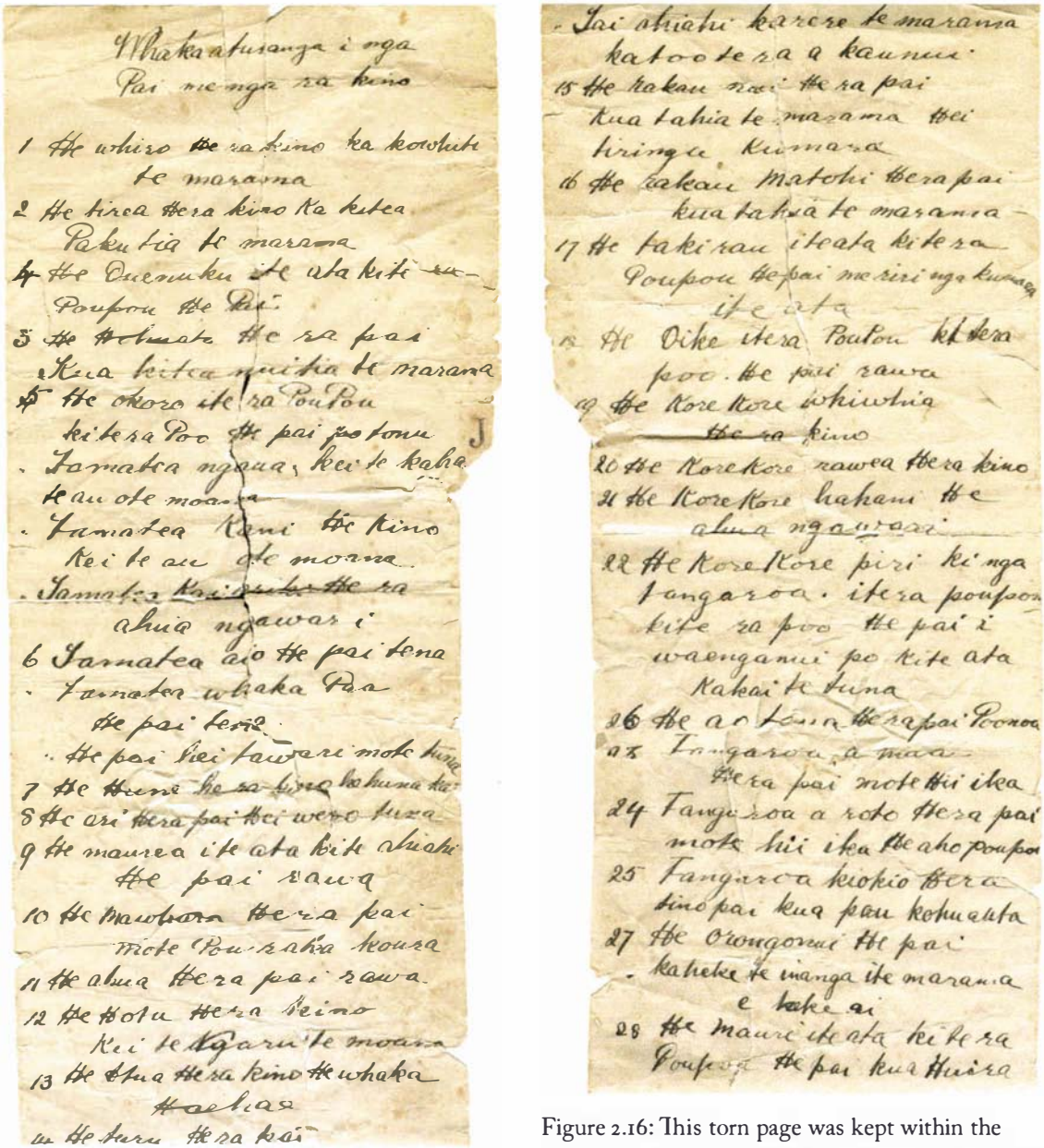

Figure 2.16: This torn page was kept within the pages of a paipera tapu or bible belonging to Hare Hemi Wehipeihana (1819-1890).
Writer and Date unknown

kua tahia te marama'. This perhaps recognised the physicality and strength required when hauling or net fishing. It was a task conducted by males at a time when the night sands and waters were swept by the light of a luminous full moon.

While the maramataka played a key role in ascertaining sustainable harvests, other local and benevolent kaitaiki or spiritual entities in the area signified that fish stocks were plentiful. Other less benevolent indicators announced that situations were unsafe, or forewarned of close, imminent danger. According to those who had experienced benevolent kaitiaki, the one they knew best had not been observed for some decades, so much so that a particular informant would sometimes go searching for that specific kaitiaki, especially if seasonal,

weather or atmospheric conditions were similar to the situation she remembered when first encountering the kaitiaki with her father and other brothers and sisters present.[75]

A key aim of the *No Queen's Chain* painting suite was to draw attention to the degraded water quality issues brought about by a council-derived river diversion, ongoing unsustainable farming activities from site and other farmers upstream. Certain empathetic Regional Council representatives recognised the validity of local concerns. Their influence helped activate the remedial changes to the culvert system with some financial and physical support. This mechanical work allowed a slightly increased influx of tidal water back into the Ōhau River 'loop' at one end of the river remnant.

He Whenua Tuku Iho [Land passed on] 2001, raised awareness for both tribal and local government authorities to consider the potential for co-management projects for special tracts of land or waterways in severe ecological decline.[76] In looking to the first colours painted on the canvas for *He Whenua Tuku Iho [Land passed on]* red represented Papatūānuku as whenua, with dusky, tear streaked-grey for Ranginui as sky. The painting radiated from an arrangement of carefully placed tī kouka. The red cabbage trees drew attention to spiritual and physical interrelationships. They highlighted ancestral, environmental and cultural values within places that had accumulated significance over generations. Layer upon layer of small brushstrokes of colour imitated strands of pasture grasses in a range of 'nitrate or fertilizer greens'[77] upon on a red earth base. The canvas encompassed the Ōhau River 'loop' system in a 360° view of the area requiring rehabilitation. At the time of producing this work, it emphasised a need to balance cultural, spiritual and economic imperatives, to advocate the changes required in tribal farming practice, to encourage plans that would reinstate environmental health, and to manage effluent regimes better that limited further pollutants to the river remnant. The 'loop' had little fresh, oxygenated water flow so contaminants had built up over decades. The waterway had not flushed or diluted the nutrients to sea but had stored them in the sediment in the lagooned 'loop'.[78] The water registered toxic concentrations of accumulated nutrients from direct dairy shed

75 Personal communication with Mrs Maire Rahapa Rehia Johns (Hummer) about a certain kaitiaki that indicated abundant fish or shellfish supplies. While Aunty Hummer divulged details to this writer and others, she always asked that the kaitiaki not be mentioned by name in the study, as she had always been taught not to divulge too many details about it, especially if the information was to go outside the community.

76 Resource Management Act and relevant sections for Māori including: Part II Section 6(e)- Matters of national importance, Section 7(a)- Kaitiakitanga, Section 8- Treaty of Waitangi, and Part III Section 33- Transfer of powers, to name but a few references of significance to iwi and hapū aspirations.

77 Artist's own naming of 'grass green' in New Zealand dairying regions.

78 Lucas and Associates, 1998, *Kuku-Ōhau Ecological Situation and Opportunities in the Lower River- Preliminary Notes*, 15.

effluent disposal into the channel, pesticides and herbicides from decades of farm runoff at site and from other farms up stream.[79]

Te Hākari: He Whenua Rāhui [The Feast: Land set aside] 2001 was another panorama that framed tribal farmland. It depicted a fragmented, drained dune wetland severed from the contiguous dune wetland or dune lakes system that once stretched up and down the south west coast. The painting outlined the place of kawenata or covenants in ecosystem restoration and the first protected site under rehabilitation at the coast. With a growing group of readied participants, the time had arrived to activate projects and reacquaint people as kaitiaki with place and knowledge of it, so as to protect and manage the tribal area better. At the time of production *Te Hākari: He Whenua Rahui [The Feast: Land set aside]* 2001 overviewed the designated area of potential protection. It drew attention to the possibilities of local government authorities seeking a transfer of powers to hapū,[80] or even co-management opportunities with hapū for such special tracts of land and waterways in severe ecological decline.

The paintings were a complementary research method or personal, creative catalyst for practical action research. The canvas became a base on which to layer information, research and context, visually. Certain knowledge elements were hidden or omitted from the image, to respect what needed to be disseminated about site and what did not. The art works explained a dynamic of physical, cultural and spiritual interaction peoples' had with, and knew about lands and waterways. The use of layers of stippled oil colour, were techniques that allowed subsurface colours seen as grounded precepts in land, to come through. As

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79 In 1998 a final year environmental science student Andrew Tipene, from Massey University issued a water report about the Ōhau River. While his report was a generalised overview of the overall water quality of the Ōhau River, the Di Lucas report would note that the waters of the loop were in dire need of oxygenation. In 2006 two further counteractive options for the Ōhau River 'loop' were outlined by two groups of final year environmental science students from Massey University, Palmerston North. From July 2006 the 'loop' revitalisation project is a major project led by Tahamata Incorporation Board of Management, supported by the environmental committee within Te Iwi o Ngāti Tūkorehe Trust.

80 Resource Management Act 1991, Part III, Section 33

Transfer of Powers

(1) A local authority may transfer any one or more of its functions, powers, or duties under this Act, except its power to transfer, to another public authority in accordance with this section.

(2) For the purposes of this section, "public authority" includes any local authority, iwi authority, board of foreshore and seabed reserve, Government department, statutory authority, and joint committee [set up for the purposes of section 80.]

Figure 2.17 : *Te Hākari: He Whenua Rahui [The Feast: Land set aside]* 2001,
oil on canvas, 2135 mm × 200mm.
Beaglehole Collection, Wellington

each layer of painted information was laid down, the process focused on conveying how Māori symbiotic relationships to the natural environment, might appear.

Another work in the series *Āhuru mōwai* referenced home ties and home spaces within the Tūkorehe meeting house, on Tūkorehe marae. *Āhuru mōwai* referred to the calm, warm sheltered haven where the practice of whakaruru or affording shelter to visitors was located. This painting honoured ancestral space and the potential of active, positive and constructive dialogue about environmental issues, in the company of ancestors whose words of wisdom or intangible experience hung on the walls within the meeting-house.

The *No Queen's Chain* suite became a personalised method of coming to terms with the complexity of Māori resource, cultural heritage and ancestral landscape management. Each painting was a personal project plan for key areas requiring environmental, cultural protection with hands-on support, particularly for the 'loop', Te Hākari dune wetland and wāhi tapu for the region. The obvious landscape works helped lead the thinking by representing protection requirements, realistically. The works launched conversations, enquiries, raised concerns and re-enlivened experiences for people who knew the areas well. The images are visual aids for other authorities to recognise the intricate relationships local Māori have with lands and waterways. In bringing the Treaty of Waitangi into environmental management practices, the basic starting point for any agency was for personnel to learn to recognise, understand and respect the mana and rangatiratanga – the autonomy and customary authority of iwi, hapū and whānau as guaranteed and confirmed under Article II[81] of the Treaty of Waitangi 1840.

81 Article II of Treaty of Waitangi refers to the undisturbed possession over lands and estates or *te tino rangatiratanga o o ratou whenua.*

Ronda Cooper & Rachael Brooking, 2002, "Ways Through Complexities" in Kawharu, (ed.) *Whenua Managing Our Resources,* Reed Publishing Ltd Books: Auckland, 196.

Bringing people and research together

The process of combining well-established oral narratives, whakapapa, dialogue, synthesis of research, reports and assessments, visual artworks, digital documentary images and other relevant information to create local solutions, further enhanced the experience of hapū and iwi participants undertaking the active revitalisation of fragmented ecosystems within cultural landscape. The research methods emphasised the importance of co-created solutions based on co-intelligence strategies, of related peoples' interrelationships and interdependencies to each other that encouraged constructive working relationships. Similarly, if indigenous, symbiotic relationships to the natural and cultural environment were deemed integral to peoples' cultural and spiritual sustainability and well being, local peoples' relationship with their natural environment had to correspondingly improve to heal uneasy relations experienced between people. This form of coming together was essential to achieve the shared, mutual benefits that came from environmental projects not only for the tribally based activities, but for the wider community.

Iwi, hapū and whānau participants focused their efforts for environmental management on the actual, tangible 'hands-on' results. The priorities for them were usually very clear-recreating the environmental basics of healthy waterways, coast and fisheries, forests and birdlife, rongoa as medicinal healing resources, weaving and carving materials and secure wahi tapu. The efforts renewed access to the resources and places but also helped refine the decision-making and planning,[82] for the sake of remaining Māori cultural and natural landscape. In garnering this local support from elders to resource gatherers, farming incorporation representatives, from iwi entities to other interested parties, the action of

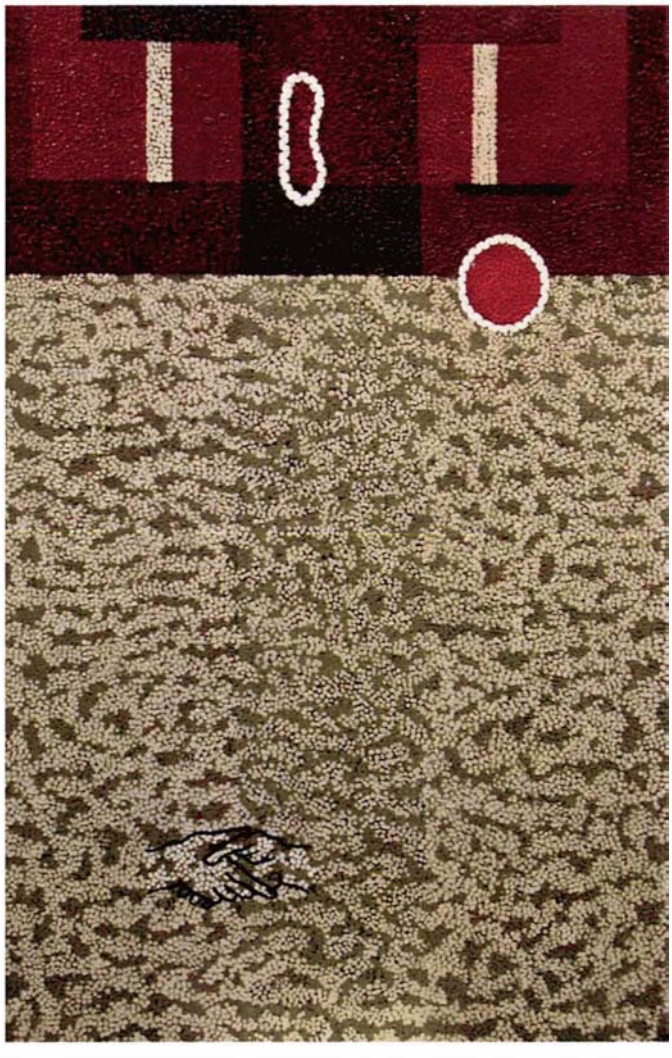

Figure 2.18: *Āhuru Mōwai* 2001, oil on canvas, 910mm × 610mm. Private Collection

82 ibid, 208.

Figures 2.19, 2.20, 2.21, 2.22: He Whakakotahitanga: A coming together at whānau planting days. Top left, September 2003; top right, July 2005, bottom left, September 2005, bottom right, August 2006.

'kuku' strengthened how collective and positive environmental futures for cultural landscape could be determined by hapū and iwi redefining resource management 'laws' for their environmental situations, and for the future well being of a community. 'Kuku' is an active allegory used to strengthen collective and positive environmental futures for cultural landscape. 'Kuku' determined direction taken over land and waterways resources, deemed valued and important.

CHAPTER THREE

Kaupapa Tuatahi Ko Iomatua

Te Oro-Ko-Timatanga te kupu I te Atua te kupu
He atua ano hoki Taua Kupu A Korepawa
Etahi mea i mahue ia ana Te hanga o nga mea kua hanga

I noho a Iomatua kia ia ano i roto i te kore
Ko te Hapu Tuatahi Tena I hangaa e iomatua mo roto
i te whare o Te Atuatanga. Ko nga Manu-Kura

Ko te hapu tuarua i hangaa e Iomatua ki ona
Ringaringa ko nga Mata-Ririki hei whaka puta
I tona Korooria-tanga ki roto i te whare-wānanga
o te Atua-tanga

Kua takoto a Papa-Tu-Anuku Kua tu a Rangi-Nui
Kua puta a raua uri
A Rongo, a Taane a Tangaroa a Haumia a Tawhiri
matea a Tumatauenga me Runuku
i Tukuna e te runanga o te whare atua te mana
me te kaha, Kia Ruunuku hei whakahoki
I te whaka tupuranga a Ranginui ki nga
Rire o te Pouritanga[1]

This chapter analyses aspects of a Māori environmental worldview and the encompassing acts of kaitiakitanga[2] as referenced within a customary context. It offers a view into Māori systems of knowing, such as whakapapa, customary narratives and other cultural templates. Human potential, creativity and of wellbeing are evident in Māori customs, values and attitudes about the natural environment. This chapter overviews some historic or ancestral interactions experienced within the coastal region and cultural landscape that gave rise to contemporary methods of environmental resource restoration and protection.

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1 This frontis page is from the whakapapa book by Tumeke Wehipeihana (1879-1968). The date of the original handwritten book is unknown. The text presented here is as written by the writer's great grandfather. In 1994, Mr Hare Hemi Wehipeihana (1917-2002) the author's great uncle formerly of Levin and pōtiki or youngest child of Tumeke and Ani Wehipeihana (1877-1975), granted permission to copy his father's handwritten book and carefully utilise it as a future reference. He strongly expressed the appropriate care, guardianship and responsibility required for the copy and its contents. Hare Hemi (or Uncle Windy as he was known) was an important whakapapa informant for whānau, hapū and iwi representatives of Tūkorehe.

2 M. Roberts, W. Norman, N. Minhinnick, D. Wihongi, & C. Kirkwood, 1995, 'Kaitiakitanga: Māori perspectives on conservation', *Pacific Conservation Biology*, Vol. 2, 8.

In revealing aspects of interactions with the past, contemporary iwi and hapū participants in ecosystem restoration have negotiated a diverse range of meanings between customary Māori environmental world-views and the reality of environmental decline facing the coastal environment. Fragmented ecosystems and subsequent impacts on the human condition, have led contemporary kaitiaki to ask how intricate relationships to cultural and natural areas could be restored and sustained for hapū, for mana as authority, for maintaining identity and activities in the present, despite the minimalised references within the landscape.

The chapter begins with valued words taken from the preface to a whānau or family whakapapa book that was written from memory for future care and ongoing family reference. It recorded an intricate system of relationships between ancestors, people, environmental properties personified as gods, and spiritual entities. Such valued ancestral expressions embody an ultimate reality for iwi, hapū and whānau Māori, that recount original interactions between Creator, the Universe and humankind.[3]

The opening words are appropriate in offering a customary view on whakapapa as an essential expression of whānaungatanga between a wider cosmology, peoples, environmental properties and land- where all are interrelated. The preface is also appropriate for signifying a familial relationship between a well-respected great-grandfather and his many mokopuna[4]. This writer only ever met her maternal great grandparents, grandfather and step-grandmother once, when visiting New Zealand at the age of two and half. The family had come over to New Zealand from Australia in early 1965 so the writer's mother, Mrs Netta Moreen Smith (nee Holder) could introduce her first three children to her Māori grandparents, Ani and Rameka (Tumeke) Wehipeihana, and her father and stepmother Arthur and Kuini Holder (nee George) of Kuku.

As a descendant of maternal kin who were once Kuku residents, whakapapa connections linked the writer to maternal great-great grandparents, Taharape Wehipeihana[5] and Arihia Whakaheke, and Thomas Fraser Richardson of Bulls and Unaiki Keremihana,[6] a daughter of Keremihana Wairaka.[7] The maternal great-grand parents were Tumeke Wehipeihana who was a third son of Taharape and his wife Arihia, and Ani Richardson, eldest child of Thomas of Bulls and Unaiki of Kuku, Ōtaki and later Ōhakea, near Bulls. The writer's

3 Te Oro-Ko-Timatanga or Te Orokohanga mai o te ao = the beginnings from which the world, gods, spiritual entities, the environment and humankind originate.

4 Great grandchild.

5 Taharape was also known as Matai or Wehipeihana Taharape, a son of Hare Hemi Wehipeihana, who in turn was a son of Rangiwhakaripa, a fighting chief of Ngāti Tūkorehe.

6 Third daughter of Keremihana Wairaka.

7 An ancestor whose ancestral line is linked to Kapumanawawhiti.

maternal grandparents were Parewai Wehipeihana, eldest child of Tumeke and Ani, and her Pākehā husband Arthur Holder from Whanganui. The writer's mother is Netta Holder, the fourth child of Parewai and Arthur. Netta, their third daughter was born in 1929 in the front room of the late 1880s cottage that was built for Heremia Terapata Rangitāwhia.[8] While the writer was not born or raised in the Kuku region, whakapapa connections to the region have been rekindled on behalf of family members living in Australia. From 1993 in listening to, taking whakapapa lessons with key informants or when researching stories of tribal place, there were simultaneous concerns for the state of environmental health and protracted inter-whānau or inter-hapū struggles witnessed between related peoples.[9]

The preface to this chapter also grounds the thesis in a context of extended whānaungatanga or kinship between peoples and tribal areas, with links to other regions including Te Kaokaoroa o Pātatere from where ancestors migrated – a region sheltered by the Kaimai Ranges, south-east of Tauranga, and to other areas around Ngongotaha, Rotorua region. Whakapapa systems bridge what a customary and contemporary Māori continuum might mean, when long-established and known relationships between peoples, entities, lands and the natural environment were the glue that held everything together. The unique whakapapa references outlined in family genealogical records, demonstrated and articulated how direct links between the spiritual entities or powers of the Māori world and human beings[10] are understood and respected.

A Customary Māori Environmental Worldview

A Māori cosmogony views genealogical perspective as emerging from a space and time continuum of profound ontological significance. The Māori nature of reality perceived the universe as process, a postulated world comprising a series of interconnected realms separated by aeons of time, from which eventually emerged the natural world. This cosmic process was unified and bound by spirit.[11] Ancestral Māori seers created a symbolic basis for their cognitive maps and models that portrayed each state or realm. In customary fashion, their sophisticated understandings around being and human existence, saw the

8 Heremia Terapata Rangitāwhia was an esoteric knowledge person and a contemporary of Arapata Te Hiwi. Both were informants about aspects of land and cultural landscape for Leslie Adkin. From 1998 the writer has renovated the cottage and resides there with her partner Mr Richard Anderson.

9 It would be later understood when taking action for ecosystems that the hands-on restoration approach instigated by kaitaiki, enabled related peoples opportunities to reconnect to their sense of place and purpose at Kuku. Hapū and iwi-driven action and research for ecosystem revitalisation drew on expected cohesiveness between peoples as found in whakapapa reference systems. While recognising the complexity of contemporary changes to land bases and uneasy human interpersonal relationships, aspects of customary understanding helped prepare a model that responds to the late twentieth century or twenty-first century consequences of human demands on the global environment. The actualised projects for key coastal ecosystems have aimed to practically improve them within safeguarded, culturally significant regions.

10 The book then references intricate inter-connections between differing waka or canoe traditions, peoples and tribes, provides some historical accounts of the development of the Kingitanga with associated whakapapa links, and records waiata and kōrero tawhito.

11 Rev. Maori Marsden, 1988, *Resource Management Law Reform* Part A: The Natural World and Natural Resources Māori Value Systems and Perspectives. No 29, 9.

universe as unfolding or evolving 'i Te Kore' out of nothingness or potential being, into the night realm 'ki Te Po', and onto the twilight dawn, into the world of light, or day to day existence, 'ki Te Ao Marama'.[12] Profound Māori thought encompasses views of being and not being that dealt directly with the relationships between spirit and matter.[13] The symbols of the sexual act as culminating in the birth of a child emerging out of the world of darkness within the womb, into the light of the natural world or the tree developing from the seed to the fruit, mai i te kākano ki te hua, were activities that represented ultimate potential, creativity and the promise of wellbeing, in a state of perpetual becoming.

Māori customs, values and attitudes are then drawn from these conceptual origins of the universe.[14] Like other tribal versions that recite creation events, the family whakapapa account begins with Io Matua,[15] the parent or origin of all things. Io may be regarded as the originator of knowledge within Te Kore, an ultimate entity responsible for creating the whare wānanga or learning centre for spiritual powers and their activities. Io created a reference system based on potential and a constant becoming that highlighted sacred, philosophical explanations of the nature of the universe. The family whakapapa reference carefully ordered ngā tohu whakamahara ki ngā whakatupuranga tangata,[16] as an arrangement of spiritual and physical transitions from various entities, to those ancestors responsible for translocating from other Pacific island 'homes' such as Hawaiiki or Rangiātea, through time, space and generations to the writer's grandmother,[17] documented in her father's book.

While origin narratives vary between different tribal groups there is a shared common theme that Papatūānuku is the Earth mother and Ranginui is the Sky father, and that they are the parents from whom all gods and Māori descend. As part of this shared belief the separation of earth and sky narrative features, as does the activity of spiritual powers and other supernatural entities. The first parents Ranginui and Papatūānuku emerge from

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12 M. Roberts, W. Norman, N. Minhinnick, D. Wihongi, & C. Kirkwood, 1995, 'Kaitaikitanga: Māori perspectives on conservation', *Pacific Conservation Biology*, Vol. 2, 8.

13 Barbara Sproul, 1979, *Primal Myths: Creating the Worlds*, Harper & Row, Publishers, New York, 337.

14 ibid, 8.

15 This whakapapa version is a particular system that considers Io Matua as the parentless one, but not all whakapapa systems share Io as the originator.

Taken from Charles Te Ahukāramu Royal, 2006, 'Māori creation traditions', *Te Ara - the Encyclopedia of New Zealand* URL http://www.TeAra.govt.nz/NewZealanders/MaoriNewZealanders/MaoriCreationTraditions/en

The whānau whakapapa version reflects tribal differences and the introduced influences of religion and other nineteenth century changes or adaptations to Māori ways of knowing. This whānau preface may also be based on other nineteenth century versions of origin narratives.

Based on Charles Te Ahukāramu Royal, 2004, *Mātauranga Māori and Museum Practice*, Discussion paper prepared for National Services, at the Museum of New Zealand Te Papa Tongarewa, 18.

16 The generational markers list the spiritual transpositions to the first parents, to environmental properties as gods and then onto to the creation of humankind.

17 Parewai Wehipeihana (1900-1948) eldest child of Ani and Tumeke Wehipeihana.

a dynamic or active vehicle of understanding that initiated a model for human existence. The supernatural offspring or environmental properties as atua that issued from Ranginui and Papatūānuku are often listed as Rongomatāne, Tāne-nui-ā-Rangi (Tāne Mahuta), Tangaroa, Haumiatiketike, Tawhirimatea, Tumatauenga and Ruunuku[18] (or Ruaumoko). Each entity is responsible for natural arenas or phenomena. In Māori tradition, these senior atua all have specific roles as kaitiaki or guardians. Tāne was the kaitiaki of the forest; Tangaroa of the sea; Rongo of herbs and root crops; Hine Nui Te Pō of the portals of death,[19] as are the remaining senior atua, attributed to other environmental properties.

As atua created the natural world and humankind, humans are only one aspect of the larger, extended family. Related animals and plants to humankind are considered the senior relations or ancestors in an all-encompassing genealogy.[20] In this way 'ancestors' are not only human ancestors, but are the antecedents of the entire natural world.[21] Such interrelationships agree that all animate and inanimate objects have divine origins where the atua or spiritual entities are noted as the source of all life and existence. Therefore, whakapapa is the system of kinship that illuminates such tangible and intangible relationships between iwi, hapū and whānau, ancestors, lands, waterways and the natural world.[22]

The nature and dimension of whakapapa transmits or expresses the attributes of atua, where their activities are recalled and recited on occasions to reaffirm connections to the environment, ancestors and generations to come.[23] Narratives about atua are also viewed as essential metaphors or compelling stories that guide, lead and influence members of iwi and hapū through life. In this way, atua shaped the natural world and acted in particular ways to secure their position in the world. Their amazing exploits and genealogies are re-expressed through Māori origin stories, customs, practices, visual expression and institutions. They are role models for humankind's behaviour and aspirations. In repeating or retelling the stories, they become creative acts that mimic the original conception of the world.[24] Legendary heroes and heroines acted as exemplars of human potential. The ascent of Tāwhaki or Tāne through the twelve heavens to obtain the baskets of knowledge

18 Ruunuku, the name of the god of earthquakes as recorded in the family whakapapa book.

19 Rev. Māori Marsden & T.A Henare,1992, *A Definitive Introduction to the Holistic Worldview of Māori*, Ministry for the Environment Manatū Mō Te Taiao: Wellington, 9.

20 Todd Taiapa, 2000, *Māori Values and the Wastewater 2006 Project*, Paper prepared for the Palmerston North City Council, 3.

21 Charles Te Ahukaramū Royal, 2004, *Mātauranga Māori and Museum Practice*, Discussion paper prepared for National Services Te Paerangi at the Museum of New Zealand Te Papa Tongarewa, 21.

22 Charles Te Ahukaramū Royal, 1998, Unpublished Chapter 3.0 *Te Ao Marama The Māori World View*, 75.

23 Todd Taiapa, 2000, *Māori Values and the Wastewater 2006 Project*, Paper prepared for the Palmerston North City Council, 3.

24 Charles Te Ahukaramū Royal, 2006, 'Māori creation traditions', *Te Ara - the Encyclopedia of New Zealand* URL http://www.TeAra.govt.nz/NewZealanders/MaoriNewZealanders/MaoriCreationTraditions/en

symbolises an individual striving toward insight and understanding.[25] Maui tikitiki a Taranga and his significant female relations all performed influential feats. Maui acquired fire from his kuia, Mahuika. With the jawbone of his kuia, Muriranga-whenua he fished up Te Ika a Maui (the North Island) and made a patu with which to subdue Ra or the sun. By capturing the sun, entering the underworld, or fishing up an island, Maui and his powerful female relations represent the characters of individuals who can bring about change and development in a community. It was to his ancestress, Hine-nui-te-po that Maui eventually succumbed when he failed in his quest to attain immortality.[26]

Customary Māori society valued knowledge that was generated through integrated ways of knowing. The notion of bio-cultural diversity[27] in landscape recognises inter-linkages between linguistic, cultural and biological diversity. Māori embraced this integrated bio-cultural system as a means of maintaining the mana or authority of peoples to place and enhancing the quality of life within healthy, sustained environments. Bio-cultural knowledge had been apparent throughout human history, especially amongst indigenous, minority, and local societies who maintained close material and spiritual ties with environments. Over generations different indigenous communities around the world accumulated wisdom about their environments and its functions, management, and sustainable use.[28]

Certain knowledge was preserved in various Māori institutions for dissemination at different levels. Higher learning taught iwi and hapū leaders advanced forms of knowledge including tribal whakapapa or genealogy, the arts of warfare and peace, astronomy, navigation, horticulture, and whakairo or carving[29] – all essential knowledge bases for the welfare of people. Within the concept of respect and gender interdependency Māori fostered relationships with natural areas not only for the practical purposes of resource use of the land and sea for daily sustenance, but for deeply spiritual reasons that involved recognition and propitiation of ancestor gods[30] by tohunga on the tūāhu or altars in areas of natural

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25 Annie Mikaere, 1994, *Maori Women: Caught in the Contradictions of a Colonised Reality*,1, URL http://www.waikato.ac.nz/law/wlr/1994/article6-mikaere.html

26 ibid.

27 Tove Skutnall-Kangas, 2000, *Linguistic Genocide in Education- or Worldwide Diversity and Human Rights?* Lawrence Erlbaum Associates Inc: Mahwah, New Jersey, 65.

28 Derived from Terralingua, a non-profit, international organization founded in 1996 by a group of professionals working in the fields of anthropology, linguistics, biodiversity conservation, and human rights who share a fundamental belief that the challenge of protecting, maintaining, and restoring the diversity of life on earth is the challenge of supporting and promoting diversity in nature and culture. URL http://www.terralingua.org

Tove Skutnall-Kangas, 2000, *Linguistic Genocide in Education- or Worldwide Diversity and Human Rights?* Lawrence Erlbaum Associates Inc: Mahwah, New Jersey, 87.

29 Waitangi Tribunal, 'Maori Education in New Zealand: A Historical Overview', *Te Wananga Capital Establishment Report: Full Report*, Waitangi Tribunal: Wellington.
URL http://www.waitangi-tribunal.govt.nz/reports/viewchapter.asp?reportID=39e13093-2f4d-4971-aca0-28e811572755&chapter=4

30 Evelyn Stokes, 2004, 'Contesting Resources Māori, Pākehā, and a Tenurial Revolution', *Environmental Histories of New Zealand* Oxford University Press: Auckland, 35.

vantage and importance. The institution of whare wānanga related to a mental process of learning, where the ritualistic aspects of wānanga were deeply inspired by relationships with the natural world, which seemed to speak directly into human experience.[31] Wānanga education developed mental discipline and adeptness in several different fields of study. People could be educated as tohunga with their specialist knowledge, be trained as the keepers of whakapapa, teachers, manual labourers, conservators, and leaders. Individuals with the appropriate skills would then instruct those chosen for specific roles, where proper maintenance and transmission of knowledge to succeeding generations was vital for survival of iwi and hapū.[32]

Customary Māori society acknowledged a natural order of the universe where everything had intrinsic tapu. Each person within a collective had his or her own intrinsic value. This intrinsic tapu was the potentiality for power that began with their existence or conception. Women and men were bonded to their source of being and therefore their mana.[33] In this way women and men were responsible for maintaining a balance not only in relationships between peoples of the collective, but with the environment and all living things.[34] Sustaining resources depended on them getting optimal balance for survival. Within Māori knowledge systems, male and female principles were essential for procreation, as was their interdependency and complementarity of roles to each other. Interdependency between roles was aptly evident in key Tainui traditions, especially when the waka or Tainui ocean-going vessel finally arrived at Kāwhia harbour.

In the following narrative, the original navigator of the Tainui ocean-going vessel Hoturoa was keen to create a school of learning at Ahurei, Kāwhia Harbour. If his crew were to become tribal leaders in the new settlement then they and their offspring needed to be instructed in culture and priestly skills, which gave them authority over common people. His second concern was undoubtedly the establishment of the seed stocks of kumara, hue and taro, which had been brought from Rangiātea. Palatable and nutritious food meant that they could settle in established communities based on a regular production of staple food. The care and responsibility of gardens rested upon the women of the family. Hoturoa's principal wife Whakaotirangi applied herself to the task of gardening in the new territories even though she was aggrieved that he had taken Marama[35] as a new wife.

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31 Charles Te Ahukāramu Royal, 2004, *Mātauranga Māori and Museum Practice*, Discussion paper prepared for National Services, at the Museum of New Zealand Te Papa Tongarewa, 21.

32 ibid, 21.

33 Michael Shirres, 1997, *Te Tangata: the human person*, K&M Print: Palmerston North, 37.

34 Charles Te Ahukāramu Royal, 2006, 'Māori creation traditions', *Te Ara - the Encyclopedia of New Zealand* URL http://www.TeAra.govt.nz/NewZealanders/MaoriNewZealanders/MaoriCreationTraditions/en

35 Marama was also known as Marama-kiko-hura and Maramahahake, or Marama of the exposed flesh or Marama the naked one. Pei Te Hurinui Jones & Bruce Biggs, 2004, *Nga Iwi o Tainui: the traditional history of the Tainui people*, Auckland University: Auckland, 28-29.

Despite this, she no doubt believed that a more favourable matrimonial and horticultural climate could be found over the hill at Aotea, so she ventured there with her adult sons to establish a garden. When the time came for the crops to be blessed and protected against malign influences Whakaotirangi sent for Hoturoa to perform the pure ceremony. It is said that the success of his wife's industry, which demonstrated that his people would be sustained and prosper, moved him to tears of joy.

According to Pei Te Hurinui Jones' account, Hoturoa wept at the sight of food from Hawaiki. Whakaotirangi then said, 'Recite the pure ritual for my garden so that it will be fruitful. This mound is the tama-tāne and that one is the tama-wahine.' Hoturoa chanted the ritual, the fire was lit, the food cooked, and all was done according to ritual. Hoturoa then returned to Whakaotirangi and lived with her again.[36]

As evident in other origin or cosmological narratives the interdependency of gender roles maintained and sustained the collective, and their activities. The atua Tāne-nui-ā-Rangi [Tāne the greatest son of Rangi] played an important role in separating his parents, the earth and sky. In his personification as Tāne Mahuta [god of the standing forest] he would later lead his brothers on the ultimate search for the female essence or uha, which culminated in the conception of human kind. During his search, Tāne Mahuta made numerous procreative attempts with important supernatural female entities, where their coupling created different trees, insects and birds, but not the appropriate female element for securing humankind. His mother Papatūānuku later instructed him on where to find the human element or kurawaka or the red earth of Papatūānuku, at her puke or mons veneris. She also guided him and his brothers on how to activate the potential of human kind.[37]

In keeping with these customary activities of ultimate potential, creativity and promise of well being to come, the brothers resolved to mould a female form from the red earth. While each brother contributed to the creation process, Tanemahuta breathed life into the inanimate form to create the ira tangata, the first human- a woman called Hineahuone. Tāne Mahuta would later couple with her to produce the first human child, a female known as Hine-ti-tama or the dawn maid. After her birth and as part of a cleansing ritual, the umbilical cord of Hine-ti-tama was severed and buried with her afterbirth in the earth. Appropriate rituals were then enacted that instigated the customary significance

36 ibid, 54.

37 ibid, 2.

The table included as Appendix II, abbreviates some of the metaphorical, procreative activities between Tāne Mahuta, other atua or environmental properties and significant spiritual entities. The 'offspring' would become the forest cover, the insects and bird life diversity. In different tribal belief system there were a range of spiritual and female spiritual entities or certain events responsible for the origins of forest cover, insect and bird life. The table offers a variety of trees, shrubs, ferns and grasses and their related spiritual entities. The trees and shrubs form the first stage of the potential forest being reinstated around Te Hākari dune wetland and other areas within the coastal area at Kuku.

of returning the whenua as placenta and pito or dried umbilical remains to the earth.[38] The whakatauki or proverb he taonga nō te whenua, me hoki anō ki te whenua, as what is given by the land, should return to the land, encapsulates the power of procreation and potential. The proverb explains why land shapes tangata whenua as people of the land. It instils strong obligations in people to sustain resources by getting the balance right for their own survival. This applies to tribal land holdings being left in healthy states for future generations.

Tāne would also have relations with this daughter that resulted in offspring. When Hineahuone realised the nature of their close relationship she withdrew to the underworld and became Hinenuitepō, guardian and protector of the spiritual welfare of the dead.

Layers of association to lands, still revered by the activities of ancestors

The powerful messages and precepts within these narratives were drawn upon to underpin activities for environmental rehabilitation. Within the coastal plain, ecosystem restoration was aligned with sacred landscape still revered by contemporary affiliates because of the rights afforded by conquest, occupation and consequent settlement, other ancestral activities and their encounters of place. Certain areas in the coastal plain were sacred due to the number of historical intertribal conflicts between Ngāti Toarangatira, Ngāti Tūkorehe and affiliates and Ngāti Raukawa against the mana whenua of Muaūpoko and their affiliates. At the times of contest, the original mana whenua to lands and waterways had resided with Rangitāne and to Muaūpoko, whose latter authority extended from Pukerua to Horowhenua.

In around 1819[39] Ngāti Toarangatira began the first steps of their Te Heke Tahutahuahi, the many-staged migration that drew Ngāti Toarangatira with Taranaki tribes, southwards. Battles over coastal land in the Horowhenua region eventuated from the action of Ngāti Toarangatira fighting for several years with inland Waikato tribes for control over Kāwhia harbour, the original landing place for Tainui waka or canoe - a place of natural riches, resources and environs.[40] Several thousand Waikato and Ngāti Maniapoto invaded Kāwhia. After losses at Te Kakara near Lake Taharoa and Waikawau Pā at Tirau Point, and a siege of Te Arawī, a coastal stronghold south of Kāwhia, Ngāti Toarangatira were

38 Based on research conducted by Te Ikanui Kapa and Jeff Fox, Concept Developers for *Blood Earth Fire: Whangai Whenua Ahi Kaa* an exhibition about the transformation to Aotearoa New Zealand at the Museum of New Zealand Te Papa Tongarewa, Wellington. The author was lead curator Māori who produced and commissioned research from Māori scholars for use within the exhibition.

39 Charles Te Ahukāramu Royal, 1994, *Kāti au i konei: He Kohikohinga i ngā Waiata a Ngāti Toarangatira, a Ngāti Raukawa*, Huia Publishers: Wellington, 19.

In 1820 according to A. Parsonson, 1978, *He Whenua Tē Utu*, PhD thesis, University of Canterbury, 158.

40 Mīria Pōmare. 'Ngāti Toarangatira', *Te Ara- the Encyclopedia of New Zealand*, updated 9 June 2006. URL: http://www.TeAra.govt.nz/NewZealanders/MāoriNewZealanders/NgatiToarangatira/en

allowed to withdraw relatively unscathed by their relatives amongst the enemy. With this defeat and pressure to leave the area, the warrior and leader Te Rauparaha persuaded the majority of his people to relocate to the Kapiti and Horowhenua coasts.[41] In those times, ancestors of Ngāti Raukawa and affiliates like Ngāti Tūkorehe and neighbouring Ngāti Wehiwehi came to later occupy and utilise land in extended kin groups of whānau and hapū, under a system of interlocking and overlapping rights of use or usufructuary rights.[42] Their rights were derived from customary rights afforded by the tenure of take tupuna and take raupatu. These rights to lands and resources also related to the concept of ahi kā or ahi kā roa, the principle of keeping the metaphorical home fires burning on land, which symbolised long-standing occupation.[43]

Following the movement of Ngāti Toarangatira, a growing number of other affiliates joined in the heke to the Cook Strait region particularly large-scale translocations of Ngāti Raukawa. One such ally amongst them was Rangiwhakaripa,[44] a Waikato chief of Ngāti Tūkorehe relations who aligned with Te Rauparaha and his movement into the south-western Horowhenua coastal territories of the North Island. In 1822, a particular skirmish one night at Te Wi or Te Poa[45] kainga on the right side of the Ōhau River upstream from the Kuku Stream junction, upset the tenuous agreement brokered between the advancing numbers of Ngāti Toarangatira and associates, and the resident Muaūpoko, Ngāti Apa and Rangitāne affiliates. A bargain had been struck to enable the translocation of peoples through territories unmolested, in order to settle them within the southwest and resource-rich region. When news of the death of Waimai, a high ranking woman of Muaūpoko and Rangitāne at Te Wharangi on the Manawatū River[46] at the hands of Nohorua[47] (Te Rauparaha's half brother) reached Te Wi kainga on the banks of the Ōhau River, her retaliatory murder and consequent consumption undermined the provisional

41 ibid, 158.

42 Evelyn Stokes, 2002, 'Contesting Resources: Māori, Pākehā, and a Tenurial Revolution', in Pawson, E. & Brooking, T (eds.) *Environmental Histories of New Zealand*, Oxford University Press: Melbourne, 35.

43 Waitangi Tribunal, 1993, *The Pouakani Report (Wai 33)*. Brooker & Friend: Wellington.

Sourced from the official website of the Waitangi Tribunal, Department of Justice, Wellington.
URL http://www.waitangi-tribunal.govt.nz/reports/viewchapter.asp?reportID=AD61AFE4-9943-41F1-8872-7435B1AB83B8&chapter=9 (Waitangi Tribunal report, 0113-4124; 6 WTR)

Historical rights of occupation for existing and ongoing land tenure, gave rise to present day responsibilities to maintain tribal lands.

44 Rangiwhakaripa and Miraka Powhirihau were the parents of Pirihira, Hare Hemi and Koronīria.

45 G. Leslie Adkin, 1948, *Horowhenua its Maori place-names & their topographic & historical background*, Department of Internal Affairs: Wellington, 419.

According to Adkin, Te Poa was the son in law of Te Rauparaha, husband to his daughter Te Uira. Te Rauparaha managed to escape his and his close relatives' planned assassination. His family members were not aware of the planned ruse and were killed. Ngāti Tūkorehe referred to the area as Te Poa, rather than its original name Te Wi.

46 ibid, 419.

47 Nohorua was annoyed that people of Rangitāne had stolen three of his canoes.

relationship negotiated between tribes.[48] At this time, Te Rauparaha and his family were staying at his Waikawa pā and were invited to a feast of eels at Te Wi kainga. It was however, an ambush with the intention to kill Te Rauparaha and his family and restore exclusive authority to the region again. He managed to escape death and make it back to his pā at Waikawa. His family were not so fortunate. The ruse resulted in the death of Te Rauparaha's close relations and three of his children. In retaliation over the massacre of his family, Te Rauparaha led severe reprisals, where a year later he exacted vengeance with such ferocity that Muaūpoko tribal strength was greatly impacted upon.

With ensuing generations, demographic and agricultural changes to landscape, some of the river papa kainga were destroyed by flood protection schemes and modification. Other areas with cultural markers remain around the lower Ōhau River area and are still respected. As Rangiwhakaripa of Ngāti Tūkorehe and others alongside Ngāti Toarangatira had led the displacement of original occupants, Muaūpoko holdings in the coastal plain were seen to be extinguished.[49] Therefore, rights to the land, waterways to sea and resource use at the coast were afforded by take raupatu, the right of conquest. The right of take tuku, a form of land allocation in recognition of assistance and support was first suggested by Waitohi, the sister of Te Rauparaha. She requested that more Ngāti Raukawa come and occupy the lands made available by Te Rauparaha's strategies. Te Rauparaha wanted Ngāti Raukawa to occupy the whole country to the south.[50] Much of the area from the Ōhau to Rangitikei was given to Ngāti Raukawa in fulfilment of the suggestion of Waitohi to 'fetch Ngatiraukawa to occupy the land'.[51] Another part of the region was allocated from the south of Ōtaki to Kukutauaki Stream, near Te Horo. As recorded in Native Land Court Minutes, before 1823 the land had belonged to Muaūpoko.

> 'It was afterwards taken by Ngāti Toarangatira. In 1824 the land was divided by them, where south of the Ōtaki River was retained by Te Rauparaha and his teina. The north side of Ōtaki to Waiorongomai was held by Tungia, Te Hua, Tauarehua and his child, Te Hiko o te Rangi. The part to the north of Waiorongomai River

48 ibid, 418-419.
The Estate of W.W.Carkeek, 2004, *The Kapiti Coast: Maori History and Place Names of the Paekakariki-Otaki District*, Reed: Wellington, 27-28.

49 Reuben Waaka, 1998, *Te Runanga o Raukawa Ōtaki-Waikanae Pipeline Project Wellfield Draft Report*, 3 Feb 1998, 2.
Te Rauparaha was principally Ngāti Toarangatira and Ngāti Raukawa.

50 Ōtaki Minute Book, Wednesday 3rd July 1889, No 1 *Sub- Pukehou G continued*, 9 Otaki Minute Book: Ōtaki, 52.

51 ibid, 47.

> onto Waikawa belonged to Te Whetu. From Ōhau to Manawatu this area was held by Te Rauparaha.'[52]

The invitation from Waitohi carried great weight. Te Manahi of Ngāti Huia, one of those who had migrated to the Kapiti coast, was emphatic on this point:

> 'We came at the desire of Waitohi. Had Te Rauparaha called, the people would not have assented. It was at the word of Waitohi.'[53]

Te Manahi also testified that Waitohi was responsible for allocating land to hapū who came south during these years. It is also said that she proposed that the Kukutauaki Stream, between Waikanae and Ōtaki, be the boundary between Te Ati Awa to the south and Ngāti Raukawa to the north.[54] While Te Rauparaha is generally described as welcoming newcomers for their strength and formally allocating territory to them along the coast, questions later arose as to the boundaries established. There were implications for the authority of those who had received the land. Ngāti Toarangatira asserted a general paramouncy in the region as indicated by that grant of territory, but Te Ati Awa, Ngāti Raukawa and affiliates tended to emphasise their independence from Te Rauparaha. They interpreted any allocation of territories as recognising their assistance in the conquest of the region, and for their presence in enabling Ngāti Toarangatira to retain its control over the Cook Strait region. Ngāti Raukawa and affiliates (with whom Te Rauparaha and Te Rangihaeata had close kinship ties) would also stress their independence of action. They argued that the decision to move to the Kapiti Coast was at the behest of Te Rauparaha's sister Waitohi, a woman of great mana within their tribe, rather than of Te Rauparaha himself.[55]

The hapū of Ngāti Tūkorehe occupied designated areas bounded by the Ōhau River and Waikawa River systems and waterways, from the sea to the Tararua ranges. Current understandings maintain that particular tī kouka or cabbage trees were deliberately planted to mark places in the coastal plain where certain warriors fell during those inter-tribal skirmishes and battles. Other anecdotal stories offered that particular tī kouka growing in the lower reaches of the Ōhau River had been transported from Kāwhia Harbour

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52 ibid, 47.

53 Waitohi (?- 1839) was the daughter of Werawera, of Ngāti Toarangatira and his second wife, Parekowhatu (Parekohatu), of Ngāti Raukawa. She was probably born in Waikato but her date of birth is not known. She was the sister of Te Rauparaha and Nohorua. Her husband was Te Ra-ka-herea, and their children included the war leader and carver Te Rangihaeata, and Rangi Topeora, herself a notable leader. Supplementary information derived from Oliver, W. H. & Teremoana Sparks. 'Waitohi ? - 1839'. Dictionary of New Zealand Biography, updated 7 April 2006.
URL: http://www.dnzb.govt.nz/

54 ibid.

55 A. Parsonson, 1978, *He Whenua Te Utu*, PhD thesis, University of Canterbury, 17-18.

deliberately to carefully demarcate areas of restriction or again to indicate where rangatira had fallen in battle. In certain areas, tī kouka held kōiwi or bones, which were therefore extremely tapu and restricted from access. Other fallen were carried further inland and buried in adjacent dune systems. While some tī kouka were planted as boundary markers in the coastal region or as resource trees at papa kainga there were other forms of boundary markings in areas of interrelated peoples. In delineating areas in such ways, ancestors carefully set aside the sacred from the commonplace or the everyday as expressions of respect for the spiritual and cultural within landscape.

Figure 3.1: From the Ōhau River, looking across Tahamata Incorporation.
Photograph by Huhana Smith, September 2005

What became urgent for contemporary acts of guardianship was that knowledge of site had to be shared to limit further loss of connection to place, to reinstate protection mechanisms based on customary precepts and to inhibit any further disrespect of such interrelated areas within Kuku.

Kaitiaki and Kaitiakitanga

The exercise of kaitiakitanga arises from the Māori worldview where concepts concerning long-term occupation, authority and title over lands are regarded as expressions of rangatiratanga and mana whenua. Spiritual beliefs appropriately honour a sense of sacredness, prohibition, and the protection of the energy or life-force within everything. Kaitiakitanga is expressed through everyday environmental activities from the most sacred or tapu aspects of Māori spirituality, to simple acknowledgement of codes of behaviour associated with manaaki, tuku and utu as respect, reciprocity and obligation to the natural world. As noted in Chapter 2, kaitiaki may be human but the term is also used for spiritual beings (including the higher gods) for tribal guardians or spiritual keepers.[56]

A cross-indigenous perspective would view the ultimate source of knowledge as the changing ecosystem itself. As peoples manifested relationships with resources, the environmental knowledge base expanded. Perhaps the closest concept that describes

56 Research by Joan Ropiha (2005) for exhibition *Blood Earth Fire Whangai Whenua Ahi Kaa: Transformations of Aotearoa New Zealand*, a long term exhibition at Museum of New Zealand Te Papa Tongarewa which opened on 29 April 2006.

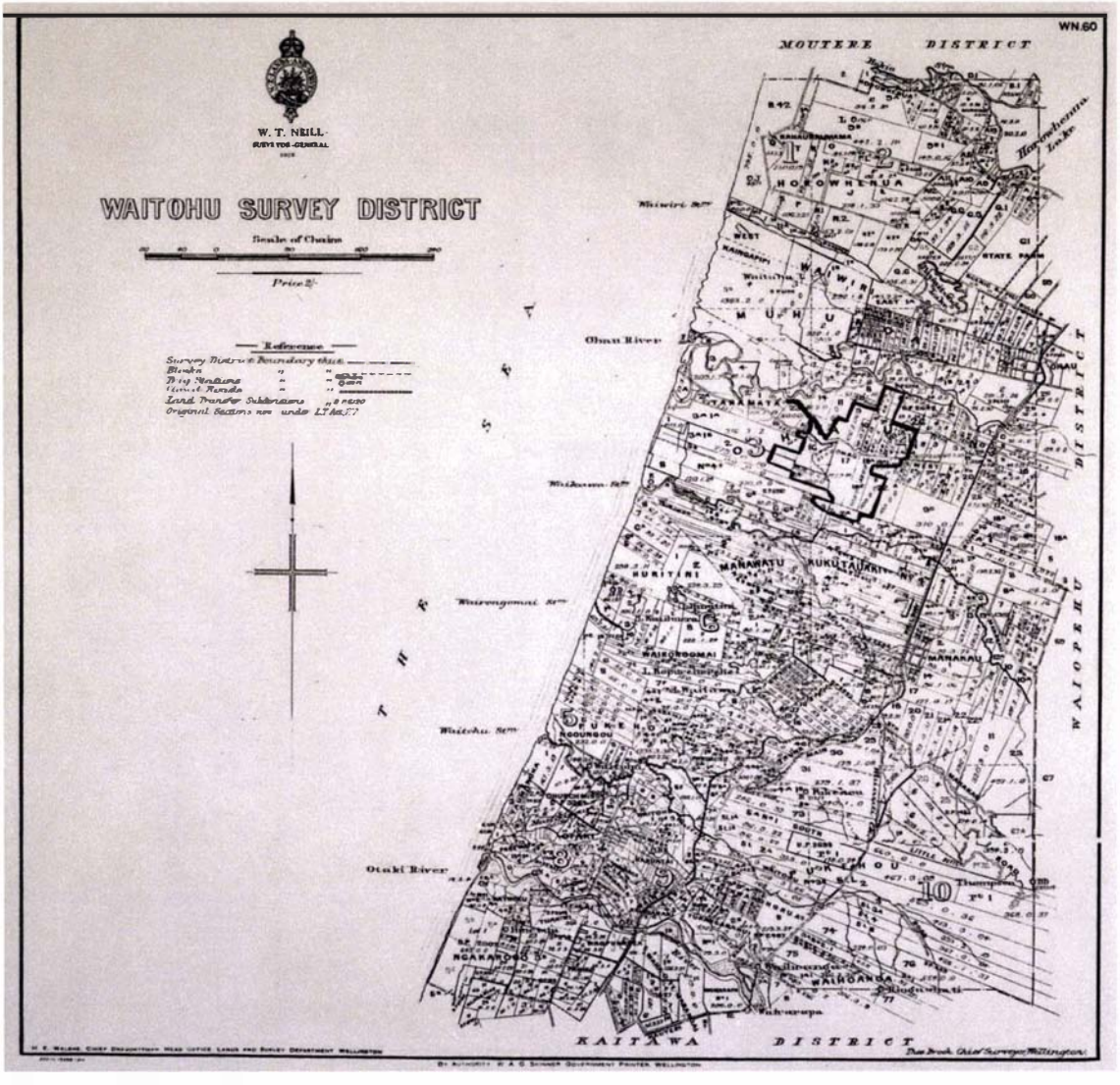

Figure 3.2: Waitohu Survey District, 1925.
Showing cadastral of land blocks and coastal areas of Ōhau River, Tahamata, Waikawa, Huritini, Waiorongomai, Waikawa, Pukehou and Ngoungou to the Waitohu Stream. The Kuku Drainage District activated in 1927 is marked in bold further inland. The area centres on the former Kuku papa kainga site and its confluences of waterways and adjacent springs.
Sourced from Horizons Regional Council Archives, Palmerston North

the unity and interrelationship that exists within indigenous knowledge systems is the knowledge that expressed vibrant relations between people, their ecosystems, and the other living beings and spirits that shared the lands. They remain multi-layered relationships that are relevant to the maintenance of social, economic and diplomatic relationships. In this way too, kaitiaki or taniwha relevant to the Kuku coast, could not be separated from the territories in which they occurred. They required ongoing and utmost respect.

A framework of inclusive environmental values reiterates how whakapapa reference systems denote a shared genealogy between spiritual entities, animals, plants and human kind. This extended to whānaungatanga, the kinship ties between people and entities, and

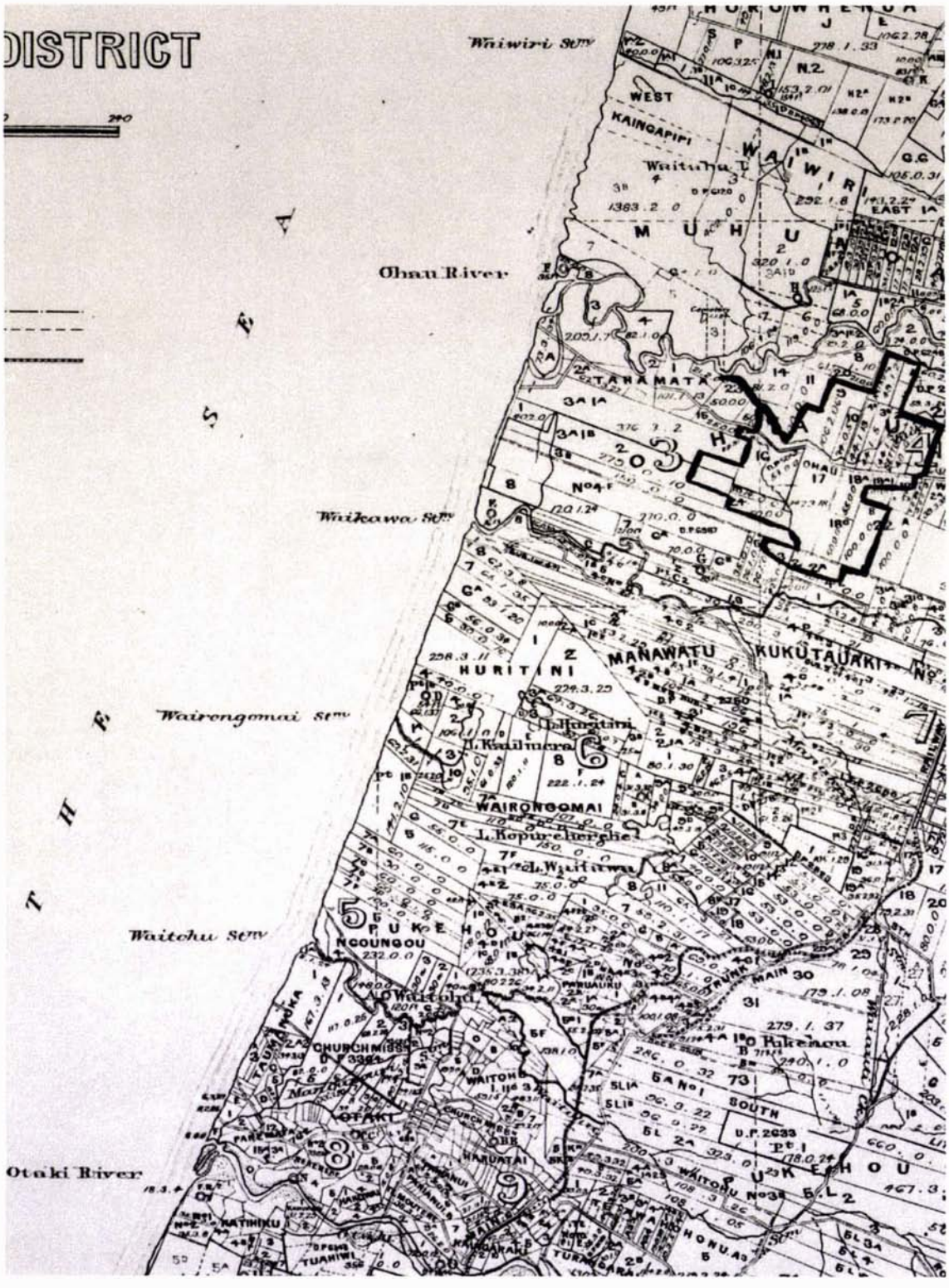

Figure 3.3: Waitohu Survey District, 1925.
Detail of map opposite.

