



# **‘Kaitiakitanga in 2040’**

NZARM 2008 Annual conference  
Nelson — 13<sup>th</sup>–14<sup>th</sup> October 2008

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# Kaitiakitanga – the origins

- As a system takes place in the natural world within the domains of Atua
- Root word is ‘tiaki’ meaning caring for, looking after, denotes custodial responsibilities, guardianship, stewardship, wise management, giving back what you take
- ‘Kai’ denotes the agent by which the ‘tiaki’ is performed, ‘tanga’ the practice or action
- Kaitiaki are the interface between the secular and spiritual worlds; the mana for kaitiaki is derived from whakapapa, mana whenua, mana moana and rangatiratanga
- Practice of spiritual and physical guardianship of the environment, an active rather than passive relationship
- Giving benefit to the resource, ecosystem, the environment
- Everything interconnected
- Hence, inextricably linked to tino rangatiratanga and indigenous rights (authority, inherent sovereignty, autonomy)
- Traditionally kaitiakitanga performed by highly respected leaders, knowledgeable people, rangatira, tohunga, ariki, kaumātua, hapu/iwi.

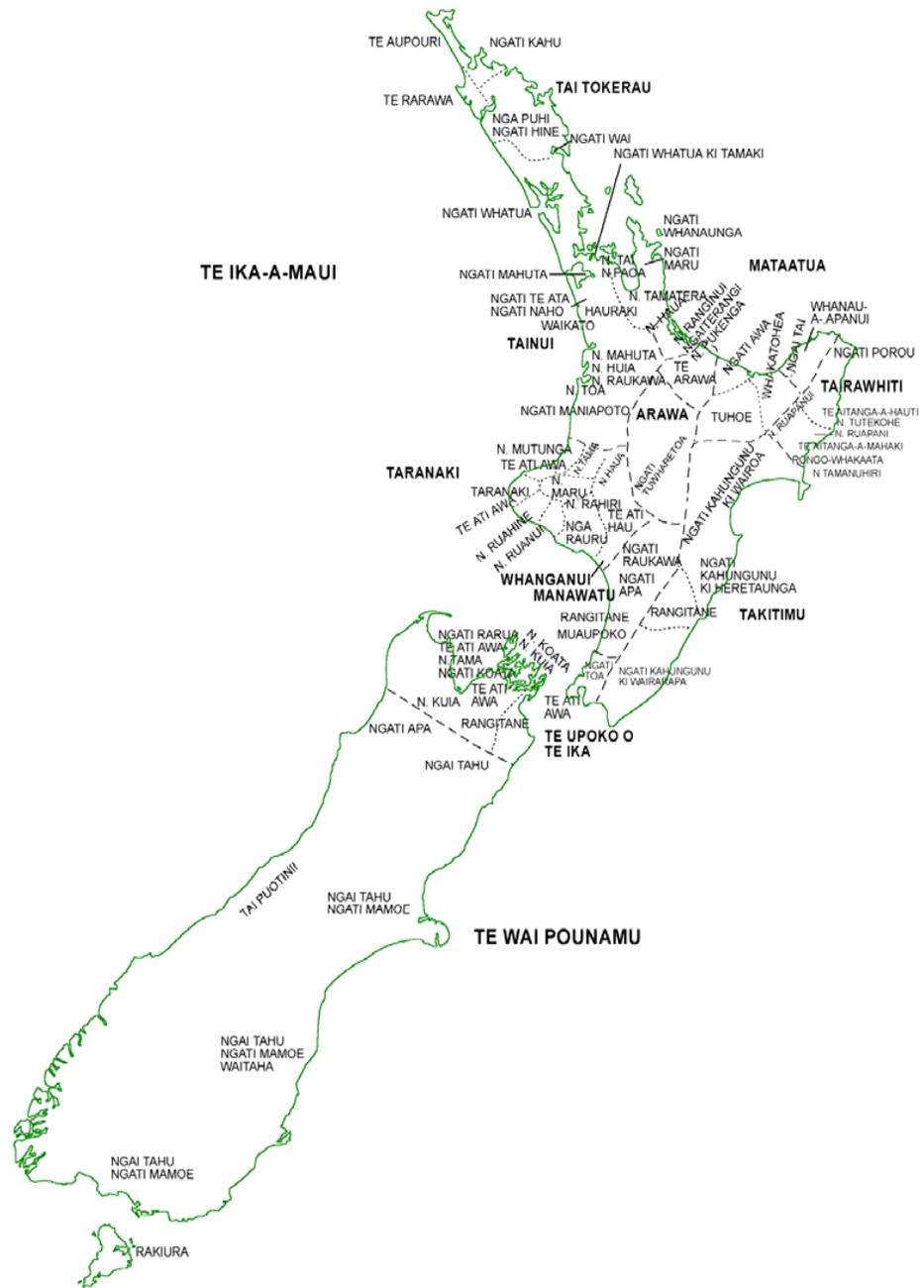


Figure 1: Location of main iwi throughout Aotearoa - New Zealand

# Māori society and mātauranga

- Māori knowledge (mātauranga Māori) systems and oral tradition in place for centuries
- Mātauranga Māori often defined as traditional knowledge handed down from ancestors (tupuna, tipuna), rangatira, kaumātua, kuia, tohunga, and knowledgeable people (Hiroa 1949; Best 1924; Marsden 1988; Mead 1984; Durie 1996; Williams 1997; Harmsworth et al. 2002)
- Integral part of Māori life and basis for tikanga, knowledge, concepts and values including kaitiakitanga (Barlow 1993, Mead 2004)

