

MĀORI VALUES AND WETLAND ENHANCEMENT

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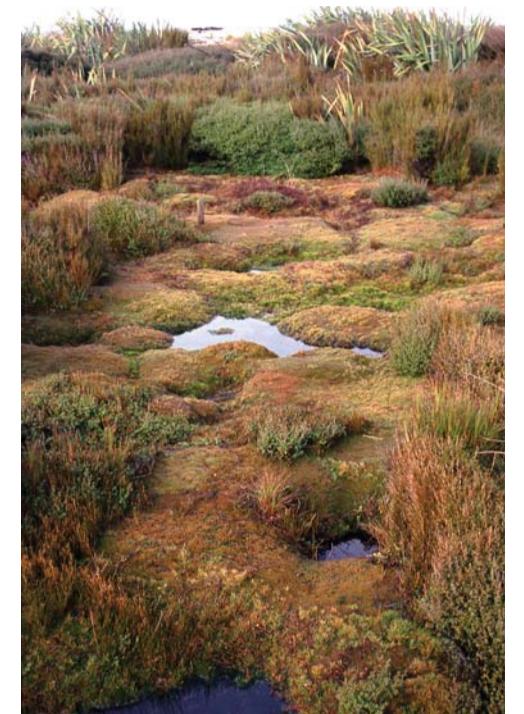
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1. MĀORI VALUES - CONCEPTS AND PERSPECTIVES

Māori Values and Wetlands

Common Māori words for describing wetlands include "repo", "poharu", and "roto".

Wetlands are regarded by Māori as taonga. They have historical, cultural, economic, and spiritual significance. Wetlands can be reservoirs for knowledge, wellbeing, and utilisation. They are mahinga kai (food gathering) sites used by local marae, whānau, hapū, and iwi and provide significant habitats for a range of culturally important (taonga) plants, animals, fish, birds, reptiles, insects, and micro-organisms. They are breeding grounds for native fish and tuna (freshwater eels), and a large range of culturally significant plants for weaving – harakeke, raupō, toetoe and kuta; carving – tōtara, kahikatea; Māori materials and implements – mānuka. Many wetlands comprise a variety of culturally important medicinal plants for rongoā (Māori medicinal use).



Māori and the natural environment

- What are Māori environmental and cultural aspirations?
- How do Māori see their environment changing in time?
- How do Māori assess the health of the environment?
- What indicators do they use?
- There is a strong link between environmental change and Māori wellbeing that needs to be taken into account in environmental monitoring
- How can Māori knowledge be used to underpin environmental monitoring?
- How can monitoring by Māori complement other approaches?

Key Māori concepts

- Whakapapa (connection to people and the environment)
- Taonga tuku iho, Te Ao Tūroa (inter-generational equity)
- Mana whenua (status, authority, prestige over a defined area)
- Kaitiakitanga (guardianship, action and association)
- Oranga (existence, health and wellbeing)
- Mauri (life force, energy, balance)
- Tapu (restricted, sacred, off-limits)
- Noa (unrestricted, open)
- Rahui (regulated)
- Te Ao Mārama (interconnection – all parts of the environment are connected, understanding the whole)
- Tau utuutu (giving back what you take)
- Mātauranga Māori (Māori knowledge)

Mātauranga Māori and Wetlands

Mātauranga Māori is Māori knowledge that provides the understanding and interpretation of the natural and spiritual world through the Māori lens.

Māori terms (Harmsworth 2002) & key wetland types (Clarkson et al. 2002; Johnson & Gerbeaux 2004)

Phase 1 Wetland classification – Level 1 Hydrosystem	Māori equivalent terminology
<i>Estuarine</i> (estuaries, lagoons, etc.)	Wahapū, hāpua, muriwai
<i>Palustrine</i> (emergent plants over freshwater, swamps, bogs, marsh)	Repo, poharu
<i>Marine</i> (saline, coastal, subtidal)	O Te Moana, a Tangaroa
<i>Lacustrine</i> (lakes, ponds)	Roto, moana
<i>Riverine</i> (rivers, streams, creeks)	Awa, manga
<i>Geothermal</i> (warm to hot subsurface and surface water)	Waiariki, wai puia, ngawha, waiwera, waipuna
<i>Plutonic</i> (underground water, from springs, possibly limestone or karst terrains)	Rarowhenua, waipuna

Definition of a Māori Environmental Performance Indicator

A Māori Environmental Performance Indicator (MEPI) is a tohu created and configured by Māori to gauge, measure or indicate change in an environmental locality. A Māori EPI leads a Māori community towards and sustains a vision and a set of environmental goals defined by that community. Source: MfE 1998: *Māori environmental monitoring*

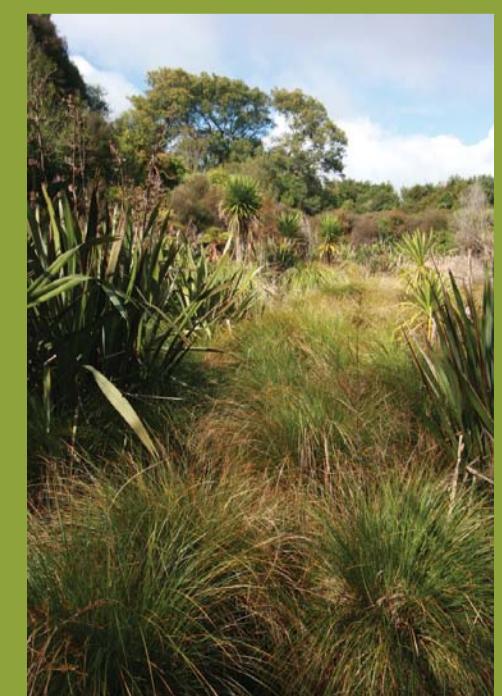
The Pressure/State/Response Model (OECD, MfE)

Environmental indicators can be organised into three main categories:

- 1) Pressure indicators
- 2) State indicators
- 3) Response indicators

WETLAND DEFINITION

Wetlands are one of Aotearoa New Zealand's most important freshwater ecosystems. Wetlands are low-lying waterlogged places bordering rivers and streams, and forming quiet edges of lakes, rivers, lowlying floodplains, estuaries, and harbours. They are classified into a large number of types, including: swamps, bogs, fens, marsh, peatlands, pakihi, flushes, lagoons, saltmarsh. In the last 150 years more than 90% of wetlands in Aotearoa have been destroyed or significantly modified through draining and other human (anthropogenic) activities.



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