Sourced from Horizons Regional Council Archives, Palmerston North

their sense of belonging and inter-relatedness. Wairuatanga is about the respect given to the spiritual aspects that existed within lands and waterways. Manaakitanga is the environmental value that protects and cares for resources for associated human sustenance and well being. Rangatiratanga recognises how iwi and hapū authority leads the decision making processes over tribal areas. Rangatiratanga is the value closely aligned to mana whenua as authority over lands and mana moana as authority over waterways and sea. Mauri as the ultimate vitality of ecosystems and resources was ascertained by knowing the extent of pollution in an ecosystem, the levels of abundance present and its regenerative capacities. Whakakōtahitanga announces the coming together of people in respect of each other, as relations who recognise everyone's individual differences, and the desires of consensus, unity and solidarity as a collective. As the natural environment and associated knowledge systems had provided for people so well in the past, people expressed the value of tau utuutu or reciprocity, by giving back the land in return.[57] In times before, secure occupation by peoples along the coast came about through collective usufructuary rights. To protect the mauri in landscape, ancestors used certain forms of cultural marker as evidence of their kaitaiki rights in the interrelated regions along the coast. For example historically, resource users erected pou or pou rāhui at different stages to protect their harakeke supplies for flax dressing, often times at areas within the Waitohu areas near Ōtaki.[58]

In the Ōtaki or Foxton Native Land Court, transaction or ancestral accounts over lands and associated resource use rights, chronicled and recorded critical connections to lands and wetlands. Māori introduced the tikanga or custom of rāhui as a prohibition or ban to protect resources from overuse, to conserve and ensure the replenishment of mauri. Certain formalities or protocols, karakia or incantations around the practice of rāhui demarcated areas and protected the resources within them from unsustainable use. Kaitiaki as resource guardians might erect a post as a pou rahui with some fern fronds or a piece of clothing attached to it, to distinguish the site in use.[59] Sometimes, rāhui involved placing a mauri stone or other object in order to aid the pro-life processes of recovery and regeneration by focussing the mauri of particular species within that area.[60] Kaitiaki could also impose a rāhui if a location had become tapu or sacred due to a death or battle on the site.[61]

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57 After Durie, 1996, 'Framework for Understanding Māori Environmental Values', in Harmsworth et al., 2002, 'Māori sustainable development on the 21st century: The importance of Māori values, strategic planning and information systems" *He Puna Korero,* Journal of Māori and Pacific Development, University of Waikato, Hamilton, 3: 2, 40-68.

58 Hare Hemi Wehipeihana (1819-1890) recorded in Ōtaki Minute Book, Monday 22nd July 1889, for *No 229 Sub Claim- Pukehou 4C continued*, 9 Otaki Minute Book: Otaki, 171-173.

59 Elsdon Best, 1898, 'Notes on the Custom of Rāhui. Its Application and Manipulation, As also Its Supposed Powers, Its Rites, Invocations and Superstitions', *Journal of the Polynesian Society* Vol XIII, 83-88.

60 Māori Marsden, 1988, *The Natural World and Natural Resources: Māori Value Systems and Perspectives*, Ministry for the Environment Working Paper, No 29, 27.

61 ibid, 27.

Localised practices of marking boundaries or erecting pou rāhui to sustain mauri and protect resources are described in a region of the south-west coast near the original Te Waitohu pā, at the mouth of the Waitohu stream that lay south of the Waikawa River. Simple wooden posts or pou rāhui were erected around resources like harakeke to indicate to others that the resources within the lakes and wetlands were being used in someway, often in the cutting or preparing of harakeke fibre. In evidence given in a Native Land Court sitting about an area identified within No. 229 Sub Claim. Pukehou- 4C, a dispute arose about access to lands, lakes and use rights to the wetland's harakeke resources. In an excerpt from the protracted case over rights to occupy, use resources, set boundaries and succeed to areas, written evidence indicates how local acts of kaitiakitanga were performed. For example,

> '...Wairaka[62] was the principle one and through him it [the land] descended to Hori... While Wairaka occupied he possessed the land with his son Hori. They belonged to Ngatikapu and te Mateawa. When they first occupied they cultivated at Te Waitohu.[63] After they occupied near Rotokaio flax dressing... I saw a pa rāhui harakeke put up by Wairaka to preserve the flax at Ngoungou. I saw the Kainga haro muka o Hori that Hare Hemi stated was a kainga wakatete.'[64]

While the 1889 Native Land Court Minutes related a more intricate contest over the ownership and use rights of the area in question than analysed here, the minutes revealed a practice of not only erecting pou rāhui for sustaining resources but also for taking stands over access and successive use rights to resource areas. The action of raising pou rāhui connected people to the fundamental foundations of a Māori world view. Erecting pou rāhui re-enacted the separation of earth and sky. In raising the pou rāhui, they brought about Te Ao Mārama or a state of peace. If by deliberately felling a pou, which metaphorically brought the sky to earth again, it signified the plunging of contested situations into the realm of Te Pō or the realm of conflict.[65] In referring to the situation over access to wetland resources as chronicled in Native Land Court Minutes, ongoing arguments and infighting over the issues at hand may have worsened if the contesters had purposely collapsed the erected pou rāhui. Peace reigned when,

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62 Wairaka was directly related to the warrior ancestor Kapumanawawhiti. He was father of Keremihana Wairaka, who in turn was father of Unaiki Keremihana. Hare Hemi was a brother of Kōroniria [Te Whakawhiti or Kōroniria Rangiwhakaripa]. With their sister Pirihira, Hare Hemi and Koroniria, were the children of fighting chief and Te Rauparaha ally, Rangiwhakaripa (also known as Te Rangiwhakaripa) and Miraka Powhirihau. The siblings of Rangiwhakaripa were his sister Waipare and brother, Poutama.

63 An occupation area, near the mouth of the Waitohu stream.

64 A wakatete in this context is possibly a quarrel about land.
Ōtaki Minute Book, *No 229 Sub Claim- Pukehou- 4C,* Native Land Court, 22-23 July 1889, Vol 9, 184.

65 Personal email communication with Dr Charles Te Ahukāramu Royal, March 2007.

'...After stopping at the mouth of Waitohu, Hori came inland and put up a pou near the bridge. When he erected it he hung his hat on it... The flax at Ngoungou[66] was thus preserved even after the pou fell and the [potai] rotted the protection remained undisturbed.'[67]

Settling in and staying

As encapsulated in the initial series of oil paintings that instigated the research interest, Tirotirowhetu was regarded as an area of original occupation. When hapū and iwi occupied lands there and at Ōhau pā on the Ōhau River, their later trading interfaces and transactions with whalers and traders supplemented their food resources from the sea and forest. A range of introduced crops, including 'honey, pumpkins, melons, marrows, cucumbers and other gourds, onions, wheat and maize; they grew choice varieties of fruits, quinces, apples, cherries, grapes and peaches'[68] were evident.

Figure 3.4: In the vicinity of original occupation areas, looking across the Ōhau River. Kapiti Island is visible to the far right of the photograph.

Photograph by Huhana Smith, September 2005

66 Ngoungou was a name given to a plough and a wetland region within the Pukehou block, north of the Waitohu River. The plough had been purchased with the rent paid by a Pākehā farmer who grazed the area with his sheep. See Figure 3.2 Map of Waitohu region.

67 Ōtaki Minute Book, *No 229 Sub Claim- Pukehou- 4C*, Native Land Court, 22-23 July 1889, Vol 9, 184.

On Tuesday 23 July 1889, Enoka Te Whano gave evidence in a Native Land Court sitting about a land area identified by the Court as No. 229 Sub Claim. Pukehou- 4C.

68 John Rodford Wehipeihana, 1964, *Sequent Economies in Kuku: A Study of a Rural Landscape in New Zealand*, Master Thesis in Arts in Geography, Victoria University: Wellington, 19-20 after Thomas Bevan Senior, 1907, *Reminiscences of an Old Colonist*, Ōtaki Mail: Ōtaki, 25.

Figure 3.5: Kuku papa kainga from a distance. From left to right the image encapsulates Kuku Stream flowing towards Ōhau River, the sacred ground, a remaining tī kouka stand, Kidd's family farm house, the bridge over the stream confluence adjacent to a former wetland region located before the sandy ridgeline. Ancestors would likely have clustered around the natural region of natural abundance.

Panoramic photograph by Huhana Smith, 2005

Ōhau pā became an important fortified enclave adjacent to a meander of the Ōhau River. It was situated near the once extensive Te Hākari wetland region. It was a large pā with accessible sea-trading links with whalers, some of who had been stationed at nearby Kapiti Island since the 1820s. In the course of hapū settling into the region from 1823-1825, pigs were bred and tradeable foodstuffs like potatoes were cultivated. As the flow of the Ōhau River formerly shared a common mouth with the Waikawa River, the watercourses were navigable and convenient for sailing vessels.[69] A later burgeoning trade of produce developed up and down the coastline when the New Zealand Company settler ship "Tory" landed the first settlers at the port of Wellington in August 1839. This new settlement would 'create a market for produce of the tribes of the west coast of the North Island, including Ngāti Tūkorehe of Kuku. Local pigs were driven down the coast and sold in Wellington. Itinerant white traders assumed the role of middlemen between the Māori and the colonists. Expeditions sent forth from Wellington to assess such resources of the country as would be useful to colonists, passed through Kuku.'[70]

As introduced in Chapter 2, there were other areas of land use and seasonal occupation.[71] Settler text describes the occupation area inland known as Kuku papa kainga in its pre-1855 earthquake[72] appearance. Whānau researcher Mr John Wehipeihana, a whangai[73] grandson

69 Thomas Bevan Senior, 1907, *Reminiscences of an Old Colonist*, Ōtaki Mail: Ōtaki, 124.

70 John Wehipeihana, 1964, *Sequent Economies in Kuku: a study of a rural landscape in New Zealand*, Unpublished thesis, Masters of Arts in Geography Victoria University, Wellington, 16.

71 This thesis does not mention and locate all occupation areas or list different cultivation areas.

72 The biggest known quake in the region had a magnitude of 8.2 It was the Wairarapa earthquake of 1855. On an international scale, the 1855 earthquake is of major significance in terms of the area affected and the amount of fault movement. About 5000km2 of land was shifted vertically during the quake. The maximum uplift was 6.4 metres near Turakirae Head, east of Wellington while at Kuku, Ōhau it was around 2 metres.

73 Adopted child according to Māori practices.

to Ani and Tumeke Wehipeihana, collated historical accounts of some papa kainga in the region. In the early 1960s he took site visits with his elderly Māori 'grandparents' who verified positions of papa kainga or unfortified settlements that were present near the important confluence of waterways- the Tikorangi rising from the ground as a spring near inland Waikawa River, to join the Waikōkopu Stream that then met the Mangananao. The Kuku stream traversed land to join the Mangananao where the confluence of waters flowed on into the Ōhau River.[74] The substantial orchards and cultivations enriched and supported the area of adjacent settlement, which was once a vast wetland and forested region. The area around Kuku papa kainga would have extended to the coastal dunes, linking the currently fragmented Te Hākari dune wetland.

Ngāti Te Mateawa and Ngāti Kapumanawawhiti were hapū of Ngāti Tūkorehe where their occupation of interrelated areas extended into regions around Waitohu, Waitawa, Pukekaraka, and Mangapouri areas of Ōtaki. When Pukekaraka was occupied as part of the conquering expeditions of Te Rauparaha, other related tribes also settled in the region. Like their relations in adjoining northern coastal regions, the fertile grounds within forest cover were well under cultivation at Pukekaraka from the 1840s. Ngāti Kapumanawawhiti like Ngāti Tūkorehe readily adopted the new economies introduced by Europeans into the area. With rival missions operating in the Ōtaki district, British Anglicans founded their mission in 1839 and the French Catholics in 1844. The Mangapouri stream at the southern edge of Pukekaraka Block 5 became a form of boundary between these Christian spheres of influence. Kuku papa kainga was a later area of occupation, after 1852, for affiliates who settled into the neighbouring coastal areas.

The peoples of Ngāti Tūkorehe offered their allegiances to Christianity, initially through the Anglican church.[75] Koronīria Rangiwhakaripa was the tohunga who presided over the felling of the tōtara trees sourced from lands at Pukeatua, on Ōtararere ridgeline adjacent to the Ōhau River. The logs were floated down the river with his wife Turuhira (according to accounts) assisting the process by urging the flotilla on, riding the logs, bearing a taiaha and performing haka.[76] These customary activities were juxtaposed with the support Ngāti Tūkorehe and Ngāti Wehiwehi accorded to the Anglican mission and church Rangiātea, commissioned by Te Rauparaha, built and completed by 1849 at Ōtaki. The French Catholic missionary, Jean Baptiste Comte (Pa Kometa) arrived in 1844 to promote Christian religious instruction as a guide to material and spiritual change for iwi and hapū. By the time he left the district in 1854, Ngāti Kapumanawawhiti had substantial

74 Unrecorded personal communication with Sean Ogden, 11 October 2005. Information supplemented by Wehipeihana thesis maps (1964: 16a) and Ōhau Manakau Scheme area line map surveyed in 1988. See Figure 2.4 in Chapter 2.

75 Koronīria Rangiwhakaripa is referred to in Native Land Court minutes, No 8 page 10, *Manawatu Kukutauaki 4F,* 27 June 1889, 12. Koronīria would be buried in the Ōhau urupa opposite the Ōhau pā.

76 The Booklet Committee, 1964, *The Centenary of the Rowland Family in New Zealand 1864–1964*, 19.

grain cultivations, a shop, a mill, flax ropewalks, orchards,[77] as well as a merchant schooner for transporting produce to the growing markets in Wellington. The wheat crops grown by a bend in the Ōhau River by Ngāti Tūkorehe and at Waikawa by Ngāti Wehiwehi were transported and milled in the Catholic Pukekaraka mill at Ōtaki.

It was alleged that the massive 1855 earthquake destroyed the grain mill,[78] and that the Ngāti Kapumanawawhiti schooner ran aground on the Ōtaki bar. The commercial ventures of Ngāti Kapumanawawhiti finally petered out when the market conditions for harakeke collapsed. With this downturn their ropewalk mill and shop went out of business. When Comte left the district a somewhat disillusioned Ngāti Kapumanawawhiti abandoned Catholic religious instruction. From the 1860s, Pukekaraka became a stronghold for the Māori King movement, the important political interest group for Māori self-assertion, where 'Kingite flags were flown, armed men drilled and patrolled and large meetings debated options which alarmed Pākehā settlers... Māori too lived in constant tension from the threat of armed intervention by the Government. In the mid sixties other notable politico-religious ideas were introduced by preachers of the Paimarie (Hauhau) faith. Between the attractions of Pai Marire and lack of instruction in Catholicism, the flock built up by Comte had greatly diminished by the time the next resident priest Delphine Moreau S.M, arrived.'[79]

In referring again to the context within kaumātua accounts or the layers of significance and association in landscape, the changeable and disaffected times of the late 1850s to early 1860s *may have* activated the metaphor of 'kuku', the call to hold fast to Māori cultural contexts particularly lands, resources and waterways. According to Matehaere Patuaka, 'kuku' is possibly the term coined for the place where laws were debated with government authorities over how situations might be for local hapū, iwi upon their lands, and their economic endeavours with their natural resources. The possible meeting referred to by Patuaka at the Kuku papa kainga *may* have also been convened to empathise with Ngāti Raukawa relations and for the pressures brought to bear on other affiliates in Waikato, for Te Ati Awa tribes' brewing land war troubles at Waitara or for the escalating fighting of Paimarie faith followers (Hauhau) in Whanganui.

The alleged debate with 'government officials of the day', was also possibly contextual to local hapū and iwi remaining out of the brewing or active conflict experienced in the those regions. With the local economic downturn for Māori enterprises and ongoing ramifications of land struggles experienced in former homelands and in the district, it

77 Notes from St Mary's Church Pukekaraka File no 12004-150 Vol 2, New Zealand Historic Places Trust, Wellington.

78 ibid.

79 Patricia Adams, 1987 'For the Salvation of the Māoris': The Catholic Mission of Pukekaraka, in J. Wilson (ed) *The Past Today, New Zealand Historic Places Trust*, 28-29.

Figure 3.6: *Crossing Kuku,* oil on canvas, 2600mm × 480mm.
Private Collection

appears that local energies concentrated on ensuring a strong, Māori cultural land base whilst supporting the growing political influence of the Kingitanga movement.[80] As recorded in the family whakapapa reference, 'I te tau 1856-7. Ka puta te whakaoati a Ngāti Haua i raro i te mana o Wiremu Tarapipipi te Waharoa ka piri ratou ki raro i te mana o te Kiingi maori, hei [peetu] nga kino i waenganui i tētēhi iwi me tētēhi iwi.'[81]

Despite the pressures of district and other regional land losses[82], the coastal land would still remain predominately in Te Mateawa and Ngāti Te Rangitāwhia guardianship, with Ngāti Tūkorehe located a little further inland until around the 1870s when more complex negotiations for land sale and purchases by others on the northern side of the Ōhau River, began.[83] While the greater details of all land transactions are not chronicled or recorded in this thesis certain dealings began around 1880 when four Europeans entered the Kuku district south of the Ōhau River and acquired areas of leasehold land from Māori. This

80 I te tau 1856-7. Ka puta te whakaoati a Ngāti Haua i raro i te mana o Wiremu Tarapipipi te Waharoa ka piri ratou ki raro i te mana o te Kiingi maori, hei [peetu] nga kino i waenganui i tētēhi iwi me tetehi iwi. A word for word excerpt taken from the whakapapa record of Tumeke Wehipeihana about the role Wiremu Tarapipipi Te Waharoa had in seeking a Māori King, who would attempt to draw tribes together to quell the mounting difficulties erupting between Māori tribes over settler incursions into lands.

81 Tumeke Wehipeihana records the historical role Wiremu Tarapipipi Te Waharoa played in seeking a Māori King, who attempted to draw tribes together to quell the mounting difficulties erupting between Māori tribes over settler incursions into lands.

82 A series of asociated pressures on land in the Horowhenua/Manawatu region included the Awahou Deed of Purchase, 1858, the Manwatu/Horowhenua deed of Purchase 1864, the Muhunoa Deed of Purchase 1864–1874, the Native Lands Act 1865, the actions of the Native Land Court in Ōtaki, and the bisecting of the community with lands acquired by the Main Railway Line 1877–1878.

Information sourced from draft Treaty Claim by Te Iwi o Ngāti Tūkorehe Trust, derived from Professor Alan Ward, 1997, *National Overview Volume III*, Waitangi Tribunal Rangahaua Whānui series, GP Publications: Wellington, 229–231.

83 Certain shares of land were leased and sold to John Kebbel and Braithwaite in 1874. John Kebbel founded Te Rauawa Station on the north side of the Ōhau River, now owned by Tahamata Incorporation.

Information about early shares being leased and sold, taken from 9 Ōtaki Minute Book, 11 July 1889, No. 118 Sub Ohau No 1 Final Apportionment, 100.

occupation and land use was relatively late compared to other parts of the North Island.[84] The lessees cleared sections of Māori land and farmed with sheep and bullocks. From the later railway era of 1883-1892 a series of more intricate lease arrangements of Māori land holdings within the wider coastal area within Kuku, began. The Kuku region would open up to change further, where papa kainga became European styled, Māori built and owned cottages or more substantial villa style houses. They were positioned closer to the main trunk line railway and the developing main, arterial road. These access ways would become the major systems of passage through cleared forest areas, rather than the previous coastal coach route that met the Ōhau Inland Road, now known as Kuku Beach Road.

Natural heritage alterations

The Ōhau coastline falls within the western dune belt, which has remained a dynamic place of regular, sweeping coastal dune accretion and erosion. In earlier times, dune advances north of the Ōhau River overwhelmed coastal forest and areas of human habitation. In respecting the local knowledge and recorded information about place south of the Ōhau River, it has been reiterated that historically there was a distinct environmental worldview based on intricate interrelationships, metaphorically ordered to make sense of peoples' place within a complex world. After settlement Ngāti Tūkorehe would alter the land they settled with clearings in tōtara forests for cultivations of communal sustenance and later tradeable commodities. In the late nineteenth century to early twentieth century, non-Māori communities would begin to more dramatically change the landscape to suit an intensified agricultural means of production and way of life. While both Māori and later communities would come to shape the land they occupied in the coastal plain, the lands they drew sustenance from subsequently shaped their communities. Initially mana whenua or iwi and hapū authority over lands and waterways determined best sustainable use of natural resources. But later sustainable use was determined by economic aspirations

84 The four non-Māori lease holders were T. Hilliard, J. Hurley, J. Hall and a man named Glover.
From John Rodford Wehipeihana, 1964, *Sequent Economies in Kuku: A Study of a Rural Landscape in New Zealand*, Victoria University: Wellington, 23.

of farmers who had acquired land blocks, either by lease or by purchase. In time Māori developmental opportunities too would consolidate Māori owners' shares, for the development of a lucrative dairy farm.

At the time of ancestral occupation in the early 1820s, significant natural forest cover existed. The later forest clearance in the coastal and inland district was swift and relentless[85] shrinking from around 73.8% forest cover to just 1% within 90 years. The forested land was rapidly cleared and converted to pasture. The development of wetlands like Te Hākari dune wetland was more constrained or protected by communal Māori ownership, but it too would fall victim to agricultural concerns by the 1930s.

	1840	1883	1890	1914	1920	1930	1963
Forest	73.8%	66.5%	38.5%	10.0%	1.0%	1.0%	1.0%
Swamp	9.7%	9.3%	9.3%	9.3%	7.0%	2.5%	2.5%
Streams, dunes, sand-flats, fern, native grasses	16.0%	14.2%	12.0%	10.9%	5.9%	4.8%	4.6%
Cleared land	0.5%	10.0%	40.2%	69.8%	86.1%	91.7%	91.9%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		Railway era		Refrigeration era		Dairying era	

Table 3.1
This table indicates the alterations to natural cover with subsequent forest-cover removal and swamp drainage in Kuku from 1840-1963.[86]

According to John Rodford Wehipeihana,

> In 1914, the area in Kuku under bush was only one quarter what it had been in 1890. Trees were felled and burnt and the ashes sown with English varieties of grass e.g. cocksfoot, clover. Swamp drainage, an extensive and expensive undertaking, was not carried out in Kuku in the first part of this period. The fact that the swamp zones

85 After Paula Loader (2003), Unpublished Masters Thesis, Victoria University, Wellington.

86 The table is taken from unpublished Master of Arts in Geography thesis by John Rodford Wehipeihana, 1964, *Sequent Economies in Kuku: A Study of a Rural Landscape in New Zealand,* Victoria University: Wellington, 27.

were owned by a group of impecunious, easy-going Maoris helps to explain this lack of economic development.[87]

Within the decades of intensive clearing of natural forest cover between 1890s and early 1930s, Te Hākari wetland may have been regarded as 'underdeveloped' because its extensive resources were still in use by hapū for housing, weaving, medicinal resources and for sustenance, health and general well-being. 'Impecunious' only related to a 'cash poor' status. The mana or authority of earlier generations and their reality as essentially land retainers defined a form of significant cultural wealth, mana and standing. Of particular interest was the horseracing track that encircled the wetland. The racetrack was a called Te Wiwi, aptly named after the sedge grass that grew in abundance. Mr Rod McDonald dedicated a chapter to racing in *Te Hekenga: early days in Horowhenua*, where he recounted the readily adopted sport of horse racing by local Māori. Ngāti Raukawa, Ngāti Toarangatira and Muaūpoko were all very active participants in racing as owners, riders or gamblers in Ōtaki, Foxton, with the Ōhau track around the wetland well described.[88] These recollections aligned with later reminiscences of Mrs Maire Johns who was taken to race meetings by her father Whareao Seymour[89] as a very small child in the late 1920s to early 1930s. At that time as well, another informant recalled that the most invasive vegetation in the area appeared to be farm escapees from across the river such as gorse, boxthorn and lupin growing amongst the swathes of harakeke, stands of kahikatea, the odd karaka tree and the innumerable tī kouka.[90] Through the later work of the Kuku Drainage Board (1927–1963) for non-Māori lessees, drainage concentrated on controlling inland streams and springs. The drainage board converted to the Manawatu Catchment Board in 1963, and continued to control, modify and channel natural waterways.

The activities of waterway modification

In moving the narrative of land and relationships forward to more contemporary times, the Manawatū Catchment Board planned a project known as the Ōhau River Scheme. The Scheme developed as a series of failed attempts. It was first approved by Cabinet in March 1953, where a proposed subsidy offered two dollars for every dollar of local money. It did not eventuate because the low subsidy rate meant more local financial input from

87 John Rodford Wehipeihana, 1964, *Sequent Economies in Kuku: A Study of a Rural Landscape in New Zealand,* Victoria University: Wellington, 33.

88 Roderick Allan McDonald, 1929, in O'Donnell, E. (ed.) *Te Hekenga: early days in Horowhenua, being the reminiscences of Mr. Rod. McDonald,* G.H. Bennett: Palmerston North, 77.

89 Son of Ngaunuhanga and John Seymour an Irishman. John wanted to take Ngaunuhanga back home to Ireland. She did not want to leave so he vowed he would sort business there and return. Unfortunately he died in Ireland.

90 Personal communication with Mrs Ruhia Martin. According to childhood memories the coastal area was cleared and drained from around the late 1920s to 1930s. She would have been around 5-6 years of age, as her earliest memories of harvesting or fishing excursions were taken with her grandparents. She lived with her grandparents Ani and Tumeke Wehipeihana in the Kuku homestead at this time.

contributors. When presented at the inital meeting, it was rejected by local farmers of the region.

Apprehensions for spiritual and cultural places around the lower reaches of the Ōhau River were possibly seeded between 1965 and 1972 when plans were mooted for the site, and later when stopbanks were constructed along the true left bank of the Ōhau River and Kuku Stream. The construction included motorscaping and shaping former papa kainga sites, or raised occupation areas as hillocks above waterways, into stopbanks.[91] The Ōhau River Scheme was the major water-engineered endeavour aimed at alleviating flooding in the lower reaches of the Ōhau River and its tributaries. It was a flood plain area targeted by government and local council for significant flood protection controls. It was later supported by some Māori landholders, the Ngāti Tūkorehe Tribal Committee, the Tahamata Incorporation (when finalised), local non-Māori farmers as landowners and other non-Māori lessees of Māori land at the coast. A large cut was created on the lower river meander to divert water away from a tortuous loop that encouraged flooding in that region.

Leading ecologist and author Geoff Park would state in a Waitangi Tribunal Report that:

> 'Māori certainly did not confine their interest in swamps to their customary hunting-gathering relationship. They frequently used the Crown's laws, policies and subsidies to drain their swamps and create fertile pasture. Moreover, it was long-standing policy of the Department of Māori Affairs to develop the 'wet areas' on Māori land for farmland. In the 1960s and 1970s, for example, the Ngāti Tūkorehe owners of Tahamata Incorporation in the Horowhenua, comprehensively drained and altered the swamps and waterways in the lower reaches of the Ōhau River in association with the local catchment authorities.'[92]

While there is some truth behind Park's submission, the establishment of Tahamata Incorporation marked a significant transition in local peoples' attitude, thinking and tribal practices, particularly their movement from customary fishing activities, access to the river for floundering, fishing or white baiting within farm leases and shell fish gathering at the river beach or foreshore. The reality behind the submission is more complex and intricate than reported. For decades, long before the development and formation of Tahamata

91 Please see Chapter 4 for more information on previous *pā* sites destroyed by stop banking endeavours.

92 Geoff Park, 2002, 'Swamp ecosystems, swamp drainage, and the development of wetland conservation' in *Effective Exclusion? An exploratory overview of Crown actions and Māori responses concerning the indigenous flora and fauna, 1912–1983*. Waitangi Tribunal Report: Wellington, 85.
URL: http://www.waitangi-tribunal.govt.nz/doclibrary/public/wai262/effective_exclusion/Chapter02.pdf

Figure 3.7: Lower reaches of Ōhau River, 2005.

Aerial photograph by Lawrie Cairns, Palmerston North. Image produced for Ōhau Manakau River Scheme, Horizons Regional Council, 2005

Incorporation there had been a range of land uses at the coast. They varied from non-Māori lessees utilising blocks of Māori land, particularly around and including Te Hākari wetland who carved extensive and deep drains right through wetland to create more arable land around its edges for grazing regimes. As Tahamata was not officially formed until 1974, the coastal flood plain and wetland area had previously been under a number of separate titles with individual or collective Māori owners.

There was a range of intricate and complex land tenure arrangements. In the late 1960s some landholders apportioned and titled their shares through the Māori Land Court, which in the early 1970s were also incorporated to augment the necessary acreage required to develop Tahamata. This also included subsuming the Ōhau pā reservation and its urupā or burial ground, to supplement the amount of acreage required to gain greater support

funding that would launch the farming enterprise. Other Māori-owned areas at the coast were amalgamated into one certificate of title administered by the Ngāti Tūkorehe Tribal Committee.[93] There were long standing, concurrent non-Māori leases of Māori land whereby the lessees would go about seeking renewal from particular kaumātua to continue their farming of the coastal region. Over time there were some land sales to non-Māori farmers; pressure from others to sell Māori land blocks using forms of financial indebtedness built up over time referred to as 'tamana' payments; a subsuming of shares so legitimate descendants were removed from land blocks, to a more comprehensive Māori share consolidation process whereby individual Māori shareholder(s) bought up others' so-called 'uneconomic' Māori shares. The Hon. Douglas Kidd explains 'tamana' payments.

> 'There used to be a system, frowned on latterly of course, and my Treaty work brought me in contact with my first tamana payments – it was a process whereby people who had eyes on Māori land would lend the owners money. They'd come back and they'd get more and they would keep a careful record of it as sort of advance payments on a lease. People would get on the land by some formal leasing arrangement, not approved by the then Native Land Court. People received the money and this tended to generate spending aspirations and a dependency on more money, and then the crunch, the squeeze would come and the land would be transferred. I recall my father, in one of his few non-Christian moments (it may have been just a teeny bit of envy) which is also not Christian, that this is what [a certain farmer] had been up to for years. The land down here is much partitioned – even back then it was and, I think it was more so later – Māori gradually handed over land to [the named farmer].'[94]

The Ōhau River Scheme was reconsidered in August 1965, when a new classification for land rating (that is land receiving benefit from the scheme) was put forward. This too was voted against by local farmers. A petition was organised in late 1966 and a meeting was held in June 1967. The ratepayers voted in favour of the Manawatu Catchement Board preparing a new scheme. It was redesined by engineer Mr Peter Farley who presented it for approval in September 1968. The scheme was again disapproved by local farmers when another farmer across the river had a long argument with the Board's Deputy Chief Enineer, Mr Fancourt. This set the tone for local farmers to disapprove the next proposal. Catchment Board engineers could be quite beligerent about their schemes, which usually created difficulties with resident farmers. In 1971 Mr Edward O'Conner became the engineer for the Ōhau River Scheme. He had considerable experience from his time with

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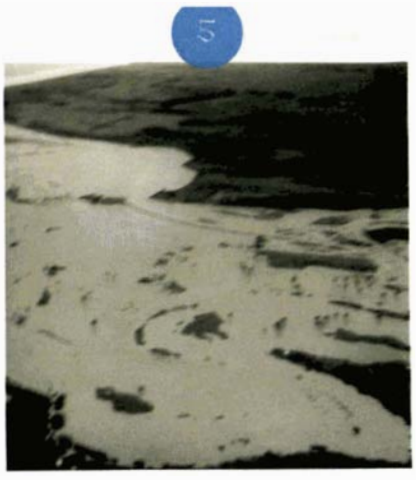
93 Letter to the Secretary of Manawatu Catchment Board, Palmerston North from Edward O'Conner, engineer of the project dated 20th June 1972 concerning *Ohau River Scheme Report on Ngati Tukorehe Tribal Property.*

94 Personal communication with Hon. Douglas Lorimer Kidd, 6 January 2006.



FLOOD AT CONTRACT AREA. [photo taken 11.0a.m 14th May 1972]

AERIAL PHOTOGRAPHS OF FLOOD (photographs taken at 2p.m. 14th May 1972)

1. LOOKING SOUTH AT FLOOD MARK ON NEW BANK. ERODED CHANNEL IN FOREGROUND CAUSED BY FLOOD.

[Photographs 1-14 were taken on the 19th May 1972 after water had receded]

Figure 3.7: Flooding at lower reaches of Ōhau River, 1972.

Photos sourced from File 9/3, Manawatu Catchment Board, Ōhau River Scheme Stage One Contract 115. *Damage to Contract Area Caused by Flood- Sunday 14th May 1972*, File 9/3, Horizons Regional Council Archives, Palmerston North.

the Waikato Valley Authority, and came recommended from various farmers to reconsider the Manawatu Catchment Board's next attempt.

In creating Tahamata Inorporation with financial support (finally gained after some effort) from Māori Affairs, Wellington, Tūkorehe marae would become a large shareholder in the tribal farm and a significant recipient of benefits generated by the tribe's new and subsequently lucrative economic activity. By sanctioning the Scheme in 1972 and establishing the farm in 1974, this Māori-instigated development for better economic futures impacted on other non-Māori farmers maintaining their farming foothold in fertile coastal lands. Despite what is assumed in the Waitangi Report about local Māori allowing farm drainage or diversion work to proceed to establish Tahamata as a major Māori economic entity, the waterway engineering activities went ahead particularly for the interests of other non-Māori farmers at site and up stream. What is important is that not all Māori shareholders or non-Māori farmers on the other side of the river agreed to the river diversion going ahead. For Māori there were concerns for adverse effects in close proximity to sacred grounds and formerly resource rich waterways.

When O'Conner arrived to do the job, he was shocked that many of the calculations and assumptions made within the proposal had involved minimal field investigations. The tidal effects had been so minimalised that a gauge was installed to check tidal movement in the lower reaches. The tides were quite substantial as the river had a very flat gradient in its lower reaches. Shareholders were certainly alarmed at how flooding events impacted so dramatically on the area just after the mechanical alignment and schemes works began the winter of 1972. While the details of how to cut a river and its ramifications are explained further in case studies Chapter 6, the river diversion impacts would eventually subside. Tribal directors developed dairying practice and training, with concerted community effort and management strategies employed to improve farming methods, so much so that Tahamata Corporation became an assured economic success for the tribe.

By 1996 however the remnant river, lagoon or 'loop' was trapped within the grazing land, peppered with intermittent stands of tī kouka [*Cordyline australis*], toetoe [*Cortaderia toetoe/richardii*], wiwi or common rushes [*Juncus gregiflorus*] and macrocarpa shelterbelts along some fence lines. The water in the 'loop' had become so eutrophic or oxygen-depleted that it was said to have caused stock sickness and loss, and was unable to fully support life within it. With a curtailed natural flow in the 'loop' and restricted tidal flushes, the sludge on the riverbed was a concentrated cocktail of dairying effluent, pesticide and herbicide runoff from decades of intensive agricultural activity from previous bale sites, and from

farming, horticultural or gravel mining activities further up river.[95] The combined practices contributed to the Ōhau River remnant's severe decline, ironically restricted by the same economic successes of the farming enterprise for tribal shareholders.[96] The modifications also disconnected the backwater known locally as the 'blind creek', a region renowned for special resources, taniwha or significant spiritual entities. Together the combined engineered 'cut', the stopbanks and constructed culvert prevented tidal river waters flowing back into the 'blind creek' area.

In this once revered area, the major earth works subsequently caused the disappearance of the peraro or fresh water oyster [*Angulus gaimardi*][97] and kōura or freshwater crayfish [*Paranephrops planifrons*]. Fresh water shellfish filter water when feeding, so when the blind creek was disconnected the shellfish could no longer feed on algae present and keep waters clear. There were correlated impacts on the quantities of foreshore tuatua [*Amphidesma subtriangulatum*] and toheroa [*Amphidesma ventricosum* or *Paphies ventricosa*], of kokata/kōkota as river pipis [*Paphies australis*], kākahi or fresh water mussels [*Amphidesma subtriangulatum* or *Paphies subtriangulata*], aua or yellow-eyed mullet [*Aldrichetta forsteri*], kanae or grey mullet [*Mugil cephalus*], patiki known as the black flounder [*Rhombosolea retiaria*], lamprey or silver fish [*Geotria australis*], banded kōkopu [*Galaxias fasciatus*], Giant kōkopu [*Galaxias argentus*], inanga [Galaxias maculatus] in both adult and juvenile, or whitebait forms [*Galaxias fasciatus*], and tuna or eel [*Anguilla dieffenbachia*].

Customary precepts and knowledge of place augment contemporary practices

Customary precepts, historical or ancestral interactions within a revered coastline have been raised in this chapter to tackle the legacy of change, ecosystem decline and disassociation to a knowledge of place. In combination, they offer critical conceptual platforms on which to create contemporary Māori approaches to environmental restoration that emphasise and augment kaitiaki obligations to ancestral landscape. Customary interrelationships

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95 The Lucas Associates report *Kuku-Ōhau Situation & Opportunities in the Lower River: Preliminary Notes* begun in August 1997 and printed in 1998 outlined the problems for the lower reaches of the Ōhau River. While Regional Council put in an improved culvert in 1999, the Council's main concern for the region was flooding so the replacement culvert did not allow for the required flushes of tidal waters into the 'loop' system. The bottom of the river remains lined with toxic sludge which will be difficult to remove as where can it be disposed of safely? Intensive planting of dune stream land vegetation will eventually clear waterways but this will take a very long period of time. The water conditions were still very marginal but the riparian areas were finally fenced off from cows in 2005.

The issues are more immediate and require urgent attention, where significant project planning is required for extensive riparian planting. The tasks for this area were activated on 31 July 2006 with personnel and financial support by Tahamata Corporation, with a major planting of grasses, shrubs and trees.

96 Recent investigation would reveal that the current quality of water in the loop is made up of inorganic nitrogen, dissolved reactive phosphates, suspended solids, dissolved solids and in one particular site near the old bale, ammonium levels that supersede safe health levels.

Derived from notes taken at Group 7B EWB Consultancy Ltd presentation, 'River restoration and dairy farm management at Ōhau Loop', Integrative Studies 2006, Massey University, Palmerston North, 18 October 2006.

97 Since 1999 there have been only very few chance finds of peraro. Since starting the environmental work, Aunty Hummer Johns felt we must be doing something right as she found some in the area around the entrance to the Blind Creek in 2002. We retained the shells as evidence. See image of peraro Figure 2.6, Chapter 2.

between the powers that existed between human beings and their natural realms were called upon to underpin active projects, rehabilitate fragmented ecosystems and ease impacts on the human condition. Ancestors, kaumātua and resource users defined a set of resource management practices and protocols, which encouraged contemporary kaitiaki to collectively 'hold fast' to what remained of Kuku signifiers within remaining natural and cultural landscape. The extent of ecosystem decline in the region required kaitiaki to draw support from an embedded knowledge of place (albeit fragmented) and concentrate on taking action, not unlike how ancestors supported the aspirations of the Kingitanga movement at times of social, cultural, spiritual change, dis-ease and disruption. Any residual local knowledge that kaumātua retained about indigenous biodiversity had to be re-edified to benefit future generations.

In recent years, kaitiaki at Kuku have reinstated relationships to land and waterways as efforts to enhance or revitalise the local natural environment. All rehabilitation progammes have taken place in the context of Māori lives experienced within a contemporary Māori society. Revitalisation programmes for ecosystems have been devised to be meaningful and relevant to the local Māori community responding to severe decline issues facing ancestral lands and waterways. Therefore, certain connections have been drawn between the themes and ideas present in customary knowledge in order to deal directly with the critical issues facing environmental degradation in the Kuku tribal area, and the environmental impacts also experienced within a wider human society.[98] Contemporary kaitiaki have been critically concerned with how once intricate relationships to cultural and natural areas could be restored and sustained for hapū, for their mana as authority, for tribal identity and for activities in the present, especially when only fragmented natural references exist within landscape.

The key themes and ideas gleaned from customary knowledge templates for relevant ecosystem restoration in Kuku emphasised the importance of interrelationships between related peoples and their land bases. Whakapapa reference systems offered the power of cohesiveness as derived from the concept of collective. By re-encouraging interdependencies between related peoples, this also acknowledged how active participants' intrinsic tapu, mana, integrity, authority and expertise was brought to the process of developing and organising projects. Aspirations for ecosystem rehabilitation focused on the positive themes derived from potential, creativity and the promise of greater human and biodiversity wellbeing. These aspirations were consequent upon reinstated forests and healthy wetlands. By combining efforts this also reinstated aspects of natural order to areas and began the process of rebalancing not only relationships between peoples of

98 Charles Te Ahukāramu Royal, 2004, *Mātauranga Māori and Museum Practice*, Discussion paper prepared for National Services Te Paerangi at the Museum of New Zealand Te Papa Tongarewa, 26.

Figure 3.8: In readiness for the Whānau Planting day, 13 August 2006.
Photograph by Huhana Smith, 2006

the collective, but with the environment and all living things. In enlivening ancestral narrative and ancestral experience in landscape, kaitiaki were reminded that they too were layering their contemporary experiences and associations to land and waterways, by taking responsibility to improve environmental conditions for inter-generational futures.

CHAPTER FOUR

> 'Cultural landscapes are places where humans have transformed natural areas or where natural settings have shaped people's way of life. Humans have so influenced nature it is likely there is no 'wild' nature left, as all landscapes have been susceptible to human action, even those where untrained observers might not notice it immediately. In this way all landscapes are cultural landscapes."[1]

In this thesis, cultural landscape[2] also refers to the activities of ancestors and ensuing generations, whose influences and adaptations have shaped lands and waterways over time. The understanding of cultural landscape in Kuku was founded upon lands and waterways remaining in hapū and whānau ownership in the first place, where a range of close relationships and associations accumulated over generations between peoples, land holdings, freshwater, marine and forest resources. In re-contextualizing ancestral narrative, talking about place and re-examining it in a detailed way, the generated dialogue renewed prerequisites to transfer what remained of customary relationships and knowledge about the beach, the former papa kāinga, related wāhi tapu, the Ōhau River 'loop' and Te Hākari dune wetland within the coastal and wider tribal region.[3]

The purpose of this chapter is fourfold. First, it continues the narrative about a tribe's determination to reconnect with the land so as to endorse and maintain cultural and spiritual values. Second it details the significance of cultural markers and the ways in which agricultural practice can enhance- or destroy- those associations. Third it describes in some detail the impact of a scheme intended to reduce flooding and improve productivity. Fourth, the chapter highlights the significance of relationships within a tribal group, between the tribe and other residents, and between past and present landowners and local authorities.

In building context around tribal occupation narratives, respected leaders within the tribe continue to use whakapapa narratives, to emphasise the importance of inter-relationships

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1 Tove Skutnall-Kangas, 2000, *Linguistic Genocide in Education- or Worldwide Diversity and Human Rights?* Lawrence Erlbaum Associates Inc: Mahwah, New Jersey, 94.

2 Cultural landscapes are described in the UNESCO World Heritage Convention as landscapes that represent the combined works of nature and of man. Cultural landscapes embrace a diversity of interactions between human kind and its natural environment. This thesis is interested in the definition of associative cultural landscape, as places with powerful religious, artistic or cultural associations with the natural elements but where cultural evidence may be significant or non-existent.

Gavin McLean, 2002, 'Historic Landscapes- New Kids on the Block?', *PHANZA: E-Journal*. Edited notes from panel discussion at PHANZA 'Historywork' conference in Wellington, 24 November 2002, 2-3.

3 Tove Skutnall-Kangas, 2000, *Linguistic Genocide in Education- or Worldwide Diversity and Human Rights?* Lawrence Erlbaum Associates Inc: Mahwah, New Jersey, 91.

between peoples, lands and their responsibilities to the region. The coast is an associative cultural landscape where powerful relations with the natural elements require contemporary kaitiaki to actively protect what remains of those values and environmental principles therein. Responsibilities to place have stemmed from early nineteenth century inter-iwi contests, established inter-tribal alliances and allegiances; rights afforded by occupation, settlement and cultivation of the region; the interment of ancestors in designated places; the shared collective enterprises and events that cemented ties with other whakapapa-related tribes;[4] and the experiences that accumulated between peoples and spiritual entities in natural areas. As outlined in Chapter 3, kaitaiki were obligated to protect significant ancestral landscape, and to maintain ahi kā for the home community's ongoing wellbeing.

Further pressures and complexities for the coastal region included legislative demands imposed upon an area long regarded as ancestral and under tribal protection. Community anxiety for the coast escalated from the misinformation and confusion created around the Foreshore and Seabed Act 2004. When the *No Queen's Chain* 2001 series of paintings concluded that the supposed rights of access afforded by the Queen's Chain edict of 1843[5] were actually based on ideals of expected public access, such 'rights' then developed into the current but unsubstantiated presumptions of Crown 'ownership' of all coastlines. Early surveyors did not survey out one chain reserves. These Crown officials were often after control of the land for themselves.[6] In investigating the context of place and in talking with elders, it was revealed there were no legal precedents to the Crown's audacious claims that they 'owned' the foreshore or seabed in the first place. Despite the law being based

4 The historical activities of intertribal entrepreneurs included cultivating subsistence gardens and foodstuffs for trading with whalers, and later grain crops for flour mills shared between related tribes.

5 Public access to the coast, lakes, rivers and streams for all citizens of New Zealand has been an ideal feature of New Zealand land law and practice from the earliest colonial times. The ideal was kept alive rather than some of the imperfect attempts made to express it in practice and in law... indeed it may have become larger in life than it did in law. One feature is common to all of the early legislation relating to Crown land after 1843 was that there were no statutory requirements to reserve marginal strips along water boundaries. What followed in the next fifty years was a unique phenomenon in land law. The factual reality is that in the period between 1840-1892, when most of the "good" land was alienated by the Crown, a chain reservation generally in the form of a public road was laid off along the bulk of the coast and major rivers.

B. E Hayes, 2003, *The Law on Public Access Along Water Margins*, Ministry of Agriculture and Fisheries: Wellington,1-2.

6 Personl communication with Mr Edward O'Conner, July 2007.

on government assumptions[7] in the minds of local Māori residents, the Kuku foreshore remains hapū or ancestral property with riparian rights from the estuary into the sea.[8]

Walking through complex landscape

Whānau researcher Mr John Wehipeihana travelled around the region with his Māori grandparents who delighted in pointing out areas of importance to their whangai grandson. Some forty years later other kaumātua conducted walking tours to enrich the potentiality of ecosystem restoration and cultural landscape protection. With Tahamata Incorporation representatives, the new sharemilker and environmentally interested others, kaumātua revealed aspects of their long-lived experience with lands, waterways and related biodiversity. Their knowledge was brought together with the values of ecosystems and wāhi tapu as taonga in urgent need of rehabilitation or protection. They read cultural landscape and offered their interpretations to new listeners. They pointed out cultural markers in ancestral landscape, the particular areas that were deemed valuable to them and the places that expressed tribal identity, history, spiritual associations or land bases of past local hapū authority.

Kaumātua recollections have underpinned strategies for improving wāhi tapu and historical papa kainga site protection. Cultural landscapes in Kuku ranged from dominating expansive landforms such as Ōtararere foot hill on the Poroporo ridgeline beneath the imposing Tararua Ranges, to the waterways and freshwater springs; from the whole Kuku coastal region at sea to the Ōhau river beach, to precisely specified areas such as different papa kainga or burial areas in dune systems. In dealing with localised aspects of history or whakapapa associations the special nature of information transfer remained complex. Substance of site varied according to a range of associations with previous inhabitants. As landscapes embraced layers of associations, this intensified the relationship between

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7 Huhana Smith, 2002, 'No Queen's Chain', Article for Te Marae Atea section, *Mana* magazine, February/March, Issue 44, Auckland. In keeping with iwi and hapū aspirations for the coast, in 2007 the tribe's environmental committee entered into dialogue with entities to extend he kawenata arrangements with the Ministry of Conservation and Nga Whenua Rahui. The committee also sought customary rights and provisions under the Foreshore and Seabed Act 2004.

8 A chorus of kaumātua (videoed at a wānanga on 18 March 2005) collectively echoed each other that the beach at Kuku into the sea, was well regarded as belonging to iwi and hapū of Tūkorehe. As attested by many,
"No-one ever talked about the ownership of the beach, we always knew that the beach belonged to Tūkorehe." Mrs Jane Poetsch.
"There was no inhibition as the beach was always considered our beach for our needs." Mr Ike Miritara (–2006).
"There was no rarurau because everyone knoew the beach was 'owned' by Tūkorehe. It was always our beach." Mrs Ruhia Martin.
"We had to go and look for kai. We stayed the weekend in summer and winter. We collected toheroa and pipi. One thing we did in those days was look for frost fish ... early in the morning." Mr Martin Wehipana.

people and land, which meant that each landscape warranted unique management and protection measures.[9]

Complex cultural landscape extended to the surrounding pasture, cropland and forestry[10] as agroecosystems or modified environments. They too became part of the whole area undergoing rehabilitation. Modified agricultural environments were still connected to residual natural remnants or groundwater dependent ecosystems including Te Hākari wetland.[11] Understanding interconnectedness between the agricultural and natural remnants stemmed from sub-surface water bodies or large underground lakes as artesian waterways or ground water seepages. These subsurface waterways hydrologically linked the former Ōhau River meander system with Te Hākari dune wetland. When flooding from the river was a regular, natural occurrence, floodwaters inundated the wetland and recharged its subsurface aquifers. In severing the meander from the Ōhau River and channelling the surface floodwaters to sea, the engineering works not only adversely affected the remaining 'loop' but also impacted on the long-term health and vitality of Te Hākari dune wetland[12] some distance away. Te Hākari wetland is subject to tidal pressure. The dune wetland is at its best when the Ōhau River migrates up to 3.5 km southwards over a 12–15 year period. It erodes sand dunes and creates a southward pointing sandspit before naturally cutting out at the northern extent of the river. Te Hākari will have its dry periods when the river breaks out to the north. Later, groundwater abstraction for farming around the wetland increased the wetland's vulnerability to groundwater pollution in its recharge areas to the east.

The reinstated Te Hākari Stream flowed west from the wetland through the revegetating indigenous forest around the wetland to the swampy damp hollows within the dune belt adjacent to the Ōhau River beach. The river is better able to tidally affect water levels in the dune wetland since reinstating Te Hākari Stream. Despite the presence of introduced plants like marram grass, pasture grass and pampas, the damp hollow areas have been revitalised with wīwī as common sea rush [*Juncus gregiflorus*], alongside oioi or jointed wire rush [*Leptocarpus similis*], mingimingi [*Coprosma propinqua*], toetoe upoko-tangata, giant umbrella sedge or coastal cutty grass [*Cyperus ustulatus*] and harakeke [*Phormium tenax*]. With the stream flowing again to the Ōhau River the estuarine area is also populated with native covers like Māori or native musk [*Mimulas repens*] and ureure or glasswort

9 Miranda Sims & Michelle Thompon-Fawcett, 2002,'Planning for the Cultural Landscape' in Kawharu, M., 2002 (ed.) *Whenua: Managing our Resources*, Reed: Auckland, 257-258. This is particularly so for Tirotirowhetu and Kuku papa kainga sites. While Tirotirowhetu is 'owned' by sympathetic non-Māori landholders, Kuku papa kainga is split between Tahamata ownership and the recent purchaser- an Ōtaki-based farmer. He purchased the large farm while working for another neighbouring Māori farming incorporation. With increasing pressure for land more lifestyle blocks, possible subdivision could impact on known archaeological regions and spring systems as former food gathering areas.

10 Geoff Park, 2000, *New Zealand as Ecosystems,* Department of Conservation: Wellington, 10.

11 Dr. Olivier Ausseil, 2007, *Te Hākari Wetland Water Quality Investigation*, Horizons Regional Council, Palmerston North, 5.

12 Te Hākari is the product of the very shallow unconfined groundwater some 4–5 metres from land surface. This is explained further into the feedback on data from hydrology research in Chapter 6.

Figure 4.1: Pingao stands, 4 April 2005.
Photograph by Huhana Smith

Figure 4.2: Pingao stand about to fall into Ōhau River, 13 July 2007.
Panoramic photograph by Huhana Smith

Figure 4.3: Marram grass in dynamic Ōhau River dune region, looking across shore pimpernel carpet, estuary backwash towards the Tararua Ranges, 16 April 2005.
Panoramic photograph by Huhana Smith

Figures 4.4, 4.5: Te Hākari Stream, reinstated to the Ōhau River in early 2000, with a view back towards wetland [top] and view towards the river, October 2005.

Panoramic photographs by Huhana Smith

Figure 4.6: Te Hākari Stream running from Te Hākari wetland across dunes to the Ōhau River, December 2003.

Aerial photograph by Lawrie Cairns, Palmerston North

Figure 4.7: Shore pimpernel and glasswort with Kōtuku ngutu papa in Ōhau River estuary 22 September 2005.
Photograph by Huhana Smith,

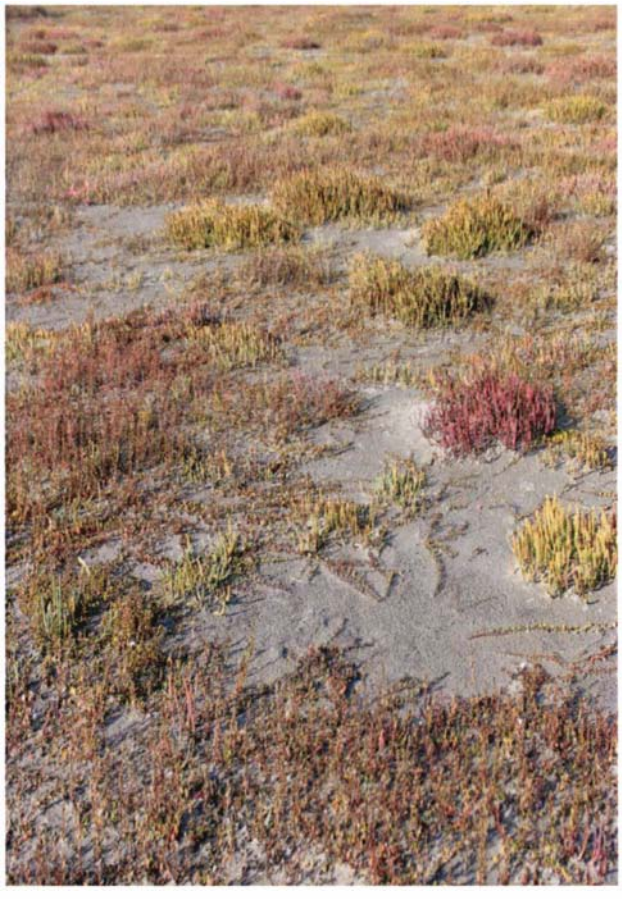

Figure 4.8: Detail of shore pimpernel carpet with ureure or glasswort present, 16 April 2005.
Photograph by Huhana Smith

[*Salicornia quinqueflora*].[13] Carpets of sea primrose or shore pimpernel [*Samolus repens*] hold sand and silt, regularly washed by the tides of the Ōhau River. Beyond the river estuary into the fore dunes, remnant stands of stabilisers like pīngao [*Desmoschoenus spiralis*] and spinifex [*Coprosma acerose*], tauhinu [*Cassinia letophylla*], and shore bindweed [*Calystegia soldanella*] have survived amongst the marram grass. Other plants such as rengarenga as climbing New Zealand spinach [*Tetragonia trgyna*] have helped clothe the littoral dunes. These low dune stabilising plants survive in competition with pervasive marram grass, an introduced plant from Europe. Prevailing north westerly winds trap sand around the base of marram grass, which builds up steep sand dunes that inevitably erode and collapse.[14]

The coastal zones adjacent to modified agricultural landscape and natural remnants are considered part of the wider surface and subsurface landscape that stretches into the sea. Kaitiaki have re-connected with the natural integrity between these zones, in order to re-stimulate the benefits that arise between ecological and agricultural regions. Each practical project builds relationships with the natural and agricultural elements as part of sustainable farming strategies.

Taking action to determine bio-cultural futures

In 1974–75, when the Tūkorehe Tribal Committee repurchased more former land blocks to further develop the profitable dairying farm business, Māori landholders became shareholders, including Tūkorehe marae- a major supporter and recipient of financial benefits from the production of milk solids. Tahamata Incorporation was a unique and positive development where the whānau and hapū instigators retained tribal coastal lands in Māori shareholdings, a situation that would prove to be a latter day saviour for Ngāti Tūkorehe tribal holdings at the coast.

At the time when the farm became a successful and profitable entity, the sensibilities of Māori marae protocol were still observed at the pā. When a significant numbers of elders passed away there was a growing shortage of proficient Māori language speakers left to support the tribe with linguistically authoritative kaikaranga and kaikōrero.[15] The

13 Frances C. Duguid, 1990, 'Botany of northern Horowhenua lowlands, North Island, New Zealand', *New Zealand Journal of Botany*, Vol 28, 384.

14 Marram grass [*Ammophila arenaria*] is an exotic sand-binder and dune builder and can be found on virtually every beach in New Zealand. It is a silvery green coloured perennial grass, native to the coast of Europe and has been widely introduced around the world as a dune stabiliser. Marram grass has impacted upon groundcovers or other sand binders like pingao and spinifex. These plants maintained a flatter profile where dune systems were less susceptible to dune build up, collapse and erosion. See Appendix III for list of native plants associated with dune wetland systems.

15 The karanga or female call is the first voice heard at a marae encounter between tangata kainga as hosts, and manuhiri as visitors. The first relationship of encounter upon the marae ātea is followed by the engagement of male speakers as kaikōrero. Through their forms of oratory they negotiate relationships between the home crowd and visitors by relating genealogies of peoples and places that emphasise points in common. The whaikōrero may also debate issues upon the marae ātea as a domain of space between peoples. The marae ātea is the domain set aside for this form of encounter. When well executed the first call sets the scene for the oratory to follow. Both are highly respected art forms.

regional initiative of Whakatipuranga Rua Mano or Generation 2000[16] within the Te Āti Awa, Ngāti Raukawa and Ngāti Toarangatira (ART confederation) acknowledged the deficits that existed in the confederation's language proficiencies. Tūkorehe marae became another key location for Māori language and learning programmes that were set in unique and local paradigms. This distinct approach to iwi and hapū development began when Tūkorehe marae facilitated student access to education, rejuvenated the marae by redefining it as an educational centre, and revitalised knowledge and concepts related to it. This included rearticulating management arrangements, whakapapa, knowledge and other matters.[17]

Between 1985-1988 other more localised approaches to tribal determination arose when Te Iwi o Ngāti Tūkorehe Trust was established, with support and sanction from kin from the original Te Kaokaoroa o Pātetere[18] homelands especially around Tapapa, Tīrau and Putāruru, areas and townships northeast from northern Taupō towards the Kaimai Range. The newly formed Trust asserted an iwi identity that acknowledged Ngāti Tūkorehe as more than an affiliate of Ngāti Raukawa, who had long been regarded as the main political, social or cultural authority for interrelated hapū development. While the two tribes had always been allied, neither were directly descended from the other, which was the criteria for being a hapū of an iwi or tribe. Intermarriage throughout their subsequent histories sealed their kinship and alliances. Ngāti Tūkorehe always supported their relations.[19] From the historical alliances to occupy and settle allocated areas through to supporting the historical regional discussions that developed the Kingitanga, Ngāti Tūkorehe have long engaged with and supported Ngāti Raukawa business for the region stretching from Kukutauaki Stream to Rangatīkei River, Manawatū.[20]

During the 1990's the burgeoning Trust would grow to lead, administer and support training developments in language and custom revitalisation, especially through the Patumakuku training establishment in Levin and the marae-based studies programme at Tūkorehe pā. There were ongoing whakapapa and tikanga Māori wānanga with elders. Waiata tawhito sessions reclaimed the substance of them, sustained and transferred their historic accounts,

16 From the vision of Whakatupuranga Rua Mano.
Waitangi Tribunal Report, 1999, *The Wānanga Capital Establishment Report*, Wai 718 GP Publications: Wellington, New Zealand. URL http://www.waitangi-tribunal.govt.nz/reports/viewchapter.asp?reportID=39E13093-2F4D-4971-ACA0-28E811572755&chapter=5

17 ibid.

18 The mountain ranges stretching north of Lake Taupō towards the Kaimai Range, west of Tauranga.

19 Queenie Rikihana Hyland quoting Mr Matehaere Patuaka and Mr Sean Ogden in an article "Tukorehe looking to set up own trust", in *The Chronicle*, Levin, Wednesday August 17, 1988.