# Kaitiakitanga

- Based on Māori knowledge, systems, concepts and values
- Māori environmental perspectives are derived from value and belief system; action and association, built up over 1000 yrs of history and knowledge in Aotearoa-New Zealand, 5000 yrs Polynesia, as Māori culture evolved alongside this environment (e.g., te reo Maori grew out of this natural environment)

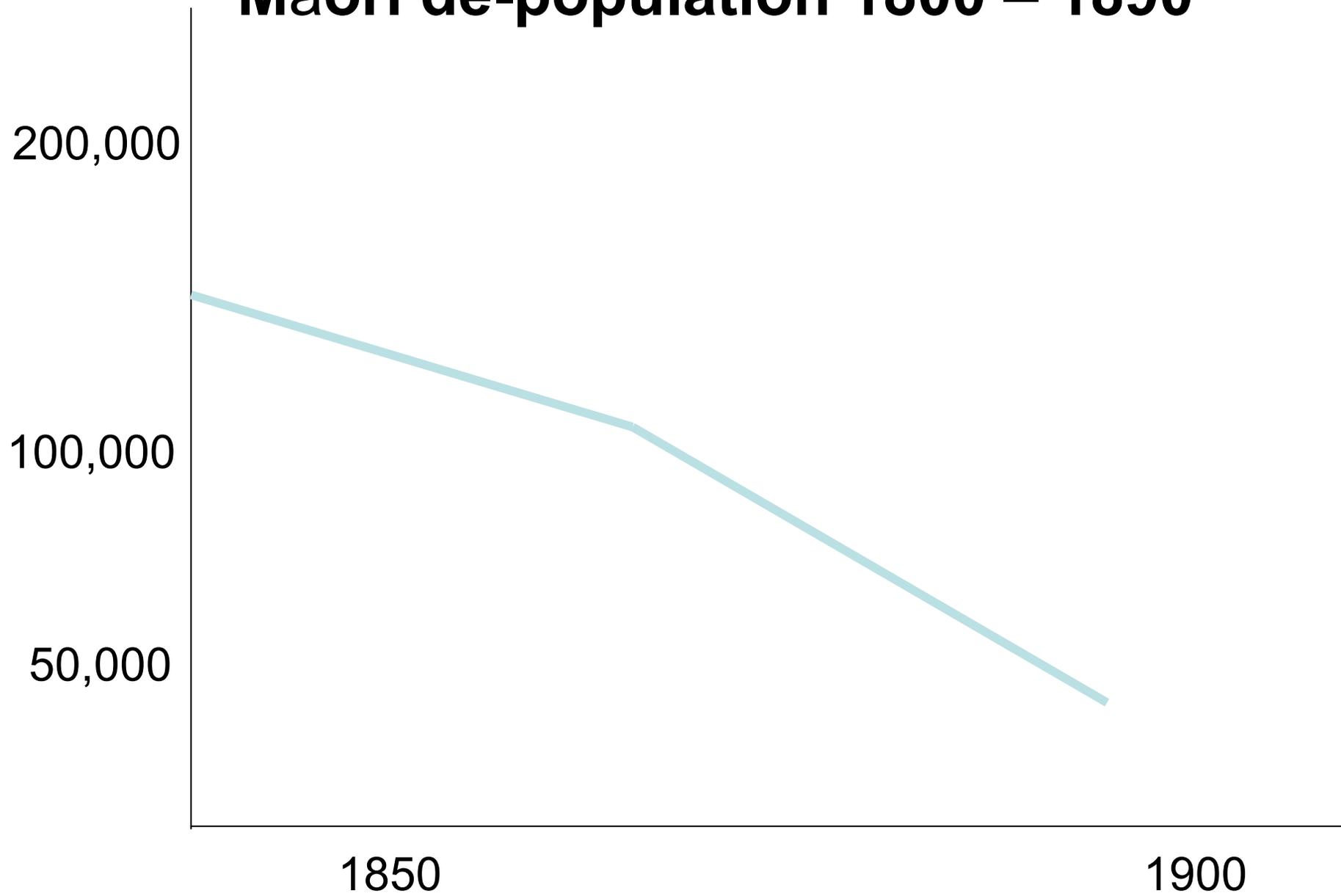
Therefore:

- Kaitiaki who practice kaitiakitanga do so because they hold authority
- For many Māori it confers responsibilities and obligations, and reinforces a spiritual attachment with the natural environment
- Active exercise of power in a manner beneficial to the resource
- Kaitiakitanga is used to achieve goals, aspirations and resolve issues from an indigenous perspective

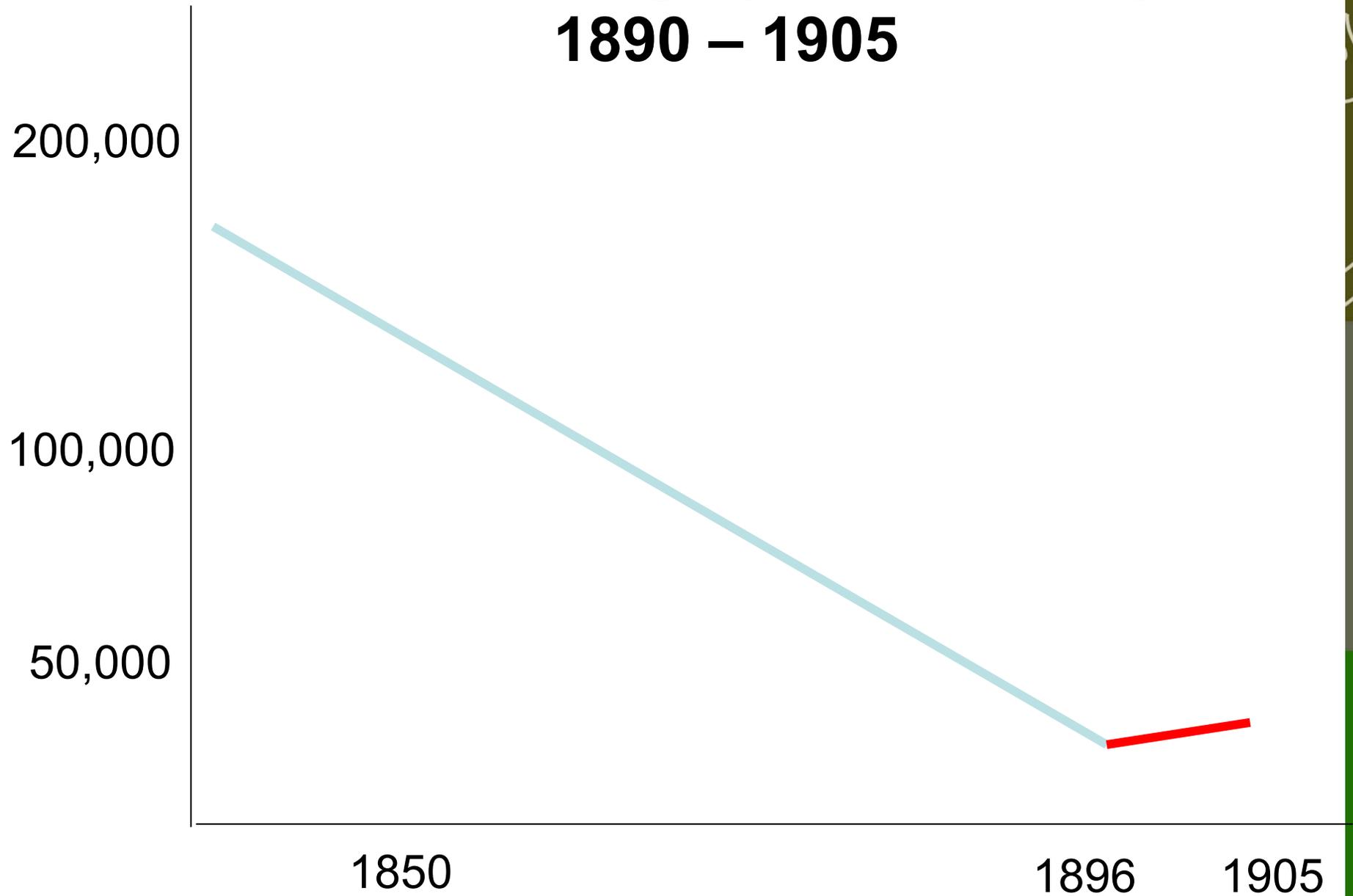
# Transformation in Māori society – the past: 19<sup>th</sup> to early 20<sup>th</sup> century

- Colonisation brought catastrophic consequences
- Political oppression through policy and legislation
- Māori survival beyond the 20<sup>th</sup> century was in doubt (1896 census) (e.g., infectious diseases, poor nutrition, warfare, poor housing, high mortality rates)
- 1840 Māori population est. @ 150,000; by 1900 @ 42,000
- Loss of resources and land (e.g., alienation, confiscation)
- Tribal society and collectives broken
- Declining Māori language speakers
- Cultural loss (customary lore and rights)
- Loss of knowledge (mātauranga), customs, and systems
- However, Māori environmental concepts and values still intact