20 Kukutauaki Stream to Rangatikei River marks the boundaries for Ngāti Raukawa ki te Tonga. The area stretches from the southern boundary at Te Horo, to the Rangtikei River in the north.

their customary inner ancestral depth, and the meanings within them[21] to new generations. Younger generations held hui rumaki or Māori only language gatherings at the pā to reclaim te reo Māori in unique ways. These ranged from composing contemporary waiata based on customary precepts and tribal narratives, to performing them regularly, both as a source of income and recreation. As vital advocates for language retention, they transferred tribal context to new generations in the wider intertribal region. In concentrating on improving developments for Ngāti Tūkorehe, advocates actively supported the important principles of honouring and valuing the Māori language as taonga; where people were the greatest resource and asset to a tribe; where the marae was the principal home of iwi; and that the principle of rangatiratanga or leadership determined tribal futures.[22] As iwi and hapū were responsible for governing themselves and for improving their lives, Ngāti Tūkorehe took control to arrest decline in language use, enliven local tribal knowledge, and intertribal associations between people.

Following this language retention model a stronger and broader environmental ethos and awareness developed from 1995 to tackle ecological decline at the coast[23] and within other areas in the tribal region. By this time, many people agreed that something had to be done about environmental degradation, the loss of resource abundance, and the impacts upon wāhi tapu and former occupation areas at the coast. With fewer people interacting with resources on a subsistence basis, the learning that accompanied food-gathering or sustainable resource practices was not always passed on correctly. There was continuing harvest for the marae with watercress [*Nasturtium microphyllum / officinale*],[24] pūhā or sow thistle [*Sonchus oleraceus*] and shellfish for special occasions. However the practices of feeding a whole community by coming together at haulings for coastal fish were very intermittent.[25] Even those who fished for the marae in the Ōhau River noted the changes in resource, its quality and relative abundance. While it was well expected that Tahamata Incorporation emphasise economic imperatives based on its core business, dairying, certain

21 Charles Te Ahukāramu Royal, 1994, *Kāti au i konei: He Kohikohinga i ngā Waiata a Ngāti Toarangatira, a Ngāti Raukawa*, Huia Publishers: Wellington, 19.

22 From the vision of Whakatupuranga Rua Mano.

Waitangi Tribunal Report, 1999, *The Wananga Capital Establishment Report*, Wai 718 GP Publications: Wellington, New Zealand URL http://www.waitangi-tribunal.govt.nz/reports/viewchapter.asp?reportID=39E13093-2F4D-4971-ACA0-28E811572755&chapter=5

23 This did not mean that there had been no previous challenges to environmental issues in the area. To highlight a few, there was great concern over the impacts of the 'cut' to the Ōhau River; great opposition to the Wellington Dairy Farmers' Cooperative polluting the Kuku stream with whey waste or the cleaning chemicals for milk vats, which destroyed eel and freshwater crayfish stocks; concerns over pig effluent storage and leachate to groundwater at the same former Cooperative piggery; the impacts of mining gravel from the Ōhau River and the ongoing whānau and iwi concerns over the lack of resource consent and monitoring for the expanding quarry operation at Ōtararere, the foothill behind the meeting house.

24 Watercress was introduced by the French to New Zealand.

25 Changes to a community's fishing practice were certainly brought about by the impacts of generalised overfishing and the development of quota management systems to sustain national fish stocks around New Zealand. When courses on customary fishing revitalised the practice of fishing hauls, the practice was reclaimed under strict fishing licence, with the only local Māori licensed fisherman based in Foxton conducting the classes.

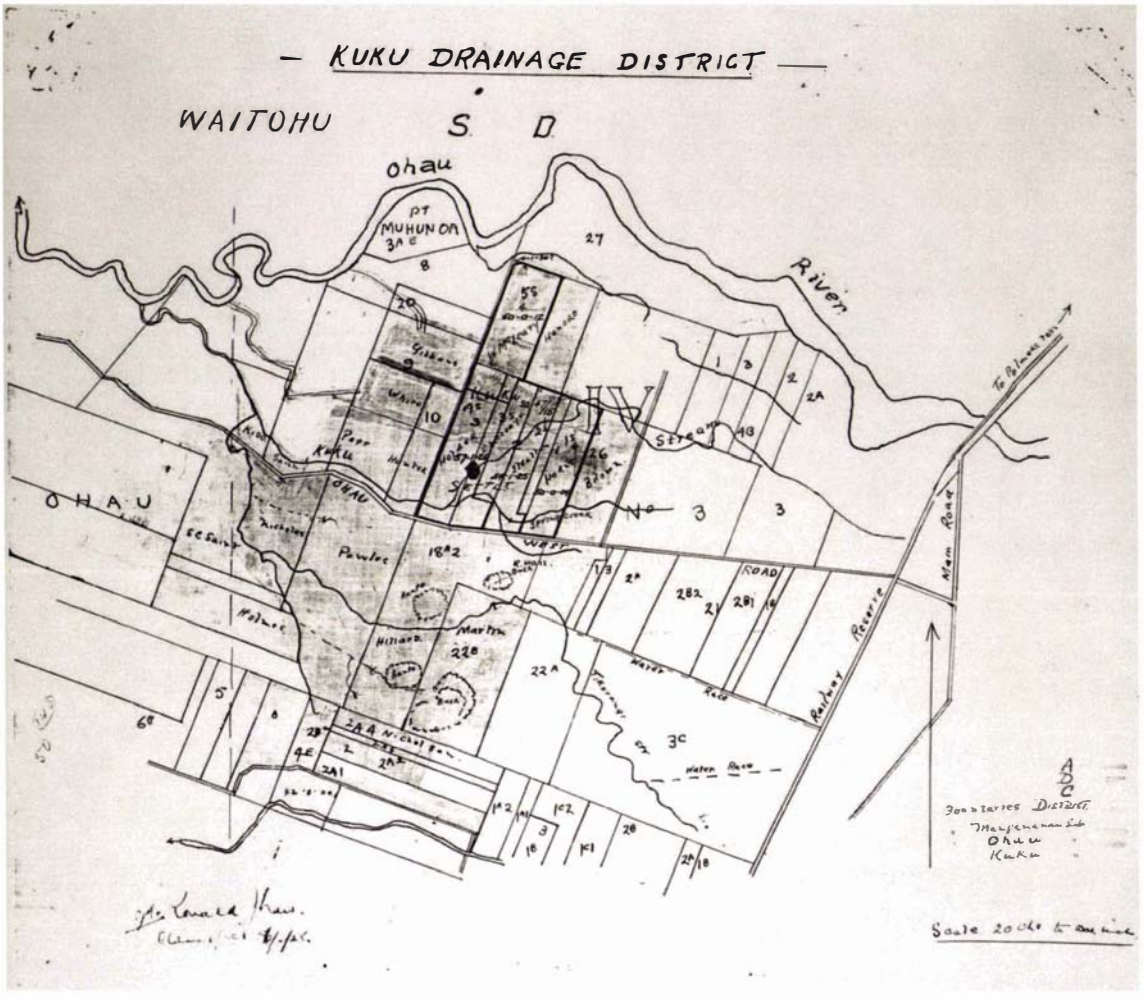

Figure 4.9: Kuku Drainage District showing different farms settled from 1913-1920.
(The thesis does not cover all the intricacies of land sales and subdivisions in the region.)
Horizon.mw Regional Council Archives, Palmerston North

other forestry ventures or farming activities were permitted on urupā, which perhaps belied the cultural integrity of the important ancestors interred there. Simultaneously, the ongoing ramifications of the Ōhau River cut so devastated the natural values of the meander, that a former local farmer depsite wanting the scheme, commented, "when they put the [cut] in they ruined it... It was a lovely spot, peaceful- nobody ever worried us."[26]

Braiding narratives to connect peoples

The concept of braided cultural landscape raised in this chapter refers to the notion of knowing place and peoples' place within it, as informed by both Māori and non-Māori recollections of encounter and change within lands and peoples. The braided approach recognises other groups' inter-generational use of land as resident farmers. Their accounts revealed how local Māori informed them of important areas within their farms. Historical

26 Neil and Margaret Candy reminisced on the state of the natural Ōhau River environment. In their day and in Candy's parents time, the Ōhau River meander was a favoured place for fishing and relaxing there. They described how the 'cut' made to the meander, just before they left the Kuku coastal region, impacted on its unique natural qualities. The meander was partly within the area that the extended Candy family had leased, owned and farmed from 1934-1975.

photographs also surfaced to support iwi interpretations of ancestral landscape. The photographs were forms of recovered knowledge or visual record. The images championed the intentions of environmental kaitiaki to protect and enhance what remained of cultural value in sites, despite obvious destruction or modification. The photos documented what no longer existed in landscape.

The braided cultural landscape concept augments ancestral landscape ideals, which aims to recover wider understandings about once significant areas, lands and waterways, albeit modified, changed and damaged by agriculture. In braiding Māori and non-Māori interactions with lands and waterways, the concept acknowledges interconnected tracks or channels of knowledge, where local Māori informed long-settled farming families about the cultural areas within the modified landholdings, whether wāhi tapu, archaeological areas or original mahinga kai at former pā sites or papa kainga, puna wai or spring system confluences.[27] The braided cultural landscape concept accepts knowledge as movements of understanding and agency between Māori and non-Māori occupants of the region. It characterises a knowledge environment that considered place, research and dissemination about it as holistic rather than sequential.[28] While non-Māori informants revealed the extent and impact of change in the region, they, in turn, highlighted ways to enhance regions from the lower reaches of the Ōhau River to sea that encompassed Te Hākari dune wetland to the Mangananao stream confluence.

From 1912 to 1997 and from 1934 to 1975 respectively, two non-Māori farming families began interacting with land or waterways within coastal and inland Kuku. During the early years of their tenure local Māori helped them deal with cultural or spiritual areas within their farm landscapes. These particular farming families managed to retain a level of understanding about the importance of Māori place as proof that they could respect Māori land-based cultural significance. Their recollections indicated how they coped with wāhi tapu as sacred grounds, puna wai or spring systems or original pā sites or papa kainga within their farm landscape. They recounted how apprehensive they felt about what resident Māori might do, if as local farmers they transgressed the significance of areas in any inappropriate way. In 1972, the experiences of the water engineer who designed and executed the 'loop' diversion in the Ōhau River, also encountered local Māori concerns for the changes wrought to a once resource rich and special area. He showed a level of empathy for Māori interpretations of relationship to ancestral lands, water, sites and wāhi tapu, despite changes and unsustainable farm practices that would exacerbate ecosystem decline in the long term.

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27 Sacred grounds, archaeological areas or original food gathering areas at former palisaded occupation area sites or occupation areas, spring systems and stream confluences.

28 Ian Wedde, 2005, *Making Ends Meet Essays and Talks 1992–2004*, Victoria University Press: Wellington, 283–284.

The Kidd Family Farm 1912-1998

The retired politician Hon Douglas Lorimer Kidd DCNZM[29] was raised in Kuku. He often referred to the region as his tūrangawaewae. Kidd offered a comprehensive overview of his family's relationship to their farmed area that included the former Kuku papa kainga and urupā, archaeological areas, puna wai or fresh water springs, a remnant kahikatea or white pine [*Darcrycarpus dacrydioides*] forest and the richly resourced confluence of the Kuku, Tikorangi and Mangananao streams. According to Kidd family research the first title issued for Kuku papa kainga took place under the Land Transfer Act 1900 with an order of the Native Land Court, No. 1796 on 1 February 1907. The land passed from the individualised Māori owner to his executors who were successors to the land.[30] They sold it to Charles Bell of Ōtaki where it was registered on 1 February 1907. It would appear that the land moved from Charles Bell onto other land speculators John Sidney Smith, Arthur Samuel Ballinger William Wilson Smith and Leonard Sanderson Smith. They sold one hundred acres to Edward Hope Kidd for £4,450 on 5th November 1912. Edward Hope Kidd bought those acres as sections of subdivisions Nos. 13 and 23 Ōhau No. 3 Block which included an Urupā Reserve.

> "Now, the interesting thing about those two titles is that the title plan on one of them shows the Urupā Reserve - that title is 159/148. The urupā is right up on the road west beyond the stream and house, then two acres where it climbs up the sand hill, and goes over towards the Kuku Stream, some 300 metres downstream from its junction with the Mangananao, a word roughly translated to represent the notion of being able to get fish with your hands. It suggests something about a swampy environment and an abundance of life in the stream and the waters."[31]

In readiness for the sale of the Kidd farm in 1998[32] the urupā area was resurveyed as part of the new subdivision of the farm that was divided between Tahamata Incorporation,

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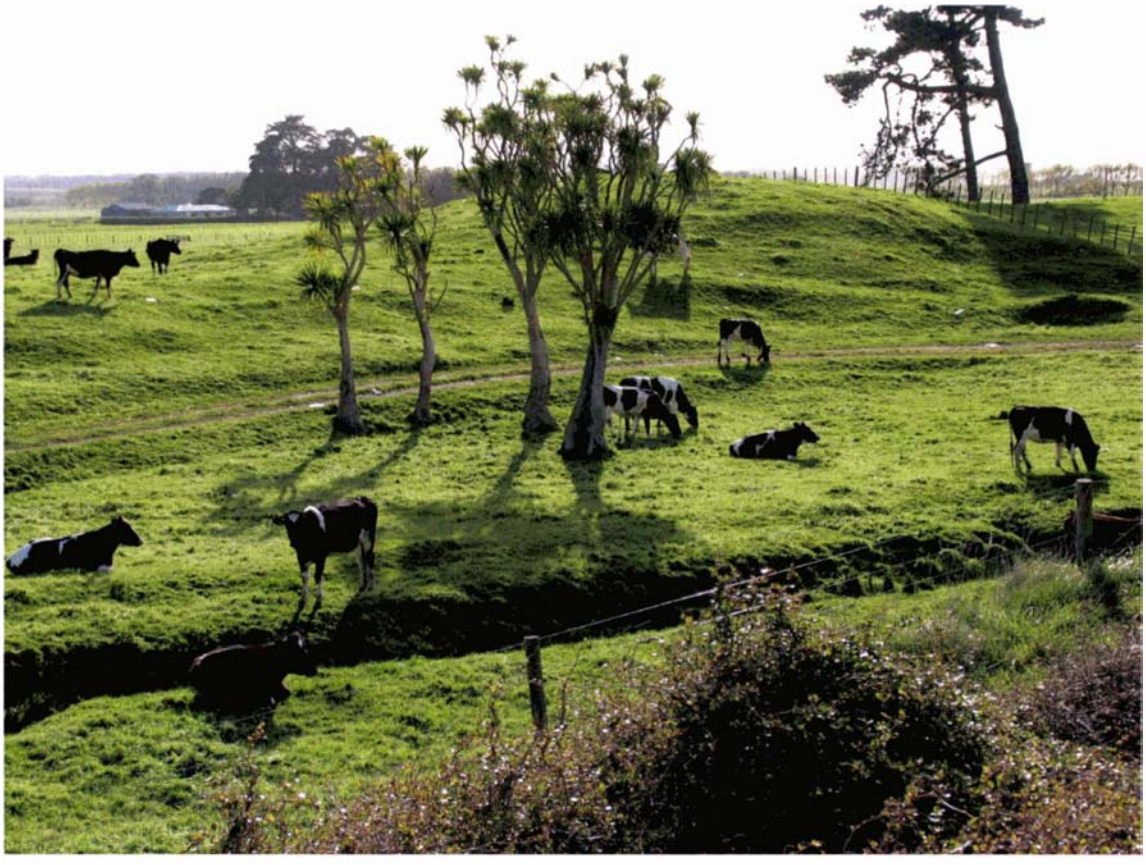
29 Hon. Douglas Lorimer Kidd was named after his father Lorimer Edward Revington Kidd (1911-1956). Doug Kidd was born at Omara Hospital in Levin on 12 September 1941. His grandfather was Edward Hope Kidd born at Hope, Nelson in 1877 and who died in Hastings in 1956. His great grandfather was Robert Kidd who was born in Edinburgh, Scotland in March 1834 arrived at Wellington on the ship Ann Wilson on 29 March 1857. Some 121 days out from London he married Sarah Ann Haycock at Richmond Brook in Awatere, Marlborough on 22 July 1863, she being the daughter of John from the North Wales / Shropshire border and Elizabeth Haycock nee Burls, from Ingrave, Essex. They arrived at Nelson on the ship Thomas Harrison on 25 October 1842, five months to the day out of Gravesend, London. As Doug Kidd related, "the Haycocks were accompanied by John's brother James and his wife, one of whose descendants, and therefore my whānauanga, is Sir Tipene O'Reagan- with whom I negotiated the Sealord deal in 1992, more formally called the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992."

Personal communication with Hon. Douglas Lorimer Kidd, 6 January 2006.

30 This thesis omits the name of the former Māori 'owner' on the original title and the Māori executors who later sold the land to Charles Bell. The information about names requires more verification. There are often many name versions for the same person. The writer does not assume an authoritative whakapapa position on behalf of the tribe. The writer purports that the interpretation put forward is that of research conducted by Hon. Douglas Kidd.

31 Personal communication with Hon. Douglas Lorimer Kidd, 6 January 2006.

32 Doug Kidd and his sister Pam reluctantly agreed to sell the farm, due to their brother Gavin's terminal illness and inability to farm and therefore retain the acreage.



Figures 4.10 and 4.11: Area of significance at Kuku papa kainga site, September 2005.
Photography by Huhana Smith

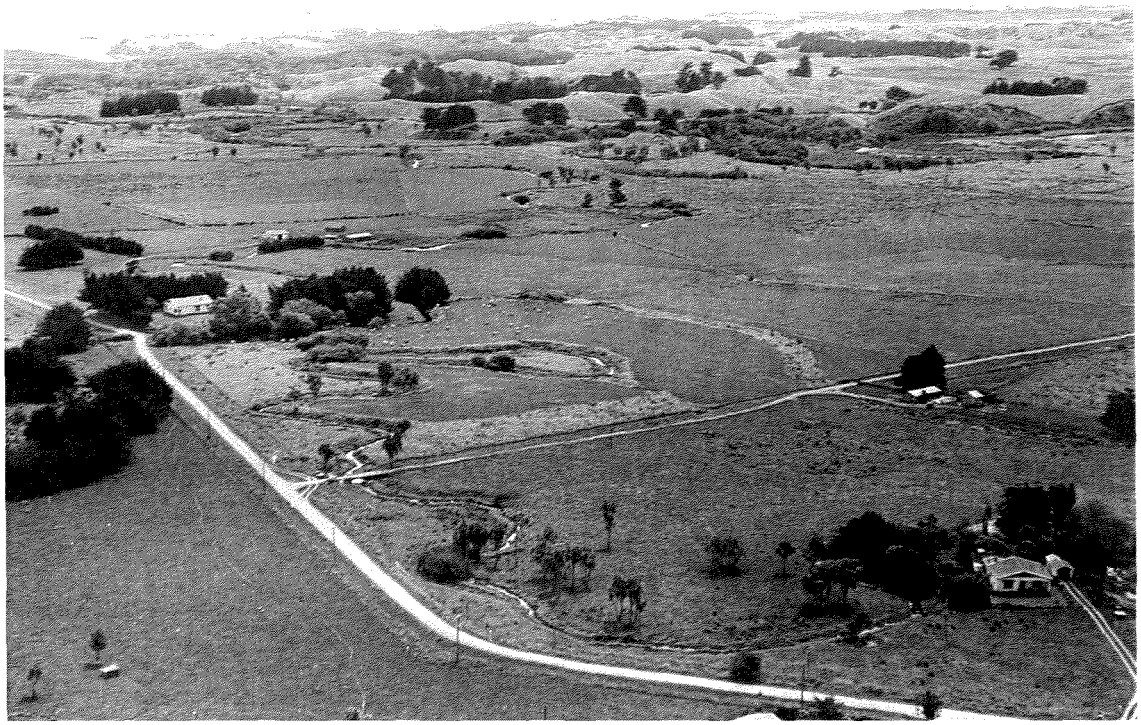


Figure 4.12: An aerial photo of the Kidd family farm taken in later summer, between 1947 and 1954. The image shows all areas of cultural significance as mentioned by Hon Douglas Kidd.
Collection of the Kidd family, reproduced with permission

a long-term farmer in the district and the new purchaser. The urupā was situated where Lorimer Kidd and his father Edward Hope Kidd had said it was. There had been some local thought that the sandy knoll adjacent to the homestead was the papa kainga area, however the two acres of land was a surveyed burial ground marked as reserve. When Kidd's mother Mrs Jean Kidd took over the management of the farm in 1956 (at the untimely death of her husband) she regularly paid rent to the trustees of the Tūkorehe Tribal Committee for grazing the two acres. At the north western end of the Kidd family house was a clothesline that consisted of a heavy metal post, strung with No. 8 wire with a large Macrocarpa branch forked at the top end, which held up the line of clothes into the abundant westerly winds. Over the years the post was thought to be part of a remaining structure upon the papa kainga area. Kidd would disappoint people by saying,

> "I was there when my Daddy dug the post hole and put in the railway sleeper and the clothesline was attached... there is no significance to that metal railway sleeper sticking out of the ground at all, because I was there when it was put in."[33]

Nonetheless, the sandy hill area was sacred ground once clearly marked by a very large tōtara tree with a significant girth that was badly afflicted with borer. In Kidd's memory, its crown had been shaped by the salt winds, burnt off on the coastal edge with an inland incline. When Edward Kidd cleared and drained the land, he had introduced mainly plantation trees such as Macrocarpa and Pinus radiata that could resist the salt winds. He planted two rows of the trees by the house as wind protection. On the western incline of the urupā reserve the tōtara tree was a visual fixture throughout Kidd's childhood. It stood near the boundary of the urupā reserve. It was said that Kidd's grandfather had been told about the daughter of a chief[34] who had been buried beneath it. The Kidd family never buried dead animals under or near it and no one attempted to climb it because it was so revered. Kidd recalled how the tree broke and fell over in a winter gale in the 1960s.

> "There was a sharemilker on the farm then and why I know was the neighbour rang to say, the tree was down and the sharemilker was starting to cut it up. And my mother got on the phone. Dad had been dead some time and she told the sharemilker's wife to rush down and tell him to stop touching it. The tree lay there for what seemed to be forever. All trace of the wood and things have disappeared since- I don't know, I suppose after a decent interval they remove these things! But, anyway, we had always respected it and the story that went with it."[35]

Kidd recalled another noteworthy area on the lower north-western side of the urupā knoll. His father had made a small cut where he kept a drum of molasses for feeding out to cows about to calf in the winter. In doing so he exposed a shellfish midden. As early Māori walking tracks followed the Ōhau River from sea to different inland cultivations and other papa kainga, the midden was possibly related to the nearby Anga-kakahi kainga. It was an area on the western side of the Kuku Stream and Ōhau River junction. Anga-kakahi kainga was a locale that marked early occupation and resource use of the kakahi or freshwater bivalve shellfish [*Hyridella menziesi*] that was once readily available in the adjacent Kuku Stream. A short distance upstream, there was another more obvious sandy, flat-topped hill. This mound marked another area of early occupation and was

33 Personal communication with Hon. Douglas Lorimer Kidd, 6 January 2006.

34 There were anecdotal stories about Kuku papa kainga where significant people were buried under the cabbage trees planted below the sandy knoll or urupā. Informants tried to recall what had been said by their parents or grandparents but they could not readily recollect the details to more adequately verify the information. There were other variations in stories from others where ancestors or namesakes were buried under an area that had become an adjacent cattle race. A comprehensive assessment of interment to inform maps of the wāhi tapu of the area is required.

35 Personal communication with Hon. Douglas Lorimer Kidd, 6 January 2006.

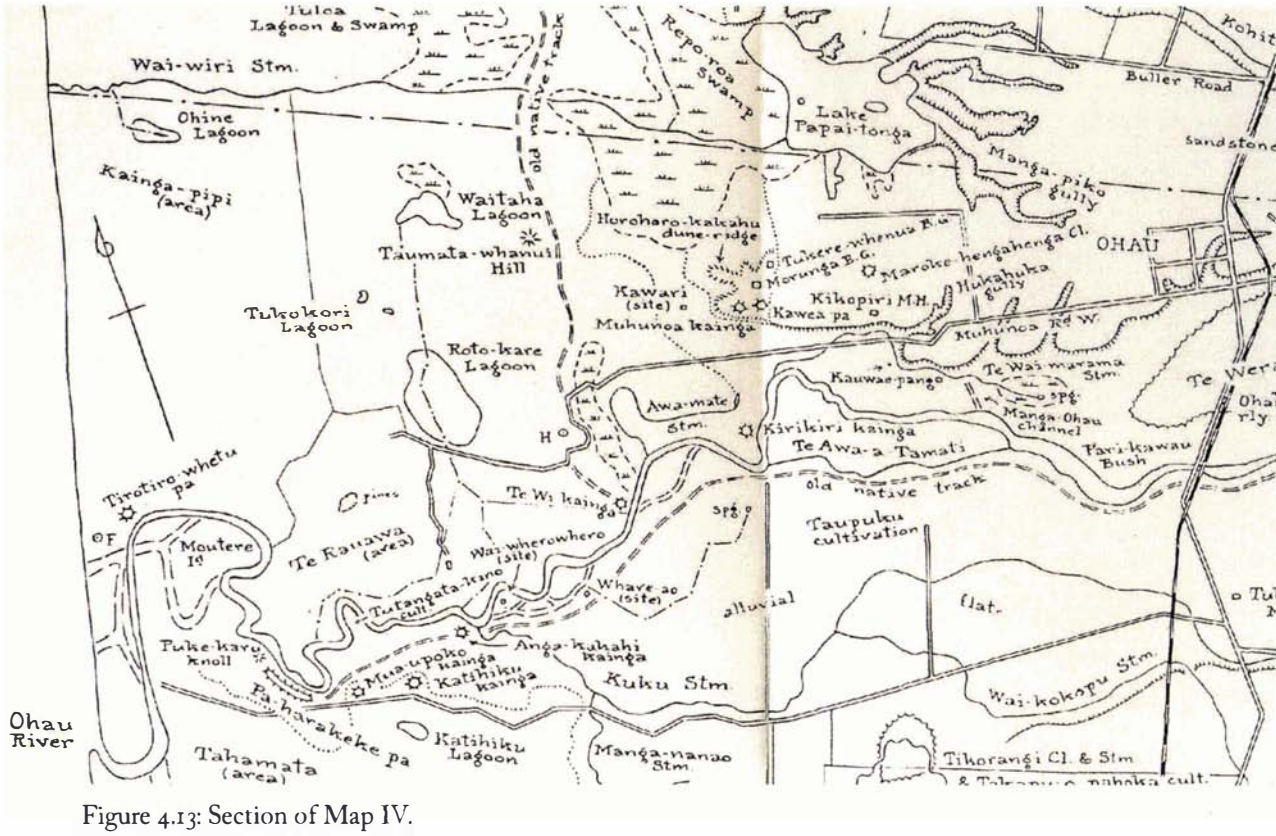


Figure 4.13: Section of Map IV.

Sourced from G. Leslie Adkin, 1948, *Horowhenua: its Māori Place Names and their Topographic and Historical Place Names*, Department of Internal Affairs: Wellington

possibly Waiwherowhero,[36] a locale that linked other areas including Kuku papa kainga and gardens.[37]

In referring to the photos provided by Kidd (and supported by Adkin maps)[38] the noticeable mound stood within adjacent cabbage trees and anabranches[39] of the Ōhau River. The isolated dune mound could possibly be Waiwherowhero, a site which Adkin recorded after information provided by Arapata Te Hiwi. He referred to the site as the dwelling place of Ngāti Tūkorehe chief Rangiwhakaripa.[40] Kidd talked about the games he and his friends played on that prominent sandy hill-lock with a flat top and steep sides.

36 G. Leslie Adkins, 1948, *Horowhenua: its Māori Place Names and their Topographic and Historical Place Names*, Department of Internal Affairs: Wellington, 137.

37 Arapata Te Hiwi pointed out both Anga-kakahi and Waiwherowhero sites to Leslie Adkin in 1931.

38 G. Leslie Adkins, 1948, *Horowhenua: its Māori Place Names and their Topographic and Historical Place Names*, Department of Internal Affairs: Wellington, Map IV.

39 An anabranch is a stream that separates from a river and follows its own course before re-entering the same river further downstream.

40 G. Leslie Adkins, 1948, *Horowhenua: its Māori Place Names and their Topographic and Historical Place Names*, Department of Internal Affairs: Wellington, Map IV.

In conversation with Mr Rameka Wehipeihana (1909–1980) son of Tumeke and Ani Wehipeihana, Mr Edward O'Conner was told that the isolated mound had subsistence gardens, where a tribal person lived alone there. It was said that he had been ostracised from tribe, sometime between 1860–1880. In talking to others about this story, it was difficult to determine who that person may have been and why he had been divorced from the tribe. According to O'Conner, the neighbouring farmer also buried his cows in the area in the 1970s.

Figure 4.14: Remaining kahikatea or white pine forest seen between the tī kouka in foreground with sand dune ridgeline in background, February 2007.

Photograph by Huhana Smith

> "We used to pretend we were Te Rauparaha and we'd get up on there with flax stalks, which you pretended were taiaha. We had friends to play and they had to try and attack us up the steep slope. Of course they were all puffed when they got to the top and you pushed them over, they all rolled down and started laughing hilariously!"

As part of Stage I, the cut or diversion at the Tūtangata-kino was modified in 1972. Sometime later that year, a small sand hill at the northern end of the Tūtangata-kino peninsula was removed, the undulations flattened and the topsoil returned to it. There was a stockpile of remnant material that was claimed by a local farmer. According to Mr Howard Schuppan who was engineer for Stage II, the bulk of the stockpile was spread in situ.

In about 1974, the Waiwherowhero kainga or occupation area was destroyed, claimed and incorporated by a motor scraper into the stop bank systems for flood protection as Stage III of the wider Ōhau River Scheme works. It was of sand material and formed a small part of the adjacent stop banks on Haine's property. There was no protection for the site's intrinsic values as an obvious historical kainga or dwelling place with gardens.

The former Mr Clyde Saint property stretched across both sides of the road and bounded the Kidd farm on its western boundary. Across the road south from the Kidd family home and according to family memory, there were a number of prominent shellfish middens with hangi stones obvious upon the elevated arm of sand hills. Their presence not only indicated additional provisions that were gathered but also the extent of the whole Kuku papa kainga region. Mahinga kai as food gathering areas were valued alongside the produce and sustenance that came from the forests, orchards, wetlands and extensive gardens. When Edward Hope Kidd bought the land in 1912 it was still largely in bush

Figure 4.15: View across Tahamata farm to puna wai or Māori Spring area, February 2007.
Photograph by Huhana Smith

although some forest had been cut for previous Māori gardens, and for when bullocks were moved on to it. Bullocks were the only animals that could cope with the conditions and not succumb to wet and boggy swamps on the lower lands. The land was gradually cleared so that by the time Kidd's parents married in 1936 there was only one northeast corner paddock, where the sharemilker house was situated within the stands of kahikatea or white pine.

On the western side of the Kuku stream in the middle of the paddock, there was a spring or puna wai that the Kidd family referred to as the 'Māori Spring'. As a child he remembered that the remains of a ponga or tree fern jetty were clearly visible. He imagined that people walked out onto it, dipped their vessels in, and filled them with the cleanest, purest water welling up from the aquifer.

> "It was a beautiful spring, which Dad had fenced off before I was around. There were Macrocarpa trees and flax plants around it... A side spring fed into it and that's where tractors disappeared into the swamp when we were breaking in the land... It was living water... there would be a little plume of silt come up to disturb things a little bit, but generally speaking the water was as clear as a bell... A pretty little place, I think is the way to describe it."[41]

There were other significant springs on the Kidd farm and also on the previous Saint's land[42] where the area flattened out past the kahikatea forest adjacent to the road, which reached further into the southern expanse of the former Saint's property. There was an extensive area of harakeke with a very large spring area, relatively unmodified. These were all important resources for health and wellbeing, within a once expansive Kuku papa kainga.

41 Personal communication with Hon. Douglas Lorimer Kidd, 6 January 2006.

42 In 2007, owned by a Ōtaki based farmer.

Figure 4.16: Another aerial photo of the Kidd family farm taken in late summer, sometime between 1947 and 1954. The image shows areas of the stream confluence in the foreground to the right where cows are grazing. The Waiwherowhero mound rises above cabbage trees in the background. To the far left, midway of the photo, the top of the tōtara tree is visible, marking the burial of a significant ancestor.
Collection of the Kidd family, reproduced with permission

The Stream confluence

At the junction of the Mangananao stream and the original course of the Kuku stream was a marshy area that was spring fed because the ground above it was swollen and boggy. It was covered in watercress when the spring was in normal flow and resident Māori regularly entered to harvest it. Over winter Mrs Jean Kidd would preserve eggs using brine in kerosene tins that ensured a supply for cakes over the off-lay or winter period. In the spring when the hens started laying again, any remaining preserved eggs were taken down to the creek for disposal, and used to catch eels. A drag or long handled apparatus, not unlike a garden fork with finer hayfork tines that curved at around ninety degrees, formed a head about a foot wide. This was used to pull apart the watercress and other weeds on the side of the stream. Eggs were broken into the edge of the stream and it was not long before the watercress would shudder and move as the eels came up to feed. When they appeared, the drag was raised and brought down to impale the eels. They were pulled up onto the bank. The Kidd family axe was used to chop the eel heads off. Kidd recalled

the exhilaration, horror and excitement felt over eeling encounters had with his older brother, especially when,

> "Gavin and a friend called Geoff Tilson from Levin, over on the Ōhau River caught the world record eel. It was the largest eel we ever caught in the Ōhau River on [Clyde] Saints' place, down near the mouth of Kuku Stream. It was enormous, the struggle we had to get it up, we beat it about and subdued it, and we dragged it all the way home through Saints' place (now Mr John Haines's) to our farm... It was probably near enough to six inches in diameter. I mean relative to all the other eels we caught this was the grand daddy of the lot. It terrified us and it took three of us to drag it home. We were exhausted and took turns across the fields."[43]

The stream confluence was essential to supplement the food supplies for the larger Kuku papa kainga site. To maintain the obligations of manaakitanga at the Tūkorehe marae complex, resident Māori collected copious watercress and pūhā supplies from the Kuku papa kainga stream confluence. Local Māori continued to catch eel, especially at the times of the annual migration. A regular feature in Kuku was the mahi pawhara or the work required to prepare eels, to split open and hang to dry on the fence of the marae. Kidd recalled a family cat that would venture out on the flat paddocks when one of the many floods receded and catch the eels that were feeding across the paddocks. Mr Hare Hemi Wehipeihana would also back up such visions of eel runs at the coast where people could kneel amongst the moving mass and pluck good-sized specimens from the movement with two hands and throw them over shoulders to waiting catchers who would then bag them, and load them into a waiting truck.

In a typical year during the later 1940s to 1954 up to a third of the Kidd's one hundred acres, the Saint family farm and flat areas across the Ōhau Inland Road (now Kuku Beach Road), and much of the farm between Kidd's and the Ōhau River would flood once to three times a season as backed up by the tide. The tidal floods came up river, gently rose and spilt out over banks to spread easily across the land. Over three generations of land use the Kidd's invested considerable energy into clearing, draining and maintaining land in stock grazing condition. Kidd remembered distinctly all the draglines that came in to mechanically excavate the main drains. The farm area was so swampy that draglines had huge pads or great baulks of timbers, which were bolted together. The machine dragged the tracks, mechanically lifted the baulks out in front in order for the machine to drive its self up onto the timber supports. The machine would sink out of sight in the swamp without them. After the land was drained it was stumped using bulldozers and grassed down. Huge piles of stumps and trunks were piled up on the low terrace, providing firewood

43 Personal communication with Hon. Douglas Lorimer Kidd, 6 January 2006.

for many years. There was an extensive range of native species including the extremely hot burning heavy black maire.[44] Silt deposits from flooding were such that where the draglines were put in, the logs from clearing the bush lay a metre down in the bottom of the drains. In some instances when digging drains the logs were sawn through on site, as the task of digging them out was too difficult and time consuming. There would still be former rainforest logs in the bottom of the drainage systems. In 1972 while the Ōhau River Scheme successfully limited the regular flooding episodes, the works completely impeded the seasonal eel runs. As more elders passed away it became difficult to imagine the extent of the eel resource before waters were drained, confined and polluted by agricultural practices.

Mahinga Mataitai

From around 1947 to 1954, Kidd joined the throng of local people, mainly family groups of men, women and children who congregated for hauling or fishing at the beach. Kidd recalled how four strong, young Māori men took a large net out into the surf using a very long pole of manuka.[45] Others fed out an extensive net to them as they pushed into the waves to set the net.

> "These muscular young men dragged it out through the breakers, holding this long, thick pole. The rope net was about 30 or 40 yards and they used to get huge amounts of fish including monstrous stingrays- all the kids would flee in terror when it flicked its tail... You peered through people's legs and I remember there would be a designated person assisted by men in their late 30s or 40s (I've got a funny feeling they were Tumeke's sons) who would divide the catch, and everybody or every family present went home with fish. There was no cutting or cleaning allowed on the beach, the net was all detangled, rolled up and heaved onto a truck, probably the only truck in the district. And everybody toddled off like nobody had been there."[46]

In remembering that event many times and noting that the nets in those days were made of natural fibre and not nylon, it was only in the early 1990's when the Hon. Douglas Kidd was Minister of Māori Affairs and Fisheries that he realised he had actually witnessed and participated in customary fishing practices as a boy.

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44 Maire tawake/maire tawhake or swamp maire [*Syzygium maire*].

45 Manuka, tea tree [*Leptosperum scoparium*].

46 Personal communication with Hon. Douglas Lorimer Kidd, 6 January 2006.

Figure 4.17: Ōhau River Meander, taken between 1942-1948.

Aerodrome Services Public Works Department, National Publicity Studio, Prime Minister's Department, 1946, National Archives, Wellington. AAQT 6404 WA2175

Figure 4.18: Gorse stands and cows on Candy leased blocks, early 1960s

Photograph courtesy of the Candy family, reproduced with their permission

Figure 4.19: Part of the original Candy farm, showing proximity of remaining cow bail to the left, and macrocarpa tree stumps that were planted by Mr Candy Senior.
Photograph by Huhana Smith, February 2007

The Candy Family 1934-1975

The Candy family came from the Wairarapa in 1934 and farmed a small 45-acre lease block as a family concern next door to an urupā that was part of the original Ōhau pā area.

Mr Neil Candy was eight years old and the fifth son of six when he first came to this part of the Horowhenua coast. The Candy family moved into the original Laingley house in 1934. It would later burn down after 1975. Their bail was a lean-to with a sand floor located at the back of the house. At that stage Candy's mother Thirsa had six boys and Mr Candy Senior milked twelve cows now. A dilapidated two-bail is all that remains of the Candy family farm.[47] According to Mrs Margaret Candy, her mother in law used to go white baiting in season with three nets and run between the nets to keep them going. Mrs Thirsa Candy allegedly made more money out of whitebait[48] than Mr John James (Jack) Candy Senior made out of cows.

Around 1946, Candy would work for other farmers, as he was unable to keep working on the family farm for no wages. While courting Miss Margaret Horn[49] he worked stumping gorse for other local farmers, 'on the end of a spade for 10 hours a day at 3 bob an hour.' Old man gorse could grow ten feet high and was present all around lower reaches of the Ōhau River. When the Candy's took the tractor down to the river someone had to stand on the back trailer and direct the driver who could not see where he was going, so great were the stands of gorse and lupins then. Candy recalled how on sandy areas the gorse

47 A family called the Laingley's built the original house that was later used by the Bayliss family.

48 Whitebait was caught at the bend north of where the current Richardson family house is located. See area marked on photograph Figure 4.14.

49 The Horne's were a local family living in Kuku from the early 1900s. Margaret Candy's (nee Horne) grandfather built the original home in the 1910's which still stands next to Wehipeihana Bush on the former river terrace overlooking Kuku Beach Road.

Figure 4.20: Looking over urupā block to sea, with Tirotirowhetu dunes in the far background.
Photograph courtesy of the Candy family, reproduced with permission

was huge, with trunks almost as round as table legs. In stumping gorse by hand in the days before rotary hoes and sprays, farmers had to dig the gorse out with a stumping spade.

Later in 1953, Mr and Mrs Neil and Margaret Candy (nee Horn) returned to form a farming partnership with Candy's parents. Further blocks of land were purchased and leases were arranged with Māori landowners, where farming of coastal blocks continued until Candy's parents retired. They took over the area and farm both Māori leased and purchased blocks. Their sons also farmed with them until 1975. During Candy's tenure the family were close to many local Māori families and particularly enjoyed the company of tohunga Arapata Te Hiwi and other Te Hiwi family members. Arapata was a local knowledge expert and was well respected by Māori and resident non-Māori alike. Candy spent time with Karanama Lewis[50] as well. Every time the lease of Māori land came up for renewal, permission had to be sought from many Māori landholders. Candy would go to see different people and then have a meeting. Arapata Te Hiwi informed the Candy family of where a specific ancestor had been interred in a former meander of the Ōhau River, an area of the farm that is still respected by hapū and iwi, the farm manager, sharemilker and farm hands. There were also Māori baches at the coast and other residents who populated the remote coastal enclave. The Candy's began farming life at Kuku with 45 leasehold acres and a house near

50 Karanama Lewis (Ruihi) was married to Noke Te Hiwi, a sister to Haana Te Hiwi (1881-1948) who was wife of Tira Putu. Ngahorihori Te Hiwi (1899-1961) was another sister who married Taurua Wehipeihana (1889-1952).

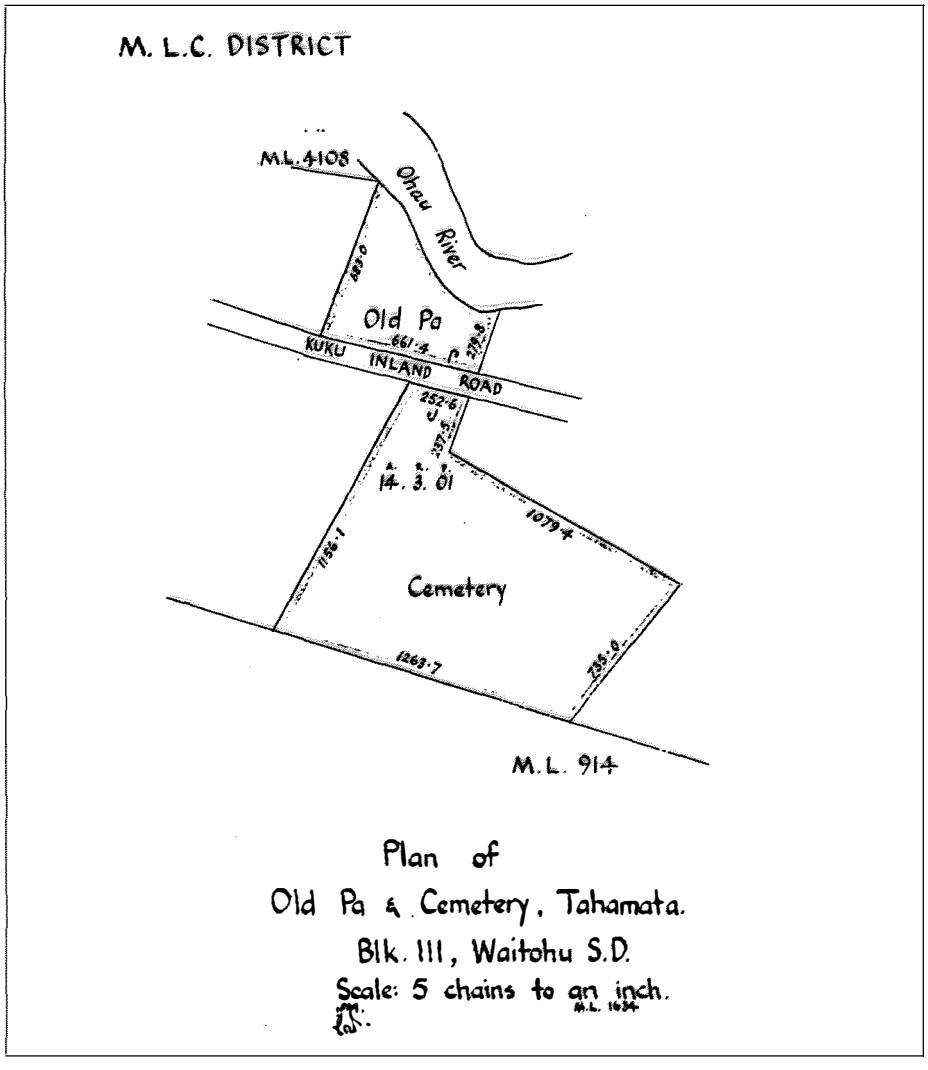
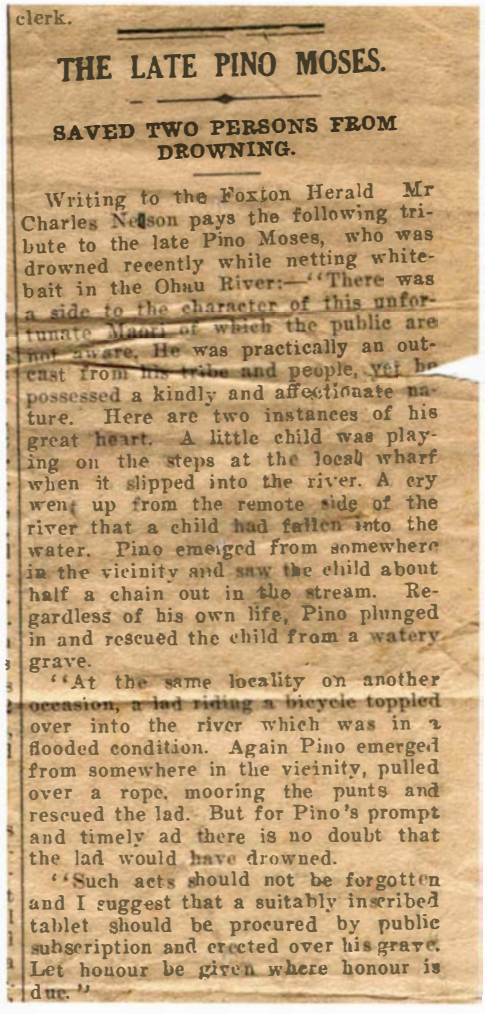


Figure 4.21: Line map of Urupā and Ōhau pā Reserve.
Taken from Land Certificate of Title, 1888

Figure 4.22: Looking over the urupā reserve towards dune lakes.
Photograph reproduced with permission, courtesy of the Candy family

the known urupā block, opposite the old Ōhau pā reserve. Over time when they leased Māori blocks and owned others, the acreage amounted to the area that Tahamata Incorporation would later control (prior to purchasing the previous Te Rauawa Station,[51] and some of the Kidd family farm in 1998.)[52]

Around the early 1960s and despite the natural sweeping, dynamic movement of the Ōhau River, certain water passageways were blasted with gelignite to ease flows and open access to the sea. This was done to prevent the influx of encroaching sand dunes systems onto grazing pasture. Gelignite tended to blow sand up only to come straight down, perhaps an ineffective way of forcing the water to sea. When the Ōhau River would naturally break out at times of flood (which happened about three times a season before stop banking the river) the intensified flows cleaned out areas that formed clay steps in the banks. These areas were accessible places to get patiki or flounders. Kaumātua spoke of the various kaitiaki or natural spiritual guardians in the region, and the sense of loss at the changes that damaged their environment. Karanama Lewis used to call the area of floodwater scour, 'The Deep'.



clerk.

THE LATE PINO MOSES.

SAVED TWO PERSONS FROM DROWNING.

Writing to the Foxton Herald Mr Charles Nelson pays the following tribute to the late Pino Moses, who was drowned recently while netting whitebait in the Ohau River:—"There was a side to the character of this unfortunate Maori of which the public are not aware. He was practically an outcast from his tribe and people, yet he possessed a kindly and affectionate nature. Here are two instances of his great heart. A little child was playing on the steps at the local wharf when it slipped into the river. A cry went up from the remote side of the river that a child had fallen into the water. Pino emerged from somewhere in the vicinity and saw the child about half a chain out in the stream. Regardless of his own life, Pino plunged in and rescued the child from a watery grave.

"At the same locality on another occasion, a lad riding a bicycle toppled over into the river which was in a flooded condition. Again Pino emerged from somewhere in the vicinity, pulled over a rope, mooring the punts and rescued the lad. But for Pino's prompt and timely ad there is no doubt that the lad would have drowned.

"Such acts should not be forgotten and I suggest that a suitably inscribed tablet should be procured by public subscription and erected over his grave. Let honour be given where honour is due."

Figure 4.23: Article about the drowning of Pino Moses in local newspaper, placed for safe keeping inside the whānau Paipera Tapu, or family bible.

51 Originally farmed by John Kebbel from 1870's, generations of the Easton family and later by Martin Johnston, before Tahamata purchased the farm and took over its management.

52 Tahamata Incorporation would then own, farm and manage the coastal area. They repurchased areas on both sides of the Ōhau River up to the urupā reserve. Tahamata Incorporation repurchased the back blocks that had passed through non-Māori owners or leasees. This increased the consolidated Māori shareholdings and acreage for a tribal farm.

Figures 4.24, 4.25, 4.26 and 4.27: Different blocks on Candy farm.
Top to bottom:
Cleared blocks looking towards the sea
Other cleared areas around the Ōhau River meander before the cut
View across flat area below urupā towards Ōhau West Road (now known as Kuku Beach Road)
View across farm with Te Hākari wetland in background.
Photographs reproduced with permission, courtesy of the Candy family

> "Kay Lewis told me there was a big taniwha down there, in 'The Deep'. We were careful there... When growing up there we tried to dive down to the bottom, deeper than floundering, but it was too deep."[53]

Known Wāhi Tapu and rules of protection

The Candy's were informed about the urupā or cemetery next to their house and were well aware that they should not disturb it, plough it or plant it. They agreed to abide by the rulings.[54] The family had been alerted to where most of the graves were, just on the south side of the first low dune with indications that there were one or two graves just on the north side. Candy believed that there were burial areas just round the edge of the highest

53 Personal communication with Mr Neil Candy and Mrs Margaret Candy (nee Horne), 5 September 2005.

54 Mr and Mrs Candy were bemused by the news that in 1994 the cemetery area was planted out in pine trees.

dune hill where the pine trees were planted. There were only, from his memory, about three or four marked graves there.

> "The depressions had the odd tōtara fence. The others were on the roadside, not marked except by depressions... I think one of those was where Pino[55] was buried around 1932 or 1933.[56]

Though difficult to ascertain exactly how many people were buried in the Ōhau pā cemetery, it is well acknowledged that significant ancestors like Koronīria (Te) Rangiwhakaripa was buried there, the tohunga responsible for spiritual propitiation at Tirotirowhetu occupation area and who with his wife Turuhira, presided over the felling and floating of the trees from Pukeātua, near Ōhau. It surprised Neil Candy that there were not more people buried at the Ōhau pā as he had heard (supported by other local, anecdotal information) that during the height of occupation there were around 4,000 people living there.[57]

> "Whether it's correct or not, the story was that they buried them at the foot of the hill and just put the sand over them. So there could be a lot more there. But the last one, apparently was buried up somewhere closer to the road on the block that we farmed."[58]

Candy was forty-nine when the family left the coastal district. Over thirty years later, he was still captivated by the special nature of the place and their family's time working the land. He admired the efforts of Tahamata Incorporation, the local Māori shareholders and share milkers who had worked so hard to improve pasture and develop a profitable entity, just the way his farming family would have liked to. As Candy reminisced on the family's interactions with the coastal plain,

> "This whole Tahamata Incorporation, I suppose you could blame me really. We were having a little bit of trouble... with the block across the river and there was talk that we weren't going to get the leases back on some of the others which were due to come up in a few years. So I went to Paul Te Hiwi because I knew he was one of

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55 Pino Moses was the last local Māori buried in the Ōhau pā cemetery around 1933. The newspaper article is from an unknown local newspaper, but likely from the Manawatu Herald, Foxton. The Manawatu Herald was founded in 1878 and was the first paper published in Foxton. It was still published bi-weekly around the time of Pino's death. Pino was unmarried and lived with his sister Akata and her husband Paipa in Kuku.

56 Personal communication with Mr Neil Candy and Mrs Margaret Candy (nee Horne), 5 September 2005.

57 In many ways the Candy's may have been informed to a certain degree, not unlike how Arapata Te Hiwi and Heremia Terapata Rangitāwhia informed Leslie Adkin. More often specific detail was left for those genealogically related to the region.

In this same way for this thesis, the stories or areas concerned are only obliquely referred to. Sites are not pin pointed as a requested form of protection. As more key people have been made aware of the remaining detail in landscape, they hold the information carefully awaiting finalisation of another tribally-based strategy for wāhi tapu in the region.

58 Personal communication with Mr Neil Candy and Mrs Margaret Candy (nee Horne), 5 September 2005.

the big shareholders, and I said either I'll have to buy you out or you'll have to form an incorporation and buy me out. As Paul Te Hiwi was a major shareholder, he had enough pull [with others] to get it [the farm] going."[59]

The Engineer and the Ōhau River Scheme

When Māori shareholdings and titled areas were consolidated Tahamata Incorporation developed into a very profitable iwi farming enterprise. Mr Edward O'Conner, the designer and engineer responsible for executing the Ōhau River Scheme for the Manawatu Catchment Board found that the position of the proposed 'cut' had been decided upon because the natural gas line at Tahamata had been designed with a wet and dry crossing. In 1971 the wet crossing lay beneath the existing river bed. The dry crossing was very close to the dune systems. Due to the proximity of the dry crossing, a north turning meander had to be considered. This required the almost complete removal of the dune complex. O'Conner wrote a report that overviewed the development of the scheme within Tahamata. On Saturday 19 February 1972 discussions were held with affected parties at a special meeting arranged with members of the Ngāti Tūkorehe Tribal Committee and Manawatu Catchment Board staff.[60] The Ōhau River Scheme was explained to the Tribal Committee, who was in favour of the scheme as a whole and of the diversion channel that would be put through tribal property. The Committee members felt that they were gaining a large benefit for their tribal farm, which would more than compensate for the small amount of land lost. On 4 May 1972 a number of committee members would again attend a local ratepayers' meeting that explained the details of what would happen to the Ōhau River 'loop'. There was limited criticism of the scheme and no request for compensation. The Ngāti Tūkorehe Tribal Committee was the key administrator for the farm before the creation of Tahamata Incorporation Committee in 1974, so the tribal committee sanctioned the project to proceed.[61]

Despite this official tribal authorisation or mandate not all remaining Māori landholders of Te Mateawa and Ngāti Te Rangitāwhia, and certainly not all the tribal descendants and their spouses agreed to the Ōhau River 'cut' going ahead. There were concerns over detrimental impacts to areas deemed sacred or resource rich. At the time the Manawatu

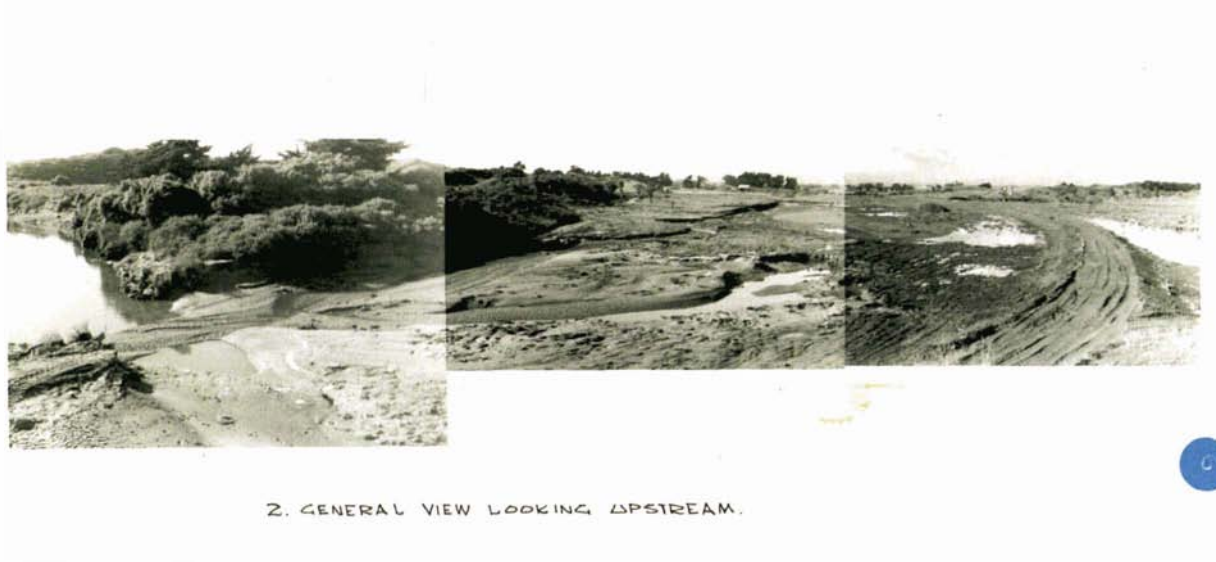
59 Personal communication with Mr Neil Candy and Mrs Margaret Candy (nee Horne), 5 September 2005.

60 Board staff included Mr A.G. Leenards, Mr. D.M. Brown and Mr Edward O'Conner, the engineer.

61 Letter to the Secretary of Manawatu Catchment Board, Palmerston North from Edward O'Conner, engineer of the project dated 20th June 1972 concerning *Ohau River Scheme Report on Ngati Tukorehe Tribal Property.*

The resolution to incorporate Tahamata Block was passed on 6th November 1974. The Committee elected to supervise Tahamata Incorporation was Mr. Arthur Price, Mr. Rameka Wehipeihana [Nigger Mick], Mr. Martin Wehipeihana [Boy Dot], Mr. Paora Natana [Paul] Te Hiwi, Mr. Cyril Seymour [Hoppy], Mr. Matehaere Patuaka, Mr. Wiremu Katene, Mr. Francis Nepahio Putu [Darkie] with Mr. Jim Goodwyn (accountant) and Ian Joll (consultant and secretary). The committee entered into a contract with the farmer, Mr. Neil Candy to purchase 233 acres of his land which was added to the 489 acres of land already owned.

Taken from a letter to the Registrar of the Māori Land Court on 15 July 1975, from Mr Arthur Price chairperson of the Tahamata Incorporation Committee.



Figures 4.28: Flood damage during the time of the cut.

Images sourced from files by Mr Edward O'Conner for Manawatu Catchment Board, *Ohau River Scheme Stage One Contract 115. Damage to Contract Area Caused by Flood- Sunday 14th May 1972*, Horizons Regional Council Archives: Palmerston North

Catchment Board implemented the project, tribal members made their concerns known to the water engineer and Māori overseer. During and after the 'cut' there were concerns over property rights, ownership of the diversion channel and compensation calls for losses of farm income, land and access to the river. It would appear that people had agreed in principle to river diversion work as a future benefit for the farming incorporation. However no one was really prepared for the reality of the 'cut' project.

Not long after the initial excavation work and stop banking at the contract site, significant flood events[62] created large, deep scour holes which affected the stability of the surrounding area. The flood waters removed the contractors channel block, damaged stopbanks, removed a foot of topsoil from the lower extremity of the flood way and created numerous erosion pockets. Though a certain amount of flood damage was beyond the contractor's power to prevent, by not acting immediately to alleviate some of the created problems until days later, the continuous water flow over the scour holes caused more damage to the floodway than necessary.[63] There would be another flood with ongoing problems due to heavy seas, high winds, exceptionally high tides and fresh water in the river that combined to wash away the river block at the downstream end of the diversion. Again, further prolonged and heavy rain in the upper Ōhau River Catchment caused similar conditions, washing away the consolidation work that the contractor had done in late June.[64] This extensive damage

62 The flood events took place on 14 May 1972,30 June 1972 and from 10-14 July 1972.

63 Manawatu Catchment Board, Ohau River Scheme Stage One Contract 115. *Damage to Contract Area Caused by Flood- Sunday 14th May 1972*, File 9/3, Horizons.mw Archives, Palmerston North, 2-4.

64 Manawatu Catchment Board, Ohau River Scheme Stage One Contract 115. *Damage to Contract Area Caused by Flood – 10th-14th July 1972*, File 9/3, Horizons.mw Archives, Palmerston North, 3-5.

raised anxieties for tribal shareholders and non-Māori lessees as well as other farmers, especially those who had not agreed to the 'cut' proceeding in the first place.[65]

Despite the devastating start to the project, and how the Ōhau River Scheme so dramatically altered waterways, the original designer and engineer Mr Edward O'Conner was willing to listen to local Māori concerns. He reconsidered ways in which he approached drainage and water engineering in areas of significant cultural landscape. The Scheme team learned that the blind creek area was a particularly special place for local delicacies, with entities present that were better left undisturbed. At one point in the development of the Ōhau River Scheme project O'Conner was very keen to run the stop bank or cut through the blind creek but was promptly told not to.