# Māori de-population 1800 – 1890



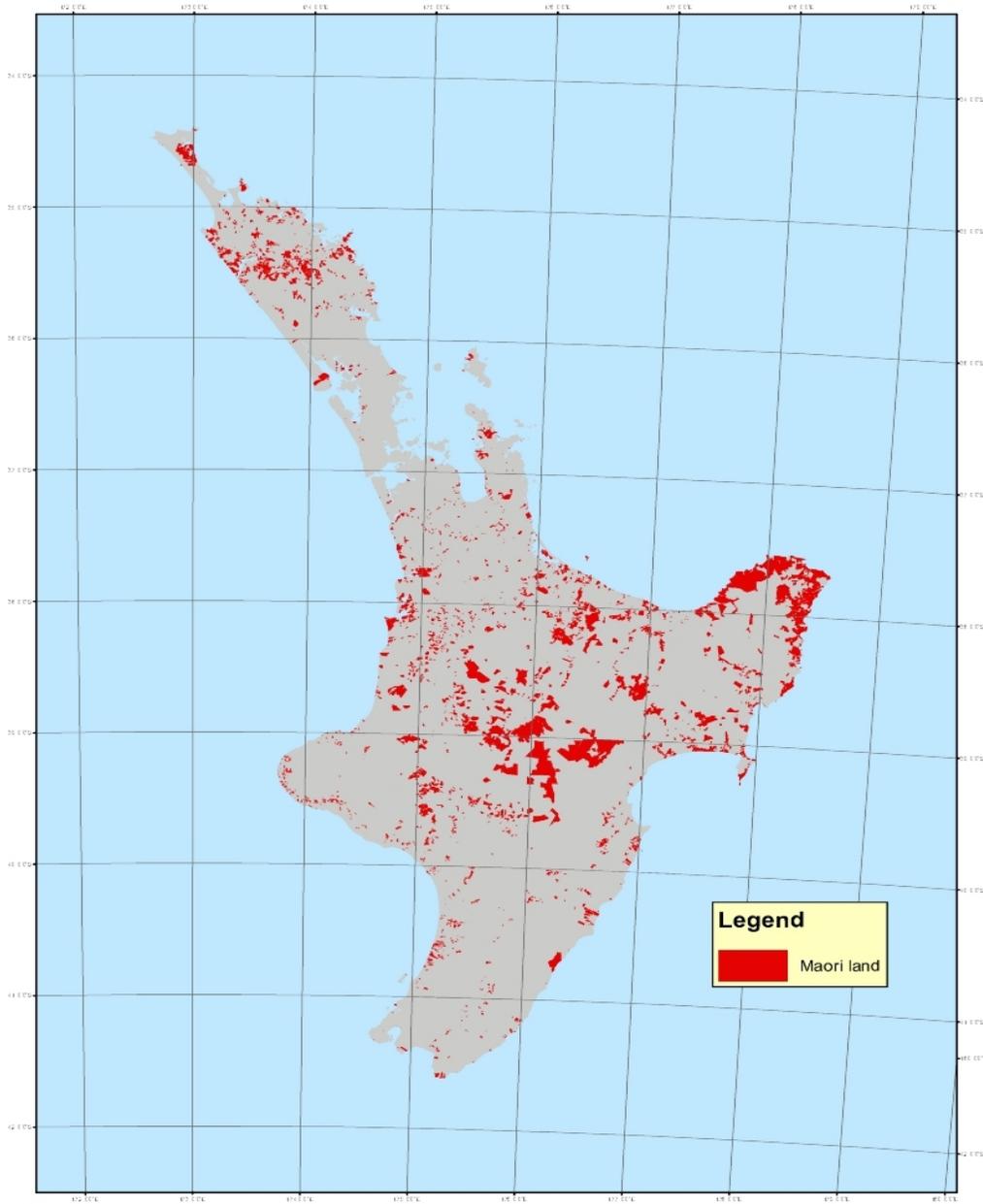
# Māori Demographic Recovery 1890 – 1905



# Patterns of Māori Land Ownership from 1840 to 2003 (Durie 1998; TPK 1998; Landcare Research GIS 2006)

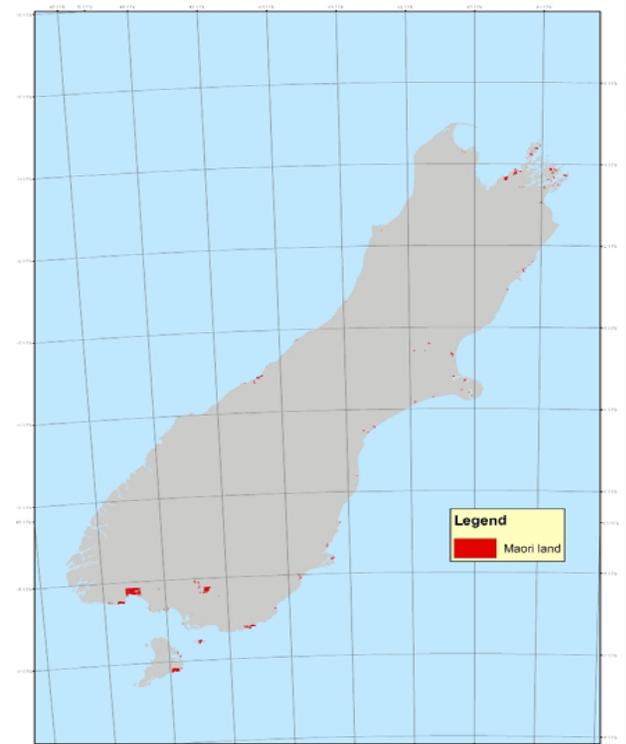
<b>Year</b>	<b>Acres</b>	<b>Hectares</b>
1840	66 400 000	27 534 000
1852	34 000 000	15 300 000
1860	21 400 000	9 630 000
1891	11 079 486	4 985 000
1911	7 137 205	3 211 000
1920	4 787 686	2 154 000
1939	4 028 903	1 813 000
1975	3 000 000	1 350 000
1986	2 626 091	1 181 740
1998	3 743 689	1 515 071

# North Island: Maori Land Court Blocks



Map reference: Arahakaitiaki pōwhiriwhiri utamatewhiri kōwhiriwhiri meiri kōwhiriwhiri

# South Island: Maori Land Court Blocks



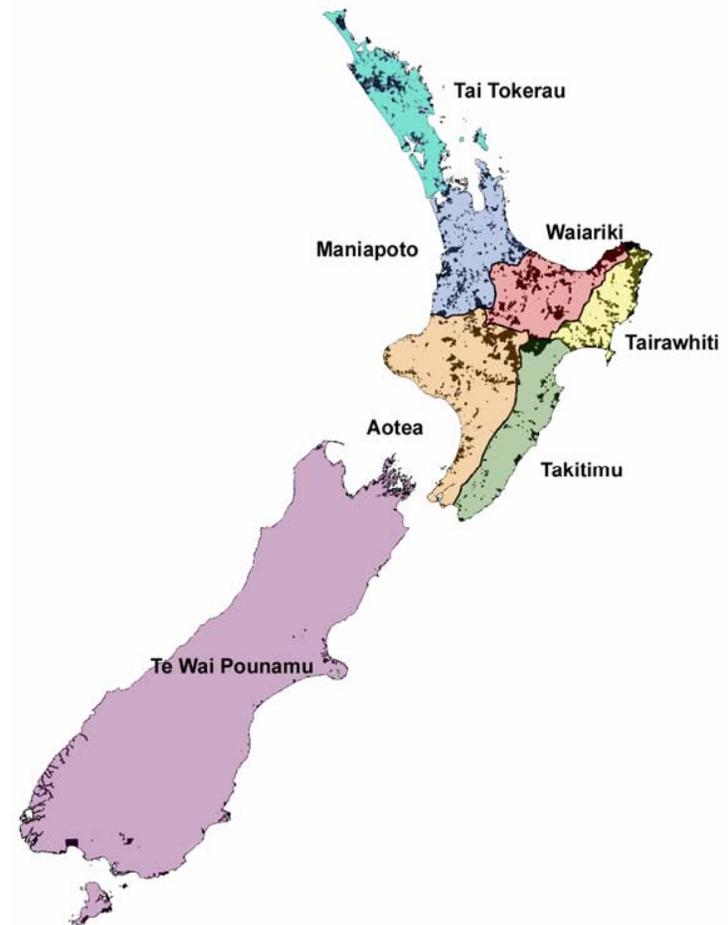
The reference: Arahakaitiaki pōwhiriwhiri utamatewhiri kōwhiriwhiri meiri kōwhiriwhiri

# 21st century: Kaitiakitanga – the present

- Kaitiakitanga now takes place in modern society
- Continuing demographic trends and changes (most Māori urban >80%) Māori pop now ~ 526,281;
- 1975 Waitangi Tribunal est. Treaty claims (~tot 1430 registered – Feb 2008); as at 2008 ~22 settled;
- Māori land (stable, collective, general, and private ownership, Te Ture Whenua Act, wide range of Governance structures)
- 1970's & 1980's – Devolution of Govt functions and building capacity for health, social, education, and culture
- 1991 RMA & LGA 2002 recognises tangata whenua, hapū and iwi
- Gaining political status (mana whenua, mana moana)
- Economic growth and advancement, Māori enterprise growing
- More active participation by Māori in research, planning and policy

# Māori Land Court Districts

- ~26, 000 Māori land block titles
- ~6 % of Total land in NZ (~1.52 million ha – TPK MLIB)
- ~50% under-developed
- Māori economy – commercial asset base @\$16.5 billion
- \$700m, 7.5%, of total NZ agricultural outputs



# Māori and the modified and natural environment

- How do Māori see themselves?
- Their environment in the present? the future? changing in time?
- How do Māori assess the state of health of their environment? and their own wellbeing?
- How do they manage and allocate resources?