> "We were actually going to cut the loop near the blind creek straight out to sea for drainage because we were originally... going to put stop banks straight across the end and carry on. We were told pretty quickly that we couldn't put a cut here. People were quite definite about that. George Gray the overseer explained to me, 'Look Ted, don't push it, don't even argue it, just let it go'. So we left the end of the loop open and it was open for quite some time. It was only covered in at a later date with a culvert through the stop bank or the barrage."[66]

In the early 1970s the engineering survey team was at the lower reaches of the Ōhau River every winter. The area was arable in summer because the land was always green, however in winter the cows paddled in water much of the time. The lay of water had much to do with the shallow groundwater below so steeping the river channel made for better drainage and allowed for more productive land in winter. Particular individuals with marriage ties to tribal owners could see that the diversion development would give the burgeoning tribal farm better opportunities and advocated for it to proceed. This activity took some explaining to other Māori owners. Others were not so sure, and the engineer well remembered the opposition the earth works faced. The cut in the Ōhau River meander was a major project for the area that would cause significant change. O'Conner distinctly recalled the level of opposition as it was quite a drastic transformation for the region.

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65 Mr Pat Easton who farmed Te Rauawa on the other side of the Ōhau River was very anti-Scheme. He feuded with another local non-Māori farmer across the Ōhau channel when the survey work was being done. He initially was very hostile to Mr Edward O'Conner the engineer when they first met. This was because he was the Catchment Board engineer and secondly, because the engineer was a friend of the farmer he fought with. Easton and O'Conner eventually resolved the impasse between them. Easton had an extensive history of previous scheme attempts in the Ōhau River that dated back to just after WWII. He held some old Public Work Department plans outlining a scheme devised between 1942–1946.

66 Despite the assurances the later effects of the cut would impact on the special nature of the blind creek. As he explained, "I would have left both to the lower end of the old Ōhau channel and the blind creek open for a considerable period. I was told that the barrage and blind creek barrage were requested by Tahamata because of flooding... On completion of all stop banking, the sedimentation would cease on the Ōhau floodplain... this sediment was transferred to the Tahamata area downstream of the cut." Personal communication with Mr Edward O'Conner, July 2007, Palmerston North.

Figures 4.29: Before the Ōhau River 'cut', taken between 1942-1948.

Aerodrome Services Public Works Department, National Publicity Studio, Prime Minister's Department, 1946, National Archives, Wellington. AAQT 6404 WA2176

> "In terms of the change was the productive land that you were going to get... You wouldn't get away with digging a cut like that in this day. The Resource Management Act would just cut you to shreds. But back in those days and strange though it may be, the cut had actually been approved way back in 1967, perhaps just before the old Water and Soil Act. To get the Government subsidy for it you had to carry out all the survey and get the approval of local people. That's when I was brought in... I did all the survey and engineering work for it and of course had to obtain the approval, and that's when it bogged down."

During the time of consulting with local resident Māori on site over the 'cut', O'Conner recalled the serious erosion on some of the bends of the lower Ōhau River. He considered pulling pine trees for bank stabilisation but they were too far away so the team thought of using some of the cabbage trees on site to layer them against the bank to provide protection. The Scheme was again promptly told 'No, don't touch anything.' The tī kōuka

Figure 4.30: Ōhau River 'cut'.

Aerial photograph by Lawrie Cairns for Horizons.mw Regional Council, Palmerston North, 2005

Figure 4.31: Ōhau River 'cut'.

Aerial photograph by Lawrie Cairns for Horizons.mw Regional Council, Palmerston North, 2005

[*Cordyline australis*] were cultural markers and their possible use as bank stabilisers in the vicinity was opposed. O'Conner remembered Ngāti Tūkorehe Tribal Committee member Mr Rameka Wehipeihana[67] being very helpful in explaining areas where the Scheme works should and should not go. There was concern with a nearby former meander area that sometimes collected water in it.

> "It was believed that there was something significant close to that 'loop'... There seemed to be some disagreement about it. Rameka Wehipeihana said 'no' and another fellow didn't think there was any but his wife thought there was... She got a bit upset about it. She started to cry, so we had to be a bit careful. Your great uncle tried to explain it to her. I presume it's one of those things about local knowledge... Others disagreed that there was anything significant there, others were unaware and some were a little unsure. Some were very definite [and she] was the one that seemed to think there was something there and was quite upset about it. I can remember people trying to explain to her that wasn't the bend... I had to let them argue for quite some time."

O'Conner talked and deliberated over the progress of the cut at evening meetings at the home of those most concerned about the operation. Mrs Wairau Patuaka[68] came to realise that the scheme was not going through the area that concerned her. When finally putting the 'cut' through between the two meanders, the team were warned to keep clear of another particular dune system. This was near the area marked with tī kouka that stood within stands of toetoe, tall native grasses and harakeke in and around the old man lupin. The former Tūtangata-kino cultivation area was also in the adjacent peninsula. The engineer noted the remnant wāhi tapu areas he had been clearly informed about, and kept well clear those places. O'Conner marvelled at people's remarkable spatial awareness. He stood by people in a seemingly featureless area, where they recited and indicated the position of former landscape features.[69]

Consequences for the natural integrity of streams as drains for waste

In returning to some of the accumulated impacts on the natural integrity of waterways in the region, from the time the Kuku dairying industry was established in 1913, new farm households and cow bails used the streams as convenient effluent disposal systems for whey or other domestic household waste. Kidd retold of the basic experiences that faced dairy farmers in Kuku.

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67 Rameka Wehipeihana (1909-1980) was the sixth child of nine of Ani and Rameka (Tumeke) Wehipeihana.

68 Wairau Patuaka (Rau) nee Karaka (1929-2002) was married to Mr Tama Tima II Richard Patuaka (1923-1993) known locally as Nigger Dick.

69 Personal communication with Mr Edward O'Conner, July 2007.

> "Unfortunately, septic tanks weren't all that common and we all grew up in an area of outhouses and buckets... Every so often the bucket was emptied into the stream. Everybody did it- there was no other way. Inside toilets weren't common in the Kuku district until the 1950s. There was cows' effluent that was fed indirectly into the stream... You could probably just about drink out of the stream now with a minor treatment, but it was pretty gross in those days."[70]

With a rapidly increasing dairying industry more farms released more waste and by-products into the length of the Kuku Stream, and at intermittent stretches of the Ōhau River.[71] When the Kuku dairying district supplied cream before the advent of much domestic refrigeration it appeared that most buildings erected beside streams used the waterways as a convenient sewer. The Kuku Manakau Dairy Company or later Wellington Dairy Farmers' Co-operative Association Limited was the biggest polluter from the time it was established on the banks of the Kuku Stream, near the main road that bisected the Māori village of Kuku. In November 1974 when Tahamata was established, a group of concerned residents (both Māori and non-Māori alike) submitted their objections against the dairy factory's long-term detrimental treatment of the Kuku stream. The Wellington Dairy Farmer Co-Op Association Limited factory applied to the Manawatu Catchment Board and Regional Water Board to 'discharge 14,7000 litres per hour, 8 hours per day, 7 days per week, 52 weeks per year of evaporation condensing and washing down and boiler blowdown water'[72] via pipe line into the Kuku Stream. This stream flowed across lands to meet the Mangananao, Tikorangi and Kuku confluence at Kidd's farm or former Kuku papa kainga, which then flowed into the Ōhau River on its way to sea. The Kuku stream flowed through many Ngāti Tūkorehe and non-Māori farming properties.

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70 Personal communication with Hon. Douglas Lorimer Kidd, 6 January 2006.

For local Māori the emptying of privy buckets into any food source area was anathema to health, as it would contaminate food supplies. Māori human sewerage was disposed to land by long drop before the advent of flushing cisterns and septic tanks. Much of the land inland of Kidd's farm was settled by returned soldiers. Some of the biggest prices of land lots in Wellington were achieved by land speculators from Ōtaki who sold several parcels to the Crown and 'settled soldiers' on them to create small dairy farms and name roads like Soldiers Road. Not all soldier settlers (particularly ones with Māori wives) used the stream for human waste, even though dairy cow effluent was washed into the Kuku Stream. The writer's grandparents Arthur, a WWI veteran and Parewai Holder used the skim milk from the shed for their pigs. The skim milk would often set into a cheese-like curd with a whey suspension beneath the surface. Inquisitive chickens would get stuck in the curd up to their necks and were rescued on many occasions! The contents of a privy bucket were always buried in designated areas. Pig, sheep or cattle stomachs or addled or slightly cracked goose eggs were put into hinaki and placed in the stream to catch the eels.

Personal communication with Mrs Ruhia Martin, 11 February 2007.

71 In 1913 the Fresh Food and Ice Company established a creamery in Kuku. The creamery was converted into a cheese factory with a piggery, where the pigs were fed and fattened on whey by-product. This business was purchased by settlers in August 1915 and called the Kuku Dairy Company. Only a year or so later it was burnt down and replaced in 1916 by the Kuku Co-operative Dairy Company Limited. From 1913-1920 and after WWI, dairying spread at the expense of beef cattle fattening.

John Rodford Wehipeihana, 1964, *Sequent Economies in Kuku: a study of a rural landscape in New Zealand,* Unpublished Thesis, Masters of Arts in Geography Victoria University, Wellington, 36.

72 Information sourced from a file held by Miss Mary Karauti (1922–2001) on the Submission to the Application for Discharge Right 74/39 (into the Kuku Stream).

Figure 4.32: (above) Kuku Stream in proximity to former dairy factory, 1 September 2007.
Photo by Huhana Smith

Figure 4.32: (right) Kuku Stream with Tūkorehe marae in background, 1 September 2007.
Photo by Huhana Smith

During this time, the community noticed how increasing pollution impacted on the health of streams and rivers in the wider region. The local Māori objectors included the Seymour, Ransfield, Lewis and Poutama families. The Burnell, Hogg and Dorne farming families objected to the waste proposal as well, as they lived close to the damaged stream system. In 1974, local non-Māori farmer Mr James Harold Hogg[73] sent a cloudy, brown wastewater sample with a milk-like odour for testing to a Waikato Dairy Laboratory in Hamilton. The results indicated that the water was definitely unsuitable for use in his dairy shed. The results reported that the organic matter present in the water and odour would lead to stock health problems, if the water was reticulated to drinking troughs. Mrs Te Mate Apiti Ransfield[74] objected to the discharges of wastewater and heated washing water that flowed via pipeline directly from the factory into the Kuku stream. It would appear from her testimony that the Kuku Stream had been progressively polluted for decades by the activities of the dairy factory and its associated pig farm off Kuku Beach Road. She wrote in her submission how:

> '...the pollution of the creek has always been of very great concern to us all. At times, particularly during the summer months, the smell from the creek is putrid. My husband has a great desire for his delicacies, and used to be able to go down to the creek to catch eels, kakahi, crayfish and gather watercress, food which is always sought by the Maori people and not only locals... Regarding the Lewis family, whose homes are less than 100yds from the creek. They live below the Pig Farm, which I believe is owned by the Wellington Farmer Co-Op., Limited. Over the years their part of the creek has become overgrown with weeds... The creek itself has become very narrow, there is no longer any form of water life that we can find... Kuku is the Papakainga of the Ngati Tukorehe, Te Mateawa and Kapu people. They do not live in Kuku for economic reasons only; it is their land; their home, they are the Tangata Whenua; and the creek and the food it contains are very important to them.'[75]

Another account proclaimed that:

> 'Many years ago, we are able to take food from the stream such as eels, watercress and crayfish, but today the watercress has disappeared. Due to factory discharges, the water is often discoloured and smelly, and is more pronounced in the summer

73 The Hogg family had lived and farmed in the region since 1916.

74 Mr Joseph (1921–1987) and Mrs Te Mate Apiti Ransfield (?–1983) were the parents of Keelan and Joseph Ransfield and grandparents to their respective families). They occupied the home opposite the marae on State Highway One. Information sourced from a file held by Miss Mary Karauti (1922–2001) on the *Submission as Application for Discharge Right 74/39 (into the Kuku Stream).*

75 Accounts sourced from a file held by Miss Mary Karauti (1922–2001) on the *Submission as Application for Discharge Right 74/39 (into the Kuku Stream).*

time... the stream at times is obviously contaminated and... stock refuse to drink the water.[76]

Mr James Poutama (1913-1994) also opposed the dumping of pollutants by the Wellington Dairy Farmer Co-Op Association Limited and effluent from their piggery into the Kuku Stream. He knew the stream once abounded with migratory eels, watercress, kakahi, fresh water crayfish and a few trout. He was well aware of how the close-knit Māori and non-Māori community within Kuku had used the stream. When the March rains came, Mr Poutama was responsible for trapping many hundreds of eels in the Kuku Stream. He kept them in running water until November in anticipation of gatherings that would take place at the marae. He wrote in his submission that 'this is a heritage enjoyed by Māori and European alike and if they take it from us, they may as well take the land with it for what is the use of first class land with a polluted stream running through it. Children cannot paddle in it, cows won't drink it, and the eels will die.'[77]

Transforming attitude and aptitude

Even though cultural landscapes are environments where humans have transformed natural areas and where natural settings have shaped people's way of life, combined, adverse influences over time have altered the environmental integrity of Kuku. Little of the region's natural environment has been left unaffected. The region suffered decades of accumulated effluent pollution into surface and subsurface waterways. People were disassociated with cultural areas through lack of interaction with resources leading to loss of knowledge. There were impacts on known cultural and spiritual grounds and upon other cultural markers. Despite a range of close relationships and associations that had accrued between peoples; land holdings, freshwater, marine and forest resources over generations, cultural landscape protection plans or active restoration projects became mana whenua assertions of genealogical jurisdiction over land, waterways and resources.[78] Environmental principles underpinned cultural landscapes and openly encouraged inter-relationships between peoples, interactions with ancestral lands, wāhi tapu, water, seas, rivers, estuaries, air, minerals, energy, coasts, indigenous biodiversity, mahinga kai, mahinga mataitai and weaving resources. However as diverse pressures increased for the region, these inter-relationships required bolstering. Far more robust and actual protection mechanisms had to

76 Mr Peter Seymour on behalf of his family Pat Seymour, Eunice Seymour, Irma Baily (nee Seymour), William Seymour, R. Seymour and Maire Johns (nee Seymour) objecting to the pollution of the Kuku Stream, November 1974. Information sourced from a file held by Mrs Mary Karauti (2004) on the Submission in support and in opposition to the *Application for Discharge Right 74/39 (into the Kuku Stream).*

77 Mr James L.G.W Poutama objected to the submission to keep discharging pollutants into the Kuku Stream. Information sourced from a file held by Mrs Mary Karauti (2004) on the Submission in support and in opposition to the *Application for Discharge Right 74/39 (into the Kuku Stream).*

78 Danny Kennan, 2004, "Bound to land: Māori retention and assertion of land and identity" in Pawson, E. & Brooking, T.,(eds.) *Environmental Histories of New Zealand*, Oxford University Press: Melbourne, 260.

be devised for ecologically and culturally sensitive areas. By reinforcing knowledge around tribal lands and waterways, peoples' collective fortitude combined to arrest any further ecological and cultural damage to the region. The braided cultural landscape concept drew upon recollections of others in the district to reclaim further understandings about lands, sites and waterway health, disconnected or rendered invisible by council-inspired projects for agricultural management.

The aim was to devise models that re-emphasised inter-linkages between linguistic, cultural and biological diversity, and to then catalyse necessary activities for reinstating mauri or vitality to valued ecosystems.[79] The model responded to the late twentieth century or twenty-first century consequences of human demands on the global environment. Principles behind indigenous language or cultural revitalisation were directly related to the aims of improving environmental futures where bio-cultural diversity became a local ideal for Kuku. What remained of local knowledge around fragmented natural ecosystems had to be consolidated.[80] At times Tahamata farming activities belied the need to balance environmental health with cultural or spiritual integrity in lands and waterways. Certain farming activities interfered with remaining natural integrity, sites of significance therefore tribal histories, and generational associations to lands and waterways, so that fundamental relationships were jeopardised. All ensuing activities aimed to rebuild once important relationships between local peoples, with regional biodiversity and the cultural integrity embedded within a distinct ecological area. The bio-cultural diversity concept clearly highlighted how sustainable farming developments could be articulated for the benefit of Tahamata farm and shareholders within the Kuku coastal area, not only to create local solutions to environmental problems but also to align the projects with wider, global environmental goals.[81]

The biggest single source of pressure on the health of New Zealand water and waterways had been the removal of riparian forests from the mountains to the coastal plain in order to create farmland.[82] Decades of clearing, realigning waterways and draining contiguous swamp lands adversely affected all water bodies in the region, including the hydrology and

79 B. James, 1993, *The Māori Relationship with the Environment,* Department of Conservation. Publication No. WRC/PP-G-93/29, 5. Mauri is the vital life principle as present in all objects, both animate and inanimate.

80 This was emphasised in Te Whakaruruhau programme conducted at Patumakuku, through on site survey studies conducted at Wehipeihana Bush and hands-on nursery, propagation and re-potting of tree stock for restoration projects at the Tikorangi Nursery. Wehipeihana Forest is a remnant stand on an inland river terrace overlooking Kuku Beach Road. It has been used as an instruction project for place-based learning in indigenous biodiversity surveys for remnant flora and fauna, and animal pest and pest weed control and monitoring. Tikorangi native tree nursery operation was established in October 2005. It has become an invaluable enterprise comprising entrance gardens encircling a car park region, a substantial potting shed, propagating units, hot houses and expansive holding areas for trees. See Chapter 6 Case studies for more details of these developments.

81 Adgar, N., [et al], 2003, *Sharing a World of Difference: the earth's linguistic, cultural and biological diversity,* UNESCO, Terralingua, World Wide Fund for Nature United Nations Educational Scientific and Cultural Operation, Paris.

82 Ministry for the Environment Manatū Mō Te Taiao, 2000, *Managing Waterways on Farms: A guide to sustainable water and riparian management in rural New Zealand,* Draft document, Wellington, 15.

hydroecology of the coastal plain at Kuku. By mechanically interfering with waterways, modifying their margins or by reducing the size of wetlands, important waterways became less favourable for freshwater fishes and invertebrates. Shallow ground waters around the dune wetlands continued to receive increased levels of nitrogen. This control over the natural environment also destroyed Māori areas of cultural importance along the river. River engineering diverted and channelled flood water and accelerated the decline of the Ōhau River meander into a captured, nitrified and polluted lagoon. Accumulated impacts exacerbated the loss of biodiversity, destroyed natural integrity and its regenerative capacities. The high levels of sediment, nutrients and faecal material that flowed into the coastal area from the wider agricultural catchment decreased water clarity, increased nutrient content, and worsened the loss of necessary plant, food sources[83] as well as fish stocks at the coast.

In recognising all these impacts and ongoing ecosystem damage, a renewed awareness to environmental decline led kaitiaki to urgently harness the potential that remained in local knowledge of past interactions, in kaumātua memories and experiences. In drawing fragmentary reminiscences together, upon tribal narratives, environmental, cultural, spiritual and linguistic interrelationships were re-emphasised for participants taking part in understanding their tribal place better. Kaitiaki revalued their genealogical relationships to lands, waterways and cultural signifiers. They felt compelled to mitigate decline within the Kuku coastal landscape. They re-enhanced their relationships with what had persistently been revered as a natural and cultural base for hapū and iwi at the coast. In transforming attitude and aptitude towards environmental sustainability, regional policies and practices also coincidentally changed to make sustainable water and riparian or waterways management on farms, a commonplace practice in rural New Zealand.

In exploring the site-specifics of place as central to understanding cultural landscape, local kaitiaki, Tahamata Incorporation, shareholders and long term residents re-edified knowledge of place to harness the principles of sustainable management in order to urgently improve environmental conditions for future generations.[84] Initiatives such as riparian planting along waterways and wetlands not only aimed to provide shelter for stock and habitat for birds and insects, but also to improve water quality for fish and invertebrates and related surface and subsurface waterways. By rebuilding relationships within the tribal group, between the tribe and other residents, and between past and present landowners and local authorities, mutual respect for place enabled movement towards resolving environmental problems facing the area.

83 ibid, 15.

84 ibid, 21.

In knowing how historic and contemporary activities polluted regional and coastal waterways, attention and focus turned to the positive actions required for the 'loop' region. After producing many reports, articulating aspirations, convening numerous meetings at site and at the marae with specialists, local farmers and other authorities, and conducting environmental wānanga- all these efforts over years of activity finally coalesced on July 30, 2006. Tahamata Board members and other supporters planted the first 1500 trees along a riparian area of the Ōhau river remnant or 'loop', around the new cow bail and in other areas on the farm.[85] In participating further in the effective ecosystem restoration model activated for Te Hākari dune wetland, Tahamata re-examined the interdependencies that existed

Figure 4.34: Planting the 'loop' led by Tahamata Incorporation, 30 July 2006.
Panoramic photograph by Huhana Smith

Figures 4.35: Planting the 'loop', 30 July 2006.
Photographs by Fiona Kamariera

85 During this time Horizons Regional Council also came to support the initiatives with funding for ongoing riparian planting and potential new bores for irrigation so as not to use the polluted waters of the 'loop' in 2007.

Figure 4.36: 'Loop' planting, 30 July 2006.
Photograph by Fiona Kamariera

Figures 4.37: Overview of 'loop' planting, 4 November 2006.
Photograph by Huhana Smith

Figure 4.38: The planted area after three months, 4 November 2006.
Panoramic photograph by Huhana Smith

Figures 4.39: Planting around farm, 4 November 2006.
Photograph by Huhana Smith

between the 'forests and oceans, fish and fowl, the rivers and the soil and between people and the elements,'[86] to restore cultural, environmental, spiritual and interpersonal health and functioning for *all* riparian waterways in the region, from the mountains to the sea.

86 Mason Durie, 1998, *Te Mana, Te Kawanatanga: The politics of Maori self-determination* Oxford University Press: Auckland, 21.

CHAPTER FIVE

> As with ecology, the significance of any component of the landscape will remain unknown until the significance of the whole is understood.[1]

Almost all the environmental laws in New Zealand include both natural and historic significance, in their definitions. The provisions for protecting historic places however have been weak compared with many other countries. In particular Māori cultural and spiritual values in landscape have often been over-ridden, with incentives for better protection almost entirely lacking.[2] This thesis investigates the restoration of fragmented ecological systems as interdependently related with the healing of a community and their relationships to their natural and cultural landscape. While certain iwi and hapū representatives may be connected to ancestral lands with close links to the landscapes around them, their memories and associations within such areas are in danger of evaporating as the population ages, and as stories or memories are not passed on. Māori have often become disassociated from cultural significance within landscapes for a variety of reasons whether the legacy of colonial regimes, alienation of lands, migrations, reinterpreted histories, or the disturbances that arise from appropriation of ancestral landscapes by developers, some archaeologists, councils and others.[3] With these as common realities facing contemporary kaitiaki, considerable navigation through the complexity of the resource management process is required, so that remaining cultural and spiritual values are recognised, reconciled with, respected and protected.

This chapter has two purposes. First, it overviews some national attempts to set out structures or policies for protecting Māori heritage, natural and cultural landscapes in Aotearoa New Zealand. They include the Parliamentary Commissioner for the Environment's Historic and Cultural Heritage Management in New Zealand report 1996, the Historic Heritage Management Review 1998, the Taonga Māori Review 1998, and the Historic Heritage Think Tank 2003, with its concept of 'heritage landscape'. While national attempts at cultural heritage protection appear to cover a complex of needs, they have failed to embed more protective policies or laws.

Second, based on the lack of assured or well-resourced protection strategies arising from national attempts, the chapter explores local movement towards overcoming some

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1 New Zealand Historic Places Trust /Pouhere Taonga, 2003, *Heritage Landscapes Think Tank: Report On Proceedings*, Think Tank held at Museum Of New Zealand Te Papa Tongarewa Cable Street, 7 April 2003, Wellington, 6.

2 ibid, 19.

3 ibid, 5.

of these realities for cultural landscape protection with an archaeological and mapping strategy proposed for wāhi tapu and other significance in landscape. In many ways iwi and hapū have already envisaged, catalysed, activated, collaborated with others, and realised the challenges of ecosystem restoration within ancestral landscape, by creating the pilot project themselves. Iwi and hapū have taken practical action and used place-based learning processes to realise change within the complex dynamic that constitutes Māori natural resource and cultural landscape management.

Historic and Cultural Heritage Management in New Zealand 1996

The Parliamentary Commissioner for the Environment's report (The PCE Report) on historic and cultural heritage management in Aotearoa New Zealand emerged in 1996 from various concerns raised by individuals, iwi and hapū, and community groups over the ongoing modification of wāhi tapu and significant Māori archaeological sites in several areas of the North Island. The PCE Report evaluated heritage management under the Resource Management Act 1991 and the New Zealand Historic Places Trust Act 1993. The review critiqued these supposed protection mechanisms and revealed deficiencies that were important to iwi and hapū over their land and water based wāhi tapu, their cemeteries, battle sites or other sacred grounds. In particular the review highlighted the lack of coordination between agencies involved in the management of historic and cultural heritage. At the time of the review the New Zealand Historic Places Trust He Pouhere Taonga (HPT), Department of Conservation Te Papa Atawhai (DOC) and other local authorities did not have close working relationships. They often siloed their activities or were at a loss to respond to the needs of Māori organisations, as iwi and hapū authorities. The lack of inter-link between all authorities is matched by a lack of resources to better assist iwi and hapū to protect their cultural areas through active planning and assessments, and by accessing HPT information systems.[4] The Historic Places Trust Act 1993 has sometimes been inadequate in dealing with Māori values associated with archaeological sites within cultural landscape, a shortfall not helped by the Māori Heritage Council having limited decision-making or binding powers over these areas. With these perceived gaps between the archaeological protection provisions of the HPA and the RMA, local authorities fail more often than not, to provide better protection for sites or wider areas as outlined in their policies and plans.[5] In saying this, the Māori Heritage Council may curtail destruction of areas when they exercise powers to refuse an authority that aims to modify or destroy archaeological areas of significance to Māori.

4 Since those times, kaitiaki representatives on the Environmental Committee plan to 'map' land and water based areas of cultural significance and retain them as silent files for ongoing reference.

5 Parliamentary Commissioner for the Environment, 1996, *Historic and Cultural Heritage Management in New Zealand*, Office of the Parliamentary Commissioner for the Environment, Wellington, 67-68.

Janet Davidson, 2003, *Wāhi Tapu and portable taonga of Ngāti Hinewaka: Desecration and loss; protection and management*, A report prepared for the Ngāti Hinewaka Claims Committee, February 2003, 19.

Historic Heritage Management Review 1998

When the Historic Heritage Review eventuated from the PCE report, it also found that there was poor commitment to Māori land and water-based heritage. Based on these identified shortfalls, in February to April 1998, HPT and DOC convened a series of hui or meetings to review historic heritage management in Aotearoa New Zealand.[6] Crown's obligations for the conservation of Māori cultural landscape under the Treaty of Waitangi, reveals a prolonged lack of both national direction and local control. Wāhi tapu protection as sacred places whether they be cemeteries, battle sites or other areas where spiritual entities reside became the crucial test to assess the effectiveness of New Zealand's heritage system. Unfortunately, the system has not met the expectations of Māori.[7]

As a result of many concerns heard at the series of heritage meetings and from the centralised national hui at Turangi in June 1998, the collective call was to shift action, responsibility and guardianship over valued resources or cultural landscapes, to iwi and hapū in their own regions. Whether the system devised was to actively protect and manage areas as possible partnerships or co-management projects with other government entities, the final decisions over the way cultural landscape was ultimately determined, resided with respective iwi, hapū or whānau members within their regions. The collective voices at the hui were very clear. Iwi, hapū or whānau were entitled to manage their own affairs as expressions of tino rangatiratanga, kaitiakitanga and maintenance of ahi kā in tribal regions. The papatipu or people on the ground, linked by whakapapa or genealogical relationships to each other could well define heritage areas in their own cultural landscapes and manage them accordingly.[8]

The Historic Heritage Review revealed that short of providing resources, legislative and policy support, central government had no relevant role to play in local heritage management. Iwi and hapū were obligated to care for the values and accumulated associations as bequeathed to them by their ancestors through land and water-based taonga tuku iho. They required support to care for the unique qualities that Māori cultural landscape and heritage brought to the country's national identity. The report summarised a range of concerns over cultural heritage or cultural landscape protection that included the inconsistencies found in interpretation and inherent weaknesses present in the Resource Management Act 1991. Hypothetically speaking, if the current Māori Heritage Council model functioned within a proposed Māori Heritage agency, then the Council would be charged with advocating for a transfer or delegation of functions, powers and duties from

6 In January 1998, the Minister of Conservation, Hon Nick Smith issued a discussion paper for public comment as the National and New Zealand First's coalition response to the PCE report.

7 New Zealand Historic Places Trust Pouhere Taonga, February 1998, Historic Management Review Flyer.

8 New Zealand Historic Places Trust Pouhere Taonga, 1998, *Historic Heritage Management Review Māori Consultation Round Key Points: Preliminary Report.*

their territorial authorities to iwi or Māori authorities. Provisions for transfer of functions, powers and duties to iwi authorities could then take place under Section 33 Resource Management Act 1991.'

When elders and like-minded others in Kuku motivated movement towards rearticulating the local 'laws' that *should* govern tribal place, they increased the interest in possible co-management models or opportunities. With the ongoing lack of inter-relationship between relevant resource management and heritage laws, local authorities often lack adequate Māori heritage protection mechanisms within their planning processes. Some struggle to understand and embrace their duties and obligations under the Treaty of Waitangi. Such disparities contribute to a general unwillingness of local authorities to devolve functions and powers to Māori, despite the opportunities outlined in Section 33 of the RMA. Even though iwi and hapū have a right of recourse to appeal decisions about resource consent issues through the Environment Court, the threat of costs against litigants is often sufficient to impede them from proceeding further. Under the RMA Part II Section 274, a person, parties, iwi or local authority can give notice to the Environment Court and to all parties after a notice of appeal has been lodged.[10] In order to alleviate some of the financial constraints facing iwi and hapū organisations and the Environment Court, the Environmental Legal Assistance Fund (administered through the Ministry for the Environment) has helped environmental, community, iwi and hapū groups to participate more effectively in the resource management process. The Fund provides groups with funding to help prepare, mediate and/or present resource management cases to the Environment Court and other courts.[11]

The Historic Heritage Management Review consultation hui inspired a series of potential solutions, devised to alleviate the general poor treatment of Māori knowledge systems and lack of understanding by local authorities about Māori relationships with land, waterways, kaitiaki responsibilities and place. Solutions included developing national policy statements and interim guidelines written by Māori with an insertion of the Treaty of Waitangi as a founding principle of the RMA. The focus of the Resource Management Act Amendments in 2004 and enacted in 2005, aimed to improve operations by addressing problems with delays, costs, inconsistencies, uncertainty and national leadership regarding

9 On 23 July 2006, Te Hākari Management Committee met with Horizons Regional Council on the One Plan, to outline the tangata whenua or kaitiaki perspective of leading and actualising positive environmental change in tribal regions. Hapū-led initiatives are now better supported by key staff at Council. It took over a decade to achieve better relationships with representatives and understanding of iwi and hapū needs.

10 Sourced from the consolidated reference version of the Resource Management Act which includes the Resource Management Amendment Act 2005.

11 The Environment Legal Aid Fund also assists cases before the High Court or Court of Appeal, particularly where the relevant Environment Court case was funded by the Environmental Legal Assistance Fund, and where the group is defending a successful outcome from the environment court. The Fund is available to cover the time and expenses of legal representatives and/or expert witnesses used in preparing for, resolving and/or presenting cases before the court.

processes of the RMA and decision-making. The amendments focussed on five key areas for improving national leadership; decision making; local policy and plan making; certainty for consultation and iwi resource planning, and for natural resource allocation. Councils are required for the purposes of the RMA, to keep and maintain a record of iwi authorities within their region or district and, if requested, groups representing hapū for the purposes of the RMA. The lack of statutory provision for joint management has been addressed by providing a framework for public authorities, iwi authorities and groups (that represent hapū recognised by iwi) to enter into joint management agreements about natural or physical resources. In consulting with tangata whenua during the preparation of a proposed policy statement or plan, councils are now required to follow a procedure that is aligned with the Local Government Act 2002. The amendments clarify that neither a resource consent applicant nor a local authority has a duty to consult any person about an application, although each must comply with a duty under any other enactment to consult any person about the application. Councils must still consider whether specific iwi or hapū are an affected party and may need to contact the iwi or hapū to determine levels of impact.[12]

It was proposed when amending the sections of the RMA that in fortifying the position of Māori environmental perspectives, this would assist in supporting cultural landscape protection mechanisms within iwi management plans. These plans could then be included into Regional and District planning documents. Other possibilities included appointing Māori as full members to Council Boards and Committees, with their approval sought for all resource and building consents, including non-notified applications.[13] In promoting the idea of iwi and hapū-based cultural heritage protection agencies, these entities would have encouraged more effective and positive relationships between Māori, local and regional councils, developers and private landowners. They aimed also to ensure that funds would be available for Māori to participate more fully in local authority processes.[14]

An overarching and supportive Māori Heritage Agency

In drawing attention to certain objectives devised to improve conditions for cultural landscape protection at a governmental level, an overarching Māori Heritage Agency within the Ministry for Culture and Heritage was proposed during the course of the Historic Heritage Management Review, 1998. This agency was promoted as the entity that would enable greater protection of Māori heritage values within cultural landscape.

12 The focus of the Resource Management Act Amendments in 2004 enacted in 2005, aimed to improve the operation of the act by addressing problems with delays, costs, inconsistencies, uncertainty and national leadership regarding processes of the RMA and decision making. Sourced from the *Resource Management Amendment Act 2005 – Summary,* Ministry for the Environment Manatū Mō Te Taiao, Wellington.

13 There were certainly capability and capacity issues with this proposal.

14 New Zealand Historic Places Trust Pouhere Taonga, 1998, *Historic Heritage Management Review Māori Consultation Round Key Points: Preliminary Report*, 4.

It aimed to advise the Minister for Culture and Heritage and the Minster of Māori Affairs on Māori heritage. As a provider of national policy its standards of practice and procedural guidelines aimed also to actively support iwi, hapū and whānau to protect and conserve their cultural landscape. The intended agency was to advise national agencies (ably assisted by local authorities) in all aspects of Māori heritage management. If it or appropriate iwi authorities were the affected parties in resource consent applications relating to Māori heritage, then improved resource management responses would provide greater clarification and clout on resource consent issues facing iwi and hapū. This would have meant more trained or expert Māori to tackle the resource consents process. The Māori Heritage Agency would have also encouraged voluntary protection mechanisms; developed national public education programmes; compiled a comprehensive national database, and advised on heritage services as appropriate. It would have assisted iwi, hapū and whānau in many ways, including them managing their own interrelated heritage in landscape through a national provision of funding, technical assistance, training and networking. A Māori heritage provider would have developed a national monitoring system to deliver clear protection of land based heritage and conservation outcomes[15], and help ease the collective concerns of hapū within iwi.

Despite Māori heritage being under-funded in comparison to non-Māori heritage for so long, there were justifiable suspicions amongst iwi and hapū authorities over another Crown agency managing natural and cultural heritage as separate entities, subject to the externalities of politics and economics. Would it provide the protective mechanisms needed? Would the envisaged entity endorse an effective partnership or co-management of Māori land and water based heritage? Even though it's major functions were envisaged as a national channel for Crown to address its obligations to the Treaty[16] with adequate funding allocations for more effective Māori heritage management, the initiative did not eventuate. Despite being regarded as *the* agency with the creative potential to provide for Māori heritage leadership and policy, the government did not establish the Māori Heritage Agency. When the potential to strengthen links and responsibilities between the Ministry of Culture and Heritage, the Department of Conservation, New Zealand Historic Places Trust, other Crown and non-Crown entities were raised for improved management of natural and cultural heritage in landscape, the recommendations were non-prioritised and therefore missed.[17]

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15 Huhana Smith, 2000, 'Taonga Tuku Iho, Taonga Māori: the Guardianship of Esteemed Treasures,' in Strelein, L & Muir, K. (eds.) *Native Title in Perspective: Selected Papers from the Native Title Research Unit, 1998-2000*, Native Title Research Unit, Australian Institute of Aboriginal and Torres Strait Islander Studies: Canberra, Australia, 285.

16 Department of Conservation, 1998, *Historic Heritage Management Review: Report to the Ministerial Advisory Committee,* Department of Conservation Te Papa Atawhai: Wellington. 23-25.

17 When the Labour led coalition of 1999–2002 was elected, there was a change of direction and the idea of a recommended Māori Heritage Agency went into abeyance.

Taonga Māori Review 1999-2000

In 1999, the Ministry of Māori Development Te Puni Kōkiri was instructed to undertake a review of Government's role in Māori culture and heritage as noted in Cabinet Paper [CAB (99) M 17/18]. At that time and as reported to Cabinet, the review was called the Taonga Māori Review.[18] It attempted to take into account the outcomes of the Historic Heritage Management Review and Culture and Heritage Sector reviews. These reviews were undertaken on the basis that all aspects of Māori culture and heritage would be transferred to the Taonga Māori Review.

The Taonga Māori Review had three main purposes. First, it tried to clarify the Government's role in Māori culture and heritage. Second, it proposed organisational options for the development of more effective policies and delivery for the protection of Māori culture and heritage, which took into account the Treaty of Waitangi. Third, the review aimed to develop options for the establishment of the Māori Heritage Agency, including consideration on issues over functions, governance, funding, accountability, legislative implications, links with other agencies, and any other performance matters.

The scope of the review identified outputs delivered by public service departments that impacted on Māori culture and heritage. The review wanted to ascertain the mechanisms and range of options that would develop more effective policies and delivery of Government's commitment to Māori culture and heritage. The review considered a range of functions and issues excluded from the Historic Heritage Management Review and the Culture and Heritage Sector Review, which included:

- The location of Māori language broadcasting and future responsibility for Te Mangai Paho
- A distinct Māori heritage agency to provide for Māori heritage policy and leadership
- Marae subsidy funding administered by the Lottery Grants Board
- The Māori Language Commission
- The Māori Heritage Council

18 The term 'taonga Māori' encompassed Māori culture and heritage. Taonga Māori was considered a very broad concept that includes both tangible and intangible aspects incorporating land-based historic heritage, natural resources and wāhi tapu (sacred sites), and also matters such as cultural property, ngā toi Māori (arts) and te reo me nga tikanga (language and customs). Definitions of wāhi tapu, the cultural sector, cultural activity, historic heritage and the arts were informed by those used in the Culture and Heritage Sector Review and Historic Heritage Management Review. See Appendix IV.

- Te Puni Kōkiri culture and heritage policy
- The Māori language strategy
- The Taonga Māori Protection Bill[19] and the repatriation of kōiwi (Māori ancestral remains)[20]
- Te Waka Toi/Toi Aotearoa
- The Aotearoa Traditional Māori Performing Arts Festival Society
- Māori Purposes Fund Board
- Māori Arts and Crafts Institute
- Wāhi tapu and heritage orders under the Resource Management Act 1991

While the Taonga Māori Review had broad scope it aimed to assist the government in devising objectives that improved outcomes for Māori culture and heritage. For this thesis the interest lay in analysing the proposed government objectives and the ability of the arrangements to meet the role of government, particularly for Māori natural, environmental and cultural landscape values. As issues emerged during the course of the Historic Heritage Management Review, certain matters also arose for the Taonga Māori Review. These included the availability of information concerning Māori culture and heritage and the extent of policy development and strategic approaches to address Māori culture and heritage issues with protection foremost in mind. The review explored the fragmentation and co-ordination of responsibilities, and analysed the capacity of the culture and heritage sector to respond to Māori culture and heritage issues. The Taonga Māori Review also investigated opportunities for iwi and hapū involvement in management and decision-making, especially in the actual protection of Māori land and water based heritage within cultural landscape.

Māori culture and heritage in the Taonga Māori Review was encompassed within the term 'taonga Māori'. It had a broad reach including both tangible and intangible aspects that incorporated land-based historic heritage, natural resources and wāhi tapu as sacred sites in ancestral landscape. The term also encompassed matters such as cultural property,

19 This bill was eventually assumed into the Protected Objects Act 2006.

20 This process is looked after by the Museum of New Zealand Te Papa Tongarewa through the Karanga Aotearoa Repatriation Research and active repatriation of kōiwi tangata or ancestral remains project.

ngā toi Māori as in the arts and te reo me ngā tikanga, as in language and customs. Previous reviews and reports such as the Culture and Heritage Sector Review and the Historic Heritage Management Review indicated that the Government did not have clearly articulated objectives in relation to Māori culture and heritage. In part, this was because it encompassed a wide range of activities. In some areas, such as Māori language, objectives were already well developed[21] but in most areas, there were no objectives that offered clear direction for other taonga, particularly for land and water-based cultural significance within landscape.

The Taonga Māori Review explored the government objectives that might develop into an effective government system that actually protected and supported Māori culture and heritage. The review intended to develop public education strategies that fostered awareness and greater respect for the integral role Māori natural and cultural landscape meant for the identity of New Zealand. A key objective of the review was for Crown to actively partner with iwi and hapū, to support their iwi and hapū-led developments, their innovations or initiatives. By supporting Māori resourcefulness in tribal regions, Māori would then become more active decision-makers for cultural context, their natural resources and for cultural landscape management. Opportunities to partner also aimed to retain, protect and develop mātauranga Māori as customary systems of understanding.[22]

A draft policy statement summed up Crown's role in Māori culture and heritage. It intended to provide and maintain an environment where Māori culture and heritage was respected, protected and enhanced for future generations. The Government's duties, derived from the Treaty of Waitangi aimed to endorse kaitiakitanga as a function residing with whānau, hapū and iwi. Crown needed to actively protect Māori culture and heritage (derived from an ancestral landscape perspective) by providing for and supporting Māori participation in activities that impacted on or were influenced by their culture and heritage. The government had an interest in recognising that Māori culture and heritage was not static, where Māori contributed to an evolving national identity. It was in the government's best interest to support Māori culture and heritage as a unique part of New Zealand's

21 As in Cabinet Agreements Māori *Language Policy: Options to Improve the Status and Vitality of the Language* [CAB (97) M 45/8C (4)] it was agreed that the Government's overarching Māori language policy objectives were to:

- Increase the number of Māori who know the Māori language by increasing their opportunities to learn Māori
- Improve proficiency levels of Māori in speaking Māori, listening to Māori, reading Māori and writing Māori
- Increase the opportunities to use Māori by increasing the number of situations where Māori can be used
- Increase the rate at which the Māori language develops so that it can be used for the full range of modern activities
- Foster amongst Māori and non-Māori positive attitudes towards, and accurate beliefs and positive values about, the Māori language so that Māori-English bilingualism becomes a valued part of Aotearoa New Zealand society.

22 Derived from Draft letter addressed to Hon Dover Samuels, Minister of Māori Affairs outlining the scope of the proposed Taonga Maori Review, Te Puni Kōkiri Ministry of Māori Development, Wellington.

In July 1999 a Māori focussed review resulted from the Cabinet Agreements "Enhanced Ministry of Culture and Heritage" [CAB (99) M 17/18] Cabinet Paper. It was noted that Te Puni Kōkiri Ministry of Māori Development, would seek to clarify government's role in Māori culture and heritage.

identity, in order to ensure that all New Zealanders benefited. The Crown agreed that in partnership with iwi and hapū they had duties derived from the Treaty of Waitangi to take reasonable action to protect sites of cultural significance to Māori.[23]

The proposed heritage management system had been devised to improve protection and management of Māori historic heritage and to clearly define the duties and functions of central and local government. It aimed to align decision-making as closely as possible to the affected communities of interest by maximising local community consultation and involvement within a national policy framework. This ensured clear national direction and consistent standards for implementation. It was crucial that Māori participate and effectively protect and manage their heritage within ancestral landscape, as was Crown's consistency to address its obligations under the principles of the Treaty of Waitangi.[24]

As part of policy implications an opinion was sought from the Crown Law Office. The opinion sought to clarify to Cabinet the role government had in Māori culture and heritage. Te Puni Kōkiri developed the following policy statement, which set out the government's role in terms of Māori culture and heritage.

> 'The role of Government is to foster an environment where Māori culture and heritage *are* respected, protected and enhanced for future generations.
>
> Among the duties derived from the Treaty of Waitangi is the duty on Crown to actively protect Māori culture and heritage. In carrying out this obligation, Crown will take all reasonable and practicable steps to:
>
> - Recognise and support the *rangatiratanga* of whānau, hapū and Iwi and Māori over their culture and heritage
>
> - Uphold the *principle of partnership*; in developing and delivering policies that impact on Māori culture and heritage; in resolving differences with whānau, hapū and iwi over the impact of policies on their culture and heritage
>
> Government also has an interest in achieving culture and heritage outcomes for all New Zealanders, and therefore:

23 It was noted in Cabinet Agreements that the objectives for the protection of sites of importance to Māori may, in some circumstances, be achieved though methods implemented by iwi/hapū authorities, local authorities and the private sector. Cabinet Agreements, *Historic Heritage Management*, Reference CAB (97) M43/22.

24 Cabinet Agreements, *Historic Heritage Management*, CAB (97) M43/22.

See Appendix III: Cabinet Minutes Relating to Māori Culture and Heritage.

- Promotes *Māori culture and heritage* as a unique part of New Zealand's culture and heritage

- Recognises that a dynamic and vibrant Māori culture contributes positively to New Zealand's identity.'

After deliberating over the statement, Crown Law Office provided a final opinion on the revised draft policy statement, with specific issues over certain wording. Crown Law considered the circumstances to avoid possible risks to government, particularly if the statement was worded where it could be used as a benchmark against which to judge Crown action. Crown Law argued against the italicised wording highlighted in the statement and sought the use of the policy statement as being merely aspirational. They considered any consequences as political rather than legal. First, Crown Law argued against the phrase, *are respected protected and enhanced*. Crown Law felt that this phrase imported a standard, which might potentially be difficult to measure. They suggested that rather than having an open-ended approach that *are* be replaced with *can be* so as to provide a statement of aspiration, rather then one that specifies outcomes in terms of respect, protection and enhancement. Second, it argued that the inclusion of the word rangatiratanga was not relevant to the issues as the language of the other articles of the Treaty have not been incorporated. Crown Law also had concerns over difficulties in the precise meaning of the term, which in their opinion certainly challenged the concept of ownership. They required an assurance that government actually accepted Māori rights of ownership in relation to the matters potentially within the scope and meaning of taonga. It suggested an approach of acknowledging the concept of kaitiakitanga, which did not connote notions of ownership. Third, Crown Law noted that there could be advantages in spelling out the parameters of the *principle of partnership* rather than using the concept in the abstract. It suggested rewriting the policy statement in line with current Treaty jurisprudence on the principles of the Treaty and the duties derived from them. Finally, Crown Law sought precise definition as to the exact scope of the concept of *Māori culture and heritage*.

In response to the specific comments on the statement from Crown Law Office, the revised draft policy was *only* intended as a government policy statement. It was not developed with the purpose of being included in legislation. The revised draft policy statement was unlikely to have any legal effect and therefore would not be enforceable by the Courts. The word *foster* did not connote any specific outcomes in terms of *respect, protection and enhancement*. Therefore it was considered unnecessary to limit the role of government in Māori culture and heritage by reducing its role to fostering an environment where Māori culture and heritage *can be,* rather than *are,* respected, protected and enhanced. The term

rangatiratanga was also considered central to the Treaty duty of the Crown to actively protect Māori culture and heritage. Any attempt to reduce the impact of the statement by replacing rangatiratanga with *kaitiakitanga* needed resisting. Kaitiakitanga is an essential element of rangatiratanga. Kaitiakitanga does not convey what Māori understood in the signing of the Treaty- that they would be protected both in the possession of, with the mana to control and exercise authority over, their valued taonga. It was well understood by officials that Māori knew best how to protect their own interests and achieve this through the exercise of rangatiratanga.

The Waitangi Tribunal research and claims process well recognises that tino rangatiratanga maintains peoples' ongoing distinctiveness, which characterises the Māori way of life.[25] The aim of government should therefore, *recognise and support* the rangatiratanga of whānau, hapū, iwi and Māori over their culture and heritage. Crown Law promulgated the phrase *act reasonably and in good faith* as a characteristic of partnership. This was considered inappropriate as a replacement for the wording *uphold the principle of partnership.* Partnership not only requires partners to deal with each other reasonably, fairly and in good faith, but also each party shares a say in how the relationship is managed and where potential conflicts of interest may lie. Furthermore, it was not the role of Crown to *define with precision as to the exact scope of the concept* of Māori culture and heritage. The Waitangi Tribunal has long indicated that the Crown should be cautious in attributing relative values to taonga such as Māori culture and heritage, since these are matters for iwi and hapū to decide.[26]

Heritage Think Tank 2003

On 7 April 2003 the New Zealand Historic Places Trust Pouhere Taonga chairperson Dame Anne Salmond, convened a Heritage Landscapes Think Tank at the Museum of Aotearoa New Zealand Te Papa Tongarewa in Wellington. A large number of key personnel from across the culture and heritage sector, iwi and hapū leaders, academics, researchers, local and regional council and other Ministry representatives converged at Te Papa to discuss and investigate particular cultural landscapes issues with heritage significance to iwi, hapū, communities, and the nation in New Zealand. As offered at the Think Tank landscapes are where important historic events occurred as part of New Zealand's emerging national identity. However, many of these heritage sites are unacknowledged or ignored. While heritage is well presented in archives, cenotaphs, libraries and museums it is rarely considered in the places where it happened. With appropriate care, promotion and interpretation,

25 Relevant Waitangi Tribunal Claims and reports that recognise tino-rangatiratanga. They include the Motonui- Waitara Claim 1982, Manakau Claim 1985, Mangonui Sewerage Claim 1988, Te Roroa Report 1992, Rekohu Report 2001 and the Report on the Crown's Foreshore and Seabed Policy 2004 – just to name a few.

26 Information sourced from Draft Brief to Minister of Māori Affairs, *Crown Law Opinion on the Role of Government in Māori Culture and Heritage*, as part of Taonga Māori Review, 16 June 2000.

such places could contribute significantly to local economic development through cultural tourism, as well as to national, regional and local pride.[27] Heritage landscapes are therefore not fixated on the 'artefactual' or heritage buildings alone. They cover large geographic areas that may have multiple owners and represent a convergence of many experiences and interests. They reveal dynamic systems undergoing constant change. They do not fit neatly into a single historical period, but have composite layers of human interaction and ongoing narratives of significance associated with each place.[28]

As affiliated hapū to Tūkorehe are linked to ancestral land through continuous land and repurchased land holdings at the coast, they represent existing and ongoing connection with place. Enhanced iwi and hapū responsibilities to protect cultural landscape, also reiterates contexts of tribal identity in the present. With accumulating pressures facing the region the Think Tank concept of 'heritage landscapes' is not easy to embrace. While the definition attempts to encompass both iwi and hapū views and develop Māori cultural heritage significance, it aims to simultaneously capture other historical relationships to land. The concept of braided cultural landscape raised in Chapter 4 refers to the notion of knowing place and peoples' place within it, as informed by both Māori and non-Māori recollections of encounter and change within lands and peoples. The braided approach recognises other groups' inter-generational use of land. As particular landholders in Kuku they interacted with knowledgeable Māori and respected the significance of place as pointed out to them within the agricultural landscape they farmed. In this way they came to respect aspects of special place, particularly burial grounds, fresh water springs and middens. Former farming families also did not want to jeopardise resident Māori relationships to these regions. While it is true that the parents or grandparents of some non-Māori informants may have disregarded key Māori understandings and context, there was certainly trepidation not to transgress the request of those key elders.

This important intertwining of stories can offer ways of appreciating landscape from bicultural or multicultural perspective as relevant in the present. Mana whenua relationships to lands, resources and waterways however, possess a priority of time requiring greater respect for long-term Māori occupation and use of these specific territories. There may also be the need to consider how lands were alienated from collective tenure. In contemporary times tensions have increased between private property rights and the collective interests and rights of iwi and hapū. In order to realise the most effective cultural landscape protection, intricacies and complex relationships to lands should be reconciled with iwi and hapū.

27 New Zealand Historic Places Trust Pouhere Taonga, 2003, *Heritage Landscapes Think Tank*, Report on Proceedings, 2.

28 ibid, 4.

Despite the Resource Management Act 1991 (RMA) and the New Zealand Historic Places Act 1993 (HPA) being the two most important laws in Aotearoa New Zealand that recognise culturally valued areas, they are relatively unconvincing when it comes to actually protecting wider or inter-related areas of Māori cultural and spiritual significance. This is due to the lack of linkages between the laws. The over-riding purpose of the Resource Management Act 1991 has been to promote the sustainable management of natural and physical resources. Within its provisions, the law recognises and provides for the relationship Māori and their culture and traditions have with their ancestral lands, waters, sites, wāhi tapu and other taonga [s6(e)]; the particular regard taken for kaitiakitanga [s7(a)], and the principles of the Treaty of Waitangi (s8).

The act aims to protect historic heritage from inappropriate subdivision, use and development as a matter of national importance. The HPA provides some protection of archaeological sites, defined as places associated with human activity, which occurred before 1900. It is through archaeological investigation that such sites within areas provide evidence that relates to the history of New Zealand.[29] Section 4 HPA recognises the relationship Māori and their culture and traditions have with ancestral lands, water, sites and other taonga. Some heritage landscapes may fit into the categories of historic areas and wāhi tapu areas provided for in the HPA, where others may not. For archaeological areas, the HPA states that it is unlawful for anyone, to damage, modify or destroy a site or any part thereof.[30] In HPA section 10 (1) this certainly applies when there is even reasonable cause *to even suspect* that there is an archaeological site present. Despite these provisions, the HPA site registration process does not automatically protect them or any other inter-related areas of cultural significance within landscape.

The heritage landscape concept may be present in law within the HPA and the RMA, but the interpretation is limited as it does not fully encompass a holistic, interconnected landscape perspective. There is no specific recognition of how whakapapa or genealogical reference systems inter-link peoples, lands, waterways, ecosystems or areas of spiritual importance. If the heritage landscape concept did recognise such intricacies then it would

29 Gerard O'Regan, 1997, *Bicultural Developments in Museums of Aotearoa: what is the current status? Ki te Whakamana i te Kaupapa Tikanga-a-rua ki roto i ngā Whare Taonga o te Motu: kei hea e tū ana?* National Services Te Paerangi, Museum of Aotearoa New Zealand Te Papa Tongarewa, Wellington, 33.

Janet Davidson, 2003, *Wāhi Tapu and portable taonga of Ngāti Hinewaka: Desecration and loss; protection and management,* A report prepared for the Ngāti Hinewaka Claims Committee. February 2003.

30 The Historic Places Act 1993 regulates the modification of archaeological sites on all land. The Act makes it unlawful for any person to destroy, damage or modify the whole or any part of an archaeological site without the prior authority of the New Zealand Historic Places Trust Pouhere Taonga. This is the case regardless of whether:

- the site is registered or recorded
- the land on which the site is located is designated, or the activity is permitted under the District or Regional Plan
- a resource or building consent has been granted.

better reflect and respect the multiple associated narratives of place, its natural resources, its peoples and other influential Māori events embedded in landscape.

The terms 'cultural landscapes' and 'ancestral landscapes' were included in the definition of 'historic heritage' in the Resource Management Amendment Bill [No. 2].[31] They offered holistic definitions that reunited and revitalised core bio-cultural values[32] within landscape. They encompassed protection and maintenance of interrelatedness that exists between all entities. A later Supplementary Order Paper however deleted both terms and included an explanatory note to the effect that these terms were already covered by enhancement of amenity values, and the maintenance and enhancement of the quality of the environment.[33] Despite the positive conclusions that cultural and historic heritage of iwi and hapū is an essential component of New Zealand's national identity, the cultural and ancestral attributes were minimalised. The system has ultimately been unable to actively support or advise Māori in the real work of protecting cultural landscape, as recognised within the principles of the Treaty of Waitangi.

Ahi kā roa archaeological assessment and protection

If Iwi and hapū had the chance to review existing information on the Historic Places Trust register and develop their own information systems, they could actively maintain their knowledge of place. By accessing archaeological surveys and databases, iwi and hapū would then conduct their own research, assess their own areas of significance and manage their findings according to their own unique needs. Nga Whenua Rahui and Mātauranga Kura Taiao with direct line funding to the Minister of Conservation could then assist Māori to manage their own heritage / significance within cultural landscape. In exploring the advantages for resident iwi or hapū holding all archaeological and heritage information about their cultural landscape, this helps over come worries about who gets to manage both unknown and unregistered, or privately-owned heritage sites in adjacent or neighbouring lands, waterways and wetlands.

Chapter Two noted how ancestors of Ngāti Raukawa and affiliates of Ngāti Tūkorehe (including Ngāti Wehiwehi as son of Kauwhata, and nephew of Tukorehe) came to occupy and utilise the coast and lands in extended groups of whānau and hapū, under a system of interlocking and overlapping usufructuary rights. Contemporary rights from the coast to the mountains still continue within the concept of ahi kā or ahi kā roa- the principle

31 Reported back to the House by the Local Government and Environment Select Committee in 2004.

32 Spiritual, cultural, human and ecological values.

33 Raewyn Peart, 2004, *A Place to Stand: the protection of New Zealand's natural and cultural landscape*, Environmental Defence Society Incorporated Landscape Report, Executive Summary, Auckland, 17.

of keeping the home fires burning on land, the metaphor that symbolises long-standing occupation, aligned with the right to determine what should happen in tribal regions.

An ahi kā roa landscape-based archaeological programme of assessment investigates all inter-relationships between physical evidence, cultural memory and identity. This is rather than the usual isolated pockets of evidence approach employed by most archaeologists. Such an interrelated landscape approach avoids the problems that arise when development is proposed and assessment turns up previously undiscovered evidence.[34] An ahi kā roa approach shifts the current nature of archaeological recording where heritage areas or cultural values are often thought of as discrete, defined places in the ground, able to be quantified in square metres where development can take place around them. This thinking results in relationships amongst sites being damaged or destroyed. This prevailing form of assessment contributes to a loss of evidence about the way people lived and interacted with resources within landscape. Conversely, another approach often preferred by coastal land developers (seeking to speed sanction for peri-urban developments) has been to consult with Māori individuals rather than groups mandated by consensus. This significantly impedes protection of ongoing ahi kā significance in coastal dune land systems.

This chapter has outlined the considerable shortfalls in protective policy and practice over time to physically care for iwi and hapū values and actual areas within ancestral landscape. The ahi kā roa approach for the coastal area works alongside another strategy referred to as the 'silent file' project. This project visually maps recollections, context and encounters with known wāhi tapu as set aside from common usage and other areas in cultural landscape. The 'silent file' mapping project uses digital mapping technology to include associated layers of ecological and hydrological importance. The ecological pilot projects underway well recognise Māori cultural identity and wellbeing as bound by vital relationships with lands and healthy ecosystems, therefore the maps encompass the goals of Māori cultural determination over the environment.

To some informants there are both known wāhi tapu and 'yet to be' known areas in the coastal dune lands region. The known sites are noted as urupā as burial grounds or where fighting chiefs were interred, pā or papa kainga as original sites of fortified and unfortified occupation, and as kauwhanga-a-riri where skirmishes or battles took place. Other burial areas in dune systems have been marked by stands of tī kouka. Other areas of significance are ahu-otaota as well-used middens or sites of shellfish harvest. Before the pine forest was grown around the Tirotirowhetu site, the midden mounds were recalled as creating

34 Sourced from the *Tirotirowhetu, Ōhau River* proposal 2007 for assessment by Susan Forbes of Kōtuku Consultancy Ltd, Titahi Bay, near Wellington. She is a leading archaeologist who works with iwi and hapū to actively support ahi kā models of landscape assessment. Her practice well understands the complex human, ecological and cultural memory interrelationships that are present within coastal landscapes in Horowhenua that require urgent protection.

a remarkable spectacle when they glimmered against pale sands in the summer sun. Other significant areas within the wider coastal area include sites as places of spiritual propitiation.[35] As part of the 'silent file' strategy more archaeological surveys will collate information utilising archaeological methods carried out alongside kaumātua and active kaitiaki participating in the process. If these activities are to at all effective and meaningful, training local iwi and hapū in new archaeological practices is vital. Local people will need to design the assessment processes alongside specialists.