# Māori perspectives, what are they now?

- Mix of traditional and modern (giving a distinct worldview – spiritual & physical; tangible vs intangible)
- Issues often revolve around cultural, social, economic, environmental, political values and dimensions
- Humans are inter-connected to land, water, air, forests – an integral part of ecosystems (whakapapa)
- Human health and wellbeing are significant (ecosystems support life)
- Holistic, need to understand whole systems, the big picture, processes, not just one part or one component
- Indigenous knowledge, frameworks, methods, integrated philosophy necessary
- Important to consider – cause and effect, cumulative effects, temporal and spatial change



# Partnerships, decision-making

Partnerships and co-management are seen as pathways to good cultural, economic, and environmental outcomes:

- Require cultural understanding and worldview
- Relationships based on respect, recognition of values, trust, goodwill
- Important to make decisions through the collective, consensus (whakakotahitanga)
- Empowerment (individuals, whānau, families, and communities, iw/hapū)
- Action and association are central to kaitiakitanga

# Kaitiakitanga in 2040

It is likely that with continuing changes in Māori society and demographics, Treaty settlements, Māori advancement in research, science and technology, a greater Māori voice in local and national politics, that land and water management will embody a different worldview from the one we currently know

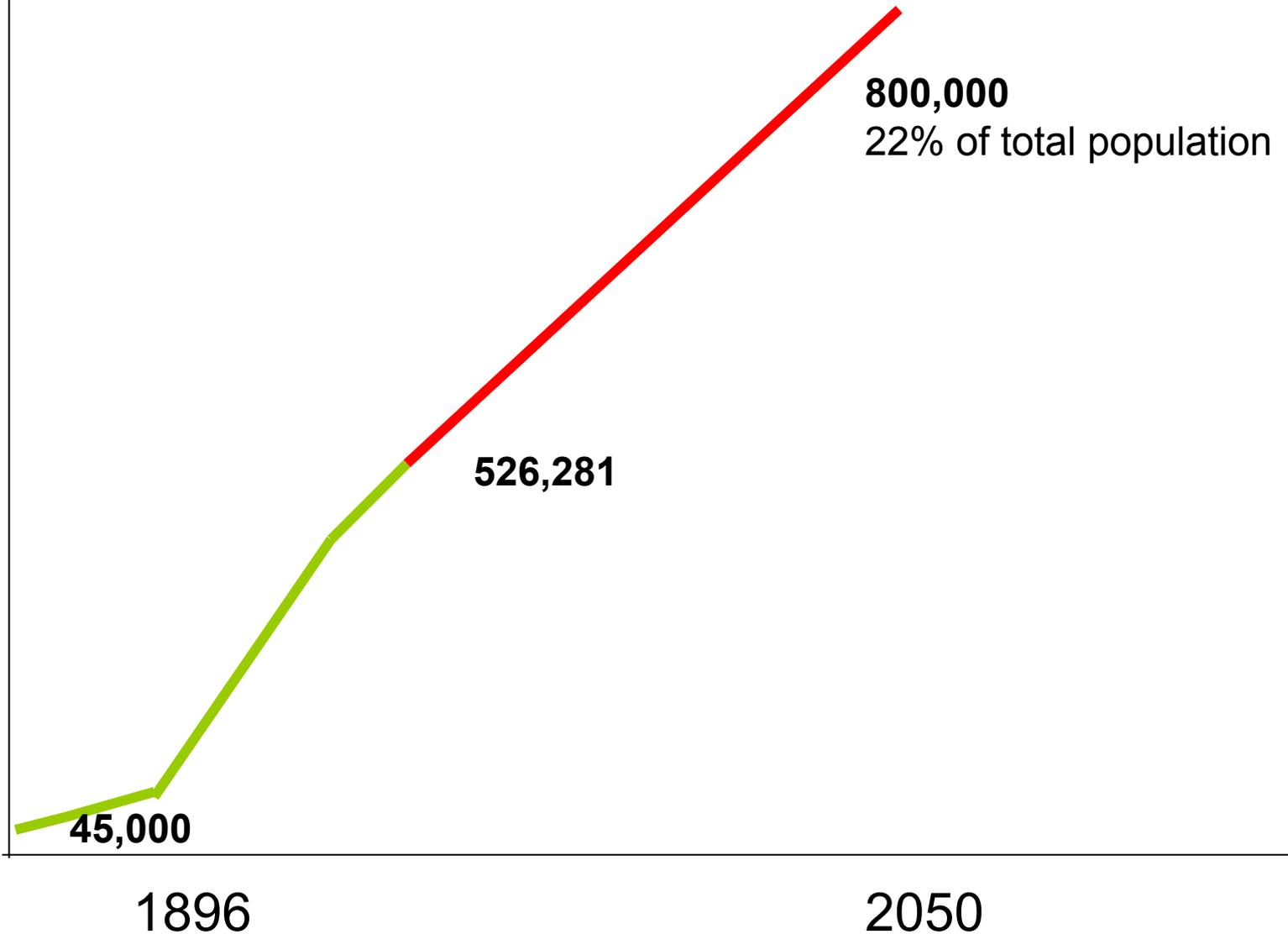
# Kaitiakitanga in 2040

- Māori are major stakeholders in business, industry, and all facets of land and water management
- Through concepts such as kaitiakitanga Māori are leaders in sustainable land and water planning, policy and management and these concepts and methods are recognised and accepted widely in NZ society
- Māori are active in research and knowledge that underpins land and water management
- Māori futures and aspirations are realised through kaitiakitanga along with other important concepts and values

# Status and Trends

- 2001: 604,110 have Māori ancestry; 526,281 identify as Māori (15% of total NZ population)
- 2011: 700,000
- 2021: 770,000 (17% of total NZ pop)
- 2050: 800,000 (22% of tot NZ pop); (100,000 living abroad)
- 2031: 33% of all children in NZ Māori
- 2031: rapid increase (300% growth) in older Māori, aged over 65
- Kaitiakitanga still intrinsic to Māori life and wellbeing

# Māori at the Third Millennium



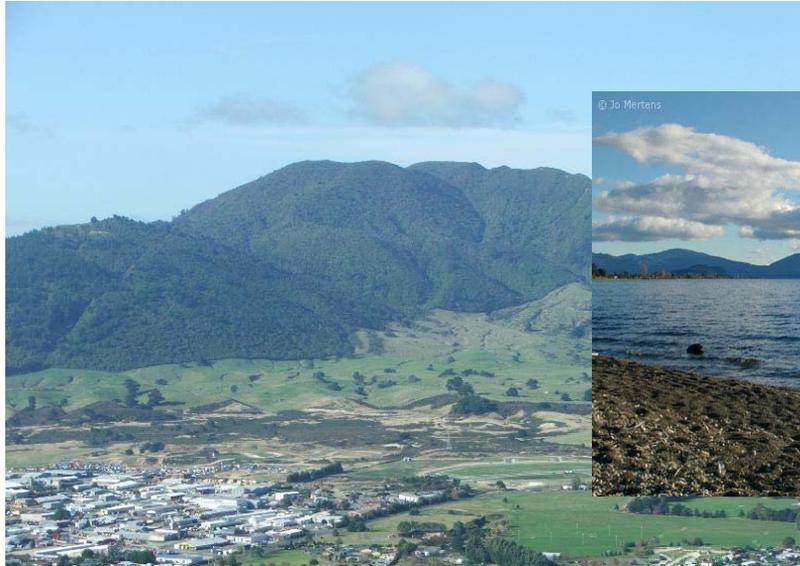
# Frameworks required for kaitiakitanga

- Complex multi-dimensional issues facing the 21<sup>st</sup> century
- Different epistemologies required (e.g., different ways of seeing, understanding, interpreting, studying and resolving issues and achieving outcomes)
- Need to understand and define Māori goals, aspirations, issues
- Need to understand and use Māori concepts, frameworks, and methods
- Requires holistic interdisciplinary/transdisciplinary approaches, & underpinning knowledge and understanding
- We can use the indigenous perspectives/worldview
- Integration, 'big picture' thinking
- Form partnerships, collaboration, co-management working together (based on respect)

# Kaitiakitanga in 2040

- Innovative collaborative management structures
- Collaborative cultural-environmental projects
- Integrated knowledge systems (e.g., western science, local, and mātauranga)
- Regular cultural-environmental assessment
- Māori imposed standards on resource allocation and use (e.g., reflecting mauri and tikanga)
- Cultural state of environment (CSOE) reporting