The pressure is on

During the course of farming and restoration activities two possible occupation, gardening or resource gathering sites have been identified. The first was noted on the eastern recharge area or in the eastern paddock adjacent to the wetland. This site was revealed when the sharemilker tried to grow stock feed in a dune system paddock. In disturbing the sandy soil surface, shells were raised across an area, close to a sheltered dune area adjacent to the eastern riparian of the wetland. The shells indicated either former resource use areas in proximity to the larger Ōhau pā area or offered information on the former orientation and flow of the Ōhau River before historical earthquake uplifts of land. A second area came to light when the project manager (2006-) held a planting day with Patumakuku students. When the very last of the karamū trees were planted a student revealed a cache of shells and stones with his spade. Without disturbing the site any further, a signal was sent to the environmental committee that yet another region required more comprehensive assessment with specialist 'archaeological' methods and knowledge applied.

There are growing concerns over the lack of wider methodical or detailed Māori 'archaeological' assessment in the expansive coastal area, especially if plans for dense coastal subdivisions go ahead (as pictured in Figures 5.4). The proposed Waikawa Beach and Hokio Beach developments will not only exacerbate predictions of negative physical and ecological impacts but will also surely obliterate remaining unique areas, which contain knowledge about the natural and cultural processes that once operated in the dune belt during the early period of Māori occupation.[36] Increased relocation and movement of people are also likely to increase accessibility to the wider coastal region with the Ōhau sand spit or Kuku beach between the Waikawa and Hokio Beach communities.

In recent years, the actions of local councils and property developers have increased pressures for multiple subdivisions in neighbouring coastal areas. This is particularly alarming for hapū and iwi inter-relationships with the wider cultural landscape at the

35 It is important to reiterate that the thesis is not an exhaustive account of *every* known area of significance within landscape at Kuku.

36 Bruce McFadgen, 1997, *Archaeology of the Wellington Conservancy: Kapiti-Horowhenua. A prehistoric and palaeoenvironemtnal study*, Department of Conservation, Wellington, 23.

Figure 5.1: Area of shells in eastern paddock, 15 April 2006.
Photograph by Huhana Smith

Figure 5.2: Shell distribution, 15 April 2006.
Photograph by Huhana Smith

coast. In the expansive coastal area, this is where original settlements, papa kainga or pā of related neighbouring tribes (including those of the Te Ātiawa, Raukawa and Toarangatira alliance) were once located; where ancestors were interred; where battles and other events took place or where the vanquished were buried in proximity. The land and seascape also contains evidence of generations of harvest with extensive shell, bone and stone middens, comprising sensitive information about a peoples' dynamic interaction with local biodiversity. So many activities took place within the wider region of mobile sand dune areas that once supported dune system grasses and sand binders, coastal forests or dune lakes and wetlands. There is vital information contained in former mahinga kai areas overwhelmed by sand movement. While there has been some archaeological site investigation between the Waiwiri Stream and the Waikawa River, the total area has not been comprehensively assessed for iwi and hapū values of its original occupants or for later mana whenua settlements and resource use.

The western dune belt is a dynamic arena of coastal accretion and erosion, where dune advances have overwhelmed forest and places of human use and habitation. Local kaitaiki are concerned about the loss of former ancestral indicators of ancestral presence. When the Manawatu Catchment Board and Regional Water Board commissioned a report

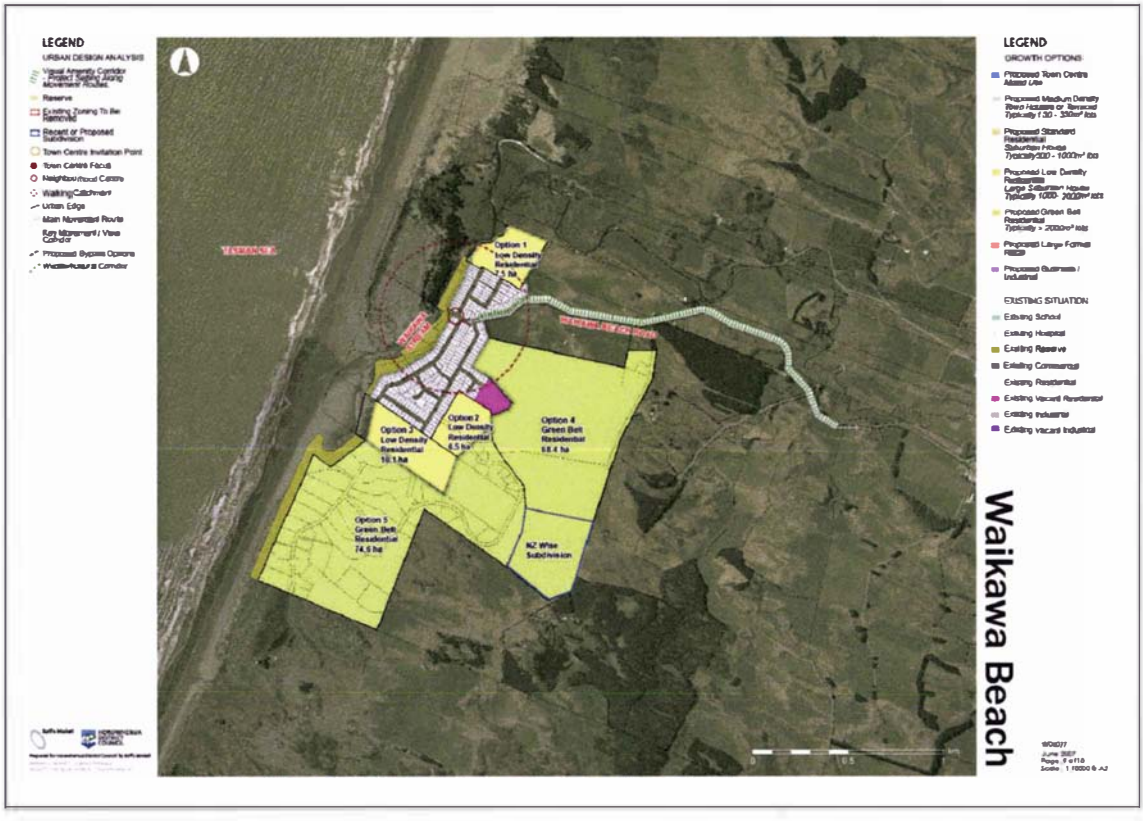




Figures 5.3, 5.4, 5.5, 5.6 and 5.7: Shells and stones revealed near Te Hākari wetland lake area, 28 July 2007.

Photographs by Huhana Smith

called *Processes of Coastal Change Manawatu-Horowhenua* in 1985, it recommended that serious future consideration be given to the physical forces that operate within the coastal zone from Manawatu to Paekakariki. The report highlighted the effects of inappropriate fore dune or land activities on physical processes that can aggravate destructive shoreline responses. On the Kapiti coast mistakes have long been (and continue to be) made by locating developments on hazardous sites without due consideration for the long-term stability and sustainability of the unique and dynamic dune coastline. As adjacent coastlines and inland uses are interconnected through wave action, wind, tides, currents and sediments, sustainable peri-urban development should respect fore dunes as natural buffers against erosion, especially during periods of storm activity. A beach absorbs wave energy and to do this efficiently it adjusts its form and position. If wave action changes then



Figures 5.8 and 5.9: Waikawa Growth Development, 2007 and Hokio Beach Growth Development, August 2007.

Sourced from Horowhenua Development Plan 2007-2027, Horowhenua District Council, Levin

the beach area compensates with a new pattern of surf energy input. Sand is transported onshore by wave action, blown inland to form dunes, and is also transported offshore and alongside depending on wave conditions.[37]

Unfortunately, unsustainable peri-urban development on fore dunes or dune systems increases drainage and runoff of fine sediments. This causes higher water tables in sandy beaches and the clogging of beach pore spaces with fines. These factors aggravate beach erosion by creating impervious surfaces that increase the scouring effect of wave backwash.[38] As the effects of different periods of urban development along the Kapiti coast have worsened shoreline erosion (that stretches south to Paekakariki) such damage requires considerable conservation, engineering or other expensive mitigating measures. With pending climate changes, the severity of storms and sea surges are more likely to impact on proposed housing developments on dune systems, especially those unsustainable subdivisions proposed on the fore dunes adjacent to the sea.

The Horowhenua coastal region has not experienced the density of proposed peri-urban development. It is likely to have adverse impacts on cultural landscape and coastal rural landscape amenities. Regional tribal authorities may also need to re-examine how they sanction 'accidental find' scenarios in relation to subdivision pressures. Their sanction becomes a management mechanism for site destruction[39] as a paradoxical form of cultural landscape preservation. Developments should not stabilise the unique coastal dynamic dune systems, dune wetlands and lakes, and their capacities as natural buffers to protect the Horowhenua coastline. If in allowing widespread subdivision, this simultaneously destroys vital evidence and identifiers of former Māori settlements and the evidence of encounter or narrative held within lands, wetlands and waterways of the region. The wāhi tapu strategy for Kuku aims to comprehensively reassess 'archaeological' and cultural areas within coastal landscape before any activities or excavation for any type of development takes place. Tangible reminders of Māori interaction with place need to remain in situ and as undisturbed as possible.

Cultural landscapes remain complex and partially contested. People mostly value landscapes that are strong on natural character and lack human influence. Local or regional authorities may also range in standard and consistency of approach when addressing statutory obligations to iwi and hapū over landscape. Matters of good governance clearly

37 M.K. Holland & L.D. Holland, 1985, *Processes of Coastal Change Manawatu-Horowhenua*, Manawatu Catchment Board and Regional Water Board Report, Palmerston North.

38 ibid, 38.

39 Diane Lucas, June 2007, An Appeal Against the Decision of the North Shore City Council on Proposed Plan Change 6 and Variation 66 to the North Shore City District Plan under Clause 14(1) of the First Schedule of the RMA between Appellants, Respondent and Section 274 parties, ENV-2006-304-000-000404, Environment Court, Auckland Registry, Auckland.

state the importance of actively protecting areas of significance to Māori, but despite these assurances, matters of protection more often than not are non-prioritised[40] with destruction, loss and modification. If by respecting that iwi and hapū can lead directions taken for tribal lands, other local government agencies can then devolve more environmental management functions to them. The amalgamated programmes that follow, better realise protection of outstanding coastal landscapes. As no local council has actually undertaken a transfer of powers to tangata whenua, leading resource management commentators continue to note the lack of progress in realising iwi and hapū aspiriations. When local authorities question capacity and skills, or encounter difficulty in ranking responsibility for iwi and hapū, then more meaningful or practical arrangements may be harder to realise. By developing protocols, innovative contractual arrangements or by simply creating training programmes, the perceived deficiencies in capacity and responsibility, can be readily overcome.[41]

As outlined in the chapter so far, comprehensive reports and reviews have attempted to clarify government's responsibilities for Māori land and water-based heritage. It has overviewed how weak domestic, political will and national attempts have been at actual protection of cultural or ancestral landscape. When the proposal for a possible Māori heritage entity charged with actively protecting natural, cultural heritage and cultural landscape was first muted, this marked an important right of recourse to finally recognise Māori 'historic heritage' or cultural landscape of iwi and hapū as equal to that of New Zealand Europeans.[42]

Despite attempts to consolidate approaches to policy development that informed and improved legislation, the Taonga Māori Review did not achieve its objectives and was unresolved. The Heritage Think Tank failed to lead to new mechanisms for the protection of landscape and heritage. All reports and reviews clearly outlined how Māori sensibilities were poorly treated towards cultural or heritage landscapes. Government still underplayed the potential of constructive and holistic approaches that valued and protected cultural heritage assets as taonga, not only for the benefit of iwi and hapū but also for all New Zealanders in general. The opportunity to address policy shortfalls and create better outcomes was missed. Despite government obligations, protection is still regarded as a non-absolute, especially when the needs of protection are balanced against a broader public interest.[43]

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40 Cabinet Agreements, *Review of Protection Mechanism: Protection of Sites of Significance to Māori (Wahi Tapu)*, Reference CAB (96) M 8/15.

41 Ronda Cooper & Rachael Brooking, 2002, "Ways Through Complexities" in Kawharu, M. (ed.) *Whenua: Managing Our Resources*, Reed Publishing Ltd Books: Auckland, 197.

42 Janet Davidson, 2003, *Wāhi Tapu and portable taonga of Ngāti Hinewaka: Desecration and loss; protection and management*, A report prepared for the Ngāti Hinewaka Claims Committee, February 2003.

43 Cabinet Agreements, *Review of Protection Mechanism: Protection of Sites of Significance to Māori (Wahi Tapu)*, Reference CAB (96) M 8/15.

Figure 5.10: *Ti Tū Tonu*, 2003, oil on canvas , 450 × 1370mm.
Private collection, Auckland

Ongoing challenges still revolve around how professional and community groups, environmental and cultural agencies find ways to effectively negotiate and collaborate with each other. In the Ōhau and Kuku coastal region, public, local and regional government support is tantamount to preserving a contiguous coastal dune wetland, a dynamic coastline and adjacent dune lands as ancestral landscape. These areas are at imminent risk from sharply increasing development pressures,[44] waterway pollution and climate change predictions. Conducive protection requires appropriate recognition and management based on meaningful partnerships, understanding and mutual respect between all parties.[45] Success in protecting landscape certainly requires a generosity of spirit that acknowledges how different places will matter to different groups and that sometimes, the same place will have different kinds of significance.[46] Kaitiaki therefore seek to exclusively record and hold site record information according to their models and alternatives, with a view to monitoring inter-related areas in cultural landscape, both tangible and intangible as part of proposed wāhi tapu and cultural landscape protection strategies. Shared cultural landscape bases at the coast have long been integral to inter-related iwi, hapū or whānau narratives. Maintaining constructive dialogue and positive action between neighbouring iwi and hapū over environmental and cultural landscape enhancement is therefore crucial. With iwi and hapū leading the way, local authorities need also to carefully consider the coastal landscape from an integrated, valued cultural landscape perspective.

The case studies that follow in Chapter 6 outline the practical ecological projects as positive solutions towards improving environmental degradation. They are also concerned with immediate increases in proposed inappropriate coastal subdivision and the local and global implications of climate change, which cannot be ignored. As indicated in the Millennium Assessment Report 2005 the most important direct drivers of ecosystem change will increase in the first half of the 21st century. Climate change and excessive nutrient loadings are the two main drivers that will become more severe.[47] More localised and forecasted extremes of climate change for the southwest coastal region of Kapiti to Horowhenua, predict wide-ranging meteorological hazards. They have been assessed as increasing threats to lifelines and services coming from more frequent heavy rainfall events and associated floods; sea level rises increasing the impact of high tides and storm surges on coastal erosion; flooding making groundwater aquifers near the coastline vulnerable to saltwater intrusion; and changes in temperature and rainfall regimes causing problems for plant and

44 ibid, 20.

45 New Zealand Historic Places Trust Pouhere Taonga, 2003, *Heritage Landscapes Think Tank, Report on Proceedings*, 16.

46 ibid, 19.

47 Millennium Ecosystem Assessment Core Writing Team, 2005, *Millennium Ecosystem Assessment Synthesis Report,* Pre-publication Final Draft Approved by MA Board on March 23, 2005, United Nations Environment Programme, Millennium Ecosystem Assessment Secretariat, World Resources Institute, Washington, DC.17.

Figure 5.11: Walking along beach to Tirotirowhetu, August 2005.
Photograph by Huhana Smith

animal pest eradication programmes.[48] Climate change scenarios; the nitrification of water from intensified agricultural activities; protection of cultural landscape and the possible increase in localised coastal subdivision combine to create a complex range of realities for kaitiaki. While customary whakapapa or genealogical relationships with lands, waterways and cultural landscape describe once intimate and intricate ways of knowing, of relating

48 National Institute of Water and Atmospheric Research Ltd, 2005, *Executive Summary: Meteorological Hazards and the Potential Impacts for Climate Change in the Horizons Region*, xviii.

to and utilising the resources of place, such relationships have been strengthened and re-edified for affiliates, in order to increase collective capacities to tackle the environmental issues facing the coastal and wider tribal region.

This thesis has overviewed the development of an inclusive framework based on natural, ancestral and cultural narratives, and action for environmental decline. Natural and human genealogies are the tools to re-edify iwi and hapū associations to each other, with their cultural identity with place, lands and waterways. With greater confidence kaitiaki commission collaboration projects with other specialists who may also express an interest in environmental enhancement. Local kaitiaki are the key determinants in ensuring vital and healthy relationships with lands, waterways and ecosystems. It is their role to balance healthy, coastal systems within cultural landscape alongside the business of sustainable farming. The lead of kaumātua and kaitiaki has created the platform on which to achieve the goals of local iwi and hapū affirmation, greater social wellbeing, and beneficial outcomes that arise from co-management or co-intelligence projects.

CHAPTER SIX

> 'Mana was... tied to human and economic resources. Human resources consisted of whānau, hapū and iwi. These resources blended different levels of reciprocity, depending on the proximity of relationships. Economic resources entailed jurisdiction over various resources such as land, food stocks, forests and fisheries. It was incumbent on the individual not only to protect those resources, but to add value to them."[1]

This chapter overviews the implementation of the practical ecological projects where the case studies and ahī kā roa archaeological strategy emerge as solutions for environmental and cultural degradation in landscape. The case studies illustrate a range of interdependencies and interrelationships that have been encouraged between local iwi and hapū residents and their natural estate at the coast. The projects or studies were practically orientated. They derive from a hapū within an overarching iwi governance perspective. In actively restoring fragmented ecological systems there is interdependent movement towards the healing of a community's tribal associations to natural and cultural landscape. As the governing and administrative body for all Tūkorehe providers, Te Iwi o Ngāti Tūkorehe Trust is also described as a developed tribal entity, which ensures that it's relevant sub-committee for environmental and cultural landscape creates distinct, well-planned, locally based programmes for all the environmental activities within the tribal region.

The case studies for the coastal area are complex and intricate, where the analysis of aims, ethics, methods, resources and theory has tended to be holistic. There are two areas of investigation covered in this chapter. The first case study focuses on the changes made to the lower reaches of Ōhau River to sea, with links to other braided waterways in the region. This case study explores how agricultural and economic forces diverted a significant waterway for floodwater control, which then impacted on indigenous biodiversity and led to local peoples' inability to maintain and sustain their interactions with once abundant resources sourced there. Before considerable drainage from around 1929-1935, waterways and wetlands in the coastal region were respected as entities and important economic and subsistence resources for local Māori. Contemporary action had to be taken to shift attitude and aptitude for their remaining natural integrity.[2] Therefore, the second interlinked case study investigated the aims and outcomes of an active dune wetland restoration project known as Hei Whenua Ora ki Te Hākari/Te Hākari Dune Wetland Restoration Project. It has related projects including the hydrology water research, the Wehipeihana Bush

1 Wharehuia Hemara, 2000, Māori Pedagogies, NCER Distribution Services, Wellington, 70.

2 Only 0.3% of wetlands remain in the Manawatu/Horowhenua region.

regeneration, and eco-seed collection project, and the expanding Tikorangi Nursery development. In Chapter Five the proposed ahī kā roa landscape-based archaeological assessment strategy has been explained.

The case studies meld existing or remaining cultural, spiritual and local knowledge as part intangible or braided narrative, where convergences between oral recollections catalysed the directions taken. Local Māori and inter-related knowledge based on once intimate, physical, cultural, inter-generational and spiritual interfaces with lands, water and resources have been drawn out to take stock of eroding understandings of place, about local biodiversity, plant resources and special areas- all for the sake of the future generations' ongoing tribal identity with land. Over time key informants have helped devise better ways to protect cultural and natural landscape. Their dialogue has helped retain and enhance what remains of natural integrity. The overall approach considers how valued or sacred areas within the coastal landscape are deemed to have more potent mauri because of the cultural context from which they were created. Any deprecation of their mauri as a cultural principle, may equate with a loss of well-being or ill health for genealogically related peoples, their lands and waterways.[3]

A series of co-intelligence research reports commissioned by iwi and hapū representatives and conducted by external specialists, combined to reveal a range of ecologically fragile situations.[4] The reports include the *Kuku – Ōhau Situation and Opportunities for the Lower Reaches of the Ōhau River* by Lucas Associates (1997-1998); the *Physiochemical Water Quality Analysis* by Andrew Tipene, Environmental Technology student, Massey University (1997); the progressive ecological assessment for Te Hākari wetland by Wildlands Consultants (2004 and 2007/2008); the plans proposed by Integrative Studies students, Massey University (2006); the collaborative hydrological surface and subsurface water quality research project (2004-2007) conducted by Dr Mark Gyopari, hydro-ecologist from Phreatos Limited, with his *Te Hākari Wetland: Hydrological Assessment* (May 2006); and Dr Olivier Ausseil, formerly of Horizons Regional Council, with his related report *Te Hākari Wetland: Water Quality Investigation* (March 2007). By collating this range of perspectives on the ecological decline facing the region, each report has been helpful in drawing better environmental strategies together to enable co-created solutions as pilot restoration projects. The action research and active projects have rallied iwi and hapū participants to perform as pro-active kaitiaki or guardians. The projects attempt to amend the detrimental changes that have resulted from water engineering diversions, drainage

3 Derived from a presentation by Professor Robert Jahnke, 2005 for *Taonga Tuku Iho: Heritage Aotearoa* paper, Massey University, Palmerston North.

4 Te Hākari wetland is also a case study for the Foundation for Research Science and Technology funded Ecosystem Services Benefits in Terrestrial Ecosystems for Iwi research project. Further opportunities exist to scope Māori landscape perspectives, investigate natural aquatic ecosystems, understand the barriers that impede ecological kaitiakitanga, and better understand remnant forests, natural systems and dune wetlands along the coastline, from Ōtaki to Foxton.

schemes and accumulated unsustainable agricultural practices in the wider coastal area. The strategies engage with global environmental goals and align them with finding locally manifested solutions as best practice for the entire coastline and dune systems, from the Waiwiri Stream to the Waikawa River.

Case Study One: Kuku-Ōhau, the Situation and Opportunities for the Lower River and the dune areas to sea

As understood in previous chapters, the Ōhau River Scheme was a major interference by mechanical means to a natural river system. It was after severe storms and floods in the Ōtaki and Ōhau River catchments in 1936[5] (and some six or so years later) that the first river diversion scheme was proposed. The hand-drawn illustrations[6] show a series of early to final diversion plans. They all aimed to dramatically alter the river and divert its waters by shorter route to sea. As indicated in the images, the 'A' proposal was based on the first plans that a well-known farmer, Mr Pat Easton held. He ran Te Rauawa Station on the northern side of the Ōhau River to the east inland of the Tirotirowhetu dune systems. The initial river diversion scheme was virtually a 3.5 kilometre straight line from upstream of the Kuku Stream and Ōhau River junction to sea. As was common practice of river engineering in the early 20th century, the proposed massive channel ignored every meander, any sense of the cultural or sacred in landscape and sliced through the sensitive blind creek area. When the Whirokino 'cut' on the Manawatu River, and the Ōtaki and Ōhau River diversions were all considered as simultaneous projects, it was ironically fortunate that the Public Works engineer felt that the Ōhau River project was too small to be viable. When the engineer interviewed Mr Pat Easton over the project, Easton too emphasised how the proposal was a waste of time. The Public Works plans were literally left on Easton's kitchen table.[7]

The Manawatu Catchment Board proposed the 'B' plan in the 1950's. This again was a series of cuts with only some stop banking, and where the Kuku Stream was to be flood gated. This proposal raised the northern cut for the first time, which allowed the Ōhau outlet to remain in its existing position. The 'C' plan was the 1967-1968 proposal posited by engineer Mr Peter Farley. This proposal had high stop banks close to the river and a narrow stopbank channel. The flat area close to the river mouth was also stop- banked off, as were the sand hills and the blind tributary. The cut was meant to be a dragline, excavated channel, which would widen and deepen with river erosion.

5 Information sourced from personal communication with Mr Edward O'Conner, July 2007. He was the engineer for the 1971 proposal. He spoke of how Mr Pat Easton a former owner of Te Rauawa Station had Public Works plans for the Ōhau River that dated to around WWII. This may explain the reasons for the Prime Minister's Department taking expensive aerial photographs of the coastal area between 1942-1946 as shown in Figures 4.17 and 4.29.

6 Provided by Mr Edward O'Conner, the engineer hired for the final 1971 proposal.

7 Personal communication with Mr Edward O'Conner, August 2007.

In 1971, the Manawatu Catchment Board finally tabled the 'D' proposal. The stop banks were lower and slightly further away from the river. There was no stopbank planned on Te Rauawa station, which gave more room to accommodate floodwaters. The lower and formed diversion channel allowed for the passage of more floodwaters, as did the lowering of the end of the Tutangata-kino peninsula. It was essential that the Ōhau River mouth remain in its existing position with the ability to travel down the coast. If the blind creek had been used as an outlet it would have caused the southward movement of the main sand dune belt.[8]

From 1965, the Manawatu Catchment Board targeted the coastal flood plain area for waterway control. From 1971, the Ngāti Tūkorehe Tribal Committee, the later convened Tahamata Incorporation Board, some Māori landholders and some local non-Māori farmers supported the diversion scheme, as did others who leased Māori land at the coast. The latter Ōhau River Scheme and its staged plans were detailed in engineering diagrams, maps, letters and reports, in the oral accounts of those who carried out the works and from those who experienced the dramatic changes first hand. With sanction from the Ngāti Tūkorehe Tribal Committee, the Manawatu Catchment Board did not have to purchase the land around the river nor carry out the water engineering works under the Public Works Act. While there were vocal hapū and whānau objections during and after the scheme's excavations and stop banking work, the Ngāti Tūkorehe Tribal Committee as lead authority of the day endorsed the flood mitigation project as beneficial for the tribe's burgeoning dairy farm operation. Like early ancestral entrepreneurs involved in trading and cultivating activities before them, tribal leaders of the time approved the 'cutting' of the river. This marked another major transition in land and resource use by Māori landowners. Tahamata developed into a lucrative dairy farm and successful economic base for the hapū and iwi shareholders and the marae of Ngāti Tūkorehe.

The Reality of the Scheme for the Ōhau River

The Ōhau River has long been regarded as a moveable feast, a watercourse known for its ever-changing character, especially when flowing across an alluvial flood plain to sea. It has been a notable feature of the Horowhenua coastal and natural flood plain, which used to emerge from the Tararua mountain range, meander north with the streams of the Manawatu River and then flow into the low-lying basin where Waipunahau or Lake Horowhenua now lies. Lake Waiwiri (often referred to as Papaitonga) was once a lagoon at the mouth of the Ōhau River.[9] As advancing dunes trapped the lakes against the marine terrace the Ōhau River changed course to spill south from the ranges and flow in the

8 All proposal information supplied by Mr Edward O'Conner of Palmerston North, former engineer of the 1971 Manawatu Catchment Board staged plans. Based on personal communication July -August 2007 and O'Conner's original project plans.

9 Lucas Associates, 1997, *Kuku – Ohau, Situation and Opportunities in the Lower River: Preliminary Notes*, 2.

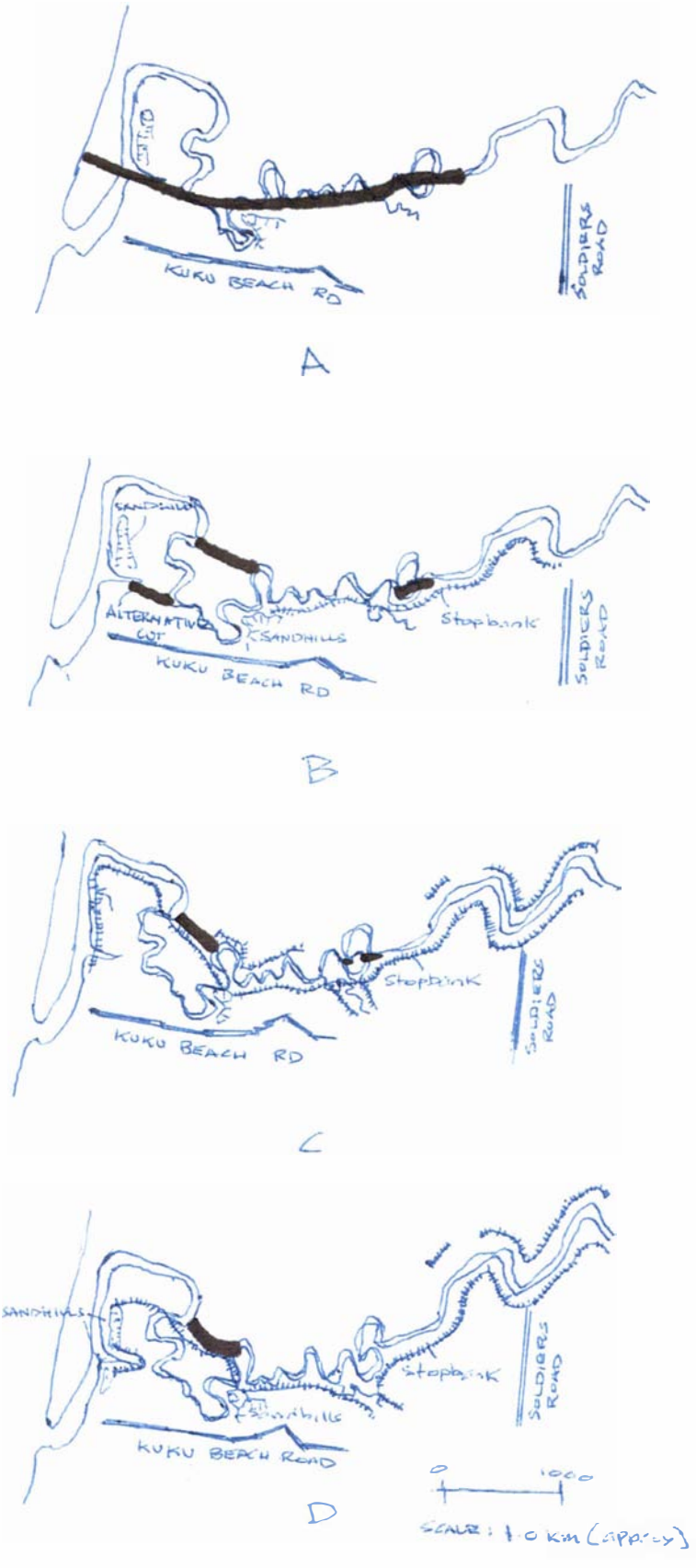

Figure 6.1: Hand-drawn images by Mr Edward O'Conner.
The images indicate proposals for the Ōhau River diversion plans from the 1940s to 1971.
Drawings kindly supplied by Mr Edward O'Conner, Palmerston North

corridor to sea, the route that it follows today.[10] The Ōhau and Ōtaki Rivers and the large streams between them deposited large quantities of gravel from the Tararua Range onto their flood plains.[11]

It would appear that no one in the local community was quite prepared for the reality of excavating the diversion or 'cut' created by the motor driven scrapers. The project commenced in the winter of 1972 to avoid the strong west and north-westerly winds. The sand was damp for easier operation of heavy machinery. Great care was taken as the cut deepened to ensure that the Kapuni gas pipeline was not hit. The gas line was struck once on the true right of the cut and work ceased until the gas pipeline inspector carefully checked it, rewrapped it, and applied two coats of bitumen liquid. Such work had to dry before soil and sands were carefully filled over the pipe. O'Conner commented that,

> The explosion would have been massive if the scraper blade had nicked a hole in the pipe. There were some very "white" contractor plant operators that day!'[12]

Soon after commencing work that winter, a series of successive and devastating floods hindered the works. The disruptions dismayed and confused Māori shareholders over their ongoing tribal fishing, trespass issues and property rights. In file correspondence and meetings held between the Manawatu Catchment Board and the Ngāti Tūkorehe Tribal Committee, there were calls to compensate the tribe over loss of farm income, loss of land or the loss of access to the area for fishing. These concerns were eventually clarified and cleared, with no change to tribal shareholders remaining the original title owners of the diversion channel.[13]

By 1997 however, it was obvious that the river remnant was no longer a river. In altering the flows and removing the plant and animal life that had once existed in the area, the river meander became a severely nitrified lagoon. In the early days of discussion over environmental decline, invited specialists, regional council representatives and iwi and hapū participants all met at the meander site. Rehabilitation for the 'loop' would only come about when all entities acknowledged how flood protection alterations and agricultural practice had combined to accelerate the waterway's deteriorated and contaminated state.

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10 ibid, 2.

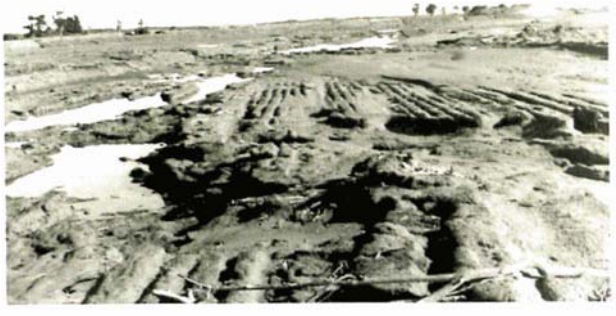
11 Frances Duguid, 1990, 'Botany of Northern Horowhenua Lowlands, North Island, New Zealand', *New Zealand Journal of Botany*, Vol 28, 383.

12 Personal communication with Mr Edward O'Conner, former engineer of the 1971 Manawatu Catchment Board's staged plans for the Ōhau River.

13 Edward O'Conner, 1972, Letter to the Secretary of the Manawatu Catchment Board, Ōhau River Scheme Report on Ngāti Tūkorehe Tribal Property, 20 June 1972, 2. File 9/3, Horizons Regional Council Archive, Palmerston North.

The tribe actually had the right to fence across the river diversion upstream and downstream of the cut, as the river was no longer considered navigable. While the bed of the river clearly belonged to the tribe, the right to fence never eventuated.

6.



7.

8. LOOKING DOWN CHANNEL (JUST DOWNSTREAM OF TOP SCOUR HOLE) SHOWING SCOUR POCKETS. GROOVES HAVE BEEN FORMED BY SCRAPER TEETH.

Figures 6.2: Selected images of flood damage, May 1972.
File 9/3 Manawatu Catchment Board Ōhau River Scheme, Stage One Contract No 115, Damage to Contract Area Caused by Flood- Sunday 14th May 1972.
Horizons Regional Council Archives, Palmerston North

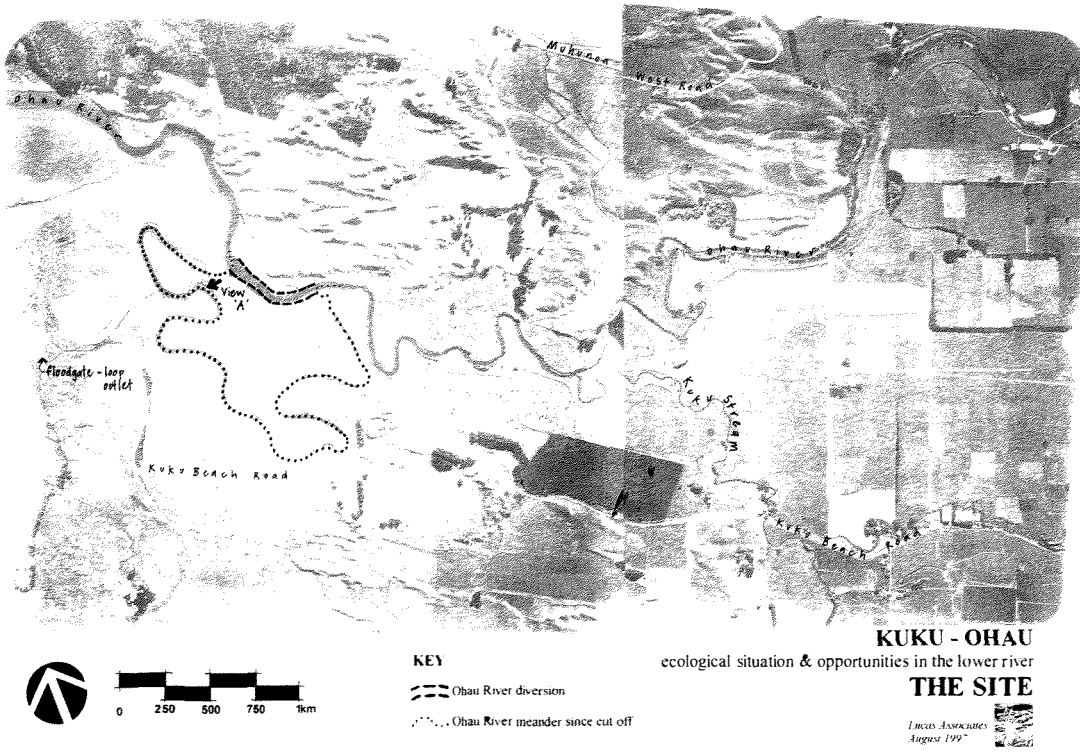


Figure 6.3: Site location map, 1997-1998.
Reproduced with permission from Lucas Associates, Christchurch

In referring to the commissioned Lucas Associates' report, this offered an integrated management strategy with options for rehabilitating the residual 'loop' waters. The preferred option aimed to divert cleaner Kuku Stream water into the remnant. Another option was to physically remove the accumulated nutrients in the sediment on the riverbed. When the opportunity to clean out the effluent by dragline was first discussed, it was potentially too risky for both human and land health. With so many stored nutrients and carbon in the diversion bed, which would continue to pollute the water body for decades, where could the toxic sludge be disposed of safely? Other remedial tasks for the former river included planting extensive riparian areas along the banks of the loop with native trees, grasses and reeds, where the emerging forest and vegetation would then trap nutrients from farm run off. The report requested that permanent fences be erected to retire the slopes of the lagoon. Reforested zones would eventually provide shelter for stock. These practices in time would also allow for a healthier lagoon ecosystem to develop and flourish.[14]

By increasing the freshwater inflows into the lagoon or river remnant from the Kuku Stream[15] into the upper loop area, this proposal aimed to inhibit saline intrusions on

14 Lucas Associates, 1997, *Kuku – Ohau, Situation and Opportunities in the Lower River: Preliminary Notes*, 17.

15 In June 2007 Tahamata Incorporation applied for a Resource Consent to install a culvert in the Kuku Stream stopbank and divert 0.1 cumecs from the stream into the former Ohau River 'loop'. The main purpose of the diversion is to improve the water quality in the old meander and thus improve fish habitat. The project is strongly supported by Horizons Regional Council.

Figures 6.4: Kuku Stream diversion aerial images, 1997-1998.
Reproduced with kind permission of Lucas Associates, Christchurch

the tide and keep them downstream from possibly ruining grazing pasture. Other recommendations sought to divert high quality spring water flowing along the toe of the sand dunes upstream, into the top of the 'loop'. In modifying designs for potential floodgates at the outlet to the 'loop', this opportunity allowed for better fish passage and spawning on incoming and outgoing tides. There were suggestions to mount a floodgate on short rollers, on a level controlled trigger or with radio-controlled trip. The later two propositions would trip the floodgate to close if there was any risk of immanent flooding.[16]

As the river remnant encompassed areas that had been recalled or stated as ancestrally sacred, changes to Tahamata farming and council practices were integral to protect the sanctity of associated areas. Figure 6.5 from the Lucas Associates' report offered opportunities for a healthier recreational site for fishing or for launching watercraft. In reality such a proposal required further thought, as there were issues in dealing respectfully with the adjacent sacred areas and some dunes areas that could not be interfered with. Any extensive revegetating would have to be done for the benefit of indigenous biodiversity, rather than recreational use (as pictured) with kaitiaki exercising caution for the adjacent areas marked by tī kouka. Even though areas along the river meander were renowned for their mullet other areas were not so commonplace for fishing activities.

16 Lucas Associates, 1997, *Kuku–Ohau, Situation and Opportunities in the Lower River: Preliminary Notes*, 17-18.

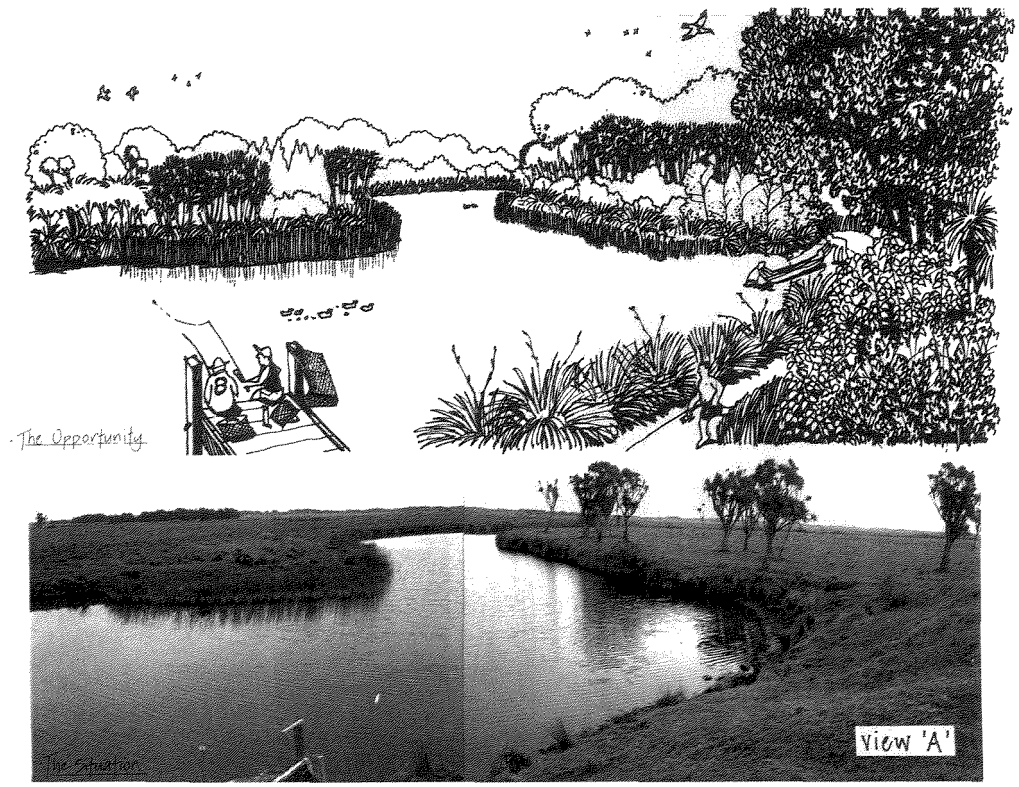


Figure 6.5: Riparian ideas, before and after, 1997-1998.
Reproduced with kind permission of Lucas Associates, Christchurch

In the early stages of encouraging positive environmental change to fragmented areas, Horizons Regional Council did not want to amend the former water engineering works, or allow more fresh water flow back into the 'loop'. Most activity and finances for their Ōhau Manakau Scheme fund maintained flood control measures for areas fragmented by the series of stop banks, the mechanical digging of stream systems, the chemical weed eradication on water and riparian areas, and the gravel extraction from river berms for erosion and water flow control. These regional authority interventions are costly and in many ways, short sighted to the needs of the whole reach of the river from the mountains to the sea. Changes in perspective should consider the whole of the Ōhau River catchment, including the land that the main waterway courses through, the volumes of sediment, sand, gravel and silt that the river shifts, the associated springs and streams, and the river's interrelated ground fed dune wetlands and other subsurface waterways.[17]

When Horizons Regional Council resolved its position to allow some water flow via a re-designed culvert from the Ōhau River back into the loop in 1998, this appeased some of the depleted oxygen matters that had been generated when the Ōhau River Scheme diverted the river. The council remained reticent however, to allow greater volumes of

17 Since beginning this research project, thinking has shifted to where the Ōhau Manakau River Scheme now notes how the community of farmers, iwi and hapū representatives and all residents along the river must work together for the overall betterment of the river catchment.

water into the remaining 'loop'. Convenors of Ōhau Manakau River Scheme ultimately wanted to maintain flood protection mechanisms as administrated by their engineers.[18] Despite many inter-authority meetings and hui at that time, it was still clear that local and national government agencies were not meeting resident Māori expectations for effective environmental, cultural heritage or landscape protection, especially when multiple entities under many laws tended to speak past each other over issues.

The wider environmental protection strategy attempted to combat the damage caused by vehicles, inappropriate rubbish disposal or people's general disregard of the sensitive, natural estuarine area within the tribe's coastline of cultural significance. When another area was cleared in the adjacent dunes to the river beach, this encouraged people to leave their cars in the car park made available and to walk, rather than drive along the river's edge to sea. As the beach environs remain hapū property under the auspices of Tahamata Incorporation, kaitiaki began to strategically place large driftwood logs in the dune systems or across the tracks to limit the damage made by trail bikes, four-wheel farm bikes or four-wheel drive vehicles to sensitive dune grass areas and bird nesting areas in season. There was concurrent planting of pīngao, coastal iris and harakeke by local kaitiaki[19] however rabbits largely displaced the efforts made when they burrowed for the potting mix and ate the tender roots of plants.

What emerged from this action research process grounded in a kaupapa and tikanga Māori epistemology of knowledge development, suggests that the restoration of fragmented ecological systems in a cultural landscape of narrative and significance, is interdependently related to the healing of a community. When local kaitaiki emphasised protective mechanisms based on former customary information and experience about cultural and spiritual areas in landscape at the coast, they forged the safeguards required to protect them against inappropriate use and development. Other kaumātua accounts also relayed a range of experiences with natural resources and the river and beach environs. They recalled how fresh fish, eel and whitebait were plentiful in the dune lakes, in the Ōhau River, and that different shellfish, pātiki or flounder could be found in the backwashes of the blind creek. Flounder were also found in ephemeral wetlands, adjacent to Te Hākari lakes south of the current Tahamata pine forest. Shoals of whitebait went up the Te Hākari Stream from the Ōhau River on spring tides. Sacks of thick eels were gathered from Te Hākari

18 This programme of activity is now part of Horizons Regional Council One Plan. In 2006, the culvert still restricted a greater volume of tidal inflow that was required to better oxygenate the remnant waterway, hence in June 2006 Tahamata made moves to divert Kuku Stream waters into the former river meander.

19 Including Peter Daly [whāngai son of Hare Hemi (Windy) Wehipeihana and Eileen Daly] and Tipene Perawiti.

Figures 6.6: Logs have often been positioned and repositioned to block trail bikes and four-wheel drive vehicular access. While these logs restrict access, new ways are often sawed through logs left by tides on the Ōhau River beach region. Access for food gathering is not discouraged. Reckless and unnecessary access to the dunes that destroys bird-nesting areas, impacts on shellfish biodiversity or other ecologically sensitive areas, are restricted for cultural and common sense reasons, 4 November 2006.

Photograph by Huhana Smith

wetland. The whole area was regarded as a significant mahinga kai or food gathering area, literally 'the feast'.[20]

Despite these elders' anecdotes that they and the 'old people' before them had always observed protocols for the beach area,[21] the river beach and coastal environ was fast becoming a waste disposal site for a range of domestic and garden rubbish. Fires were even lit on occasions to destroy dumping evidence. As happened one weekend in 2000 a local shed was cleaned out and all refuse including old mattresses, paint cans, broken crockery, paper, plastics, glass panes, glass bottles and other assorted domestic rubbish, was transported to the river beach to burn. An incredulous local kayaker watched from a hidden vantage as the perpetrators went about their business. When they left, thinking the fire had been sufficiently put out, the wind picked up and the flames spread into the dune marram and other coastal grasses. The kayaker put the fire out for the sake of the

20 These combined recollections were collated with Mr Gary Wehipeihana (1943-2006), Mr Horace (Cooky) Lawton, Mrs Jane Poetsch and Mrs Ruhia (Buddy) Martin at the wānanga harakeke, 18 March 2005.

21 Huhana Smith, 2002, "No Queen's Chain" in Marae Atea section, *Mana Magazine*, February/March, Auckland.

Figure 6.7: Blocking vehicular access encourages more environmentally responsible and respectful use of the beach environs, 4 November 2006.
Photograph by Huhana Smith

Figure 6.8: Remnant pingao in sensitive dune systems, 9 August 2005.
Photograph by Huhana Smith

farming incorporation's adjacent pine forest. There were other witnesses and phone alerts were made. In taking a trip down the beach the next morning, the detritus was carefully shovelled up and taken away to the tip. Tahamata Incorporation would later recommend that the sign be moved to its better site at the entrance to the beach in April 2001, to ensure that everyone (including local residents) could read it before entering the area. The bilingual sign encouraged visitors to behave responsibly and it did not exclude access to the beach environs as hapū lands. It simply sought all peoples' respect of the natural and cultural precinct they were entering.

It was therefore timely that an informative and quality sign was created for the entrance to Kuku Beach. The sign was erected as an encouraging conservation guide for both local people and visitors. It was based on affiliated ancestors' association and kaumātua recall about the special nature of coastal place. It encouraged local residents and visitors alike to contemplate how past generations lived. It aspired to engender from visitors a sense of respect for local Kuku histories, their interactions and identities[22] as the local mana whenua of the area. The bilingual sign, completed and erected in January 2001 was placed

22 New Zealand Historic Places Trust, 2004, Heritage Management Guidelines for Resource Management Practitioners, Wellington, 2.

at an initial locale alongside Kuku Beach Road. It encouraged all visitors and the local community to respect the tribal area as special and revered, to take personal responsibility of the region, and to use their ommonsense for the cultural and natural environs they were entering. The sign highlighted the misuse of the river environs and appealed to local residents, iwi and hapū affiliates and other peoples' better judgement, before they dumped inorganic or domestic refuse on the river beach.

Figure 6.9: Images of Beach Sign[23], January 2001.
Local relations, elders and marae committee members at the newly erected sign for beach. From left to right, Mrs Yvonne Wehipeihana Wilson, Mrs Ruhia Martin, Ms Huhana Smith (in hat), Mrs Apia Heke, Te Huaki o Te Rangi Kamariera, Mrs Fiona Kamariera, Mr Sean Ogden, Mrs Pauline Moffat with her father Mr Harold Rowland (1915-2001), Mr Witana Kamariera, Mr Philip Putu, Carla (Unaiki) Johns and her grandmother Mrs Maire Johns. Children in front of sign are Suitsinaan and Isaac Heke, January 2001.
Photograph by Susan Forbes

23 Te Reo Māori text by Te Tumatakuru O'Connell. English text devised by the Ngāti Tūkorehe Tribal Committee.

Figure 6.10: The sign was moved to the site near the entrance to river beach area, April 2001. Local kaitiaki enlivened the area with niho taniwha[24] arrangements of sand, plants, mulch and stones to make the sign more visible and attractive to visitors, March 2004.
Photograph by Huhana Smith

In cutting rivers and transforming cultural landscape, relationships are compromised

The Ōhau River Scheme excavated the diversion between two natural bends in the river. It aimed to prevent floods that occurred once in every ten to twenty years, however as experienced flood recurrences could happen twice in one year. The severed meander or river remnant was shortened by the diversion and confined by its subsequent stop banking. While this work reduced the size and severity of flooding along the Ōhau River, most natural processes were considerably disrupted, resulting in loss of indigenous biodiversity, food resources in the river and in the adjacent region known as the 'blind creek'. As attested by certain kaumātua, the blind creek was a particularly special area for local delicacies and the presence of spiritual entities.[25] This action however, marked a significant severing of peoples' relationships to the region, whereby the process of disassociation to environmental values within land and waterways, began.

24 The niho taniwha is a local design element or pattern referenced both inside and outside the Tūkorehe meeting house on State Highway One, Kuku. It is present on the marae ātea. Niho taniwha may represent the sharp teeth of the shark or inner markings on its skin, when skinned. From personal communication with Matehaere Patuaka, 1993.

25 In 1878 John Kebbell married 19 year old Mary Grace Ray of Sydney. They later built Te Rauawa station on the northern side of the Ōhau River at Muhunoa. There were local Māori stories about the drowning of John Kebbell's twin daughters in the blind creek some years after John and Mary settled in Muhunoa. The story noted how the little girls had tried to find the sacred taniwha that was purportedly located in that region and perished as a result.

Figure 6.11: Ōhau River 'cut' area with eroding dunes, 23 October 2005.
Panoramic photograph by Huhana Smith

When cutting the Ōhau River, the sand was damp enough to allow motor scrapers (two or four-wheel drive large vehicles with a motor at the front and a bowl at the back) to be used in conjunction with a large digger. Hydraulics dropped the bowl and the motor pulled it along. The bowl filled up, the hydraulics lifted the bowl, carried it away and dumped the scraped soil, then came back and repeated the procedure again. Much of the scraped soil was put in a stockpile just on the boundary between a farm owned by the Haines family and Tahamata Incorporation. Some of the material was used to put the stop bank through the Haines farm, which was stage two of the scheme conducted in 1974.[26] The bulk of the excavated material formed stopbanks that were placed on the dune systems opposite. Some 30,000 cubic metres of soil were removed when cutting the river meander. The surrounding sand dunes were modified to form flatter areas for pasture.

Incoming coastal dunes often encased putrefying vegetative matter or decaying forest trapped by sand movement before significant earth uplift by earthquakes had taken place. Over time the scraping and digging for the 'cut' revealed very acidic soils. This acidity softened the tyres on the scrapers and wore them out more quickly. There were concerns about machines breaking through sand crusts into enclosed vegetation, as the stench from the hummus below could be very over powering and dangerous to workers. The possibility of uncovering human remains however, was far more serious for local people and Māori workers alike. There were resident people present at the site acting as unofficial Māori overseers. As mentioned in Chapter 4, there were upsetting moments for some concerned observers. In one instance, a wife of an unofficial overseer regarded a particular area as containing the human remains of a significant ancestor. Many local people knew her

26 Personal communication with Mr Edward O'Conner, 6 September 2005.

Figures 6.12: Blind Creek and Ōhau loop long before the 'cut', Cropped aerial photograph taken between 1942-1948.

Aerodrome Services Public Works Department, National Publicity Studio, Prime Minister's Department, 1946, National Archives, Wellington. AAQT 6404 WA2175

Figure 6.13: Blind Creek area, December 2003.

Aerial photograph by Lawrie Cairns

as matakite or able to foresee events, so they were somewhat concerned by her anxious displays as well. She was particularly worried about a former river bend that used to hold water.

Overcoming fragmentation by reconnecting

The fragmented natural estate in Kuku results from human activities and intensified agricultural development in the coastal region. In an ecological sense this fragmentation divides once contiguous natural ecosystems into smaller and smaller patches.[27] Fragmentation has ongoing impacts when it comes to assessing the cultural landscape survival context of the coast especially if other authorities enable further compartmentalisation of land according to cadastral survey. Fragmentation and destruction of the natural Māori estate has altered most conditions in which native species once thrived. Local people have been also effectively disassociated from once resource rich areas, and the learning and relationships that came with the former food gathering encounters within the coastal environment. In the mid to late 1960s a local farmer confessed to removing many tī kouka and burying them behind the dunes, behind the back of the meander beyond where the Ōhau pā was situated.

> 'I shouldn't tell you how many I dug out and dragged them over into an old part of the river that had shifted... there was quite a depression. I dragged them into that. There was too many to work the ground up. They were quite easy to dig out, they don't have any big roots, they're all soft and just all in a ball, all just little roots.'[28]

Reduced ecological remnants are now scattered throughout the agricultural area of the farm. They exist as convoluted shapes like the tortuous lagoon left over from the diversion and the dune wetland, with its complex and contiguous form stretching south beyond Waikawa. Other fragments include paddocks and uniform forestry blocks grown to cadastral size. Introduced plants such as marram grass continue to modify the fore dune area by building up, collapsing and eroding dunes that should be low level systems with indigenous groundcovers and binders to control the sand movement. The cyclic nature of the Ōhau River mouth and sand spit presents special problems in maintaining sand stability, hence pertinent reports for the local region clearly emphasise how not to detrimentally interfere with this unique coastal landform.[29]

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27 Daniel Rutledge, 2003, 'Landscape indices as measures the effects of fragmentation: pattern reflect process?' DOC Science Internal Series 98, Department of Conservation, Wellington, 7.

28 Personal communication with Mr and Mrs Neil and Margaret Candy, 22 September 2005.

29 M.K. Holland & L.D. Holland, 1985, *Processes of Coastal Change Manawatu–Horowhenua*, Manawatu Catchment Board and Regional Water Board Report, Palmerston North, 146.

Figure 6.14: Site in dunes with low-level vegetation.
Cropped image from photograph taken between 1942-1948.
Aerodrome Services Public Works Department, National Publicity Studio, Prime Minister's Department, 1946, National Archives, Wellington. AAQT 6404 WA2174

The Lucas Associates' report carefully outlined the possibilities for beneficial change. At that time representatives of Regional Council's Ōhau Manakau Scheme, Tahamata Board and some iwi members were at attitudinal odds over whom, how, when, what and why, the 'loop' required rehabilitating. The then co-ordinator and manager of Horizons Regional Council's Ōhau Manakau Scheme Committee was reticent to change his overall perspective on flood control in the lower reaches. His general attitude was, if he could channel the Ōhau River to sea as similar to plan 'A' in Figure 6.1 then he would. At that time the general feeling about waterways and wetlands mirrored earlier comments made by the Scheme's 1971 engineer.

Similarly at times of first deliberation over the Lucas Report in 1998, too few on Tahamata Board or amongst shareholders were attitudinally ready for the challenges required for the large-scale, meander rehabilitation project. Tribal or marae committee members argued amongst themselves over governance or management issues, particularly over who would lead and administer the project's potential funding. Other farmers upriver were mainly interested with their section of river, and failed to see the river in its entirety. With such divergent conversations going on, the tendency for people to talk past each other prevailed. The vision for the fragmented loop went into abeyance.

Making positive changes

The series of environmental hui during 1996-2001 for iwi and hapū representatives, wider communities of interest (including local farmers of the region), environmental and cultural

heritage entities and other authorities, disseminated relevant information that went some ways towards reactivating constructive directions for change. The learning amassed by these environmental meetings, the later wānanga, and hands-on wetland restoration experience, shifted local peoples' passivity in accepting the fragmented natural estate in decline. Environmental damage is mainly admissible by those reluctant to inhibit tribal economic developments in cultural landscape. While the convoluted resource management consents process may be confounding to committees and individuals alike, naivety to better resource management processes (which can be led by Māori) can also inhibit progress. Tahamata Incorporation became a very successful farming business in a short period of time but in ways it became a closed entity. As contextual to the times and as expected at its annual general meetings, very few shareholders interrogated the long-term sustainability of the farm's dairying practices. The emphasis was on the business of dairy farming, milk solids production and economic prosperity.

Even though it took nearly a decade after the Lucas Associates report to comprehensively reassess coastal farming practices and address the farm's future environmental and economic viability, practical action took place to reinstate the nationally significant dune wetland and dune lake systems. In June 2001, with important Tahamata Board and marae committee representatives' support, the local sharemilker and Nga Whenua Rahui officials, activated Te Hākari dune wetland project (with shareholder support) as a prioritised environmental development for the region. With increased national and local funding support for the wetland, it was later that peoples' attention returned to the potential of the Ōhau River 'loop' rehabilitation project. Aptitude changed for an attitudinally different Tahamata Board whereby farm board members took up the challenge and instigated the necessary changes required to slowly return health to the former Ōhau River meander. Shareholders also elected managers and others with more desirable sustainable farming management practices and ideas. Slowly but surely, board directors and shareholders could see how important it was to improve and maintain coastal integrity by working in conjunction with the natural. Later collaborative research relationships were forged between farm management, lecturing staff and environmental science students at Massey University in Palmerston North. They developed favourable environmental plans, upon an improved farm and effluent management regime. With Te Hākari dune wetland project well underway, additional positive convergences ensured that a comprehensive Ōhau River remnant rehabilitation project would finally proceed. Tahamata Incorporation drew on shareholder, the wider iwi and hapū and other specialists for greater, collective support, in order to achieve effective ecosystem restoration and sustainable farming practices. The farm also functioned alongside the redeveloped Te Iwi o Ngāti Tūkorehe Trust with its tribal governance arrangements.

Figures 6.15 and 6.16: Student Groups from Massey University offering integrated approaches that could rehabilitate the 'loop' system, 18 October 2006.
Photographs by Huhana Smith

Renewed Focus for the 'loop'

The depleted Ōhau River waterway was severed in many places by stock passes or farm vehicle access ways. Crucial rehabilitation tasks calculated a range of costs to flush or remove the levels of toxicity in the water. The nitrified waterway still held concentrations of inorganic nitrogen, dissolved reactive phosphates, suspended solids and dissolved solids[30]as a direct result of restricted water flow and dairy farming wastes reaching water. Nutrient loadings in the 'loop' were also exacerbated by non-existent flow rates during the drier summer months. To counter these deficits, Tahamata Incorporation began to actively address its land use practices. Effluent management regimes and water abstraction from the 'loop' for irrigation were monitored. Silage distribution was more closely scrutinised for leaching and nutrient runoff. Different water levels within the 'loop' made rehabilitation processes more difficult, as in places the water actually ran backwards! Dammed areas at race crossings and areas of landfill experienced severe heliotropic[31] slime build up that blocked the flow of water. The adjacent waterway at the old bail site (located by the site of the original Ōhau fortified pā) was choked with willows. Sustained levels of nitrates in the form of ammonia exceeded the highest unsafe levels.