# Innovative collaborative management structures



# Collaborative cultural-environmental projects



# Integrated knowledge systems

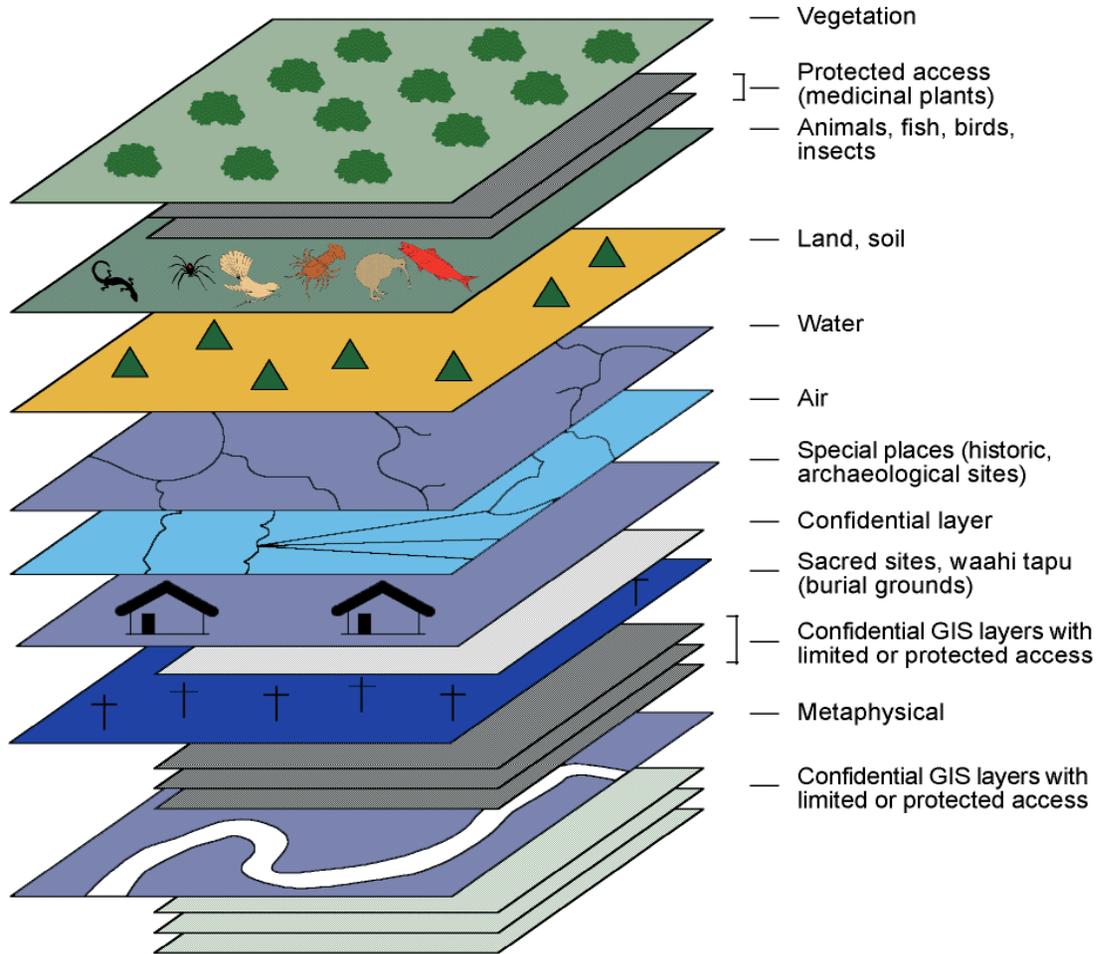


Figure 1: GIS layers and confidential sub-layers

# Regular cultural-environmental assessment



*In future environmental monitoring programmes could be classed into three main types that are complementary:*

<b>Māori knowledge based</b>	<b>Community-scientific based</b>	<b>Scientific based</b>
<p><b>Māori monitoring –</b> Requires in-depth Māori knowledge and understanding of environments, concepts, and issues. Understanding Māori values, goals, and aspirations. New Knowledge often created.</p> <p>Examples:</p> <ul style="list-style-type: none"><li>• Cultural values and uses;</li><li>• Taonga lists;</li><li>• Key sensitive taonga;</li><li>• Cultural indicators, MEPI's; Te Mauri;</li><li>• Kaimoana surveys</li><li>• Knowledge on uses and preparation of taonga;</li><li>• Cultural health Index (CHI);</li><li>• Takiwa database, SOT, SOE reporting</li></ul>	<p><b>Community based monitoring –</b> requiring lower levels of technical input and skill but scientifically robust and part-value based. Cost effective, relatively simple and short duration.</p> <p>Examples:</p> <ul style="list-style-type: none"><li>• Stream, river and lake assessments; SHMAK assessment;</li><li>• Coastal surveys;</li><li>• Wetland surveys &amp; monitoring;</li><li>• Semi-technical assess.;</li><li>• Community based values, indicators, projects;</li><li>• School projects;</li><li>• LTA monitoring and assessments with communities</li></ul>	<p><b>Scientific monitoring –</b> Requires higher levels of scientific/technical input and skill, robust sampling strategies, analysis and interpretation. May be time consuming. Science knowledge created.</p> <p>Examples:</p> <ul style="list-style-type: none"><li>• Chemistry, water quality, nutrients; pH;</li><li>• Biology; Pathogens, Bacterial counts; Giardia; MCI; Cryptosporidium;</li><li>• Hydrology; Modelling;</li><li>• Botanical mapping, classification of plants;</li><li>• GIS applications; Satellite imagery;</li><li>• Studies of fish, macro-invertebrates, macrophytes.</li></ul>

# Māori imposed standards on resource allocation and use



# Cultural state of environment reporting



# Cultural state of environment reporting

Outcomes:

1. Sustainable Environment
2. Quality and Healthy Life
3. Sustainable Economy
4. Culture and Identity
5. Participation and Equity



# 2040: Māori active and equal participants in land and water planning, management, and policy