The meander was so degraded that it no longer resembled anything like how local Māori residents or early farming families recalled it before the 'cut'. The current state of the river remnant reminded people of how devastated they first felt when the diversion impacted on the natural integrity of the meander system, and their fishing and white-baiting activities,

30 Solids in water can be either suspended or dissolved. Examples of suspended materials include clay, silts, oils and pathogens. Dissolved solids include nutrients metals. The effects of solids vary where silts can damage the gills of fish or smother small organisms, including eggs of aquatic life.

Information derived from B.J.F Biggs; C. Kilroy; C.M Mulcock & N.M.R Scarsbrook, 2002: *New Zealand Stream Health Monitoring and Assessment: Kit Stream Monitoring Manual*, Version 2, National Institute of Water and Atmospheric Research Technical Report, Unit 10, in association with NZ Landcare Trust, Christchurch.

31 Heliotropism refers to the growth by a plant that moves towards sunlight.

forever.[32] During the Candy family tenure, the family remembered the area as a special recreational and restful site near the former Ōhau pā. It was replete with whitebait or abundant fish supplies in season.

Contemporary approaches[33] for the 'loop' include removing weeds and willows and destructive fauna like koi carp by mechanical means, especially at the former cow bail site. The meander needs reconnecting with culverts under each farm race or crossing. Tahamata Incorporation has reassessed land use management regimes and put contingency plans in place to deal directly with detrimental nutrient loadings. Farm staff and board members began to actively monitor waterways and soils for contaminates and leachate.

For the sake of what people recalled about fishing activities, sustenance and shellfish gathering places around mahinga mataitai, Tahamata Incorporation worked on improving its effluent irrigation practices to alleviate further pollution problems for estuarine, coastal marine areas and subsurface waterways. Farm managers assessed runoff from farm tracks and races and made other changes that bettered overall farming practice. In 2006 Tahamata Incorporation instigated a comprehensive staged riparian planting programme for the lagoon. These adjustments to practice went someway towards enhancing sustainability, protecting residual natural and cultural integrity, for associated human, water and animal health. In all, the remedial actions began the process of balancing environmental and economic futures for the farm.

Draining experience that aids rehabilitation

Despite all the historical changes made to the coastal area, Mr Edward O'Conner (the engineer responsible for implementing the Ōhau River Scheme Plan 'D" in Figure 6.1) offered his long-term experience and accumulated knowledge when mechanically modifying rivers and wetlands, to the projects at hand. Ironically in knowing drainage so well, he advised local kaitaiki on the nature of the waterways within the dynamic coastal dune systems. As the Ōhau River flows in a southerly direction and cuts through to sea about every ten to fifteen years (depending on the extent of flooding on the flood plain) the river actually sweeps the fore dune area clean in a regular backwards and forwards motion. The dune region opposite Tirotirowhetu pā, where the ground had been built up with overflows of silt in deposited layers, also erodes and moves sand in an unimpeded manner. Before modification or extensive agricultural land use developments, the area in Figure 6.17 was estuarine. This is where the wide, lower flow of the Ōhau River meets the tide, and where fresh and salt waters mix. Certain estuarine grasses or indigenous groundcovers

32 Personal communication with Mr Philip Putu, April 2007.

33 In 2006 Tahamata farm management costed and created a five-year rehabilitation plan for the region.

Figure 6.17: The dynamic riverine area opposite Tirotirowhetu site, 18 February 2005.
Aerial photography by Lawrie Cairns

cope well with such tidal flushes of water.[34] If any reclamation or tree planting was to happen in the southern bank area then problems will arise for consolidated dunes further south. Kaitaiki are therefore advised not to plant any trees, grasses or ground covers on shifting dunes as a natural build up of silt will eventually prevent an overflow of water or encroaching sands onto pasture.

Any future projects or covenants planned for the wider beach environs need to protect against the impacts of possible inappropriate coastal subdivision, other developments or misuse through destructive vehicle access and senseless dumping of domestic or inorganic rubbish. If a new kawenata or covenant with mataitai status is realised for the Ōhau estuary and related coastal dune environment, then the lower reaches of the Ōhau River

34 Such plants include tātaraheke, sand coprosma [*Coprosma acerosa*], sand sedge [*Carex pumila*] or horokaka or ice plant [*Disphyma australe*] on the moist sites. The estuarine area may also be populated with native covers like Māori or native musk [*Mimulas repens*] and ureure or glasswort [*Salicornia quinqueflora*] with sea primrose or shore pimpernel [*Samolus repens*].

to the sea must remain as natural, dynamic, or as mobile as possible. The dunes at the river beach should be allowed to build up naturally.

Case Study Two: Hei Whenua Ora ki Te Hākari- He Kawenata, He Whenua Rāhui

Te Hākari dune wetland was once part of a contiguous wetland and dune lakes system, stretching south to incorporate dune wetland lakes such as Pekapeka, Manga Pirau, and further onto other dune lakes such as Huritini, Kauhuera[35] through to Waiorongomai near Ōtaki. To the north, Te Hākari dune wetland formed part of the shared lake and wetland systems of Waitaha, Rotokare at Waiwiri, Lake Waiwiri (or Papaitonga) and Lake Waipunahau at Levin. From 1842 to 1855 a series of recorded seismic activities, with associated uplifts of land drained the lagoons and shallowed the watercourses. In 1878 a major storm that forced the deliberate grounding of the Hydrabad vessel onto Waitarere Beach further north was possibly responsible for changing the shared and navigable common mouth of the Ōhau and Waikawa Rivers.

When first subjected to intensive drainage, Te Hākari dune wetland (like many other dune lakes in the wider district) became a captured, groundwater fed and rainfall enriched system, with a stream that flowed west to meet the Ōhau River in its changed course. By 1935 Te Hākari lagoon was greatly diminished in size, choked with raupo 'with the central open water covered in a green weed.'[36] By 2001 it was reported that most wetlands in Aotearoa New Zealand had been drained,[37] with those remaining, many were small where their natural character and habitat quality had been lost or degraded by drainage, pollution, animal grazing, introduced plants, subdivision and other developments. Leading authors in ecological history similarly confirmed that there has been an 85 percent decline in Aoteaora New Zealand's wetlands since European settlement. The decline is one of the most dramatic known anywhere in the world, far higher than the countries in which modern agriculture began large-scale draining of swamps and marshes.[38] While drainage to Te Hākari dune wetland was reversed in 2003, drainage and modification of wetlands continues unmonitored (and illegally in certain areas) where valuable ecosystem services continue to be lost.

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35 G. Leslie Adkin, 1948, *Horowhenua: its Māori Place Names and their Topographic and Historical Place Names*, Department of Internal Affairs: Wellington, 167. Kahu-wera lagoon. One of the larger and better known lagoons of the Horowhenua dune-belt. This lagoon occupies a broad, shallow basin, and is connected with the Wai-rongomai Lagoon, further south, by a swamp watercourse, now a drain. Variations in this lagoon-name are 'Kahuera' and 'Kauhuera', but according to Adkin the correct form is Kahu -wera, which means 'burnt cloak or garment'.

36 ibid, 148.

37 Parliamentary Commissioner for the Environment, 2001, *Boggy Patch or Ecological Heritage? Valuing wetlands in Tasman*, Parliamentary Commissioner for the Environment Te Kaitiaki Taiao a Te Whare Pāremata: Wellington, 43.

38 Geoff Park, 2003, 'Swamps which might doubtless easily be drained': Swamp Drainage and its impacts on the Indigenous', in Pawson, E & Brooking , T., *Environmental Histories of New Zealand*, Oxford University Press: Melbourne, 151.

When these regretful statements on the condition of wetlands within Aoteaora New Zealand were conveyed the second and largest case study Hei Whenua Ora ki Te Hākari was just getting ready to begin. A series of activities enabled a kawenata or covenant of twenty five years to be placed over Te Hākari dune wetland under Section 29 of the Conservation Act 1987. After officials, kaitiaki and Tahamata Board members discussed appropriate approaches for securing a covenant for Te Hākari wetland, it was settled that Ngā Whenua Rahui[39] was the most favourable agency to fund and implement the strategies of action research. After meetings and reports were finalised, the Committee of Ngā Whenua Rahui successfully adjudicated on the wetland project. To secure the kawenata the then Minister of Conservation, the Hon. Sandra Lee entered into an arrangement with Tahamata Corporation in July 2002. Her signature sealed the conservation of the natural and historic resource, Te Hākari dune wetland. It included an area of 13.7 hectares or 33.85 acres, the southwest paddock with ephemeral wetland adjacent to the farm's pine forest, the larger wetland system itself and Te Hākari Stream. The area was set apart as a Māori reservation pursuant to Section 338 of Te Ture Whenua Māori Act 1993. After further discussion with Tahamata Incorporation, the Minister was satisfied that the dune wetland would manage, preserve and protect the natural and historic resources, and to bolster the spiritual and cultural values of the interrelated region.

Ngā Whenua Rahui is the contestable Ministerial fund established in 1991 that helps achieve the objectives of the Indigenous Forest Policy. The Indigenous Forest Policy[40] arose in 1993 from the New Zealand Institute of Forestry's (NZIF) concern about the apparent poor health of large parts of the indigenous forest estate and the fragmented and uncoordinated nature of legislation when addressing the management and administration of indigenous forests. There has been a lack of funding support for research concerned with indigenous forest issues, and widely divergent views amongst organisations and the public at large about the future management of indigenous forests.

The kawenata acknowledges the mana whenua status of Tahamata Incorporation and its iwi and hapū shareholders because the wetland lies within Māori land.[41] When the Māori Land Court approved the covenant agreement relevant and accommodating changes were made to Tahamata Incorporation's operating constitution. A covenant protects and enhances the natural character of the land with particular regard taken for remaining indigenous flora and fauna, their diverse communities and interactions with

39 An entity serviced by the Department of Conservation through an annual allocation of finances from Government. Both Ngā Whenua Rahui and Mātauranga Kura Taiao are support agencies for Māori-based initiatives, especially designed to protect indigenous ecosystems on Māori owned land. Of interest are the remaining indigenous ecosystems that represent a full range of natural diversity originally present in the landscape. These agencies provide the incentive for voluntary conservation by hapū and iwi participants.

40 See Appendix V.

41 Derived from the kawenata document created between the Minister for Conservation and Tahamata Incorporation.

Figure 6.18: The dynamic Ōhau River and estuary, 12 July 2006.
Panoramic photograph by Huhana Smith

Figure 6.19: The Ōhau River and its changed mouth to sea, 17 November 2006.
Panoramic photograph by Huhana Smith

Figure 6.20: Dynamic dunes towards Waikawa, 18 February 2007.
Aerial photography by Lawrie Cairns, Palmerston North for Horizons Regional Council

the environment that support them. The kawenata protects and enhances the cultural and spiritual values by recognising the historic, archaeological and educational values associated with the land and its related water bodies. The kawenata maintains landscape amenity values of the land. It provides for the public's recreational use and enjoyment of the land consistent with the objectives and consent of Tahamata Incorporation as an entity of Ngāti Tūkorehe.

Tahamata Incorporation is compelled to use all reasonable endeavours to restrict domestic stock coming through or grazing the land within the area designated as covenant.[42] Certain provisions have been made available to authorise removal of native plants, shrubs, trees and plant material from the land by local healers for customary Māori healing purposes. This is an important objective of all the environmental projects underway, as access to residual customary knowledge for re-edified learning is vital for improving the tribe's future generations' contact with rōngoa Māori or Māori medicinal properties derived from the forest. Access is provided and Tahamata can carry on work without restriction, engaging in the business of dairying and forestry on any adjoining or neighbouring land or other land owned by or leased by the farm. As part of permitted public access to the kawenata, management plans envisage other future access ways, boardwalks, interpretation signs or whare raupo structures as bird hides- all carefully placed within the area of the

42 Since the initial September 2002 plantings there had been around 30 days where cows as individuals or in groups broke through electric fences within the kawenata and consumed a swathe of three-year-old palatable trees on the eastern riparian. While destructive and disappointing for tribal participants who have planted thousands of trees, in ways it was not surprising considering the attractiveness of prolific grass growth in a fenced off region! It only took one hefty or hungry dairy cow to break through and open the way for others. To this end, cows in 2004 destroyed some 2000 trees on the eastern riparian of the wetland. Despite such an expensive setback the area was effectively replanted in the planting season for 2005. For the then project manager, Te Hākari Management Committee and other local kaitiaki, the plea to the farm's sharemilker aimed to ensure that such difficulties would not be repeated. More recently in June 2007, cows entered the fenced off wet delta region and fed on the profuse wiwi growth there. In alerting the farm manager, he informed the farm hands that they had to be more vigilant for the sake of the project.

Figure 6.21: Fence around wetland, 2002.
Panoramic photograph by Huhana Smith

covenant to enable peoples' enjoyment and enhancement of their relationships with the natural in cultural landscape. These provisions have been arranged within the kawenata but they restrict the taking of any native plants, shrubs and trees from the land by others not of the tribal region. Tahamata Incorporation retains the right to decline access and entry onto the land for the purposes of reasonable management, to protect the extensive revegetating wetland forest, its incorporated lake systems and spring fed waterways, and to protect against fire.[43]

Making connections

When shareholders and Tahamata Board authorised the reinstatement of health to the natural dune wetland, other opportunities to restore coastal forest, shrub land with associated grassland projects increased. Particular families revived local interactions with the dune lands and actively participated in major earth works, such as the 'big dig' or mechanical excavation operations that increased the volume of water in the dune wetland lakes. These families hold generations of ecological knowledge through long-term resource interaction, especially for eels, whitebait, fishing at the coast, and water quality. During whānau planting days these local informants helped rebuild others' resource relationships with the wetland area again. As an extended family that had lived within the dune systems

43 Tahamata Incorporation acknowledges that if this agreement was to terminate, no compensation shall be payable to the Minister for any improvements on the land. In the event that the Māori reservation was revoked, the agreement would be terminated without releasing the parties from liability for any breach of this Agreement up to the date of termination. Information derived from original contract with Minister of Conservation, July 2002.

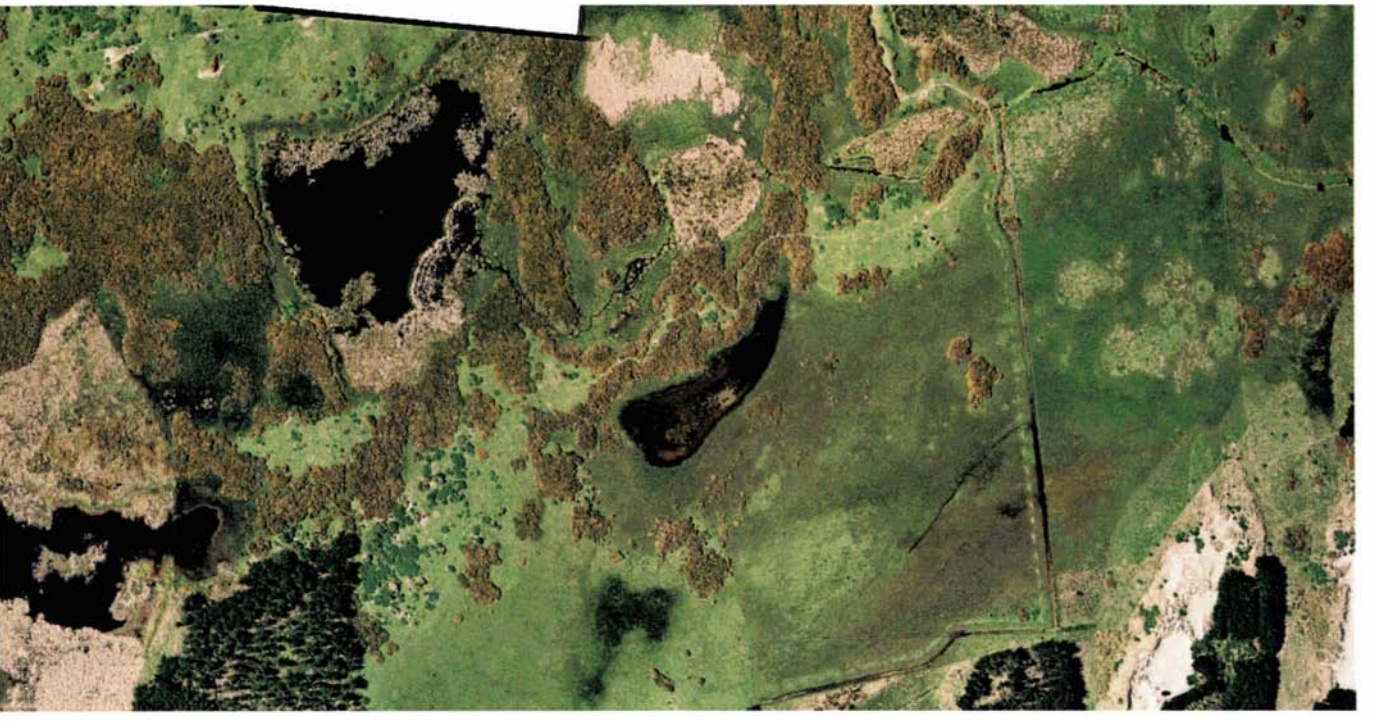
Figure 6.22: Te Hākari wetland towards Waikawa, 2003.
Panoramic photograph by Huhana Smith after Lawrie Cairns, Palmerston North

all their lives, they recommended certain ways to plant trees so they survived the dry dune areas and the difficult wind conditions.[44]

Natural ecosystems like the Ōhau River meander and its adjacent blind creek were altered by river alignment, drainage and intensive agricultural activities. In order to reinstate the wetland's environmental and cultural benefits, the wetland had to be managed better. Since setting in motion environmental changes, the residual ecosystems, their indigenous vegetation and associated wetlands have been reviewed as integrated with the surrounding pasture and cropland.[45] In their decline they literally become part of the surrounding pasture, cropland and farm forestry. Ground spring-fed waterways, artesian waterways and underground lakes hydro-logically but tenuously connect these fragmented natural areas on the surface. Te Hākari dune wetland is linked by Te Hākari stream that flows to the Ōhau River and the estuarine area with its native groundcovers and grasses. The Ōhau River flows through the shifting fore dunes with remnant stabilisers and sand binders amongst the dominant marram. All aspects of the fragmented natural and modified are therefore part of a wider landscape that stretches to sea. The hydrology results prove that the subsurface water quality has been compromised. Active kaitiaki therefore strengthen the revegetation programmes within the agriculturally adapted or modified, to alleviate the

44 Additionally water retention gel and mulching were activities that supported the tree in forcing its roots towards the artesian water below. This simple but effective technique before mulching, led to family members working with the committee to plan and organise the later mechanical excavation of the wetland lake region.

45 Geoff Park, 2002, *New Zealand as Ecosystems: the ecosystem concept as tool for environmental management and conservation*, Department of Conservation: Wellington, 10.



impacts of damage. Through their actions they reconnect intricate relationships between cultural and natural significance, with the rural in landscape.

The objectives of Nga Whenua Rahui and Mātauranga Kura Taiao align with the concept of active kaitiakitanga. When kaitiakitanga was the exclusive preserve of mana whenua groups, rangatiratanga was the customary or chiefly authority that created the necessary overarching framework within which kaitiakitanga operated.[46] As outlined in Chapter 1, the nature of spiritual entities and their ability to guide local residents on resource use and protection are still revered. The responsibilities of kaitiakitanga and kaupapa are passed down from ancestors where local whānau, hapū and iwi are charged with the care of places, their natural resources and other taonga as valued assets in their regions. They are compelled to protect the mauri or vitality of places and resources as taonga.[47] Within the perspective of leading Māori environmentalists, kaitiakitanga is a socio-environmental ethic that acknowledges relationships between humans, spiritual and environmental properties.[48]

In improving the socio-environmental health for lands, waterways and peoples in Kuku, the holistic nature of a Māori environmental world view had to be re-edified by more

46 Merata Kawharu, 1999, *Local Maori Development and Government Policies*, Research Fellow, James Henare Māori Research Centre, University of Auckland, Auckland, 9.

47 Parliamentary Commissioner for the Environment, 1998, *Kaitiakitanga and Local Government: Tangata Whenua Participation in Environmental Management*, Parliamentary Commissioner for the Environment Te Kaitiaki Taiao a Te Whare Pāremata: Wellington, ix.

48 Merata Kawharu, 1998, *Dimensions of Kaitiakitanga: An Investigation of a Customary Māori Principle of Resource Management*, Doctorate of Philosophy thesis, Oxford University, 7.

Figure 6.23: Hei Whenua Ora ki Te Hākari / Te Hākari Dune Wetland Restoration Project. First planting in September 2002, conducted into the grazed western paddock of wetland kawenata, November 2002.
Photograph by Huhana Smith

Figure 6.24: First planting area in western paddock with trees and pasture grass, 21 December 2002.
Photograph by Huhana Smith

Figure 6.25: First planting area in western paddock that was inter-planted again in 2004 and 2005 planting season, 2 July 2005.
Photograph by Huhana Smith5

Figure 6.26: First planting area in western paddock that was inter-planted again in the 2004 and 2005 planting season, October 2005.
Photograph by Huhana Smith

Figure 6.27: First planting area in western paddock. Trees were released from grass and mulched, 15 November 2006.
Photograph by Huhana Smith

local people. When resident kaitiaki became reacquainted with their ecological locale and their sense of place, their responsibilities within it, they recognised that they possessed the authority to actively manage areas. They utilised their 'powers' of determination for the sake of unique environmental and spiritual values that supported tribal territories, and for the future generations' physical, economic and cultural welfare.

As well recognised by agencies like Nga Whenua Rahui, Aotearoa New Zealand's biodiversity is an important source of knowledge, where conservation covers more than just looking after, preserving or restoring areas. The Mātauranga Kura Taiao fund (as administered through Nga Whenua Rahui) support initiatives for tangata whenua to revive, use, and bolster customary Māori knowledge and practices associated with biodiversity management within cultural landscape. It fully affirms that spirituality and cultural history are inseparable in Māori conservation and biodiversity initiatives. Even though Nga Whenua Rahui and Mātauranga Kura Taiao function within the Department of Conservation, they both actively maintain Māori accounts and understandings around lands and waterways that may have been under utilised or vulnerable to further knowledge erosion. The agencies help rebuild relationships with the natural environment based on localised cultural memories and experiences. Funding support also broadens community effort in the management of indigenous biodiversity on tribal lands. With the level of financial aid that can be sourced, shareholders and active participants as kaitiaki became more inspired to improve the conditions of remaining biodiversity.[49]

Mātauranga Kura Taiao support helped capture an understanding of bio-cultural diversity by oral archiving aspects of remaining knowledge of kaumātua and key resource users. The archive partially remedies the loss of local Māori understandings and practices, once fundamental to the management of biodiversity on lands and waterways within Kuku. Mātauranga Kura Taiao and active kaitiaki at Kuku clearly recognise the importance of local Māori participation in the management of biodiversity, consistent with customary knowledge and practices. The revival and maintenance of kaitiaki responsibilities are vital for remaining natural resources and the spiritual aspects that accompany such care. The Mātauranga Kura Taiao fund well recognises the importance of ongoing use and protection of residual local Māori knowledge, as central to kaitiaki participation in biodiversity management.[50]

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49 Horizons Regional Council, like Nga Whenua Rahui contributed significantly to the initial supply of trees and later, to help instigate the tribally run native tree and grasses propagation project established in 2005. The nursery initiative supported Te Hākari wetland and was set up in a former tribal area known as Tikorangi, just south of Kuku in the former Summerlands facility for market gardens and the later Sevilo Olives operation. Tikorangi is an original name that means to descend from the heavens.

50 Nga Whenua Rahui, 2006, 'Matauranga Kura Taiao Fund', *Nga Whenua Rahui*, Booklet produced through Department of Conservation, Wellington, 8.








Figures 6.28–6.42: Whānau Planting day, 19 August 2003.
Photographs by Huhana Smith

Figure 6.43: Te Hākari Stream outlet, August 2005.
Panoramic photograph by Huhana Smith

Figure 6.44: Te Hākari Stream flowing towards the Ōhau River beach, 9 January 2005.
Photograph by Huhana Smith

Figure 6.45: Te Hākari Stream to Ōhau River, 2 June 2006.
Photograph by Huhana Smith

What remained of local knowledge of place within a cultural landscape of former papa kainga, kauwhanga-a-riri and wāhi tapu, mahinga mataitai and mahinga kai in Kuku, was collated as residual recollections and interactions with biodiversity for sustenance and well-being. The resulting active pilot projects as physical hands-on work with ecosystems, increased local peoples' involvement in environmental management. The whakatauki or Māori maxim 'mā te tini, mā mano, ka rapa te whai'[51] best encapsulates what collaborative interaction can achieve and maintain. While this whakatauki refers to the notion of pursuit, where 'by large numbers will the chase be spread out'[52] it describes the goal of pursuing objectives that are based on collective effort. Cooperative action far outweighs what small groups working separately as silos can possibly accomplish. As experienced in the early developmental phase of projects, consensus was at times disturbed by non-constructive

51 Hirini Moko Mead & Neil Grove , 2002, *Ngā Pēpeha a ngā Tīpuna: The Saying of the Ancestors*, Victoria University Press: Wellington. 287.

52 ibid, 287.

agendas, usually acted out behind the decisions made or directions forged at regular committee meetings. At the times of experience, such localised criticism of key participants and the projects underway seemed debilitating to them even continuing. Cohesiveness was critical in the early phases and despite some setbacks, dedicated participants still managed to share and articulate the main objectives and outcomes of the action research strategy to others. In this way, the capacity of participants and kaitiaki grew in confidence each year. Even local children (who attended kohanga reo, kura kaupapa or the local primary school in Ōhau) became the most efficient and dedicated tree planters, capable of collective action, easy delegation and swift completion of tasks. They became important, active participants in the process of enhancing their own environmentally healthier futures. As the projects progressed and as addressed by the whakatauki, it was important to maintain the collective and supportive approach in order to achieve beneficial outcomes.

As projects developed further other key adults disseminated sound information about the projects underway. They spread knowledge of active restoration to local Rūnanga and neighbouring hapū, then nationally or internationally via news print media, radio interviews, television programmes or conferences.[53] Through such place-based learning projects, hapū and iwi participants reclaimed a greater sense of ownership over the decisions required to implement strategies that improved environmental health.[54] As the action research projects progressed, other entities or local authorities engaged more readily with kaitiaki where Horizons Regional Council representatives openly acknowledged the efforts undertaken. Council came to understand better that those with whakapapa ties to the area exacted and implemented the most positive ways forward for ecosystems, themselves. Council representatives better understood that hapū and iwi set the direction for these projects, as was their preserve, right and responsibility to future generations. Participants and organisers of Te Hākari dune wetland did not passively wait for regional

53 In 2004, Mr Philip Putu and Huhana Smith presented an overview on the coastal restoration projects and the impact of the Foreshore and Seabed Act for the Bush Telegraph series of programmes aired via ABC National Radio, Australia. During 2005 regular presentations were made to Te Rūnanga o Raukawa and other interest groups. In June 2006, key representatives were invited to Canada to speak at an international conference, *Building Futures with Mother Earth*, University of Saskatchewan, Saskatoon.

54 The kaitiaki education and training course in iwi and hapū ecosystem management, through Patumakuku Incorporated based in Levin moved to Tikorangi nursery site in 2007.

Figure 6.46: Children of Ngāti Tūkorehe planting trees in eastern riparian area, 2004.
Photograph by Moira Poutama

Figure 6.47: Te Huaki o Te Rangi Kamariera, Mr Richard Anderson and Mr Major Meta, 11 September 2005.
Photograph by Huhana Smith

or local council to assist them. They took proactive stances to plan, organise and implement constructive change, for the future of the iwi and for the related benefit of the wider community.

Te Pā Harakeke: Our Future with Harakeke Wānanga, 18–20 March 2005

The range of research methods emphasise how important the seeking of co-created solutions is, based on related peoples' interdependencies to each other and generating constructive working relationships between participants. Te Hākari Management Committee convened a wānanga for the purposes of discussing, debating and analysing 'kei te wānanga te hui i te take',[55] where the wānanga focussed on matters that expanded the understanding of the taonga species, harakeke. The wānanga with local and external Māori interest groups sought answers to research questions. It also contributed to the knowledge dissemination requirement within the objectives of Te Hākari Dune Wetland Restoration project, whereby local weaving specialists, Māori environmentalists and other sustainable farming advocates presented their viewpoints, knowledge and research over new futures for harakeke.

The first day of proceedings was dedicated to Ngāti Tūkorehe kaumātua, iwi and hapū participants only, in order to record recollections and visions for enhancing water health and former mahinga kai as once food gathering areas of abundance. This opportunity with kaumātua brought together their experiences, cultural memory, reminisces and other

55 Charles Te Ahukāramu Royal, 2004, *Mātauranga Māori and Museum Practice*, Discussion paper prepared for National Services, at the Museum of New Zealand Te Papa Tongarewa, 41.

Figure 6.48: Some kaumātua of Tukorehe pā at Wānanga Harakeke, 18 March 2005. From left to right: Kaumātua Mr Martin Wehipeihana, Mr Horace (Cooky) Lawton, Mrs Jane Poetsch, Mrs Bella Price (?1915–2007), Mr Gary Wehipeihana Senior (1943-2006) standing, Mrs Ruhia (Buddy) Martin, Mr Gary (Tipi) Wehipana Jnr., Mr Eric Gregory standing, Ms Joyce Winiata, Mrs Mary Wehipeihana, and convenors Mrs Yvonne Wehipeihana-Wilson, and Ms Huhana Smith. Absent Mrs Maire Johns.
Photograph by Gary (Tipi) Wehipeihana Jnr

Figures 6.49 and 6.50: Kaumātua at wānanga, Tūkorehe Marae, 18 March 2005
Above left: Mr Horace (Cooky) Lawton, Mrs Bella Price, Mrs Haona Lawton, Mrs Ruhia Martin, Mrs Sis Lewis, Mrs Carol McDonald, Mr Martin Weihipeihana.
Above right: Mrs Yvonne Wehipeihana Wilson (standing), Mr Eric Gregory, Mr Ike Miritana (?–2006), Mr Gary Weihipeihana Senior (1943–2006), Mr Brent Packer.

Figures 6.51, 6.52 and 6.53: Caleb Royal, his children and kaumātua Mr Gary Wehipeihana Senior moving towards south western end of wetland to retrieve a hinaki set on evening of 9 March 2005.

Photograph by Huhana Smith

Caleb Royal retrieving hinaki through hornwort, 10 March 2005.

Photograph by Huhana Smith

Caleb Royal checking for eel in hinaki, 10 March 2005.

Photograph by Huhana Smith

relevant information of Ngāti Tukorehe,[56] especially from those whose recollections related to Te Hākari wetland, the surrounding beach environs, and their range of experiences with tuna, inanga or eeling, white baiting and fishing practices at the coast. Some had intricate relationships to the coastal area and retained connection to site by fishing, white baiting or duck shooting at the wetland. They maintained and sustained relationships as activities in the present despite the fragmented natural references that included Te Hākari wetland. While not all kaumātua present had had an intimate resource-use relationship (as some rarely went to the coast) others offered evocative, revealing, poetic and challenging responses to the work being conducted for dune wetlands at the coast.

At that gathering, kaumātua were also taken through the water health issues facing Te Hākari dune wetland project where waimate or nitrified water had increased with the spreading hornwort [*Certophyllum demersum*] problem. Hornwort is an invasive and submerged weed with detrimental effects on habitat quality in freshwater environments in New Zealand. As an enveloping weed in the south-western end of the wetland, it

56 The kaumātua present included Mrs Bella Price (?1915–2007), Mrs Ruhia (Buddy) Martin, Mrs Joyce Winiata, Mrs Sis Lewis, Mrs Haana Lawton and husband Mr Horace (Cooky) Lawton, Mr Martin Wehipeihana, Mr Eric Gregory, Mr Ike Miritana (?–2006) and Mr Gary Wehipeihana Senior (1943–2006), They gathered at the pā to talk about their relationships with Te Hākari dune wetland, the Kuku beach coast and surrounding environs. While Mrs Maire (Hummer) Johns was not present, the recollections gathered added to her experiences and understanding of the cultural landscape at the coast.

Figure 6.54: Hornwort, 10 March 2005.
Photograph by Huhana Smith

Figure 6.55: Hornwort and dead eel in hinaki, 10 March 2005.
Photograph by Huhana Smith

Figure 6.56: Asphyxiated eel with facial lesions, 10 March 2005.
Photograph by Huhana Smith

forms a dense, unsightly and hazardous weed bed that displaces valuable native plant communities. It removes fish habitat and other freshwater biota. As native aquatic plants are the preferred vegetation type in most freshwater environments, they provide the essential habitat for life. Even though raised water levels had generated positive effects on the wetland's potential for increased associated bird, fish and invertebrate life,[57] it was in early March 2005 when two sites were surveyed for tuna or eel[58] that the water quality in the wetland was brought into question.

Deoxygenated water is the result of the litter and debris that is laid down beneath hornwort weed beds.[59] Hornwort is another potent barrier for the potential of native plant restoration, as it crowds out native aquatic plants and lessens invertebrate food supplies for fresh water biota.[60] The hornwort weed in the wetland should be removed by mechanical,

57 See Appendix I: Bird life associated with Te Hākari Dune Wetland.

58 Survey for eels were conducted by Caleb Royal, with his children, Gary Wehipeihana Senior (1943-2006), Richard Anderson and Huhana Smith present on 10 March 2005.

59 Fleur Matheson, Mary de Winton, John Clayton & Tracey Edwards, 2007, *Aquatic Plant Management* Programme (CO1X0221), National Institute of Water and Atmosphere, Hamilton.

60 URL: http://www.niwzscience.co.nz/pubs/wa/12-4/weeds

chemical or manual means. Its invasion within the wetland added another urgent task to the long list of ongoing monitoring requirements for Te Hākari dune wetland project. It was also recommended during that survey, that a rāhui or fifteen-year lapse in eeling be placed on Te Hākari wetland to allow for breeding and edible stocks to replenish an over-harvested wetland[61]. When the hinaki was set again the following night in the well-flowing, reinstated Te Hākari stream, some fifty-six tuna of larger size were counted. This was a far more positive indicator consistent with healthier and fresher flowing waters in Te Hākari Stream to the Ōhau River.[62]

In presenting these situations for water health to kaumātua, their unanimous call was for the environmental committee to continue mitigating decline in ecological and cultural integrity for the wetland.

As part of action research strategies, the ongoing seminar series for the weekend conducted with other interest groups highlighted how positive actions were well underway for other cultural and natural landscapes around the country. All participants in the weekend wānanga were involved as directors or supporters of their own research programmes. The visitors became potential partners in the revitalisation work happening at the coast and spoke enthusiastically about their experiences with land, coastlines and waterways projects within their own tribal regions. The wānanga encouraged dynamic information exchange for each uniquely developed Māori-led initiative[63] or research model. An objective of the Te Hākari project included creating accessible pā harakeke for weavers' exclusive use and for the eventual development of whare raupo that may be used for bird hides or other activities within the kawenata. It was also discussed that Te Hākari dune wetland restoration project model extend beyond the Tahamata boundary fence to involve the wetland managed by Pekapeka Taratoa Ahuwhenua Trust, and the larger contiguous wetland under affiliated hapū that stretched to the Waikawa River. Invited neighbours and relations like Ngāti Wehiwehi could clearly see the benefits of working with the environmental committee and Te Iwi o Ngāti Tukorehe Trust, to realise the opportunity of transforming their interconnected dune wetland region towards the Waikawa River. The Pekapeka Taratoa Ahuwhenua Trust is keen to participate in wider wetland restoration. Opportunities for the coastline and other natural systems as far as the Waiorongomai system near Ōtaki are certainly aspirational projects to be realised for related tribal affiliates. The picnic lunch

61 Since this time, restocking the wetland with eel has taken place at the wetland.

62 While the south-western hornwort problem in the wetland requires strict monitoring, the water levels changed again when the mechanical excavation work was completed in February 2006. This created an expanded and deepened lake region for fish, bird and invertebrate life.

63 There was a strong local interest from Te Kōkiri weavers of Levin for the wetland resources. With the ongoing need to extract choked raupo from the wetland and clear the hornwort weed problems it was suggested that the raupo resource be made available to Te Kōkiri, especially for making poi. Since that meeting Te Kōkiri weavers have been kept informed of any supplies of pingao from the beach, especially when the dynamic Ōhau River changes course and washes out stands of pingao. They are also offered bird skins that are either road kill or accidental deaths.

Figures 6.57–6.60: Retrieving hinaki from Te Hākari Stream, 11 March 2005.
Caleb Royal, Mr Gary Wehipeihana Senior (1943-2006), Richard Anderson
Top right to bottom left: Full hinaki of healthier eels
Releasing and counting
Counting eels.

held in the cow paddock that day in March 2005 was a successful sharing of perspective, practice, research expertise- all supported by an emphasis on iwi and hapū taking control and making projects happen in their tribal regions.

Harakeke as healer and sustainable resource for environmental health

Of particular interest to the weekend seminar series were presentations that heralded a new range of uses and research projects around harakeke, especially those projects that dealt with fragmented ecosystems and impacts on the human condition. Projects ranged from using harakeke as a rehabilitator for waimate or polluted waters issues in streams like the Mangapouri Stream in Ōtaki, to sustainable resource solutions that integrated harakeke back into farm and rural land management systems. Local researchers from Te Wānanga o Raukawa based their harakeke research on their whakapapa relationships to a stream area in Ōtaki. The Mangapouri Stream came within their area of kaitiakitanga responsibility. They assessed the role that harakeke played in the uptake of pollutants from the stream. They researched and planted the depleted waterway at the southern end of the Pukekaraka block in Ōtaki. Their research investigated once intricate relationships

Figure 6.61: Wānanga participants, 19 March 2005.
Photograph by Huhana Smith

Figure 6.62: Te Hākari visit for participants, 19 March 2005.
Photograph by Richard Anderson

Figure 6.63: Wānanga participants planting first trees in area that fronts Kuku Beach Road, 19 March 2005.
Photograph by Richard Anderson

Figure 6.64: Wānanga participants standing on high dune for vantage over contiguous wetland area, with project manager providing project overview, 19 March 2005
Panoramic photograph by Huhana Smith

Figure 6.65: Seminar Series with Caleb Royal and his role in tuna or eel studies research programme conducted through Te Wānanga ō Raukawa, Ōtaki, 19 March 2005.
Photograph by Huhana Smith

Figure 6.66: Seminar Series with Soyara Pohatu and Dawn Pomana, presenters from Ngai Tamanuhiri and Ngāti Porou talking about their coastal project, 19 March 2005.
Photograph by Huhana Smith

Figure 6.67: Wānanga participants planting more trees in area that fronts Kuku Beach Road. The area has become the main planting area for all visitor whether weavers, local council personnel, politicians, indigenous visitors from Canada and Hawaii who have all contributed to or supported the dune wetland project, 20 March 2005.
Photograph by Huhana Smith

between biota like the giant kōkopu and harakeke and other diverse riparian plants. As misuse of the stream and domestic pollution impacted on the integrity of the Mangapouri, local mana or authority over the stream and its resources was simultaneously reduced.

In respecting the range of customary understandings and use, the wānanga aimed also to set more sustainable farming targets. Harakeke had been a significant industry for ancestral iwi and hapū, so the proposal to extensively regrow harakeke as riparian or plantation planting projects, actively revitalised previous relationships with harakeke and how it protected biodiversity. Harakeke is able to absorb and slow floodwaters as it lies down when water rises and flows over it. Harakeke stabilises stream and riverbanks and prevents bank erosion.

The aims of research around new industries for the whole plant use of harakeke and its by-products are directly linked to sustainable, economic, environmental and social health dimensions. Harakeke creates possibilities for new enterprises, with renewed industries and employment opportunities. There is considerable value in planting harakeke for shelter or as a nutritious stock feed. For example, green-waste from the process of haro or stripping harakeke leaves for muka fibre had been researched to be a nutritional by-product for stock. The green waste aids digestion and relieves worm problems in ruminating animals like cattle.[64] Other opportunities include the planting of extensive plantations with the view to producing fine quality fibre for high-end upholstery fabric markets, both nationally and internationally. In developing new textiles or fabrics from harakeke, Nga Hua o Te Harakeke Trust based out of Te Kuiti, Waikato actively promotes the re-establishment of pā harakeke with a view to creating an economic base for the local marae. The project takes into account the customary practices of harvesting harakeke and stripping leaves for muka, of caring for and clearing around the plants in order to keep insects at bay and allow light to enter around the pā harakeke.[65]

In considering how current fragmented ecosystems could be rehabilitated or how a range of potential new uses of harakeke may ensure sustainable farming practices- not all views for customary or contemporary use, coalesced that weekend. Some weavers objected to the use of harakeke green waste after haro or stripping, being used as a by-product for cows and healthy digestion, and not the weaving remainder returned to nurture the harakeke plant after use. In the minds of many present at the hui harakeke also comes within the realm of Hine-te-iwaiwa, the tutelary deity of weaving. When one of the weavers (supported by some others) fervently opposed the sustainable farming presenters' views on harakeke use (whose key aim was to improve animal health farming practice and ease the environmental and human health impacts of nitrified of water) the weaver vehemently considered such ways of using harakeke as degrading.

In this way the wānanga about harakeke and Te Hākari dune wetland explored some causes of conflict in the research gathering process. The confrontation highlighted how concurrent aspirations for harakeke reflect a range of different experiences or ways of seeing the world of harakeke. With beneficial uses of harakeke including economically sustaining marae with a raw muka product for possible new industries in harakeke fabric; to sustaining lands, waterways and improving farm animal health for eventual human use or consumption- the harakeke plant could be viewed as a whole plant healer or a whole-of-system healer. When the customary weaving view contested another's aspirations for

64 The last two projects received substantial research support from the Sustainable Farming Fund.

65 Rangi Te Kanawa, 2005, *New Research for the Harakeke Industry*, Workshop at Industrial Research Limited, Gracefield, Lower Hutt, 12 March 2005.

harakeke as environmental rehabilitator, the two ethics or ideologies clashed. Making sense of both of them proved demanding for some participants, organisers and presenters. In considering stronger relationships between customary and contemporary views about harakeke, the wānanga opened up dialogue around harakeke that did not necessitate confining its wider healing properties. In revitalising harakeke use with customary knowledge bases there is the need to allow opportunities for participants to think outside their own resource-use views and envisage harakeke has having a place in the context of Māori lives lived today. New knowledge around old industries should be internally meaningful to culture and hold relevance to issues for a contemporary Māori world.[66] Whilst considering all the important spiritual and physical values of harakeke, there are added value uses for the resource that can ultimately benefit ecosystems, human and animal well-being. As stated by key Māori scholars on Māori knowledge systems, Dr Charles Royal offers that:

> 'The task is not merely to reconstruct a worldview so as to return to it...but rather to develop an understanding of aspects of that worldview, and to explore how they might inform a new paradigm...[Māori] have to shape a worldview that weaves these elements convincingly and into a lived whole. One way to do this is to draw connections between key themes and ideas in our traditional knowledge bases, and critical issues facing human society everywhere. For why revitalise and revive mātauranga Māori if not to make a contribution to our world?'[67]

Hydrology Research, Water Levels and Subsurface Waterways for Dune Wetland Health

In the dune wetland case study, the hydrology research results are synthesised and the validity of their research assumptions assessed. There were limited problems for kaitiaki associated with measuring water quality, collating data and recording the results. The final results clearly indicated that agricultural practice surrounding the wetland had compromised its water quality.

Te Hākari wetland lies within a complex of dunes deposited over the last 6,000 years. The dunes lie parallel to the coast and become progressively older as they move inland. Te Hākari dune wetland is a 'groundwater depression swamp' upon extensive peat, which forms part of a much larger and intricate system that extends southwards to Waikawa and beyond. The remaining area of the wetland complex to the south of Tahamata boundary

66 After Charles Te Ahukāramu Royal, 2004, *Mātauranga Māori and Museum Practice*, A Discussion paper prepared for the Museum of New Zealand Te Papa Tongarewa, 3.

67 ibid, 26.

Figures 6.68 and 6.69: View of Te Hākari Dune Wetland, November 2005.
Panoramic photograph by Huhana Smith

View of Te Hākari Dune Wetland, 21 September 2007.
Panoramic photograph by Huhana Smith

is still highly fragmented and had suffered the effects of land drainage activities[68] and illegal drainage as late as 2004. Despite being a part of this damaged system, Te Hākari dune wetland retains a high cultural, ecological and aesthetic value.[69] There have been agricultural impacts but the wetland is still unique, as it has escaped the intensive or widespread drainage that destroyed other areas like the Tangimate waterway system.

The first phase of water research raised water levels in the wetland region to contour from July 2003. When deliberating over the next phase of water quality testing to assess the wetland's mauri and environmental pollution or the weed infestation problems facing water quality, it took some time to assure farm board members, some kaumātua and Te Hākari Management Committee members that staged hydrological research was vital for ascertaining the long-term health of the dune wetland system. This was especially so when the Project Manager (2003-2006), Tahamata Board chairperson, Tahamata Board representatives, Te Hākari Management Committee and the farm consultant discussed

68 Mark Gyopari, 2006, *Te Hakari Wetland Hydrological Study*, Phreatos Hydrological Research & Consulting Ltd, Wellington, 1-2.

69 ibid, 1-2. The logical plan to extend projects and protect the whole wetland is probable.

raising the wetland water levels. After considerable debate the farm board permitted the water levels in the wetland to rise by one metre. Water levels were achieved by constructing temporary sandbag weirs at the northern drain alongside Kuku Beach Road and at the existing culvert site on the natural, west flowing Te Hākari stream to the Ōhau River. This allowed for a certain tidal overflow for Te Hākari stream out to the Ōhau River, without allowing brackish or salt-water intrusions to impact on surrounding pasture.

In manipulating water levels in the wetland and guarding against overflows onto Kuku Beach Road, regular adjustments were made to the temporary sand bagged weirs on both outlets. Three surface water level gauges were installed at the Kuku Beach Road drain, Te Hākari Stream, and the south end of the wetland lake where weekly surface levels were recorded.[70] When it became apparent that the one metre level for water was too high for road safety, levels in the wetland were kept to an average height of 700-800 mm. The northern drain under the road held the lake level at 800mm. The weir at Te Hākari stream culvert prohibited salt-water intrusion from the Ōhau River but allowed for fish

70 When the kawenata fence was first demarcated around the wetland, it was done when the wetland was drained and grazed. The initial organisers (the chairperson of Tahamata and this writer) of where the fence was to be placed should have had taken a harder look at the lay of the land. Finding the right place was a matter of balancing space for trees and allowing grazing paddocks for cows, especially on the eastern side of the wetland. There were certain compromises made to where the fence should go. During the first six months of playing with water levels, all participants learnt how to reinstate wetland health as they went. In hindsight and in learning where the water actually flowed to contour, the fence could have been put further out from where it was initially located.

Figure 6.70: Water level gauge at the northern drain, 3 January 2005.
Photograph by Richard Anderson

Figure 6.71: Water level gauge at Te Hākari Stream after draining over summer in preparation for mechanical excavation, 26 January 2006.
Photograph by Huhana Smith

passage back into the lake via a temporary fish pass. This first phase of supported research came within the government's overarching biodiversity protection strategy that aimed to increase the management of indigenous biodiversity outside public conservation lands, especially those on private and Māori land are under legal protection. In reinstating water to contour for the dune wetland this activated diverse native reeds, rushes, sedge and grass growth, which enlivened the habitats of native fish, wading birds and other species.[71]

In successfully manipulating and adjusting the water levels over the initial six month period, the second phase of the co-intelligence or collaborative research project began in February 2004, with hydro-ecologist Dr Mark Gyopari of Phraetos Ltd, Wellington, water scientist Dr Olivier Ausseil, from Horizons Regional Council, Te Hākari Project Manager (2003-2006) Richard Anderson, the members of Te Hākari Management Committee and the kaitiaki students of Patumakuku. When Dr Olivier Ausseil visited the contiguous wetland south of Te Hākari area for placement of piezometers on 27 May 2004 with the Te Hākari Project Manager, they noted that drainage had taken place in the neighbouring farming corporation. The group found a number of freshly dug drains, running along and through some of the wetland areas. There was no resource consent for this activity. This extensive part of the wetland was also regarded as regionally and nationally significant with good populations of threatened wetland birds such as bittern and spotless crake

71 The Biodiversity Condition fund through the Ministry for the Environment invites applications twice a year from private landowners and community groups for projects aimed at improving or maintaining the condition of indigenous vegetation, species and habitats.

Figures 6.72 – 6.77: Cows in wet delta before fencing, 9 January 2005.
Photograph by Huhana Smith

Te Hākari Stream weir with temporary fish pass, 14 September 2005.
Photograph by Richard Anderson

Nga Whenua Rahui funders- Mike Mohi and Trevor Lambert meeting over wet delta region at Te Hākari Stream with Richard Anderson and Witana Kamariera (filming), 19 September 2005.
Panoramic photograph by Huhana Smith

Sand bagged weir at Te Hākari Stream with temporary fish moved aside during drainage of wetland, October 2005.
Photograph by Richard Anderson

Replacing temporary weir on Te Hākari Stream, 15 February 2006.
Photograph by Richard Anderson

Repositioned temporary weir on Te Hākari Stream, 20 June 2006.
Photograph by Huhana Smith

present.[72] When discussions over hydrology were first planned, the piezometer project was to measure the water health and depths around this larger contiguous wetland region stretching from Kuku Beach Road along the coast to the Waikawa River. Unfortunately the extended piezometer project did not eventuate.

The hydrology research project centred on Te Hākari dune wetland as one of the largest and most ecologically diverse wetland complexes in the Kapiti, Horowhenua and Manawatu coastal dune zone. The kaitiaki community helped install permanent surface water gauging sites on the Te Hakari Stream and northern drain in 2003. Another gauge was installed within the main, open water area towards the south of the wetland in October 2004. The gauge sites provided initial monitoring data of water levels that would aid long-term wetland management. The water level research ascertained that Te Hākari wetland receives input principally from rainfall and groundwater inflow as there is limited or no surface water inflow to the wetland, except during heavy rainfall when water may flow off surrounding paddocks via shallow drains.

In July 2004 after kaumātua conducted the required karakia or customary protocols for drilling to proceed, Webster Drilling installed four shallow groundwater level wells for Tahamata Corporation. They were wash-drilled into place around Te Hākari wetland and finished with 50mm diameter PVC casing and factory-slotted screens. Other piezometer monitors for ground water were positioned further inland. These shallow monitoring wells provided site-specific information on the groundwater levels and water chemistry. They were also used to predict the direction and magnitude of groundwater inflows to the wetland. This knowledge then determined the nature and degree of any contaminated groundwater entering the wetland from surrounding farmland.

To verify which components were important to the wetland systems, the research looked at the hydrological context of the wetland- its surface water drainage characteristics; the underlying soil and geological characteristics; the water table level; the variations in levels, and flows through the year. Participants began testing water for its quality and ground water levels alongside the specialists. Kaitiaki continued these activities of collating and generating data that ultimately proved that there was a water quality decline issue.

As the hydrology project did not extend around the whole system, as initially planned it centred on Te Hākari dune wetland. Active participants recorded the first water levels around the wetland on 3 July 2004. The project manager and kaitiaki students continued to adjust water levels and took more regularised monthly measurements from 19 October 2004.

72 Sourced from the Incident Report 9/3, File Note PP 0503 dated 10 June 2004, Horizons Regional Council Archives, Palmerston North.

Figure 6.78: Drilling Piezometer 3 into place, May 2003.
Photograph by Richard Anderson

Figures 6.79–6.82: Project Manager (2003-2006) Richard Anderson measuring water depth and quality at piezometers 1 and 3 at locales around the wetland, 3 January 2005.
Photographs by Huhana Smith

The ground water level samples were taken at the four different wells into the subsurface waterways. Participants checked ground water depths, took water samples, bottled samples and stored them in cool packs for delivery to Massey University laboratories. The samples were analysed for the trophic status of nutrients (Nitrogen and Phosphorus) and algal density (Chlorophyll a). Water samples were investigated for the microbiological quality (Escherichia coli or E. coli) to check whether the water in the wetland was safe for swimming and food gathering, especially within its outflow stream. The samples looked at the sources of nutrients from groundwater, including Nitrate (NO_3), Ammonia (NH_3), dissolved reactive phosphorus (DRP), Total Nitrogen (TN) and Total Phosphorus (TP).[73] This sampling of water continued until 3 November 2005.

At that first summer 2004-2005, preliminary results showed that the lake surface had dropped to levels of 200-300mm depending on weather patterns or dry periods. As expected, the first takes of sampled water indicated high nitrate and phosphorus levels. Even though the northern drain was sandbagged to hold water levels at 700-800mm, thousands of litres per day were still being lost sub-surface to the north. To the western or coastal side of the wetland, water table levels fluctuated between 60-80 mm, while to the east the water levels dropped some 120-140mm. The raised water levels attained in the wetland also depended on the difference in ground water levels during winter or spring. As a result marginal pasture was flooded beyond the covenant fence to create a wetland delta. A substantial electric fence was erected around the wet delta region to exclude stock in September 2005. The hydrology research and water-monitoring discussions continued with designs for permanent weirs with fish pass, planned and costed. The potential weir at Te Hākari Stream culvert was designed to withstand logging truck passage when Tahamata Corporation eventually removed the pine trees.

Since raising the water levels to natural contour, the former marginal pasture around the cow pugged, drained wetland completely changed in appearance. The common Māori name wīwī is used for a number of species of *Juncus,* which grow profusely in wetlands, along stream banks and other damp places. Wīwī [*Juncus gregiflorus*] is tolerant of a wide range of conditions and produces large quantities of microscopic seed that remain viable in the soil for years. In the wetland stream area wīwī literally helped recover its memory with obvious flushes of other rushes and sedges growing on the banks and into the former pasture area. The higher water levels led to increased sedge [*Isolepis prolifer*], local sea rush [*Juncus kraussii s.s australiensis*] and [*Schoenoplectus pungens*].

When seen in renewed, thick and luscious states, the combination of reeds, sedges and rushes form bright and variegated green clumps of narrow, wiry stems, buffeted and

73 Dr. Olivier Ausseil, 2007, *Te Hākari Wetland: Water Quality Investigation,* Horizons Regional Council, Palmerston North, 8.

Figure 6.83: Te Hākari Stream before rehabilitation, July 2003.
Photograph by Paula Loader

Figure 6.84: Te Hākari Stream with raised water levels to create wet delta, 3 January 2005.
Photograph by Huhana Smith

Figure 6.85: Te Hākari Stream and wet delta electric fence, 17 July 2005.
Panoramic photograph by Huhana Smith

Figure 6.86: Te Hākari Stream and wet delta, with weir removed to drain wetland for summer mechanical excavation in February-March 2006, 20 October 2005.
Photograph by Huhana Smith

Figure 6.87: Project Manager Mr Richard Anderson (2003–2006), Te Hākari Stream with weir removed, 22 October 2005.
Photograph by Huhana Smith

Figure 6.88: Re-vegetated riparian alongside Te Hākari Stream, with dune land forest growing in background, January 2007.

Panoramic photograph by Huhana Smith

Figure 6.89: Profuse reed, grass and sedge re-vegetation on left of Te Hākari Stream, 26 November 2006.

Photograph by Huhana Smith

shaped by north-westerly winds. Reeds and rushes were once important resources when bundles were tied together for finishing off the inner linings of whare raupo.[74] The healthy re-vegetating fringe habitat helps remove stock nutrients from the water. When frog numbers increased in this biologically important shallow fringe habitat, they attracted greater numbers of wading birds to feed. The wet delta was becoming a significant ecosystem interlinked to the stream, the wetland itself, the dune systems and the Ōhau River flowing to sea. Of biodiversity importance is New Zealand's most threatened wetland species, matuku or Australian Brown Bittern [*Botaurus stellaris poiciliptilus*]. A resident pair of matuku was recorded feeding in the delta. The wet delta also attracted self introduced white-faced heron [*Ardea novaehollandiae*], endemic kotuku or White Heron [*Egretta alba modesta*], Little egret [*Egretta garzetta immaculate*], and kotuku ngutu-papa or Royal Spoonbill [*Platalea leucorodia regia*]. The water health project clearly highlighted how marginal pasture easily reverts to more natural states when water is reinstated, as happened in the wet delta around Te Hākari stream.

74 Other forms of temporary housing recalled in the region were made of driftwood or car case wood, roofed with bracken fern, harakeke or raupo. Some had dried, crushed shells on dirt floors or wool hessian sacks sewn together as a floor covering. Some whānau members recalled these forms of housing as still in use up until the 1930's. Other temporary structures at the beach were made of tarpaulins, painted with bitumen. There were also a series of small, more robust summer houses or baches made of wood. They were one to two room dwellings permitted to be erected by the Māori landholders. These forms of summer baches were utilised by Turihia Bevan and whānau of Manakau, Mr Walter Wiley, Tumeke Wehipeihana and whānau of Kuku, Gerry Te Rangitāwhia (who lived at the beach) and Harold Rowland and his whānau.

Personal communication with Mrs Maire Rahapa Rehia Johns and Mrs Ruhia Martin, 2007.

Figure 6.90: White faced heron on fence post overlooking wet delta region, 22 October 2005.
Photograph by Huhana Smith

Figure 6.91: Kōtuku ngutu papa or Royal spoonbills in the wetland lake region, 20 August 2006.
Photograph by Huhana Smith

Figure 6.92: Kōtuku ngutu papa or Royal spoonbills in the wetland lake region, 26 November 2006.
Photograph by Huhana Smith

All participants in the water sampling work learnt that wetlands require a reliable continuous or seasonal source of water, which is usually a combination of rain falling directly onto the wetland, runoff from surrounding land and from underground as groundwater inflow. The research found that water was lost through evaporation from open water; transpiration from plants; flows out of drains and streams, and groundwater outflow. The water balance of a wetland describes the balance between the sources and discharges of water. Therefore, wetlands like Te Hākari are dynamic hydrological systems where the flows and levels of water can vary substantially, both seasonally and from year to year. When averaged over a long time period, the wetland's water inflows balance the outflows. At any moment in time, one or more component of the balance may dominate, and water levels will rise or fall depending upon whether the dominant water budget components are inflows or outflows. For example, a heavy rainfall event would cause water levels to temporarily rise.

Alternatively, a seasonally depressed groundwater level may cause the wetland to dry because groundwater inflows decrease. The groundwater level monitoring data provided information on how the wetland interrelates with the underlying water table, and how this relationship may change through the year. The monitoring data illustrated and calculated the direction of groundwater flow around the wetland during the summer and winter seasons.[75]

The hydrological data generated in the Gyopari Report found that the general direction of groundwater flow is from the farmland to the east of the wetland, towards the coast where the subsurface water flows in a north-westerly direction. The groundwater flows within an unconfined sand aquifer with occasional peaty lenses is recharged from rainfall. The recharge area is the sand dune and flat paddock area to the east of Te Hākari dune wetland. During the winter the wetland level sits at about 2.1m (above mean sea level). The water table is much higher than the wetland level, which indicates that there is an upward flow gradient from the water table into the wetland. This occurs because the base of the wetland is lined with low permeability of organic silts and clays. They restrict the upward flow of groundwater and slightly pressurises (or confines) the aquifer. Groundwater seeps upwards at a slow rate into the entire wetland area.

During the summer months, the groundwater-wetland relationship changes slightly. The wetland level is about 2.0m above sea level and the water table lies above this only on the eastern side of the swamp. On the western or seaward side, the water table is lower than the wetland level, lying just beneath the ground surface. This suggests that during the summer, groundwater is entering the wetland, through slow seepage, along the eastern side. The seasonal wetland level fluctuated by about 0.3m over the year, reflecting underlying groundwater levels. The levels dropped during summer when there was less rainfall recharge. The levels rose again during the winter rainfall infiltration to the east of the wetland. The water table was measured as being generally higher than the wetland level. This indicated an upward flow from the water table into the wetland. The groundwater flow varied depending upon the groundwater levels. In summer, the upward flow appeared to be restricted to the central and eastern side of the wetland.

There was a strong inter-relationship between the groundwater and wetland surface levels, suggesting that the wetland was vulnerable to nearby groundwater abstractions and to any contamination of groundwater by farming and nutrient pollutants in the recharge areas to the east. The wetland water balance indicated that rainfall provided around 50% of the recharge to the wetland. The remaining 50% was accounted for by groundwater inflow. Evapotranspiration of water accounted for about 40% of wetland water loss with the

75 Mark Gyopari, 2006, *Te Hakari Wetland Hydrological Study,* Phreatos Ltd, Wellington, 3.

remainder draining into the Te Hākari Stream or out of the northern drain under Kuku Beach Road.[76]

The hydrological investigations carried out from 2003-2005 characterised both the surface water and groundwater environments. In participating in this research, kaitiaki learnt also to control water levels, re-plant native vegetation and address the adverse effects of contamination of water flowing into the wetland. When Te Hākari Stream and northern drain were partially impounded to raise the wetland water levels, this successful activity raised wetland levels by 0.3 to 0.4m. At this point in operations, it was very difficult for some kaumātua to accept a 'wet' wetland as they had known Te Hākari in its modified state for much of their lives. By raising water levels, talking, discussing and debating the importance of the changes in water levels this dialogue improved kaumātua, kaitiaki and shareholder understanding of the hydraulic functioning of the wetland. Iwi and hapū participants learnt about water quality and its importance to the overall success of the restoration project. It also required considerable kaitiaki effort and ongoing participation in work required for the farm's invaluable wetland ecosystem.

The water quality testing took place before the first series of mechanical excavations of the wetland. The nutrient status and likely nutrient stores in the wetland sediment indicates that monitoring nutrient input into the wetland alone, will not be sufficient enough to maintain the open water areas. With time (and if no monitoring takes place) the lakes are likely to be replaced by raupo. In order to maintain open water, active management is required to mechanically harvest the hornwort and raupo.

The Clean Stream Accord, June 2004

The 'Big Dig' Mechanical Excavation December 2005-February 2006

Te Hākari dune wetland work and the mechanical excavation planning coincided with other regional actions taking place. On 26 May 2003, Fonterra Co-operative Group, Regional Councils, the Ministry for the Environment, and the Ministry for Agriculture and Forestry, signed the Dairying and Clean Streams Accord.[77] This accord aims to provide a clearer statement of intent for a framework of actions that promote sustainable dairy farming in New Zealand. The Accord focuses on reducing the impacts of dairying on the quality of New Zealand streams, rivers, lakes, groundwater and wetlands. The goal is to have water that is suitable and appropriate for fish, drinking for stock and recreation

76 Data sourced from co-intelligence projects that determined the water quality and sources of point pollution to Te Hākari dune wetland.

Mark Gyopari, 2006, *Te Hakari Wetland Hydrological Study,* Phreatos Hydrological Research & Consulting Ltd, Wellington.

Dr. Olivier Ausseil, 2007, *Te Hākari Wetland: Water Quality Investigation,* Horizons Regional Council, Palmerston North.

77 The Accord was implemented in June 2004.

purposes. Priorities and performance targets have been set for fencing off waterways; improving farm races, bridges and stock crossing culverts over waterways; ensuring discharge compliance through resource consents and regional plans; treating dairy effluent appropriately; ensuring that better nutrient management regimes are in place, and fencing off significant or important wetlands in the region.

The performance targets for the Accord have been set as follows:

- By 2007, 50% of dairying herd or other stock had to be excluded from waterways with 90% excluded by 2012
- By 2007, 50% of regular crossing points on waterways had to be improved for farm races and stock crossings, with 90% completed by 2012
- By 2007, 100% of farm dairying effluent regimes or systems were in place to manage nutrient inputs and outputs
- By 2005, 50% of significant or important wetlands were fenced off, with 90% by 2012.[78]

The Accord targets the farming fraternity and an intensifying dairying industry. Tahamata Incorporation on the one hand is well commended for activating Te Hākari Dune Wetland Restoration project. As the objectives of the wetland project were well underway at that time of the Accord signing, Tahamata had in part fulfilled some of its positive intentions. In fencing off the 'loop' project for the lower reaches of the Ōhau River in 2005, with the first extensive plantings underway by July 2006, the process of mitigating the degradation of the farm's natural capital, namely its soils, biota (vegetation and fauna), streams, lakes and wetlands and atmosphere[79] had begun. In accepting the challenge to assist Te Hākari dune wetland in 2001, the farming incorporation was ahead of the time, in comparison to other farmers in the region. On the other hand, a sharemilker of Tahamata (2003-2006) could be reproached for contributing to non-point source pollution when a stalled effluent irrigator in the eastern paddocks was left in the same place for nearly three months. When the final results from the hydrology research project indicated that the surface and subsurface quantity and quality of water around that eastern side of Te Hākari wetland had been detrimentally compromised, the farming incorporation led initiatives for the natural within cultural landscape. Such unchecked degradation to the farm's natural capital was still too high to postpone action.[80]

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78 Parliamentary Commissioner for the Environment, 2004, *Growing for Good: Intensive farming, sustainability and New Zealand's environment,* Parliamentary Commissioner for the Environment Te Kaitiaki Taiao a Te Whare Pāremata: Wellington, 137.

79 **Natural capital**- the renewable and non renewable stocks of natural resources that support life ad enable all social and economic activities to take place. It includes rivers, lakes and aquifers, soil, minerals, biodiversity and the earth's atmosphere. Taken from Parliamentary Commissioner for the Environment, 2004, *Growing for Good: Intensive farming, sustainability and New Zealand's environment,* Parliamentary Commissioner for the Environment, Te Kaitiaki Taiao a Te Whare Pāremata: Wellington, 21.

80 ibid, 185.

The direct effects of reactive nitrogen on ecosystems include acidification and deoxygenation effects on forest, soils and fresh water systems; eutrophication in lakes and coastal ecosystems; nitrogen saturated soils; biodiversity losses; invasions of nitrogen loving weeds and changes in abundance of beneficial soil organisms.[81] Non-point source pollution from farming systems remains the most significant risk to New Zealand's environment and to the future of farming itself. Nutrient management, faecal contamination from animals, the fresh water quality decline for the coastal region, still required significant and immediate focus.

Recommendations for water quality and mechanical excavation

The Ausseil and Gyopari Reports alongside kaumātua and kaitiaki calls recommended that it is critical to keep improving the overall mauri and health of the wetland region. Water levels must be maintained as close to their natural levels as possible. A permanent weir plan with costs is ready for Te Hākari Stream.[82] This weir will allow for fish passage and for farm vehicles and trucks to traverse over. By backfilling the northern drain this will also assist in retaining the current water levels. As expected the monitoring results indicated that the wetland has a very high nutrient status, worsened by continuous nutrient input from adjacent land via the groundwater.

It is recommended that Tahamata Incorporation reduce nutrients and undertake further changes to their on-farm practices. The following combined actions will help reduce nutrient inputs to the wetland. The water quality results well indicate that farm management needs to:

- Evenly spread dairy shed effluent at the paddock scale and over all paddocks
- Maintain travelling irrigators so that they do not stall and create effluent ponding
- Favour irrigation during dry weather times and effluent storage during wet weather. In simply deferring irrigation this can reduce nitrogen leaching by up to 80%
- Monitor effluent application as no more than what is required for grass growth which aids in nutrient and water budgeting

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81 The experts who compiled the Parliamentary Commissioner for the Environment's *Growing for Good* publication, would recommend that more proposals were required for integrating sustainable farming within a wider indicator programme to assess the state of the environment. Actions in these areas would be taken up by the Ministry for Agriculture and Fisheries alongside Ministry for the Environment in order to place farming firmly within a broader environmental context in New Zealand. ibid, 187.

82 Gary Williams, a water engineer of Manakau has completed a planned and costed fish pass weir for the Te Hākari Stream. He is also working on a water level control system for Te Hākari dune wetland as at September 2007.

- Monitor bore into the farm area (Bore 4) to measure changes to the effluent management regime and to check if the nitrate levels are back to normal

- Develop and implement a comprehensive nutrient management plan

- Split fertiliser application into lighter loads such as 3-4 smaller applications per year rather than one large application.

Before May 2005 the bacteriological results indicated that at times, there was a significant health risk to people if there was any prolonged contact with the water, especially for swimming or food gathering. In fencing off the main open water area of the wet delta, this significantly improved the bacteriological water quality of the wetland. Since May 2005, the wetland water quality is now safer for swimming and food gathering most of the time, although it is recommended that food is cooked before eating. Drinking water directly from the wetland remains inadvisable.[83] When hydrology results registered an overall unsafe level of faecal or E. coli contamination from non-point source pollution (due mainly to an ineffective farm nutrient management regime) Tahamata Incorporation began to mitigate these problems.

The 'Big Dig'

Te Hākari Management Committee first discussed mechanical excavation or chemical eradication of water weed pests in 2003, with a view to improving the overall water quality by releasing waterways from choked raupo growth and hornwort infestation. The process began in October 2005, when the temporary weir was removed with the waters released along Te Hākari stream to the Ōhau River. It took over four months for the water levels to subside sufficiently to allow a mechanical digger access into the area to effectively excavate raupo, harakeke and silt from the bottom of the wetland. The actual excavating of the dune lakes began on 12 December 2005. The process began with recognised kaumātua blessing the Hitachi 120 excavator, its driver and key organisers with karakia.[84] Other key participants[85] observed the process for the first day of excavation activities, whereby a drain along the west side was opened up from the outlet stream to the southern reaches of the wetland. This work was necessary to drain the wetland further and to allow for the summer to dry up the region, before the significant excavation work could take place.

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83 Dr. Olivier Ausseil, 2007, *Te Hākari Wetland: Water Quality Investigation,* Horizons Regional Council, Palmerston North, 14.

84 Those present on 12th December 2005 included Mr Matin Wehipeihana, Mr Lee Gibson, Mrs Maire Johns, Mr Patuaka Wehipeihana, Mr Eric Gregory, Mr Witana Kamariera, Mrs Fiona Kamariera, Mrs Yvonne Wehipeihana Wilson, Mr Peter Daly, Mr Richard Anderson and Mr Tana Carkeek (Chairperson of Tahamata Incorporation).

85 Those present overall included Mr Matin Wehipeihana, Mr Lee Gibson, Mr Karl Gibson, Mrs Maire Johns, Mr Patuaka Wehipeihana, Mr Eric Gregory, Mr Richard Anderson, Mr David Seymour, Mr Willie Packer, Ms Moira Poutama, Mr Witana Kamariera, Mrs Fiona Kamariera, Mrs Yvonne Wehipeihana Wilson, Mr Peter Daly, Mr Sean Ogden and Mr Tana Carkeek (Chairperson of Tahamata Incorporation).

Figures 6.93–6.98: The excavation begins with blessing, 12 December 2005.
Series of photographs by Richard Anderson

In early February 2006 work resumed with two more working weeks of intensive digging. This work created deeper lake regions in the northern and southern ends of the wetland. A widened and deepened channel was created between what was coined the 'tail and head' of the wetland.[86] These excavation efforts created small islands and completely transformed the wetland region. Many supporters came to site to witness the changes made for the ecological health and benefit of the region. Clear summer days with intermittent heavy falls of rain failed dampen the importance of the work undertaken. Over the period of

86 Mr Patrick Seymour (Project leader for the excavation), Lee (operator) and Karl Gibson (owner) of the excavator combined skills with the Project Manager and Te Hākari Environmental Committee to determine the best plans for the wetland excavation project.












Figures 6.99–6.111: The excavations that took place on 13 February 2006.
Series of photographs by Richard Anderson

work over one hundred small eels were returned to the water, with waterfowl and other water birds in great numbers seen flying into the opened lakes.[87]

Te Ngahere ā Wehipeihana/Wehipeihana Reforestation Project and Tikorangi Nursery Development

In April 2005 kaumātua Mr Martin Wehipeihana[88] offered another possible environmental project that looked specifically at the enhancement of the mauri of a local forest remnant. The idea was to sustain and maintain the last of a range of trees that had largely been

87 Patrick Seymour, 2006, *Te Hākari Dune Wetland 'Big Dig'*, Report tabled at Environmental Committee meeting April, 2006.

88 Mr Martin Wehipeihana is a kaumātua and the recognised rangatira (by genealogy) of Ngāti Tūkorehe ki Kuku.

Figures 6.112: Cow pugged delta region before water level rise, 9 August 2003.
Photograph by Huhana Smith

Figures 6.113: Wet delta before fencing looking across Te Hākari Stream with Harold Rowland's bach in background, 3 March 2005.
Photograph by Huhana Smith

Figures 6.114 and 6.115: Before and after images from cow-pugged edges of wetland, to dune wetland and lakes opened for bird, fish and invertebrate biodiversity.
Photograph by Paula Loader, July 2003
Photograph by Huhana Smith, 26 November 2006

Figure 6.116: Te Hākari Dune Wetland with raised water level and winter flows, July 2005.
Aerial photography by Lawrie Cairns, Palmerston North

Figure 6.117: Te Hākari Dune Wetland towards Pekapeka, 21 September 2007.
Aerial photography by Lawrie Cairns, Palmerston North

removed from the district. His family had a block of bush on a former river terrace that looked down over their farmland stretching towards Kuku Beach Road. It was a only a fragment of an inland forest that had been logged of its matai [*Prumnopitys taxifolia*], rimu [*Dacrydium cupressinum*] and totara [*Podocarpus totara*] in the late 1880s up until the 1930s. This remaining stand became an instructive project for place-based learning in the Māori values of indigenous biodiversity and the opportunity to survey remnant flora and fauna.

The objectives of place-based learning are simple. The forest fragment provided kaitiaki students with hands-on opportunities to develop their love of the natural envrironment.

They learned narratives about Weihipeihana Bush from Mr Martin Weihipeihana who offered aspects of his whānau interactions within the place. His localised stories presented more meaningful context to the students, who then physically surveyed the range of animal pests, predators, and pest weeds that required control and monitoring. While the area had been fenced off from stock from 1999 it was weed invested. It was peppered with 200–300 year old tawa [*Beilschmedia tawa*] and mahoe [*Hemiphaga novaeseelandiae*] and ruru or morepork [*Ninox novaeseelandiae*]. The forest was linked to the Whakaruruhau programme within the Kaitiakitanga: Iwi Environmental Management course conducted through Patumakuku private training establishment in Levin. The project offered tangible ways to overcome peoples' detachment to environmental learning by literally placing them inside 'the consciousness of the forest.'[89] Place-based education in this sense is rooted in what is local and therefore unique to place. The forest formed a vital part of the learning programme for students, as it emphasissd how iwi and hapū as mana whenua, are part of the environment as active kaitiaki, and that the environment is part of them. When interacting with the forest, the students were deeply conscious that their kaupapa was to enhance the natural revegetation process and to return the forest remnant to a near natural state, as a taonga given by Mr Martin Wehipeihana for future generations to enjoy.

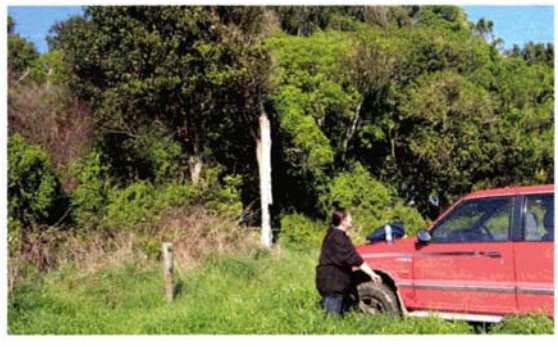
Another key objective for Te Hākari Dune Wetland Restoration Project, was the development of a nursery operation. The site was secured in the vicinity of an original site of significance known locally as Tikorangi. Tikorangi was a former tribal area around a puna-wai or spring-fed stream that linked the Waikawa River system with the Ōhau River. Floods of the past used to create shallow water expanses that linked waterways like the Waikawa and Ōhau Rivers at the Kuku/Mangananao/Tikorangi stream confluence. This enabled waka to travel further inland rather than just along the coast. Before the Kuku Manakau Water Races were created in 1908, the Tikorangi stream pursued a large circuitous and meandering course across land that eventually fell into the Mangananao, a tributary of the Kuku Stream. this combined waterway then flowed into the Ōhau River.[90]

Te Iwi of Ngāti Tukorehe Trust secured a long-term lease for the iwi and hapū-based nursery development which has been in business since October 2005. It is a valuable localised site comprising entrance gardens encircling a car park area, adjacent to a substantial potting shed, propagating units, hot houses and holding-out areas for trees. The relationships between forest remnants and Tikorangi nursery are obvious as the operation propagates and nurtures seeds from the ecological region. This ensures a continuous supply of plants

89 Wally Penetito, 2004, *Theorising a 'Place-Based' Education Ahakoa kai tahi, tera a roto te hahae ke ra.* Keynote address to NZARE Conference, Westpac Stadium, Wellington, 24–26 November 2004, 11.

90 G. Leslie Adkin, 1948, Horowhenua: *its Māori Place Names and their Topographic and Historical Place Names*, Department of Internal Affairs: Wellington, 367.

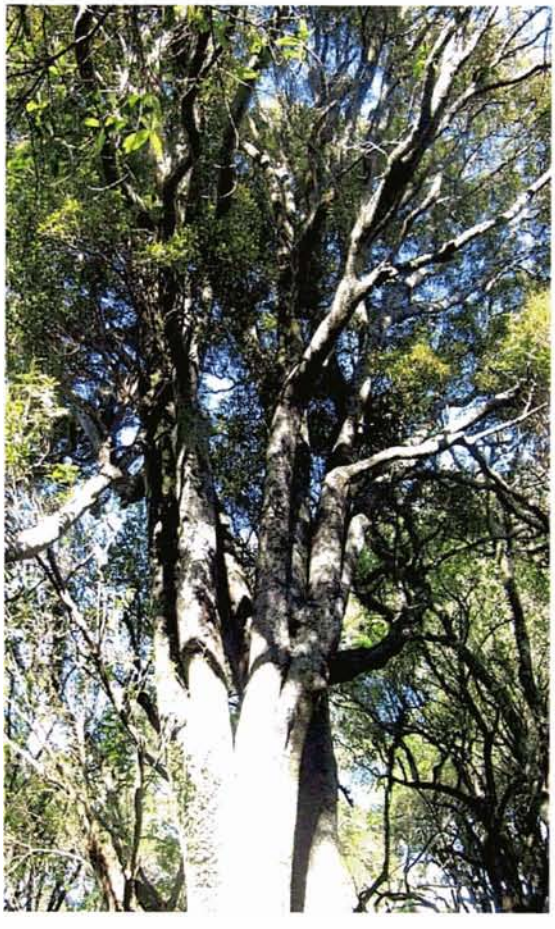
Figure 6.118: Te Ngahere ā Wehipeihana/Wehipeihana Bush from Kuku Beach Road, October 2005.
Photograph by Huhana Smith



Figures 6.119–6.122: First survey of Te Ngahere ā Wehipeihana with Kaitiaki Students, 12 October 2005.
Photographs by Huhana Smith

Figure 6.123: Te Ngahere ā Wehipeihana/Wehipeihana Bush blessing with Mr Martin Wehipeihana and kaitiaki students before weed clearing work begins, 26 October 2005.
Photograph by Huhana Smith

Figures 6.124–6.127: Wehipeihana Bush with students surveying and collating data, 26-27 October 2005.
Photographs by Huhana Smith



Figures 6.128–6.131: Some revegetation of karaka, mahoe with 200-300 year old tawa, and kereru watching the work below, 12 October 2005.
Photographs by Huhana Smith

Figure 6.132: Rest time for kaumātua, kaitiaki students and kaiako in Wehipeihana Forest, 27 October; 2005. Rest time for koroua Mr Martin Wehipeihana, kaiako Keremihana Heke, students Janine Gardiner and Kira Packer.

required for restoration projects expanding around the district. Some kaumātua and kaitiaki are passionate about native plants, propagation and gardening. They work alongside other recognised plant or horticultural specialists from within and beyond the tribe.

Te Whakaruruhau kaitiakitanga students developed their nursery skills to increase the plant and seed stock sourced from reputable native plant nurseries, from individuals who propagated tōtara and kahikatea in home backyards[91] and from seedlings sourced from the Wehipeihana Bush project. While other simultaneous seed propagation experiments have taken place in the nursery's hot houses a significant number of river riparian grasses or fore dune stabilisers like pingao and spinifex have been seed-collected from the beach, and successfully propagated. Innumerable plants, native trees, shrubs and grasses relevant to the ecological region have been potted-on into new containers and arranged in the expanding holding areas. While not all the stock was eco-sourced at the very first stages of the nursery development, the native plants have been sourced from reputable suppliers that hold appropriate stock for the ecological area.

91 Miss Margaret Anderson of Wallaceville has propagated seed for thousands of tōtara and kahikatea trees for the Kuku environmental projects.

Figure 6.133: Cleaning up gardens and driveway to Tikorangi Nursery, 28 October 2005.
Photograph by Huhana Smith

Figure 6.134: Key kaumātua and supporter helping with tidy up, 28 October 2005.
Photograph by Huhana Smith

Figure 6.135: Local kaitiaki Mr Tipene Perawiti and Mr Peter Daly helping at Tikorangi working bee, 28 October 2005.
Photograph by Huhana Smith

Figure 6.136: Utilising tree chipper and placing chipped mulch around cleared gardens, 28 October 2005.
Photograph by Huhana Smith

Figure 6.137: Mulching gardens, 28 October 2005.
Photograph by Huhana Smith

Figure 6.138: Kaumātua Mr Eric Gregory and Mr Martin Wehipeihana clearing around harakeke. Mrs Yvonne Wehipeihana Wilson is working behind harakeke, 28 October 2005.
Photograph by Huhana Smith

When the redeveloped Te Iwi o Ngāti Tūkorehe Trust became the governing and administrative body for all Tūkorehe providers in 2005, Te Hākari Management Committee (2002-2006) was strengthened into the environmental and cultural landscape arm of the Trust in 2007. This arm approaches ecosystem restoration from an integrated cultural landscape perspective where all aspects of significance including ecosystem sustainability and human well-being are taken into consideration. The series of co-intelligence projects over time have helped activate the goals of effective ecosystem restoration for environmental sustainability within tribal lands. Despite the ongoing complexity of projects, this thesis has sought better understanding of ways forward in very practical terms, in order to arrest cultural disintegration and ecosystem degradation in natural and cultural landscape, within a revered coastal and dune system landscape.

To reiterate, when mana or authority is tied to human and economic resources through whānau, hapū and iwi and their jurisdiction over various resources such as land, food stocks, forests and fisheries, there are unique opportunities through pilot projects and well formulated strategies, to protect and enhance what remains of resources and ecosystems as taonga.

Figures 6.139 and 6.140: Tikorangi plants in holding areas, 31 January 2006.
Photographs by Huhana Smith

Figure 6.141: Tikorangi Nursery promotion at Māori Business Expo, 11 November 2006.
Photograph by Huhana Smith

Figure 6.142: Tree stock at Tikorangi Nursery, 30 March 2007.
Panoramic photograph by Huhana Smith

CHAPTER SEVEN

> The power to act has moved away from governments and...the real force for environmental improvement lies with people... Individual and community action are crucial to effecting change.[1]

In iwi and hapū restoring cultural, spiritual and interpersonal health and functioning for all fragmented ecosystems in the region, the activities have advanced local peoples reconnecting with natural and cultural landscape. The concerted efforts have brought people together in one accord in order to take on the challenges of environmental decline. This chapter overviews the significance of these local activities and findings, and aligns them with a broader context of international laws and standards for indigenous human rights. When kaitiaki mobilised together to instigate positive change for the coastal and tribal agricultural landscapes[2] they increased understanding that contemporary human relationships with the environment are highly complex and diverse phenomenon. Their re-enhanced iwi and hapū interaction within a wide range of social, cultural, economic, political and ecological variables[3] have made a difference in protecting their cultural landscapes.

This chapter interweaves particular international standards that aspire to protect global indigenous cultural heritage and natural environments for the well-being of humankind, particularly indigenous peoples. The international laws and standards explored in this chapter are the ILO Convention 169, the deliberations over the United Nations Declaration of Indigenous Peoples' Rights (DRIP), ratified in June 2006 and passed by the General Assembly in September 2007, and the Millennium Assessment 2000 (MA) with research results released in 2005. The chapter also highlights breaches of international standards, especially over the Foreshore and Seabed Act 2004.

The ILO Convention No. 169 is an international law based on respect for cultures, ways of life, traditions and customary laws of indigenous and tribal peoples. The Convention supports indigenous peoples' right to exist as distinct parts of their national societies

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1 Dr Claude Martin, Director General, WWF International, WWF Annual Report 1997. Quote derived from Gonzalo Oviedo, Luisa Maffi & Peter Bille Larsen, 2000, *Indigenous and Traditional Peoples of the World and Ecoregion Conservation: An Integrated Approach to Conserving the World's Biological and Cultural Diversity,* WWF International-Terralingua, Gland, Switzerland.

2 Agicultural landscapes may also be known as agroecosystems. They are defined as biological and natural resource systems managed by humans for the primary purpose of producing food as well as other socially valuable nonfood goods and environmental services.

3 Gonzalo Oviedo, Luisa Maffi & Peter Bille Larsen, 2000, *Indigenous and Traditional Peoples of the World and Ecoregion Conservation: An Integrated Approach to Conserving the World's Biological and Cultural Diversity,* WWF International-Terralingua, Gland, Switzerland., 6.

with their own structures, traditions, protection for their unique ways of life and the right to determine their futures as active decision-makers in the processes of states in which they live. The Convention seeks to maintain and develop unique cultural forms of expression, languages and religions, according to indigenous peoples' own schema. The ILO Convention No. 169 advocates for indigenous histories, knowledge, technologies, language impart and usage, value systems, economic and cultural aspirations as essential for conducive, indigenous education programmes. It purports community-based health services that bring traditional healing practices and medicines to people. It also encourages socio-economic determination as critical in reducing the disparities that exist between indigenous and non-indigenous peoples.

The DRIP deals with the rights of indigenous peoples in areas of self-determination for culture and language, land and resources, environment and development, education, health, housing, employment intellectual and cultural property, indigenous law, treaties and agreements with governments. When the Draft Declaration emerged from a climate of changing international attitudes in 1982, a Working Group on Indigenous Peoples (WGIP) was established. Its official name became the Working Group on Indigenous Populations, mainly because states were nervous about the use of the term 'peoples' as suggesting self-determination for 'all peoples'.[4] In 1993 WGIP (as the longest standing UN body dealing exclusively with Indigenous peoples) completed its work on DRIP. It was mandated to review developments that promote and protect human rights and fundamental freedoms of Indigenous Peoples. It gave attention to the evolution of international standards concerning Indigenous rights. The United Nations General Assembly finally adopted the DRIP in September 2007.[5] New Zeand, however, did not vote in favour of the Declaration.

The Millennium Assessment is a global project that examines the consequences of ecosystem change and associated impacts on human health and well-being. At the time kaitaiki were organising arrangements for the initial wetland covenant with Tahamata

4 Boaventura De Sousa Santos, 1995, *Toward a New Common Sense: Law, Science and Politics in the Paradigmatic Transition*, Routledge: London. 239.

5 The Declaration on the Rights of Indigenous Peoples' was not supported by the United States of America, Canada, Australia and New Zealand. As raised by Alan Parker, a professor at the Evergreen State College and co-chairman of the Special Committee on Indigenous Nation Relationships for the National Congress of American Indians, in a column for the Seattle Post-Intelligencer newsletter, he wrote that: 'Indigenous leaders in the U.S., Canada, New Zealand and Australia described a concerted and organized political campaign within these Pacific Rim countries, a campaign directed against the foundation of their indigenous rights. The current Bush, Harper, Clark and Howard administrations have coordinated their policies toward indigenous nations by consistently characterising indigenous nation rights, recognised in treaties with these various colonial nations, as *racial preferences* or *race-based rights*. Further evidence of a coordinated campaign is seen in their joint opposition to the Declaration on the Rights of Indigenous Peoples before the United Nations. It is evident that these national governments share a common commitment to restrict the rights of their indigenous people strictly to the domestic law of each nation and oppose any UN. policy that would recognize indigenous nation rights as a matter of international law and policy.'

Sourced from email communication distributed by Aroha Te Pareake Mead, Senior Lecturer in Māori Business, Treaty of Waitangi and Māori Resource Management at Victoria University of Wellington's School of Management.

Incorporation and Nga Whenua Rahui in 2001, the Millennium Ecosystem Assessment (MA)[6] was launched as a global project with consolidated research documents released later in 2005. The worldwide action of the Millennium Ecosystem Assessment intends to improve the conservation and sustainable use of systems, and assess their contributions to human well-being. With reports compiled by more than 1,360 experts worldwide, the comprehensive assessment joins a compendium of literature and research outlining the seriousness of ecosystem change and the likely detrimental consequences that face the global community. The MA responds to government requests for information received through four international conventions, including the Convention on Biological Diversity, the United Nations Convention to Combat Desertification, the Ramsar Wetlands Convention,[7] and the Convention on Migratory Species. The MA is designed to meet the needs of numerous stakeholders, including the business community, the health sector, non-governmental organisations, and indigenous peoples.[8] New Zealand is also a contracting party to Ramsar Wetlands Convention where it is obligated to designate and include at least one wetland of international significance on the Ramsar list of wetlands of international importance.

As a signatory, New Zealand's wetland conservation takes place within national land use planning. All global signatories to Ramsar formulate and implement planning to promote the conservation of wetlands, and as far as possible ensure the wise use of wetlands within their territories. The wise use concept is defined as the sustainable use of wetlands for the benefit of humankind in ways that are compatible with maintaining the natural properties of such important ecosystems. In recent times Ramsar has become more regionally relevant to the wetland project Hei Whenua Ora ki Te Hākari within its' contiguous Pekapeka system towards the Waikawa River. The intergovernmental treaty has provided a framework of protection over the Manawatu Estuary, located at Foxton Beach coastal township, Horowhenua/Manawatu region. When iwi and hapū in Kuku assisted in protecting and interacting with Te Hākari dune wetland and related bio-cultural diversity under a Nga Whenua Rahui kawenata system, they did so regardless of whether the wetland was included on the global list or not.[9]

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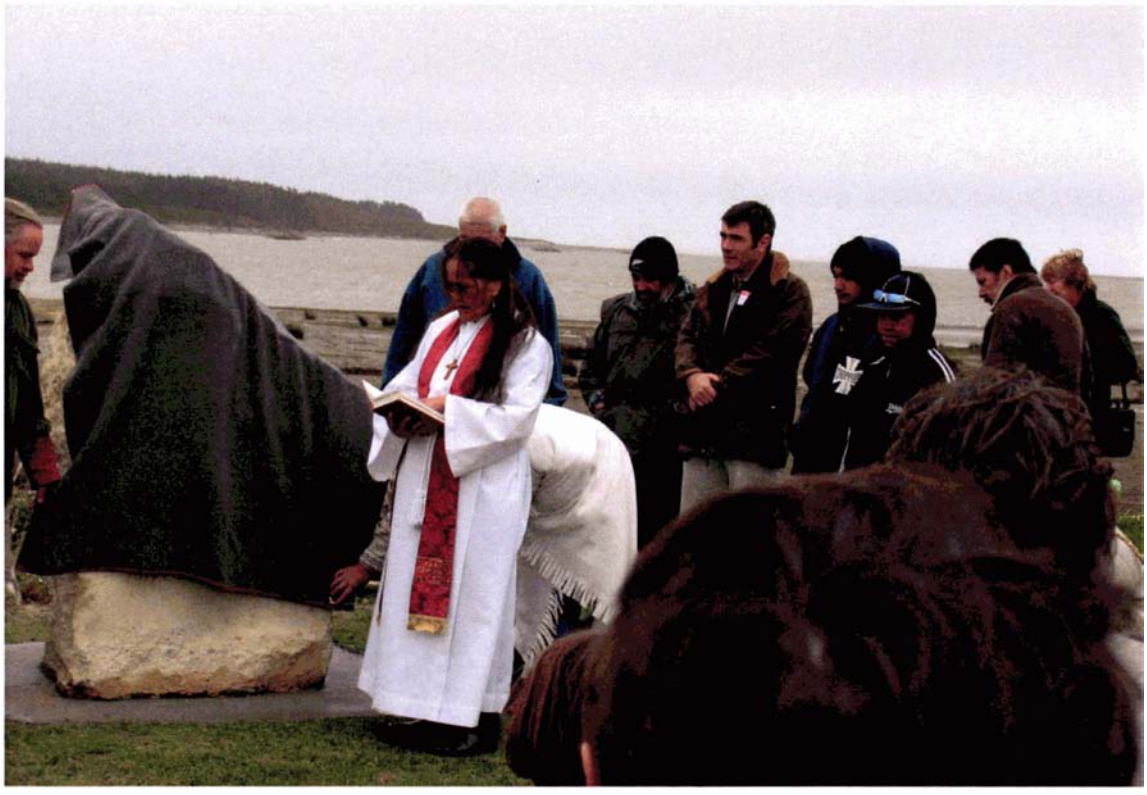
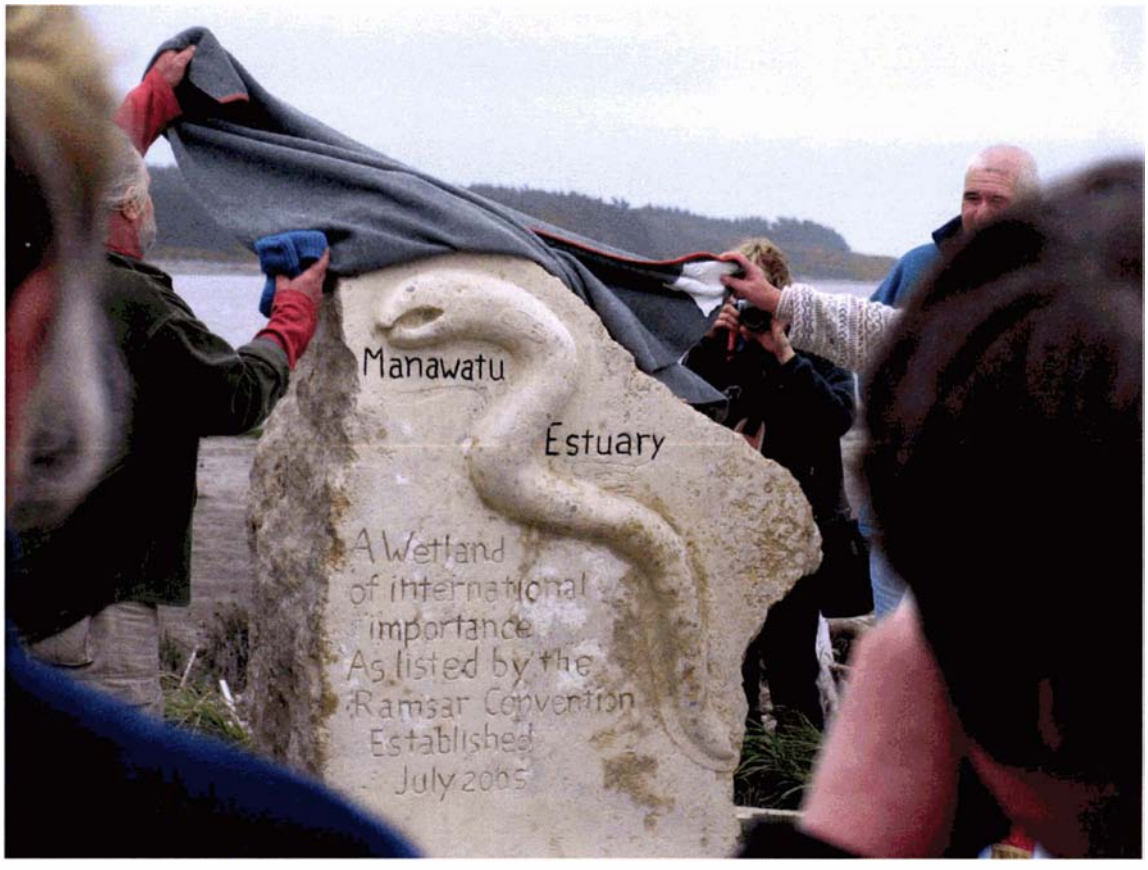
6 In 2000, United Nations Secretary-General Kofi Annan tabled a Report to the General Assembly entitled We the Peoples: The Role of the United Nations in the 21st Century, calling for The Millennium Ecosystem Assessment (MA).

7 The Convention on Wetlands, signed in Ramsar, Iran in 1971, is an intergovernmental treaty which provides the framework for national action and international co•peration for the conservation and wise use of wetlands and their resources. There are presently 153 Contracting Parties to the Convention, with 1626 wetland sites, totalling 145.6 million hectares, designated for inclusion in the Ramsar List of Wetlands of International Importance.

8 Millennium Ecosystem Assessment, 2005, *Millennium Ecosystem Assessment Synthesis Report,* Pre-publication Final Draft Approved by MA Board on March 23, 2005, 9.

9 Parliamentary Commissioner for the Environment, 2001, *Boggy Patch or Ecological Heritage? Valuing wetlands in Tasman.* Office of the Parliamentary Commissioner for the Environment Te Kaitiaki Taiao a Te Whare Pāremata, Wellington, New Zealand, 7.





Figures 7.1 and 7.2: The Manawatu Estuary received important Ramsar status, 14 August 2006. A blessing took place over the commemorative stone. Ramsar is an inspiration for the Manawatu/Horowhenua region to take considerable action for its remaining 2% of wetlands in the whole region.

Photographs by Huhana Smith

Ramsar designations for wetlands, reports like the MA, different conventions, international laws and standards for human rights, domestic legislation and national policies are ways of aligning iwi capacity with a national and global good. Despite the potential of such international support for bio-cultural diversity and natural integrity within landscapes, the realities for ngā papatipu or the 'peoples on the ground' are often frustrated or made difficult by the shifts and changes in local and central government political will, especially when decisions and priorities impact on the integrity of ecosystems within related ancestral landscape. There had been a general lack of both national direction and local control in the conservation and protection of holistic understandings around Māori cultural landscape. Iwi and hapū therefore activated movement towards ecosystem rehabilitation, themselves.

An Historical Overview of Public International Law for Indigenous Peoples, Collective Rights and International Standard Formation for Indigenous Peoples

There has been inadequate government attention given to protect more areas of cultural importance to iwi and hapū in New Zealand. This chapter explores aspects of international standard formation for indigenous human rights over lands, waterways, and natural integrity within cultural landscape, and where they might contemporaneously assist in influencing central government and domestic law.

It is well understood that iwi and hapū and indigenous peoples around the world are members of strong and informed global indigenous coalitions. As descendants of the original inhabitants of many lands, they are strikingly varied in their cultures, religions and patterns of social and economic organisation.[10] Their range of linguistic and cultural differences distinguishes at least 5,000 indigenous groups across the world. Cultural knowledge from these peoples is relayed through various modes of visual expression; oral narratives and stories of land relationships, and through particular forms of oration, songs, gestures or dances. Indigenous systems of belief, knowledge, cosmologies, whakapapa or genealogical narratives, and other forms of expression arise emerge from different geo-spatial configurations.[11] Indigenous groups share special relationships to land and waterways, where they elicit a particular culturally based response to the earth that nurtures all life. There are many supportive indigenous networks that share global knowledge and perspective on issues facing their different communities. Global strength is important but different indigenous groups must also concentrate efforts on attaining the most effective cultural and natural landscape protection mechanisms and enhancements for what remains

10 Department of Public Information, 1992, "Who are the world's indigenous peoples? *The International Year for the World's Indigenous People*, New York: United Nations.

11 Boaventura De Sousa Santos, 1995, *Toward a New Common Sense: Law, Science and Politics in Paradigmatic Transition*, Routledge: London, 327.

of their local ecosystems. For those kaumātua and resource users who were in full dialogue with what Kuku and its natural resources had to teach,[12] they developed distinct and close relationships with place. They knew their local environment, from its rational properties through to its' metaphysical. This chapter seeks support for cultural heritage and protection from international law and standard formation, particularly the ILO Convention 169, the Declaration of Indigenous Peoples Rights 2007, and the Millennium Assessment 2005.

European expansion has gained greater influence into the twenty-first century, due to intensified communication and global economic capacities. Worldwide sourcing and production systems have since incorporated the whole world within a capitalist world economy. Even the most remote arenas have been drawn into the process of capital accumulation. While globalisation is nothing new, its trends and intentions have increased dramatically in the last thirty years. Indigenous populations around the world have seen their customary lives, traditional precepts and economies threatened or destroyed by such powerful developments. Trans-national companies or nation states exact influence, indebtedness and changes on populations, through economic structural adjustment programmes- the most powerful wave of globalisation that impacts on indigenous peoples.

During the fifteenth and sixteenth centuries, international human rights appealed to 'natural law' or a higher legal order that came from God or reason. At that time, frameworks of 'natural law' provided some form of protection for indigenous peoples from sovereign state violations. With the emergence of the modern state system in Europe, the concept of nationhood emphasised territorial boundaries where the concept of 'natural law' was subsumed. Sovereign states determined that only individuals held rights and Indigenous peoples were recognised as non-communities within state systems. By mid eighteenth century, European nation-states assumed the role of assessing whether indigenous peoples' patterns of political or social organisation and land use, were civilised or backward.[13] By the nineteenth century, legal positivism overrode the concept that universal rights for all human beings, existed in 'natural law'. International laws could only be created by nation-states who were only concerned with the rights, duties and sovereignty of states. This ensured that all internal affairs were protected from external scrutiny. They only supported European style or civilised nation-states as capable of holding rights or duties in the international arena. Positivist law ignored treaties because international law upheld treaties that were devised between sovereign states. During the later nineteenth century under paternalistic humanistic policies, indigenous peoples' institutions were

12 After Manulani Aluli Meyer, 2003, *Ho'oulu Our Time of Becoming: Hawaiian Epistemology and Early Writings,* 'Ai Pōhaku Press Native Books: Hawai', 63.

13 Boaventura De Sousa Santos, 1995, *Toward a New Common Sense: Law, Science and Politics in Paradigmatic Transition,* Routledge: London, 236.

systematically destroyed so colonial agencies could impose authority over peoples, their lands and resources.

The impacts of Euro-centric, legal doctrines of dispossession over centuries are varied, detailed, damaging and pervasive. The nation-state is based on European ideas of political organisation whereby indigenous peoples' systems of legitimate governance,[14] remain curtailed. Cultural bias contributes to a legitimated expropriation of indigenous lands, territories and resources. Attitudes, doctrines and policies, developed to justify the taking of lands from indigenous peoples were and remain, driven by the economic agendas of States.[15] The primary concern of modern international law is to maintain the rights and duties of European or similarly 'civilised' States. It is perhaps only recently that the international community has been able to grasp the devastation wrought by the concerted dispossession of indigenous peoples' cultural context. Since 1920 and Article 23 of the Covenant of the League of Nations international law shifted somewhat to impact on nation-state domestic law formation. Over time, international law has assisted in changing nation-state attitudes from those of resentment and rancour towards indigenous peoples, to an emerging 'ethic of humanity.'[16]

Long before the United Nations, the International Labour Organisation (ILO) assigned an important place to human rights. The organisation was a prominent inspiration of universal and regional texts, relating economic and social rights to certain civil and political rights.[17] The ILO managed to generate wider public awareness and interest in indigenous issues because of conquest, penetration and marginalisation of traditional indigenous societies and the discrimination they experienced. Gradual destruction of material and spiritual bases for indigenous societies, the loss of their land and natural resources, left indigenous peoples with little recourse but to accept employment under the worst conditions.[18] In 1957, the ILO Convention No. 107 recognised that indigenous peoples did have rights and particular needs, but no right to exist as distinct cultures.[19] In Article 2 of the Convention the international standards were aimed at protecting, improving the living and economic conditions, and the progressive integrating of peoples into

14 Paul Havemann (ed.) 1999, *Indigenous Peoples' Rights in Australia, Canada and New Zealand*, Auckland: Oxford, 236.

15 Erica-Irene Daes, 1997, "Human Rights of Indigenous Peoples: Indigenous Peoples and their relationship to land", *Preliminary working paper,* E/CN.4/ Sub.2/ 1997/17, 20 June 1997, Economic and Social Council, United Nations: Geneva.

16 Paul Havemann (after P, Heelas,) 1999, *Indigenous Peoples' Rights in Australia, Canada and New Zealand*, Auckland: Oxford, 18.

17 N. Valticos, 1982, "The International Labour Organisation", in: Vasak, K and Alson, P., (ed.), *The International Dimension of Human Rights,* Westport: Paris, 363.

18 Hans-Joachim Heintze, 1993, "The Protection of Indigenous Peoples under the ILO Convention" in: Bothe, M., Kurzidem, T., Schmidt, C., (eds.). *Amazonia and Siberia: Legal Aspects of the Preservation of the Environment and Development in the Last Open Spaces*, Graham and Trotman: London.

19 Paul Havemann (ed.), 1999, *Indigenous Peoples' Rights in Australia, Canada and New Zealand,* Auckland: Oxford, 238.

respective national communities.[20] Progressive integration was problematic as it favoured assimilating groups and individuals who underwent dramatic social and economic change. Convention No. 107 grew from the impacts of WWII and the desire to endorse active human rights protection. International public opinion was re-directed to the problems facing indigenous peoples, even though the overall ideology remained positivist. Positive law rationalised that colonising states could legally justify the acquisition of territory of indigenous peoples. Under Euro-American international law nation states were immune from external scrutiny or comment. After WWII, positivist ideology determined what laws were legally binding. From the 1950s until changes in the 1970s, indigenous peoples were considered minorities within states, only entitled to minority rights.

International law is primarily a law of relations between sovereign states. Convention No. 107 was a step towards the creation of a human rights protection system not only for individuals but also for collective human rights. As states increased their participation in active human rights protection, indigenous communities were also well aware of the tensions. Despite recognising some rights for them under Convention No. 107, New Zealand did not develop domestic issues based on this understanding. At that time, assimilation into wider society was the goal for iwi and hapū in New Zealand. As happened within a liberal political paradigm, human rights were considered as entitlements held by individuals, not collectives.

In 1963, the United Nations Declaration adopted human rights laws to protect minorities and individuals against discrimination within states. In 1965, the *Convention on Elimination of all Forms of Racial Discrimination* (CERD) further bolstered human rights. CERD was signed by Australia and New Zealand in 1966, and ratified by both countries in 1972 and 1975. By ratifying the CERD certain measures of domestic compliance were introduced, which had far reaching consequences.[21] When the *International Covenant on Economic, Social and Cultural Rights* (ICESCR) and the *International Covenant on Civil and Political Rights* (ICCPR) were ratified, this affirmed the rights of indigenous peoples to not be discriminated against and to self-determine futures over natural resources in their territories. The ICCPR also protected rights for minorities to practise their culture.

During the early years of the period referred to as the Aboriginal rights talk and confrontation era of the 1970s – 1990s,[22] non-governmental organisations (NGOs) of indigenous peoples, such as the American Indian Movement (AIM) or the Canadian

20 Hans-Joachim Heintze, 1993, "The Protection of Indigenous Peoples under the ILO Convention" in, *Amazonia and Siberia: Legal Aspects of the Preservation of the Environment and Development in the Last Open Spaces*, Graham and Trotman: London.

21 Paul Havemann (ed.), 1999, *Indigenous Peoples' Rights in Australia, Canada and New Zealand*, Auckland: Oxford, 238.

22 ibid, 44.

Indian Brotherhood exerted national and international influence. From their struggles emerged the term 'indigenous peoples', which internationalised the experience, issues and struggles of the world's colonised peoples.[23] In 1971, various indigenous leaders from Australia, New Zealand, Scandinavia and the National Indian Brotherhood met and assisted in creating the World Council for Indigenous Peoples (WCIP).[24] The WCIP was founded in 1975 and played a leading role in generating the changes from policies of integration or assimilation. As indigenous groups they used consensus to affect their decision-making. In the later years, the Third Assembly of the WCIP made fundamental moves from the ILO Convention No. 107.

In 1972, the UN Economic and Social Council Sub-Commission on Prevention of Discrimination and Protection of Minorities, appointed Jose R. Martinez Cobo as Special Rapporteur for a *Study of the Problem of Discrimination against Indigenous Populations*. The report was completed in 1983 and offered an important overview of the national and international situation that indigenous peoples found themselves. Martinez Cobo defined indigenous peoples as nations with an historical continuity with pre-invasion and pre-colonial societies that developed on their territories. Indigenous peoples therefore consider themselves distinct from other sectors of the societies now prevailing in these territories or parts of them. They are non-dominant sectors of society and are determined to perceive, develop and transmit to future generations their ancestral territories and their ethnic identity, as the basis of their continued existence as people, in accordance with their own cultural patterns, social institutions and legal systems.[25]

In 1986, the UN General Assembly commented on the struggle for wellbeing and prosperity for indigenous peoples. The struggle against discrimination aligned with the principle of self-determination where all peoples have the right to control their own futures. By virtue of that right, indigenous peoples may freely determine their political status and pursue their economic, social and cultural development.[26]

The ILO and indigenous non-governmental organisations (NGOs) took part in the revision of Convention No. 107. The ILO was often condemned for restricting active indigenous participation. On 27 June 1989 however the *Convention No. 169: Concerning Indigenous*

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23 Linda Smith, 1999, *Decolonising Methodologies: Research and Indigenous Peoples*, Dunedin: Otago University Press, 7.

24 Franke Wilmer, 1993, *The Indigenous Voice in World Politics*, Sage: California, 127.
George Manuel (1921-1989) was an Aboriginal leader in Canada. He was a former national chief of the Assembly of First Nations. In 1975 Manuel helped found and became the president of the World Council of Indigenous Peoples, a position he kept until 1981.

25 Hans-Joachim Heintze, 1992, "International Law and Indigenous Peoples." *Law and State*, 45: 39.

26 Hans-Joachim Heintze, 1993, "The Protection of Indigenous Peoples under the ILO Convention", in: M. Bothe., T. Kurzidem., C. Schmidt., (eds.). *Amazonia and Siberia: Legal Aspects of the Preservation of the Environment and Development in the Last Open Spaces*, Graham and Trotman: London.

and Tribal Peoples in Independent Countries accepted the notion of indigenous peoples as a collective. When Convention No. 169 was finally adopted it referred to 'peoples', not to populations as in Convention No. 107. In international law, a population has practically no juridical significance. In accepting the character of 'peoples' this implied a right to self-determine and control futures.

Fundamental human rights principles are embodied in the Universal Declaration of Human Rights and the International Covenants on Human Rights. Such rights prohibit discriminatory activities, and recognise equality and the rights of self-determination. Preserving the well-being of indigenous cultures and communities, eliminating their poverty and deprivation, and creating justice for indigenous people, remain the most critical issues. New international instruments strengthen the struggle for indigenous peoples' collective rights however they are insufficient if states continue to interfere with the process of active implementation. As the development of international law is an ongoing process, there remain many areas in which agreement on more detailed legal regimes are still required.[27] States need to provide active support for indigenous peoples, so they may actually enjoy their collective human rights.

Attempts to ratify Convention No. 169

International standards concerning racial discrimination and civil and political rights have had a significant impact on New Zealand's domestic laws. The Race Relations Act 1971 and the Humans Rights Commission Act 1977 were enacted specifically to implement the *International Convention on the Elimination of All Forms of Racial Discrimination* (CERD) ratified in 1972, and the *International Covenant on Civil and Political Rights* (ICCPR.) ratified in 1978. CERD and ICCPR[28] together with the *International Covenant on Economic, Social and Cultural Rights* (ICESC) are reflected in part in domestic legislation in the Human Rights Amendment Act 2001 (which amended the 1993 Human Rights Act) and the NZ Bill of Rights Act 1990. It was from the ICCPR legislation that the Human Rights Commission, Equal Opportunities Tribunal and Race Relations Office were established to apply anti-discrimination measures. The New Zealand Bill of Rights Act 1990 also offered protection of human, civil and political rights, as obligated under the ICCPR.

In 1998 just before the Taonga Maori Review was launched, Te Puni Kōkiri Ministry of Māori Development and then Minister of Māori Affairs, the Hon. Tau Henare

27 N. Singh, 1988, "The United Nations and the Development of International Law", in Roberts, A and Kingsbury, B., (eds.), 1993, *United Nations, Divided World: The UN's Roles in International Relations*, Oxford University Press: London.189.

28 Catherine J. Iorns Magallanes, 1999, "International Human Rights and their impact on Domestic Law on Indigenous Peoples' Rights in Australia, Canada, and New Zealand," in Havemann, P. (ed.), *Indigenous Peoples' Rights in Australia, Canada and New Zealand, Auckland*: Oxford, 258.

consulted with iwi and hapū to determine their responses to New Zealand's sanction of ILO Convention No. 169.[29] Te Puni Kōkiri encouraged Māori to ratify the convention because officials could clearly see that the international law supported cultures, ways of life, traditions and customary laws of indigenous and tribal peoples.[30] The Convention bolstered the rights of Indigenous peoples to exist as distinct parts of their national societies with their own structures, traditions and their unique ways of life protected and enhanced. Importantly the convention recognised indigenous peoples as potentially very active in the decision-making processes of the states in which they lived. In a general sense the Convention also supported traditional healing practices for people; indigenous histories, knowledge, technologies, language and usage; value systems; and economic and cultural aspirations as essential for indigenous education. Additionally, the convention supported socio-economic determination to reduce the disparities that exist between indigenous and non-indigenous peoples.

Overall, the Convention recognises indigenous peoples' rights of ownership to customary land and their right to actively conserve, use and manage their natural resources. The ILO Convention No.169 was presented to iwi and hapū as a potential basis for constitutional change with its previous (and ongoing opportunities) to impact on domestic law formation. If the convention had been ratified then, central government in New Zealand would have been legally bound to support more conducive cultural and natural heritage legislation. Ratification would have helped promote activities to better enhance bio-cultural futures, with iwi and hapū more actively supported to protect their ancestral landscape. Ratifying the convention relied on government dramatically shifting its stance and actively backing the collective initiatives that would flow. It still remains that the concept of collective(s) and the principle of self-determination attached to it, raises fears for central government. New Zealand is concerned that the convention might destroy their territorial integrity or the political unity of central government as a sovereign state.[31]

According to authorities, Government should be responsible and demonstrate good faith to the constitutional rights of iwi and hapū Māori. Ratification of ILO Convention No. 169 would have provided a more solid foundation for recognising indigenous rights in

29 Te Puni Kōkiri Ministry of Māori Development, 1999, *The International Labour Organisation Convention No. 169: Concerning Indigenous and Tribal Peoples in Independent Countries 1989,* Discussion Document, Te Puni Kōkiri Ministry of Māori Development: Wellington.

As at July 1998, the Convention has been ratified by thirteen countries including Bolivia, Colombia, Costa Rica, Denmark, Ecuador, Fiji, Guatemala, Honduras, Mexico, Norway, the Netherlands, Paraguay and Peru. They supported ILO 169 on the basis that it identifies Indigenous peoples' rights as not specified elsewhere in international law or in many countries' domestic laws. Therefore, ratification by States could give Indigenous peoples in that country more rights than they have, at present. At that time too, Argentina and Austria gained legislative approval while Brazil, Chile, Finland, Philippines, Venezuela and New Zealand were in the process of considering endorsement of Convention No. 169.

30 ibid, 2.

31 ibid, 321.

New Zealand. The Federation of Māori Authorities (FOMA) recommended that the rights of Māori needed recognising with better provisions defined by international law. They also recommended that any constitutional reform must not fall below the rights that have been preserved in the Treaty of Waitangi[32] and the ensuing consideration of its Treaty principles. In many ways, it is unfortunate that ILO Convention No. 169 has not been ratified, as it would be legally binding on central government, more so than the recently adopted United Nations Declaration on Indigenous Peoples, 2007.

The Declaration of Indigenous Peoples Rights 2007

Since the inception of the League of Nations after World War One, Indigenous peoples have continually brought their concerns to international fora. As international human rights law has developed, Indigenous peoples have been at the forefront of these developments, relaying their history and concerns to ensure human rights law applies to their situations. In 1923, when Haudenosaunee Chief Deskaheh travelled from Canada to Geneva to speak to the League of Nations, he defended the right of his people to live under their own laws, on their own land and under their own faith. Even though he was not allowed to speak and returned home in 1924, his vision nourished the generations that followed. In 1924, T.S Ratana, the influential spiritual leader and a large delegation of Māori also travelled to London to protest New Zealand's breach of the Treaty of Waitangi and petitioned King George for redress, but he was denied. In 1925, Ratana then journeyed to Geneva to approach the League of Nations about his cause, but like Chief Deskaheh he too was turned away.[33] Since that time, Māori representatives have joined with other Indigenous Peoples to participate in the development of international law that informs the international community on indigenous issues, including those concerns affecting iwi and hapū in New Zealand.

When the United Nations was founded in 1945 it aimed to pursue three primary goals of ensuring peace and security, promoting social and economic development, and respecting the rights of humans around the world. The majority of human rights matters are dealt with under the umbrella of the Economic and Social Council (ECOSOC) via its parent body, the Sub Commission on the Promotion and Protection of Human Rights. The Working

32 Federation of Maori Authorities Inc, 2005, *New Zealand's Constitutional Arrangements,* Submission to Select Committee on New Zealand's Constitutional Arrangements, April 2005, Wellington, 7.

33 Fayth A. Ruffin, 2004, United Nations Chronicle Online Edition.
URL: http://www.un.org/Pubs/chronicle/2004/issue2/0204p18.asp

Group on Indigenous Populations (WGIP), made up of five experts[34] dealt exclusively with Indigenous peoples. They met each year in Geneva, Switzerland with a mandate to review developments that promoted and protected human rights and fundamental freedoms of Indigenous Peoples. They gave attention to the evolution of international standards concerning Indigenous rights. As non-government representatives, the experts were independent and members of the Sub-Commission who represented different geopolitical regions. WGIP was renowned for drafting the Declaration on the Rights of Indigenous Peoples. The Sub Commission on the Promotion and Protection of Human Rights then adopted this document in 1994. WGIP experts[35] provided opportunities for Indigenous Peoples to provide annual updates about their situations. This is where Māori representatives successfully used the meetings to draw attention to government policies. By raising matters in this way, the New Zealand government could be held to account for its actions and embarrassed by any public attention, thrust upon them.

On 28 July 2000, the Economic and Social Council established the United Nations Permanent Forum on Indigenous Issues, as recommended by the United Nations Commission on Human Rights. The Permanent Forum related more directly to the structure of a UN body, by introducing the forum to the right place within the United Nations system. When negotiations to secure an "at the table" involvement of indigenous peoples within the United Nations process, the first call was for a Permanent Forum for Indigenous Peoples, where it was felt that conflicts and issues could be better resolved. What ensued was a Permanent Forum on Indigenous Issues. The shift in dynamic from 'peoples to issues' still called for more positive outcomes for the team of independent, indigenous representatives and experts. The Forum was charged with reporting to and advising the Economic and Social Council (ECOSOC) on indigenous human rights, including the rights of children and youth, intellectual property and protection of traditional knowledge, health, education and culture, economic and social development, environment and sustainable development, and global geo-political issues. Indigenous peoples remain as prepared as ever to tackle big issues, as they done for decades. The Secretariat assisted the Permanent Forum on Indigenous Issues to carry out its mandate through the provision of expert advice and recommendations on issues to ECOSOC as well as to other programmes, funds and agencies of the United Nations. They assisted in raising awareness and promoting integration and coordination of activities relating to

34 The experts of the WGIP were Mr. Miguel Alfonso Martinez (Cuba), Ms. Christy Ezim Mbonu (Nigeria), Mr. Yozo Yokota (Japan), Mr. Gáspár Bíró (Hungary) and Mrs. Francoise Hampson (United Kingdom). The Working Group on Indigenous Populations (WGIP) was de facto disestablished as a result of the disestablishment of the Sub-Commission on the Protection and Promotion of Human Rights (the Sub-Commission). There has been a number of indigenous peoples' organisations' representatives who have, since June 2006, been attending the newly formed Human Rights Council to work on the successor to the WGIP.

35 The five experts controlled the proceedings and outcomes. Governments and NGOs could only participate as observers. While standard formation is a highly politicised process, governments and NGOs have limited control over proceedings or outcomes.

indigenous issues within the UN system, and in preparing and disseminating information on indigenous issues.

In better understanding the international mechanisms for standard formation as a means to exact change, anyone with an interest in this field of investigation, must keep abreast of local issues and context in order to appeal that international law can provide moral influence upon domestic legislation formation. International law, standards and declarations (including DRIP) emphasise that Indigenous peoples and their respective organisations *should* enjoy direct access to all intergovernmental negotiations, in order to share their views on all measures needed to protect their unique heritages with lands and waerways. Another avenue of support for indigenous issues, are the United Nations' Special Rapporteurs as independent experts who investigate specific human rights issues and report on them to other UN bodies. While the reports are not binding on relevant states, they have the potential to encourage states to address the concerns raised in them. There are alignments to what has been raised in these reports and to what kaitiaki had been involved in when garnering greater respect for hapū territory at the coast at Kuku in Horowhenua.

Central government activities around a law known as Foreshore and Seabed Act 2004 came under scrutiny when the United Nations Special Rapporteur for Human Rights and Fundamental Freedoms of Indigenous Peoples, Professor Rodolfo Stavenhagen submitted a report outlining his concerns after his visit to New Zealand in 2005. Professor Stavenhagen monitors issues for indigenous communities for the United Nations Commission on Human Rights. As a specialist on indigenous issues he had particular concerns for the law and its implication for Māori. He is mandated to gather, request, receive and exchange information and communications that may violate indigenous peoples' human rights. He then formulates recommendations and any appropriate measures that prevent and remedy any violations of human rights. He has worked closely with other institutions that focus on indigenous peoples, and had already compiled numerous reports on other countries before he arrived in 2005 to conduct an independent overview of human rights in New Zealand. With a wide mandate, he canvassed a range of topics affecting Māori matters that stemmed from race relations and constitutional context, to the human rights implications of the Foreshore and Seabed Act 2004. His report also overviewed political representation, the Treaty settlements process, Māori justice, language and education issues, and social and economic inequalities.[36]

36 Moana Jackson, 2005, *The United Nations on The Foreshore: A Summary of the Report of the Special Rapporteur*, Wellington.

While the legacy of land and resources fragmentation stills impacts on iwi and hapū today, it was not until the Foreshore and Seabed Act 2004[37] and the events surrounding its deliberations in 2003 that the general political acceptability of the Treaty of Waitangi (that had been built up over the preceding two decades) was challenged. The Court of Appeal's decision of Attorney General v Ngāti Apa of Malborough region in Te Wai Pounamu (Nelson region of South Island) enabled the tribe to adduce their evidence to the Māori Land Court, that there had been no explicit statutory extinguishment of their rights to the lands beneath the foreshore and seabed, or to their ongoing relationship between their tribal lands into the sea. The court ruling created a storm of controversy amongst the general public who mischaracterised the findings as Māori claiming the beaches and removing New Zealanders rights to access the coastlines.

The legal problems relating to the foreshore and seabed had been known for some time. They have been repeatedly pointed out in reports and law review articles. The decision of the Court of Appeal took the political establishment and the public by surprise. Some ill-judged reactions by politicians led to angry Māori responses, and the issue snowballed in the midst of misinformed and vociferous public debate.[38] The polarised debate was certainly based on misinterpretations of legal history in New Zealand. At no stage had New Zealand domestic law previously established that the public had full rights of access to or use of all rivers, lakes and beaches, nor had the Crown control or 'ownership' over the region and its resources. The supposed rights of access afforded by the Queen's Chain edict of 1843 were based on ideals of expected public access, where such 'rights' then developed into the unsubstantiated presumption of Crown 'ownership' of all coastlines. To Māori the issue was not about access or denying people access to coastlines adjacent to their lands, it was about Crown acknowledging Māori collective rights, to have their day in court to legally prove that their rights and relationships to resources of the foreshore and seabed had never been extinguished... until 2004.

The Special Rapporteur recommended that issues surrounding the Foreshore and Seabed Act 2004, be addressed through a constitutional convention and a process of constitutional reform 'in order to clearly regulate the relationship between the government and Māori people on the basis of the Treaty...and the internationally recognised right of all peoples to self determination'.[39] As a substantive claim had already been made to the CERD Committee (that hears complaints about breaches) they confirmed that the Foreshore and Seabed Act 2004, was in breach of the international standards, CERD. They found

37 Derived from David Williams, 2004, *Myths, National Origins, Common Law and Waitangi Tribunal,* Paper presented at the 23rd Annual Australia and New Zealand and History Society Conference, Murdoch University, Western Australia, 2-4 July 2004.

38 Richard Boast, 2004, 'Constitutional Crisis Over Foreshore & Seabed in Aotearoa', *Pacific Ecologist* Double Issue 7/8 - Autumn-Winter 2004.

39 Moana Jackson, 2005, *The United Nations on The Foreshore: A Summary of the Report of the Special Rapporteur,* Wellington.

that the legislation contained discriminatory aspects against Māori, in particular the extinguishment of the possibility of establishing Māori title to the foreshore and seabed, and the law's failure to provide a guaranteed right of redress.[40] Professor Stavenhagen strongly recommended that the Treaty of Waitangi be constitutionally entrenched and that iwi and hapū be enabled to strengthen their customary governance. In this way too, he recommended that the Waitangi Tribunal be more legally binding with enforceable powers to adjudicate on Treaty matters, so that situations for iwi and hapū would then improve in terms of protecting human rights at an international level.

The Treaty of Waitangi remains the key reference point between Crown-Iwi relationships where the Crown's recognition of local rights is unique. Customary rights based on Māori title continue because of European Common Law presumptions. Aboriginal title can continue after a change of sovereignty, not because of any residual legal sovereignty in the indigenous community, but from Common Law presumptions and with Crown recognising these local rights. The respective roles, authority, rights and responsibilities to cultural landscape are indisputable as in Article II of the Māori version of the Treaty of Waitangi, "...te tino Rangatiratanga o o ratou wenua o ratou kainga me o ratou taonga katoa." In this way, customary rights or Māori interests to actively protect and care for their natural resources are rights already within cultural landscape. They have not been removed or taken away.

When Crown then discredited the CERD committee's findings, despite the clear and independent analysis to the human rights situation and implications of the law now facing iwi and hapū through their government actions, they and other political parties were clearly duplicitous to the human rights advocacy body. Lawyer and indigenous rights advocate Moana Jackson summed up sentiments, when he stated that:

> '...to repeatedly reject the United Nation findings is unhelpful and does no credit to the country's international reputation. The Report is the product of the most important international human rights institution there is. Governments established it and for the New Zealand government to belittle its work, is to belittle the very notion of human rights.'[41]

All indigenous groups and individuals have rights not to be discriminated against. It is clear that the human rights referred to by the CERD Committee are the collective rights of peoples or groups or nations, not so-called 'race-based rights' as mischaracterised by

40 ibid.

41 ibid.

the governments of Canada, Australia, New Zealand, and the United States.[42] Despite the drive to create greater equality between diverse peoples and cultures around the world, the struggle persists to displace systemic discrimination that can dominate contemporary worldviews. Discrimination manifests itself in all institutions, policies, and law, and perhaps explains why nation-states are still unable to comply with international treaties and the calls for national constitutional reform.[43]

Ratifying the Declaration of the Rights of Indigenous Peoples (DRIP)

When the New Zealand government and other NGOs actively participated throughout the negotiation and text amendment stages, the Declaration centred on the importance of collective rights contained within it. Indigenous peoples previously agreed that the Declaration text should stand in its entirety, as any proposed amendments by governments clearly aimed to isolate parts of the Declaration to minority rights as individuals, not as the collective rights of self-determining peoples. The process of deliberation over international standard formation is much politicised. Any amendments opened the way for states to impede what Indigenous peoples had worked on for many years.[44]

The New Zealand government was loathe accepting the draft and suggested many amendments, most of which were rejected by states, NGOs and indigenous peoples, as a watering down of the text to an unacceptable degree. Māori representatives had their moments of struggle with the process. When it came to adjudicating over the final text they and NGOs realised that the overwhelming majority of Indigenous peoples favoured limited change. They did not block the consensus decisions made over the final text. The draft Declaration of the Rights of Indigenous Peoples (DRIP) document was then moved to the Human Rights Commission working group, where the United Nations Human Rights Council adopted it in 2006. After a long protracted process of some 20 years of negotiating, WGIP[45] finally had DRIP ratified by the United Nations General Assembly in September 2007. DRIP may not be binding on states but it does have considerable moral force, which can be referred to in legal and human rights discourse.

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42 Sourced from email communication firstpeoples@earthlink.net by First Peoples Humans Rights Coalition, received 29 August 2007.

43 Dr. Marie Battiste & James Youngblood Henderson, 2000, *Protecting Indigenous Knowledge and Heritage,* Purich Publishing Ltd, Saskatchewan, Canada, 59-60.

44 Net Warriors, Indigenous Peoples Global Caucus, 1996, *Reasons of the Decision Taken at the Indigenous Preparatory Meeting 20th October, 1996.*

URL. http://www.netwarriors@hookele.com

45 Since ratification of DRIP, Indigenous representatives have been working on ideas for the successor to WGIP, a process agreed to by the indigenous caucus at the UN Permanent Forum in 2006 and 2007. As requested by various indigenous caucuses many states argue for another expert and appropriate body who may then be mandated to implement the rights of indigenous peoples, mainstream their rights in the work of the Human Rights Council and set standards.

There have been two International Decades of the World's Indigenous People. The first (1995-2004) was proclaimed by the General Assembly to strengthen international co-operation and to resolve the problems facing indigenous peoples over their human rights, environmental, development, education and health matters. In the first decade under the theme *Indigenous people: partnership in action*, the New Zealand government undertook a number of activities including the translation of the Draft into te reo Māori. In December 2004 the General Assembly proclaimed another International Decade of the World's Indigenous People (2005-2014). The combined objectives of the Decades have been to encourage governments to consider the issues faced by indigenous peoples and to create more conducive programmes of action. There has been very little activity from the New Zealand government within the second decade and considerable lobbying by government agencies against the content of the draft. It was no surprise (but still disappointing to Māori and NGO participants) when New Zealand, Australia, Canada and United States failed to support DRIP, despite significant collective rights for iwi and hapū within the declaration and as enshrined in the Treaty of Waitangi.

> The Declaration document is remarkable, though it reflects the compromised aspirations of Māori and indigenous peoples around the globe. Years of discussion, critical time, resources and energy were involved in generating a legitimated, co-equal and participatory decision-making processes. When the Commission on Human Rights completed its work and the Declaration was adopted, it became a powerful tool for creating paradigmatic shift for governments to ensure better policies, or far more conducive legislations that recognise indigenous peoples' aspirations in their own countries, and worldwide.[46]

The Roles of Special Rapporteurs

Like Stavenhagen, other Special Rapporteurs have played important roles, especially Mrs Erica Irene Daes. She wrote numerous reports on indigenous people's heritage; the protection of cultural and intellectual property of indigenous peoples; indigenous peoples and their relationship to land, and indigenous peoples permanent sovereignty over natural resources. As Special Rapporteur of the Sub-Commission on Prevention of Discrimination and Protection of Minorities, she wrote in her preliminary working paper on indigenous peoples' relationships to land and how urgent it was for non-indigenous societies to understand and recognise different conceptual frameworks. She emphasised how non-indigenous communities needed to recognise the profound relationship that indigenous

46 On the 8 November 2007, the United Nations congratulated the Bolivian Congress for the passage of a law on the rights of indigenous peoples within their country. The United Nations Declaration on the Rights of Indigenous Peoples was made law by both houses of the Bolivian Congress on 31 October 2007. Bolivia is the therefore the first country in the world to make the international standard (ratified on 13 September 2007) into a law. The UN considers this an "advance of humanity". Sourced from email distributed by Aroha Te Pareake Mead, Victoria University, Wellington.

peoples have with their lands, territories and resources. Indigenous peoples have long urged the world community to attach a positive value to these distinct relationships.[47]

As indicated throughout this thesis the nature, foundation, scope, state and validity of the research proposition has been underpinned by those informants who governed the distinct means of access or restriction to the knowledge of significance within place. What they retained supported practical activities required for associated ecosystems in decline. Most of what kaumātua offered were common sense protection measures for resources and place passed on from their elders, or from other family members before them. As found throughout the studies and supported by Daes' reports, key kaumātua confirmed that there had been both cultural and common sense protection measures for sensitive sacred and natural areas, for related biodiversity, resources at the beach, and within the coastal waterways in Kuku. When creating local solutions for ecosystem decline based on key kaumātua recollections, elders also stressed that lands must remain within the control of resident Māori as much as possible. In passing on their knowledge about place to a wider group of kaitiaki, Tahamata Incorporation board members, sharemilkers and farm managers, they shared information in ways that they deemed appropriate, or as they had been taught by those elders before them.

Certain kaumātua continuously argue that the significance of place must be upheld so the areas not alienated, surrendered, sold or destroyed by inappropriate activity. In sharing their knowledge about inter-related places at the coast this has since recreated stronger relationships between them and the receivers of that information. Particular kaumātua stressed how the recipients were obligated to respect and humbly care for the information passed on, as well. New trustees were compelled to act with the interests of the community as a whole in mind. Daes' insightful reports also highlighted how the notion of culture and intellect are inseparable, a value shared by many other indigenous peoples. Her and other indigenous scholars' findings well relate to the experiences of kaumātua, their memories and how they have created the platform for activities of local kaitiaki at Kuku. There was definitely a time in the lives of elders when all products of the human mind and heart were interrelated, as flowing from the same source of relationship between people and their lands; their kinship with the other living creatures that share the land, and with the spiritual realm. Since the ultimate source of knowledge and creativity is the land itself, those same underlying relationships are then manifested within peoples as a whole.[48] This was evident in the degrees of inter-relationship remaining within the cultural memory

47 Erica Irene Daes, 1997, *Indigenous People and their Relationship to Land*, E/CN.4/Sub.2/1997/7, United Nations Economic and Social Council, Geneva.

48 Dr. Marie Battiste & James Youngblood Henderson, 2000, *Protecting Indigenous Knowledge and Heritage*, Purich Publishing Ltd, Saskatchewan, Canada, 3.

of key elders, especially when they recalled aspects of profound knowledge systems and practices of the 'old people' in Kuku.

It is when such values of customary knowledge are drawn into the complex dilemma of economics, commodification and power that finding the balance between sustainability of cultural resources, natural integrity, knowledge of place and economic prerogatives,[49] becomes even more vital. Over periods of time, local context in Kuku has been subjected to individualisation of land ownership that alienated large tracts of lands and waterways away from iwi and hapū tenure. This has had consequent complex effects on the maintenance of identity of different hapū and whānau groups, similar to the forms of fragmentation mirrored in many other countries. [50] As experienced on the Horowhenua coast at Kuku, the fragmented reality inspired current kaitiaki to consider how all elements of what remains (or is hidden) within cultural landscape, should be managed as a single, interrelated and integrated whole.[51] The collective right to manage cultural landscape in the area is therefore critical for bio-cultural survival and identity, for maintaining local narratives and encouraging sustainable development for iwi and hapū.

Cultural landscapes are places where humans have transformed natural areas or where natural settings have in turn, shaped people's lives. A Māori cultural landscape based on customary precepts encompasses a series of intricate relationships between peoples, lands, waterways, entities and biodiversity- all connected by whakapapa or genealogical references and ties. Despite land tenure changes, disassociation to cultural integrity, accompanied by diminishing ecological health, the concept of braided cultural landscape acknowledges a persistence of narrative about place and entities at the coast.

Millennium Ecosystem Assessment 2000-2005

The Millennium Ecosystem Assessment (MA) recognises that the actions people take that influence ecosystems, result not just from concern about human wellbeing but also from considering the intrinsic value of species and ecosystems. The MA is designed to meet the needs of numerous stakeholders, including the business community, the health sector, non-governmental organisations, and indigenous peoples. It deals with the full range of ecosystems as dynamic complexes of plant, animal, and communities of micro organisms where the non-living environment interacts as functional units of the whole system. Ecosystems range from those relatively undisturbed, such as natural forests, to

49 Mason Durie, 2002, *Indigenous Art and Heritage and the Politics of Identity* Concluding Remarks, Closing address for Indigenous Art and Heritage and the Politics of Identity Conference, organised with Massey University, Palmerston North and Museum of New Zealand Te Papa Tongarewa, Wellington on 6-9th July 2002.

50 ibid, 4.

51 Dr Charles Te Ahukāramu Royal, 2004, *Mātauranga Māori and Museum Practice*, Discussion paper prepared for National Services, at the Museum of New Zealand Te Papa Tongarewa, 21.

landscapes with mixed patterns of human use, to ecosystems intensively managed and modified by humans, such as agricultural land and urban areas. As ecosystem services are regarded as the benefits people obtain from ecosystems, these include provisioning services such as food, water, timber, and fibre; the regulating services that affect climate, floods, disease, wastes, and water quality; the cultural services that provide recreational, spiritual and aesthetic benefits; and the supporting services such as soil formation, photosynthesis, and nutrient cycling. The human species, while buffered against environmental changes by culture and technology is fundamentally dependent on the flow of ecosystem services.[52]

Across the world severe changes to the natural environment has weakened nature's ability to return or deliver key services such as purification of air and water, protection from disasters, and the provision of medicines. Many of the world's fish stocks are in crisis of collapse. There has been unprecedented loss of ecosystem services, including impacts on water supplies, and a growing threat to ecosystems from climate change and nutrient pollution. Human activities have caused a massive wave of species extinctions, which further threaten global humanity and their wellbeing. The pressures on global ecosystems are increasing unless human attitudes and actions significantly change. Measures to conserve natural resources are more likely to succeed if local communities are given ownership of them, to be involved in decision-making and to share the benefits. While it is suggested that today's technology and knowledge can considerably reduce the human impact on ecosystems, they are unlikely to be deployed fully until ecosystem services cease to be perceived as free and limitless, and where their full value has been taken into account. The MA aims for better protection of natural assets, which will require coordinated efforts across all sections of governments, businesses, and international institutions. The productivity of ecosystems clearly depends on policy choices on investment, trade, subsidy, taxation, and regulation, amongst others.[53]

The global stretch of the MA signals that significant change is urgently required to the ways economies enable or support the decision-making processes of governments and states. It is well understood that worldwide sourcing and production systems have incorporated the whole world into a capitalist economic model, capital accumulation increasing dramatically in the last thirty years. The key messages within the MA advocate for considerable global inter-activity to dramatically improve the conservation and sustainable use of remaining ecosystems and their contribution to human well-being.[54] This message aligns with and supports localised ecosystems projects and aspirations to expand into neighbouring

52 Millennium Ecosystem Assessment, 2005, *Millennium Ecosystem Assessment Synthesis Report*, Pre-publication Final Draft Approved by MA Board on March 23, 2005, 9.

53 ibid, 3.

54 Millennium Ecosystem Assessment, 2005, *Living Beyond our Means: Natural Assets and Human Well-Being*, Statement from the Board, World Resources Institute, Washington, DC, 5.

collectively held wetlands at the coast and for many other environmental projects within the tribal region. For those participating in projects, they well acknowledge that everyone depends on local nature and ecosystem services to provide the conditions for a decent, healthy, and secure life. Kaitaiki through their own whānau and inter-hapū experiences and accounts of agricultural change in Kuku and adjacent coastal areas, recognise that humans have indeed been responsible for unprecedented changes to ecosystems in recent decades, in order to meet their growing demands for food, fresh water, fibre, and energy.

Therefore, it is now more important than ever to influence individual and collective behaviour, and to increase public education on why and how to reduce consumption of threatened ecosystem services. While policy, planning, and management objectives of the world's ecosystems and services worldwide need considerable improvement, better decision-making should rely on integrating different departments and sectors. This extends to international institutions so they may ensure that domestic policies are focused on the actual protection of ecosystems for human well-being, with landscapes that acknowledge the cultural and spiritual dimensions as well.

As individual and community action is crucial to effect change, kaitiaki have catalysed a range of local activities in order to influence decisions over their ecosystem services within their domain of kaitiakitanga. Kaitiaki have empowered local 'laws' of community, and have re-strengthened their ownership of decisions over remaining natural and cultural resources. Other regional authorities have also finally acknowledged that Ngāti Tukorehe are very serious about the responsibilities of kaitiakitanga, which extend over mountain ranges, foothills, lands, floodplains, remaining forests, waterways and coastal environs. By aligning local action with global measures, iwi and hapu prescribe the benefits that arise from ecosystem restoration, which then encourage mutual benefits for the wider community. Projects like Hei Whenua Ora ki Te Hākari Te Hākari Dune Wetland Restoration and the riparian planting of the Ōhau River remnant help reverse the loss of ecosystem services, clean up water supplies and alleviate potential health threats from contaminents.

Even though recognition of indigenous rights is improving at an international level, nation-states like Australia, Canada, United States and New Zealand remain inflexible to the notion of shared or polyphonic[55] sovereignty. Until there are more assured constitutional arrangements based on the attributes and benefits of the Treaty of Waitangi partnership, Māori will still need to envisage and implement their futures-based projects, supported by their own tenacity, unique sensibilities and principles alongside other supportive agencies.

55 Boaventura De Sousa Santos, 1995, *Toward a New Common Sense: Law, Science and Politics in the Paradigmatic Transition*, London: Routledge. 326.

Despite the needs and aspirations of international standards to protect global indigenous cultural heritage and natural environments for the well-being of humankind (particularly indigenous peoples), the arena is often frustrating and perplexing. Enhancing indigenous peoples' cultural landscape protection and their distinct ways of life, is as convoluted moving into the 21st century, as it ever has been.

Despite this reality, kaitiaki in Kuku are closely linked with other indigenous coalitions[56] to share and accrue environmental expertise. These groups all devise cultural landscape protection strategies through the use of co-intelligence strategies, collaborative projects with other specialists, and through place-based learning exercises underpinned by local knowledge. Te Iwi of Ngāti Tukorehe Trust has also consolidated its organisational arrangements so as to govern and manage committee activity in environmental and resource management, alongside all other entities who share a range of responsibilities for wider iwi and hapū development. Local representatives retain their unique cultural genius by ordering their practices to encourage bio-cultural diversity; language retention; protection of inter-related knowledge around place; disseminate iwi narratives as appropriate; share collective experiences that re-edify cultural identity, and lead ecosystem rehabilitation projects for their culturally specific parts of the world.

Kaitiaki aspire to manage, maintain and sustain the significance and health of their local ancestral landscape. Their practical projects have rested on attaining sufficient change in understanding and attitude around the environment. They have revitalised models according to contemporary realities based on what remains of knowledge and experience of ancestral lands, waterways and resources within them. In order to ensure ongoing inter-relationships with land, waterways and coastal scapes, Māori systems of relationship through whakapapa, customary narratives and other cultural templates have been emphasised. They offer potential, creativity and the promise of well being to come- a philosophical framework that underpins all work and activity underway.

56 Kaitiaki are linked with the Blood tribes of Southern Alberta, Canada; the Big River Nation, Prince Albert, Saskatchewan, Canada; Hawai'ian Lomilomi groups, Honolulu, Hawai'i and Cape York Peninsula elders and environmental guardians from Queensland, Australia.

CHAPTER EIGHT

E tata tope e roa whakatipu.
A forest is easy to destroy but it takes a long time to grow![1]

A strong conclusion can be drawn from this thesis. Simply, iwi, hapū and whānau who have long standing relationships with their natural environment, are able to effect significant ecological improvements in modern times. Sustainablitiy and endurance, of both the environment and the people, can be enhanced through planned kaitiakitanga, shared visions, and the co-construction of strategies. Kaitiakitanga and development need not be polar opposites; a conclusion from the research is that they can have a complementarity, which recognises both economic and cultural imperatives. A Māori environmental world view encompasses acts of kaitiakitanga whereby Māori are caretakers or guardians of future generations' environments and all resources from tribal lands, sea and waterways. Kaitiaki are obligated to keep the natural environment safe and protected for human wellbeing and for future generations. The return on these activities is the relationship they create, the knowledge and learning that comes from that interaction and the benefits of sustainability. If people want to exercise kaitiaki, they first need to understand the value of all things, and the effects and consequences of adverse activities on the natural environment.

Māori recognise a mauri within all things, imbuing them with a life vitality generated from within the cosmological realm of Te Kore. Nothing in the natural world is without this essential element; mauri represents the interconnectedness of all things that have being. Humankind has an added responsibility to ensure that the mauri within natural resources is protected and maintained. Inappropriate use of resources such as discharge of effluent and sewage to water, impacts directly on the mauri of the waterway and therefore all factors associated with it. The natural balance, which exists amongst all things is disturbed and, in many cases, irreversibly damaged.[2]

Contemporary iwi and hapū participants in ecosystem restoration, negotiate a diverse range of meanings between customary Māori environmental world-views and the reality of environmental decline facing tribal areas. In dealing with fragmented ecosystems and subsequent impacts on the human condition, contemporary kaitiaki have collaborated with each other and external specialists on the reinstatement of intricate relationships to cultural and natural areas. They seek co-created or co-intelligence solutions on how

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1 *Te Ao Hou*, Winter Vol 1, 1952, 1.

2 Horizons Regional Council, 2007, Te Ao Māori, Chapter 4, *One Plan*, Horizons Regional Council, Palmerston North, 4-5.

ecosystems can be regenerated. They activate them by utilising their mana as authority in the present, to sustain and maintain their hapū and iwi identity with lands and waterways into the sea, for the future.

The motivation for this thesis was inspired by the anxieties of kaumātua and local tribal members about the situation they could observe, sense, feel and experience for a declining environmental integrity of their ancestral landscape at the coast at Kuku. The research interest began by talking about place in more detail, and kaitiaki recording the recollections of kaumātua. These important tasks re-animated the sensibilities of special regions. When elders transferred their understandings and experience the dialogue strengthened residual knowledge of and respect for place. This led to further co-intelligence strategies in collaboration with other specialists. This was vital to limit further alteration or destruction of place, as understandings are only made more difficult to transfer if the wairua or mauri of place is diminished or destroyed, or if the areas within landscape have been rendered invisible to future generations. Without cultural landmarks, the means to embed whakapapa narratives as ancestral links to land and to people, or to know of experiences with spiritual entities, are greatly reduced. Maintaining relationships between inter-related groups also becomes as important as the memories revitalised over wider cultural landscape, as they face a grim reality if inter-generational responsibilities to actively protect the surrounding environment are jeopardised.

The concern to catalyse and activate actual protection programmes and strategies for cultural landscape came about because of a concurrent disregard for Māori landscape values, especially as significant areas across Aotearoa New Zealand continue to be obliterated. Active protection of the cultural and natural resources protected in Article II of the Treaty of Waitangi, has long been deficient. Iwi and hapū have often been powerless to stop destruction by ineffectual laws; naiveté to the complexities of legislation; the bureaucracy of resource management processes, and insufficient local and central government support or funding. Māori cultural landscape in coastal dune regions competes with peri-urban development, agricultural or agro forestry expansion. To obliterate cultural markers in landscape is to sever peoples from their ancestral reminders and therefore, their present day identity.

The series of culturally mediated or value-based tools that emerged through the research activity catalysed and helped implement ecological and Māori cultural landscape restoration projects. The tools attempted to strengthen tribal authority and autonomy, and elicit more collaborative practices between related peoples over their environmental and cultural landscape needs. In rebuilding local contexts of identity with place through environmental activities in the present, the combined action also encouraged more

sustainable practices for the coastline, for Tahamata Incorporation and for the wider tribal region. Taking practical action revitalises bio-cultural inter-relationships between peoples and ecosystems; goes some way towards overcoming peoples' disassociation with the significance of place; and dis-encourages a local and wider communities' disregard (at times) for a unique and treasured coast. Coming together to heal the natural and cultural landscape also alleviates dysfunction experienced between related peoples.

The major case studies for the Ōhau River 'loop', for Te Hākari dune wetland and the planned ahi kā roa archaeological strategy for sacred and special areas in the coastal dune lands, have highlighted how the process of whakakōtahitanga or coming together in one accord is essential. The concept of kotahitanga may be described as co-operation or support. Opportunities for better decision-making for more constructive outcomes are created when kaitiaki improve ways of interacting with each other and ways required to protect and rehabilitate areas. When iwi and hapū set about to define and determine locally devised sustainable management strategies for their natural, cultural and spiritual estates, the concept of whakakōtahitanga then satisfies these sets of expectations. By drawing like-minded iwi and hapū representatives together, the act of working in one accord reiterates that the wairua of Papatūānuku resides within people.

Active kaitiaki recognise the prosperity generated by Tahamata Incorporation for iwi and hapū shareholders at the coast and for the Tūkorehe marae complex. Practical action emerged from local concerns over the imbalances created by farming activities that perhaps belied the inherent sacredness present in cultural landscape. From these initial sensibilities, the series of environmental hui, the co-created solutions in reports, the later comprehensive ecological assessments, and the hydrological water quality research -all indicated how human activities had impacted on human well-being, waterway health, plant, animal, and bird and invertebrate biodiversity.

As local kaitaiki are responsible for envisaging, describing, activating, analysing and achieving progress with environmental projects, according to localised schema, they align these aspirations with global environmental goals. In the first years of activities to turn environmental decline around, definite synergies emerged between ecosystem projects, people and authorities that instruct new generations of kaitiaki, council representatives, local farmers and the community about the value of a Māori interrelated, environmental perspective. During the course of projects active participants also determined what distinct learning programmes were beneficial, with unique environmental activities and outcomes whether for the Ohau 'loop'; the dune wetland; Wehipeihana Bush project and the Tikorangi Nursery development. All ensuing activities raised the priority of improving bio-cultural diversity for iwi and hapū, lands, waterways, springs, rivers, wetlands, estuaries

and foreshores for the sake of shareholders, the farm board, descendants of Ngāti Tūkorehe (including inter-related hapū and iwi) and all ensuing generations.

Kaitaiki support environmental initiatives that utilise the power of inter-generational effort. The ecosystem projects and cultural landscape protection strategies require supportive interactions for collectively held lands and waterways of whānau and hapū. In drawing people and other authorities together, participants more readily identify in the strength of moving beyond mere consultation with each other. From the first series of meetings that identified the crucial areas of concern, a renewed sense of direction or ownership over decisions and ways to proceed, eventuated.

Across the world, indigenous peoples have sought to fashion cultural and natural landscape protection models based upon their own knowledge systems and experiences. Indigenous peoples expect to enjoy direct access to all inter-governmental negotiations in the arena of cultural landscape or heritage protection. Despite complexities and difficulties in deliberation over human rights, international laws and standards *can* exert moral influence upon domestic legislation formation. They emphasise that indigenous peoples and their respective organisations expect to enjoy direct access to all intergovernmental negotiations, in order to share their views on all measures needed to protect their unique heritages. In this way, aspirations for managing, maintaining and sustaining cultural landscape have rested on influencing the necessary transitions within other authorities, local and central government to accept iwi and hapū options over how tribal lands *are to be* respected protected and enhanced.

All the coastal information, research and reports gathered about decline in the area between the Ōhau and Waikawa Rivers supported, developed, helped design and implement ecosystem improvements. The information encouraged best-practice farming activities for environmental and economic sustainability, as essential elements of the quest to improve the quality of peoples' lives and surroundings. In activating changes for coastal Kuku the wetland project extended plans to re-vegetate green corridors along *all* coastal waterways in the tribal region from the mountains to the sea, with other extensive harakeke, native rushes, sedges and tree planting programmes planned for economically unproductive areas of the farm. These all important sustainable practices are about enabling prosperity without destroying the life support systems that current and future generations actually depend on, for their human well-being and comfort.[3]

3 Parliamentary Commissioner for the Environment, 2004, *Growing for Good: Intensive farming, sustainability and New Zealand's environment*, Office for the Parliamentary Commissioner for the Environment Te Kaitiaki Taiao a Te Whare Pāremata: 23.

The subsequent programme of restoration has gone some way towards alleviating the challenges and dangers of nitrified waterways for human health and climate change forecasts for the southwest coastal region. In time more extensive revegetation projects around other areas of the farm will combine to mitigate the adverse effects of flooding, high tides, storm surges, salt water intrusions, and temperature and rainfall fluctuations, as the likely climate change scenarios predicted for the coastal region. Co-created solutions and practical action aimed to overcome the concerns for cultural landscapes, so valued because of the associations they accumulated betweens generations of people.

An extensive file of quality digital and aerial photographs documented these activities. The visual devices (as panoramic images or large-scale acrial photographs) reconnected kaitiaki with their wider domain of accountability, as 'big picture' vantages for all participants. Visual imagery aided in drawing people to practical action, the multiple and monitoring tasks required for maintaining the constructive action taking place at the coast. They assisted all participants in envisaging more effective ways of enhancing valued, ancestral landscapes. In combining subjective artistic endeavours with academic practice and research, personal pathways through the complex environmental issues facing the region, were facilitated.

Valuable lessons were gained from the series of environmental meetings at the marae, the specific wānanga convened for taonga species, from walks on the land with kaumātua, and from meetings with Regional Council representatives, Tahamata Board members, funding officials, kaitiaki and other interested parties at site. All activities were synthesised as combined developments that catalysed and activated the hands-on projects. The environmental programme also re-enhanced active change-agents' experiences with biodiversity, and encouraged their better inter-personal relationships with each other and with remaining natural resources, albeit significantly modified by agriculture. By improving water quality in the dune wetland and stream area, the environmental programme underway will improve (by association) the health of the subsurface waterways, coastal and marine environments, and human wellbeing.

With so much environmental transformation underway around Te Hākari wetland and for the Ōhau River 'loop' within the tribal dairy farming enterprise, comes the notion of fluidity, a way of thinking or making knowledge that revolves around surface and subsurface waterways coiling towards the sea, or wetlands with associated waterways literally remembering how to be wetland streams again. The potential of fluid thinking re-imagines a peoples' belonging to place by re-edifying their relationships with land and waterways. In playing with the value of positive potential and pro-creativity inherent in genealogical reference systems, disassociations between people and their natural environment are

alleviated especially when local fish, plants, birds and animals have returned in greater numbers to inhabit and feed at revitalised environmental regions.

The main question underlying this thesis was how active restoration of fragmented ecological systems could be interdependently related to the healing of a local community, and their relationships to their natural and cultural landscape. Customary context acknowledges that everything visible or invisible that exists across the universe is interlinked and codified according to relatedness to environmental and life issues. The models devised at Kuku have re-emphasised inter-linkages between linguistic, cultural and biological diversity. Practical projects have catalysed necessary activities for reinstating mauri or vitality to valued ecosystems as a supportive response to the late twentieth century or twenty-first century consequences of human demands on the global environment. Principles behind indigenous language or cultural revitalisation have been directly related to the aims of improving environmental futures, where bio-cultural diversity is now an integrated ideal for Kuku. The notion of bio-cultural diversity consolidates what remains of local knowledge around fragmented natural ecosystems, and rebuilds relationships with flora and fauna by bolstering natural areas for the benefit of Tahamata farm, shareholders and descendants of Ngāti Te Rangitāwhia, Te Mateawa, Ngāti Manu and Ngāti Kapumanawawhiti ki Kuku, as affiliates of Ngāti Tūkorehe.

The restoration activities now ensure that major remnant ecosystems are in a state of recovering health, not decline and the iwi concerned have a stronger sense of place and resilience. Despite the complexity of the exercise and the considerable ongoing work required, this thesis demonstrated how better collective understanding of conducive ways forward in very practical terms, can arrest cultural disintegration and ecosystem degradation within a special coastal area. As the projects progress, awareness spreads that a significant area will be protected from the ill effects associated with intensive agriculture, and increasing pressure from coastal and adjacent peri-urban development. Iwi and hapü are acting for ecosystem services where their full value is being taken into account again. The coastal area is better understood as a dynamic series of intricate inter-relationships between descendants, all living beings, spiritual entities that share the lands and waterways, ecosystems within agricultural landscape, and the known and yet to be known significance in landscape.

The vision is to protect, nurture, sustain and enhance this environment for inter-related hapü and iwi, for future generations and communities in the whole tribal region, with the added mission to promote sustainable kaitiakitanga practices for positive environmental and cultural landscape solutions. The current model of protection and revitalisation for the coast invites more positive relationships between neighbouring iwi and hapū (and

other entities) to collaboratively return health and vitality to a distinct coastal domain, from Waiwiri to Waikawa in Horowhenua. The model is applicable for extending into the greater Ngāti Raukawa ki te Tonga tribal region, where increased regional activities led by iwi and hapū in their distinct regions will then contribute to national efforts and the considerable global inter-activities underway. An increasing combination of actions dramatically improves the conservation and sustainable use of remaining ecosystems in this part of the world, with overall beneficial contributions to global human well-being.

APPENDIX I: BIRDLIFE ASSOCIATED WITH TE HĀKARI DUNE WETLAND

Weweia, New Zealand Dabchick [*Poliocephalus rufopectus*]
Kawau, Black Shag [*Phalocrocorax carbo*]
Kawaupaka, Little Shag [*Phalacrocorax sulcirostris*]
White-faced heron [*Ardea novaehollandiae*]
Kōtuku, White Heron [*Egretta alba modesta*]
Little Egret [*Egretta garzetta immaculate*]
Matuku, Australian Brown Bittern [*Botaurus stellaris poiciloptilus*]
Kōtuku Ngutu-Papa, Royal Spoonbill [*Platalea leucorodia regia*].
Black Swan [*Cygnus atratus*]
Canada Goose
Putangitangi, Paradise Shelduck [*Tadorna variegate*]
Mallard duck [*Anas platyrhynchos*]
Grey Duck [*Anas superciliosa*]
Tete, Grey teal [*Anas gracilis*]
Kuruwhengi, New Zealand Shoveller [*Anas rhynchotis variegate*]
Papamango, New Zealand Scaup [*Aythya novaeseelandiae*]
Kahu, Harrier [*Circus approximans*]
California Quail [*Callipepla californica*]
Pheasant [*Phasianus colchicus*]
Puweto, Spotless Crake [*Porzana tabuensis*]
Marsh Crake [*Porzana pusilla*]
Australian Coot [*Fulica atra australis*]
Pukeko [*Porphyrio porphyrio*]

Shrub land

Pipiwharauroa, Shining Cuckoo [*Chrysococcyx lucidus lucidus*]
Ruru, Morepork [*Ninox novaeseelandiae*]
Kōtare, New Zealand Kingfisher [*Halcyon sancta*]
Skylark [*Alauda arvenis*]
Welcome Swallow, [*Hirundo tahitica neoxena*]
Piwakawaka, Fantail
Matata, Grey Warbler [*Bowdleria punctata*]
Song Thrush, [*Turdus philomelos*]
Blackbird
Hedge sparrow, [*Prunella modularis*]

Pihoihoi, New Zealand Pipit [*Anthus novaeseelandiae*]
Tauhou, Silvereye [*Zosterops lateralis*]
Greenfinch [*Chloris chloris*]
Goldfinch [*Carduelis cardeulis*]
Redpol
Chaffinch [*Fringilla coelebs*]
Yellowhammer [*Emberiza citronella*]
Cirl Bunting [*Emberiza cirlus*]
House Sparrow [*Passer domesticus*]
Starling [*Sturnus vulgaris*]
White Backed Magpie [*Gymnorphina tibicen hypoleuca*]

Coastal

Torea, Variable Oystercatcher [*Haematopus unicolor*]
Torea, South Island Pied Oystercatcher [*Haematopus ostralegus*]
Spur-winged Plover [*Vanellus miles novaehollandiae*]
Tuturiwhatu, Banded Dottere, [*Charadrius bicinctus*]
Ngutu Parore, Wrybill [*Anarhynchus frontalis*]
Asiatic Whimbrel [*Numenius phaeopus*]
Kuaka, Eastern Bar-tailed Godwit [*Limosa lapponica*]
Greenshank [*Tringa nebularia*]
Poaka, Pied Stilt [*Himantopus himantopus*]
Karoro, Southern Blackbacked Gull [*Larus dominicanus*]
Taranui, Caspian Tern [*Sterna. Caspia*]
Kahawai, White fronted Tern [*Sterna. Striata*]

Potential

Kereru, New Zealand Pigeon [*Hemiphaga novaeseelandiae*]
Matata, Grey Warbler [*Bowdleria punctata*]
Tui, New Zealand honeyeater
Korimako, Bellbird [*Anthornis melanura*]

APPENDIX II: THE ACTIVITIES OF TANEMAHUTA AND SIGNIFICANT FEMALE ENTITIES

Ngā Ātua	**Supernatural female entity**	**Offspring as Trees, shrubs, grasses, 'flax'**	**Stage of planting**
Tāne Mahuta *or* Rurutangiakau, given to Tūmatauenga. Kahukura resides in the bark[1]	Puwhakahara[2]	Akeake, akerautangi [*Dodonoea viscose*] Shrub	Stage 1
Tāne Mahuta *or* Haumi a tiketike[3]	Pātoki[4]	harakeke [*Phormium tenax*] Aruhe Rahurahu Koromiko [*Hebe stricta*] New Zealand 'flax'	Stage 1
		hukihuki [*Coprosma tenuicaulis*] Shrub	Stage 1
		karaka [*Corynocarpus laevigatus*] Tree (Purposely planted in groves as a fruit crop)[5]	Stage 1

Unknown but regarded as a highly placed one	Unknown but regarded as a highly placed one	karamū [*Coprosma robusta*] shining karamū [*Coprosma lucida*] Shrub	Stage 1
		kowhai [*Sophora microphylla*] Tree	Stage 1
		kōhūhū [*Pittosporum tenuifolium*] Tree	Stage 1
Tāne Mahuta	Huri mai i te ata[6]	manuka [*Leptospermum scoparium*] Tree Red Manuka, tea tree	Stage 1
Tāne Mahuta	Kui ū uku[7]	matai [*Prumnopitys taxifola*] Tree Black Pine	Stage 2
Haumi a tiketike	Te Hekapona[8]	ngaio [*Myoporum laetum*] Te Monuehu- young shoots of common fernroot (rahurahu) Tree	Stage 1
Tāne Mahuta	Ōtunairanga[9]	nikau [*Rhopalostylis sapida*] Tree New Zealand palm	Stage 2

Tāne Mahuta	Hinewaoriki[10]/ Kūraki[11]	kahikatea or kahika [*Podocarpus dacrydioids*] matai [*Podocarpus taxifolia*] matai [*Podocarpus spicatus*] Tree	Stage 2
		puka, kāpuka [*Griselinia littoralis*]	
		tui or koko[12] Birds	
Tāne Mahuta	Ngāore	toetoe [*Cortaderia toetoe*] Grasses, sedge	Stage 1
Tāne Mahuta	Mumuhunga/ Mumuwhango[13]/ Kuwhakahara[14]	totara [*Podocarpus totara*] Tree	Stage 3
Tāne Mahuta	Rerenoa	Epiphytic plants	Stage 3
Tāne Mahuta	Tuwhare kiokio	Tree ferns	Stage 3
Tāne Mahuta	Apunga/ Punga	Insects, small plants, small creatures of the forest	

Tāne Mahuta	Hine tu pari maunga (Mountain Maid)	Parawhenuamea Water	

1 Murdoch Riley, 1994, *Māori Healing and Herbal: New Zealand Ethnobiological Sourcebook*, Viking Sevenseas N.Z. Ltd: Paraparaumu, 116.

2 From table based on Johannes C. Andersen's *Maori life in Ao-tea* (1922), http://www.TeAra.govt.nz/NewZealanders/MaoriNewZealanders/MaoriCreationTraditions/en

3 Murdoch Riley, 1994, *Māori Healing and Herbal: New Zealand Ethnobiological Sourcebook*, Viking Sevenseas N.Z. Ltd: Paraparaumu, 126.

4 From table based on Johannes C. Andersen's *Maori life in Ao-tea* (1922) http://www.TeAra.govt.nz/NewZealanders/MaoriNewZealanders/MaoriCreationTraditions/en

5 Murdoch Riley, 1994, *Māori Healing and Herbal: New Zealand Ethnobiological Sourcebook*, Viking Sevenseas N.Z. Ltd: Paraparaumu, 177.

6 ibid, 278.

7 ibid, 290.

8 ibid, 307.

9 From table based on Johannes C. Andersen's *Maori life in Ao-tea* (1922).
http://www.TeAra.govt.nz/NewZealanders/MaoriNewZealanders/MaoriCreationTraditions/en

10 M. Roberts, W. Norman, N. Minhinnick, D. Wihongi, & C. Kirkwood, 1995, 'Kaitiakitanga: Māori perspectives on conservation', *Pacific Conservation Biology*, Vol. 2, 8.
From table based on Johannes C. Andersen's *Maori life in Ao-tea* (1922).
http://www.TeAra.govt.nz/NewZealanders/MaoriNewZealanders/MaoriCreationTraditions/en

11 http://www.TeAra.govt.nz/NewZealanders/MaoriNewZealanders/MaoriCreationTraditions/en

12 These birds feed on the berries of the maire [*Olea spp. (Gymnelaea)*], miro [*Podocarpus ferrugineus*], tutu [*Coriaria arborea*], makomako [*Aristotelia serrata*] and toro [*Myrsine salicina Persoonia toru*].

13 From table based on Johannes C. Andersen's *Maori life in Ao-tea* (1922).
http://www.TeAra.govt.nz/NewZealanders/MaoriNewZealanders/MaoriCreationTraditions/en

14 ibid.

APPENDIX III: VEGETATION AND HABITATS IN THE TE HĀKARI DUNE WETLAND REGION

In the well-drained sand dune habitats, a comprehensive list of exotic grasses and herbs forms a low cover.

1. There were a few scattered African boxthorn [*Lycium ferocissimum*], lupin [*Lupinus arboreus*], and gorse [*Ulex europaeus*]. Other species present included Yorkshire fog [*Holcus lanatus*], catsear [*Hypochoeris radicata*], ratstail [*Sporobolus africanus*], ryegrass [*Lolium perenne*], tall fescue [*Schedonorus phoenix*], sheep's sorrel [*Acetosa acetosella*], red clover [*Trifolium pratense*], sweet vernal [*Anthoxanthum odoratum*], fleabane [*Conyza albida*], and Muehlenbeckia complexa.

2. The rank grasses area, a range measured 30-50 cm tall with abundant Yorkshire fog, browntop [*Agrostis capillaries*], red clover, fleabane, and cocksfoot [*Dactylis glomerate*]. Other species present included scattered lupin [mostly dead], Trifolium dubium, narrow-leaved plantain [*Plantago lanceolatum],* creeping buttercup [*Ranunculus repens*], dock [*Rumex obtusifolius*], and timothy [*Phleum pratense*].

   At the first planting in 2002 the following plants helped form the initial lower story cover. The trees and shrubs included karamū [*Coprosma robusta*], ngaio and koromiko [*Hebe stricta*] in abundance, akeake [*Dodonea viscosa*], Olearia sp., and kohuhu [*Pittosporum tenuifolium*]. Toetoe and tī kouka were present as well.

Rough pasture

3. Well-drained rough pasture is populated with narrow-leaved carpet grass [*Axonopus fissifolius*], paspalum [*Paspalum dilatatum*], browntop, tall fescue, narrow-leaved plantain, white clover [*Trifolium repens*], creeping buttercup, wīwī [*Juncus gregiflorus*], dock, and lotus [*Lotus pedunculatus*].

Poorly-Drained Pasture Habitats

4. Poorly drained rank pasture was dominated by tall fescue, *Juncus effusus* and *Juncus acuminatus*], in association with creeping bent [*Agrostis stolonifera*], Yorkshire fog, dock, creeping buttercup, and red clover. There are local sea rush [*Juncus kraussii subsp. australiensis*] and [*Schoenoplectus pungens*]. Higher water levels led to increased sedge [*Isolepis prolifer*]. There are two plants of giant spike rush [*Juncus acutus*], which should be removed, as they are troublesome pest plants.

5. The grasslands area is dominated by tall fescue, in association with lotus. Other species present include dock; creeping buttercup; cocksfoot; creeping bent; red

clover, and fleabane with local timothy present. Much of this area has been flooded as a result of raising water levels. Sedge has become more prominent in the wet delta area.

6. The adjacent poorly drained rank pasture is dominated by tall fescue, track rush [*Juncus tenuis*], jointed rush [*Juncus articulatus*] and creeping buttercup; swamp plantain; clustered dock [*Rumex conglomeratus*]; white clover; paspalum and creeping bent.

7. A diverse range of species forms a low cover in a poorly drained hollow of an ephemeral wetland. Water ponds following heavy rainfall in areas with species including spike sedge, hawkbit [*Leontodon taraxacoides*], paspalum, jointed rush, marsh bedstraw [*Galium palustre*], Carex ovalis, water forget-me-not [*Myosotis scorpioides*], white clover, plantain, Yorkshire fog, track rush, Indian doab, penny royal, water purslane [*Ludwigia palustris*], creeping buttercup, toad rush, and sedge [*Schoenoplectus pungens*], with local centella [*Centella uniflora*], the endemic [*Hydrocotyle sulcata*] and [*H. pterocarpa*], purple cud weed [*Gnaphalium sphaericum*], arrow grass [*Triglochin striata*], and swamp hypericum [*Hypericum japonicum*].

Wetland Habitats

7. Sedge land vegetation developed following the removal of grazing stock and the raising of water levels. Sedge and jointed rush are dominant, in association with marsh bedstraw, bachelor's button [*Cotula coronopifolia*], water forget-me-not, [*Myriophyllum propinquum*], clustered dock, and [*Persicaria decipiens*]. There is also local Swamp buttercup [*Ranunculus macropus*] and water celery [*Apium nodiflorum*], [*Juncus effusus*], and [*Carex ovalis*] present. Spike sedge [*Eleocharis acuta],* Tussock sedge [*Carex maorica*], creeping buttercup, water celery, Raupo [*Typha orientalis*], the native annual herb [*Persicaria decipiens*], Rautahi or Cutty grass [*Carex geminata*] are locally common.

8. Sedge and sweet grass are common, in association with creeping bent and scattered Leafless rush [*Juncus effusus*]. Other species present include creeping buttercup, tall fescue, paspalum, Yorkshire fog, dock, and marsh bedstraw.

9. Raupo is dominant in the reed land with scattered harakeke over Pōhue or bindweed [*Calystegia sepium*], lotus, and Yorkshire fog, with local creeping buttercup, and a few Toetoe, [*Cortaderia toetoe*], yarrow [*Achillea millefolium*], and Toetoe upoko-tangata [*Cyperus ustulatus*].

   Raupo, harakeke, and toetoe are common over bracken, Baumea [*Baumea rubiginosa*], lotus, and swamp Kiokio [*Blechnum novae-zelandiae s.s.*] in association with the

rhizomatous herb [*Cyperus*], Yorkshire fog, Creeping Pōhuehue [*Muehlenbeckia complexa*], Mingimingi [*Coprosma propinqua*], Hukihuki [*Coprosma tenuicaulis*], spike sedge [*Carex secta*], Tussock sedge [*Carex maorica*], with some Tī kouka [*Cordyline australis*].

10. Harakeke stands 2-3 m tall and is common around the wetland margins over Kuawa [*Schoenoplectus tabernaemontani*], over Pōhue or bindweed [*Calystegia sepium*], lotus, bracken, and cutty grass [*Carex geminata*] and a few Mingimingi [*Coprosma propinqua*], and Karamū [*Coprosma robusta*].

11. Raupo and Kuawa [*Schoenoplectus tabernaemontani*] are dominant over [*Carex secta*], Yorkshire fog, lotus, and swamp Kiokio [*Blechnum novaezelandiae*].

12. As water ponds in depressions following heavy rainfall, where sedge is dominant with scattered soft rush and occasional gorse. Other species include Jointed rush [*Juncus articulatus*], Yorkshire fog, catsear, browntop, kopakopa [*Plantago australis*], creeping buttercup, and lotus.

13. The open water areas contain Common duckweed [*Lemna minor*] and karerarera or retoreto [*Azolla filiculoides*] on the margins. This habitat type is heavily infested with hornwort [*Ceratophyllum demersum*][1].

14. Radiata pine shelterbelt

Indigenous

A total of 40 indigenous species were recorded from the survey area. Two species present are chronically threatened species. They are Swamp buttercup [*Ranunculus macropus*] as a plant in serious decline and Marsh willowherb [*Epilobium chionanthum*] in gradual decline. These species are only known from a handful of other sites in the Manawatu.

Exotic

Sixty-two exotic species are present. One of these the Giant spike rush [*Juncus acutus*] is a serious pest plant and should be eradicated from the area. Only a few plants are currently present.

1 In 2006 the major excavation of Te Hākari lakes assisted in removing some of the existing hornwort problem, however active monitoring and eradication is required to stay on top of this invasive aquatic plant.

APPENDIX IV: CABINET MINUTES RELATING TO MĀORI CULTURE AND HERITAGE

Cabinet Minute	Reference
Review of Protection Mechanism: Protection of Sites of Significance to Māori (Wahi Tapu)	CAB (96) M 8/15
Noted that the Crown has an obligation derived from the Treaty of Waitangi to protect sites of significance to Māori, but that this obligation is not absolute and needs to be balanced against the broader public interest; Noted that apart from its obligations under the Treaty of Waitangi the Crown should as a matter of good government actively protect sites of significance to both Māori and non-Māori; Good Government Agreed that as an objective of good government the Crown's policies should continue to provide mechanisms for protecting the following categories of sites of significance to Māori, being those discrete sites which are: • Burial places; • Rua koiwi; • Sacred shrines; • Underwater burial places and caverns; • Waiora or sources of water (springs) for healing; • Sources of water (springs) for death rites.	
Historic and Cultural Heritage Management in New Zealand	CAB (96) M 33/3C (2)
Noted that the Parliamentary Commissioner for the Environment has released a report on the "Historic and Cultural Heritage Management in New Zealand". Noted that the report finds that the present system of cultural and heritage protection in New Zealand is performing very poorly and permanent losses of all types of heritage are continuing. Noted that the Parliamentary Commissioner for the Environment has also concluded that "there are deficiencies in the present system for managing historic and cultural heritage which are of significance for Māori". Noted that there is presently a risk of ongoing loss of sites of and heritage significance for Māori because of deficiencies in the present system. Noted that in any process of policy development in relation to Māori heritage protection and management, ongoing consultation and input, additional to the hui to be conducted by the Māori Heritage Council, will need to be sought from Māori.	

Cabinet Minute	Reference
Historic Heritage Management	CAB (97) M43/22]
Treaty of Waitangi Considerations Noted that Article 2 of the Treaty of Waitangi guarantees Māori protection of their taonga, the Waitangi Tribunal agree that wahi tapu are taonga, and that the Historic Places Act 1993 and the Resource Management Act 1991 provide statutory recognition of the importance of protecting taonga; Agreed that the Crown, in partnership with Māori, has duties derived from the Treaty of Waitangi to take reasonable action to protect sites of significance to Māori; Noted that objectives for the protection of sites of importance to Māori may, in some circumstances, be achieved though methods implemented by iwi/hapū authorities, local authorities and the private sector… Proposed Policy Principles for the Review Cabinet agreed that the following policy principles should inform preparation of the public discussion paper and subsequent processes in the Historic Heritage Management Review: • The system should produce improved protection and management of Māori historic heritage; • The duties and functions of central and local government in historic heritage protection and management should be clearly defined; • There should be an increased emphasis on aligning decision-making processes as closely as possible to the communities of interest affected and maximising local community consultation and involvement, within a national policy framework ensuring clear national direction and consistency of standards and implementation; • The system should provide for Māori to participate and be represented effectively in the protection and management of Māori historic heritage, consistent with the obligations of the Crown under the principles of the Treaty of Waitangi.	
Māori Language Policy: Options to Improve the Status and Vitality of the Language	CAB (97) M 45/8C (4)
Objectives Agreed that the Government's overarching Māori language policy objectives are to: • Increase the number of Māori who know the Māori language by increasing their opportunities to learn Māori; • Improve proficiency levels of Māori in speaking Māori, listening to Māori, reading Māori and writing Māori; • Increase the opportunities to use Māori by increasing the number of situations where Māori can be used; • Increase the rate at which the Māori language develops so that it can be used for the full range of modern activities; and • Foster amongst Māori and non-Māori positive attitudes towards, and accurate beliefs and positive values about, the Māori language so that Māori-English bilingualism becomes a valued part of New Zealand society.	

Cabinet Minute	Reference
Māori Language Policy: Options to Improve the Status and Vitality of the Language	CAB (97) M 34/5B (2)
Noted that: • Article II of the Treaty of Waitangi guarantees to Māori protection of their taonga; • The Waitangi Tribunal and the courts agree the Māori language is a taonga and • The Māori Language Act 1987 provides statutory recognition of this. Agreed to the following statement as a summing up of the Crown's obligations to the Māori language: "that the Crown and Māori are under a duty derived from the Treaty of Waitangi to take all reasonable steps to actively enable the survival of Māori as a living language". Noted that the Crown's obligation to the Māori language is not absolute or unqualified, and that in the opinion of the Privy Council the Crown is not required to go beyond what is reasonable in prevailing circumstances. The Crown's other responsibilities as the Government of New Zealand is a factor to be taken into account when determining what is reasonable.	
Involvement in the Repatriation of Koiwi (Māori Ancestral Remains) and Taonga Māori Protection Bill	CAB (98) M 46/22A & B
Noted that in May 1998 Cabinet agreed to be more proactive in facilitating the repatriation of koiwi – Māori ancestral remains [CAB (98) M 16/14 refers]; Agreed that the Government's involvement in facilitating the repatriation of koiwi is to... • Be based on setting a strategic direction on repatriation with iwi (paragraph (f) below refers)... Agreed the involvement of the Crown's Treaty of Waitangi partner in the repatriation of koiwi is essential...	

Cabinet Minute	Reference
Historic Heritage Management Review: Conclusions	STR (99) M6/16
Noted that the report of the Ministerial Advisory Committee and the paper under STR (99) 32 fulfil a commitment in the Ngai Tahu Deed of Settlement; Agreed that historic heritage on land include: • Intangible historic heritage values including those of Māori; and • The ancestral landscapes of iwi, hapū and whanau, waahi tapu, and sites of significance to Māori. Agreed that the objectives of central Government for historic heritage management are: • To ensure that the Crown's duties derived from the Treaty of Waitangi to take reasonable action to protect sites of significance to Māori are effectively implemented in partnership with Māori. Agreed that the historic heritage management system should provide for: • The Treaty of Waitangi relationship between the Crown and Māori, and the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga (Resource Management Act 1991 s 6(e) refers): Agreed that the primary roles and responsibilities in the historic heritage management system are: [taken from table] • Key role for Central Government is leadership and its key functions are policy and purchase, integrated conservation management, and appropriate regulation and incentives. • Key role for Local Government is implementation and its key function is sustainable management under the Resource Management Act. • Key role for NZ Historic Places Trust is heritage promotion and its key functions are heritage advocacy, public education, heritage identification, heritage property management and information and advice. Noted that the recommendation of the Ministerial Advisory Committee that a distinct Māori heritage agency be established by Government to provide for Māori heritage policy and leadership while empowering iwi, hapū and whanau. This recommendation will be considered in the review of Māori culture and heritage to be led by the Minister of Māori Affairs… Agreed in principle to explore further the concept of a contestable national incentive fund to protect and conserve historic heritage and Māori heritage, similar to the Nature Heritage Fund…	

APPENDIX V: NEW ZEALAND INDIGENOUS FOREST POLICY

The New Zealand Indigenous Forest Policy (NZIF) has long-held that New Zealand's indigenous forests have important ecological, cultural, production and scientific values that contribute to the economic and social well-being of the nation. A full range of indigenous forest types must be maintained (or expanded) in a healthy state, for the benefit of present and future generations.

To contribute further to this overall objective, the NZIF advocates and supports a forest ecosystem management approaches that sustainably manage New Zealand's indigenous forests. In particular, these activities are important to sustain forest productivity, health, biodiversity, soil quality, water quality, natural landscapes, and the full range of natural forest ecological processes. The development of this NZIF strategy promotes the intrinsic values of indigenous forests and enhances their status as key contributors to New Zealand's economy. As an outcome of the NZIF the kawenata provides for the management of the dune wetland in a manner that achieves the following purposes and objectives.

Indigenous Forest Policy

- The development of a comprehensive national database, which continuously updates the condition, health, location and extent of indigenous forests
- The maintenance and enhancement of the current integrated research effort concerned with the development of new methods to manage and control animal and plant pests
- The establishment of a comprehensive national indigenous forest health surveillance system to provide full coverage of the national forest estate on a biennial basis, and incorporating a rigorous system of border control and emergency response
- The protection of indigenous forests against fire through research and improved fire prevention, detection and control policies and practices
- The management for timber and other products removed using silvicultural systems, which limit the magnitude of the resulting changes to levels near those that occur naturally in healthy forests

- The initiation of a research and development programme to document and demonstrate ecologically sustainable silvicultural systems for indigenous forests with sustainable timber production potential
- The development and use of reliable and consistent systems to monitor the sustainable management of indigenous forests
- The development of a streamlined 'National Application and Consent System' for the management of indigenous forests for wood production which would be implemented by the Ministry of Agriculture and Forestry under the Forests Act 1949 (1993 Amendment) in cooperation with local government under the Resource Management Act.

Furthermore, the NZIF assists in promoting:

- Improved cooperation and coordination between government departments, local government authorities, research organisations, NGOs, indigenous forest owners, the Indigenous Forests Section of the Farm Forestry Association and other organisations, in the development of strategies, policies and plans for meeting international commitments that affect the management of indigenous forests
- Public awareness of the Indigenous Forest Policy, and with the assistance of indigenous forest owners and other interested parties, the maintenance of an overview of indigenous forest management planning and practice.

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