

# Bicultural Methods for Biodiversity Measurement and Monitoring

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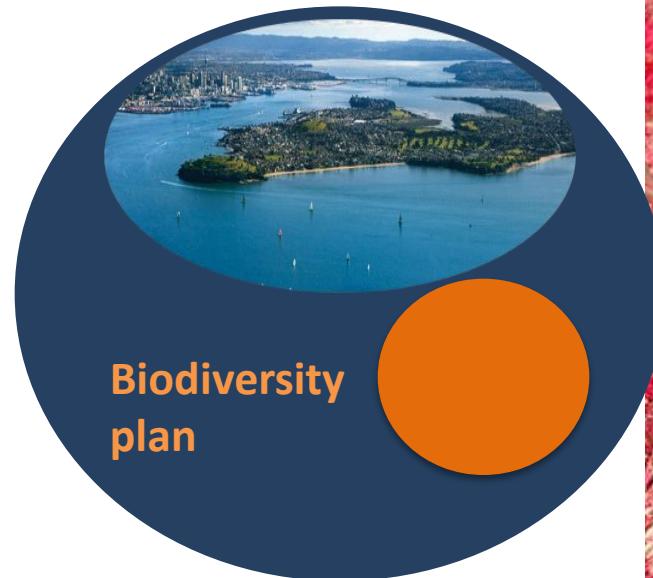


LANDCARE RESEARCH  
MANAAKI WHENUA

## Kaitiakitanga



## Western Planning



### Common approach

- Co-option of Mātauranga Māori
- Descriptors of Mātauranga Māori in plans but not enacted
- Mana Whenua not empowered



## Kaitiakitanga



## Western Planning



## Co-planning

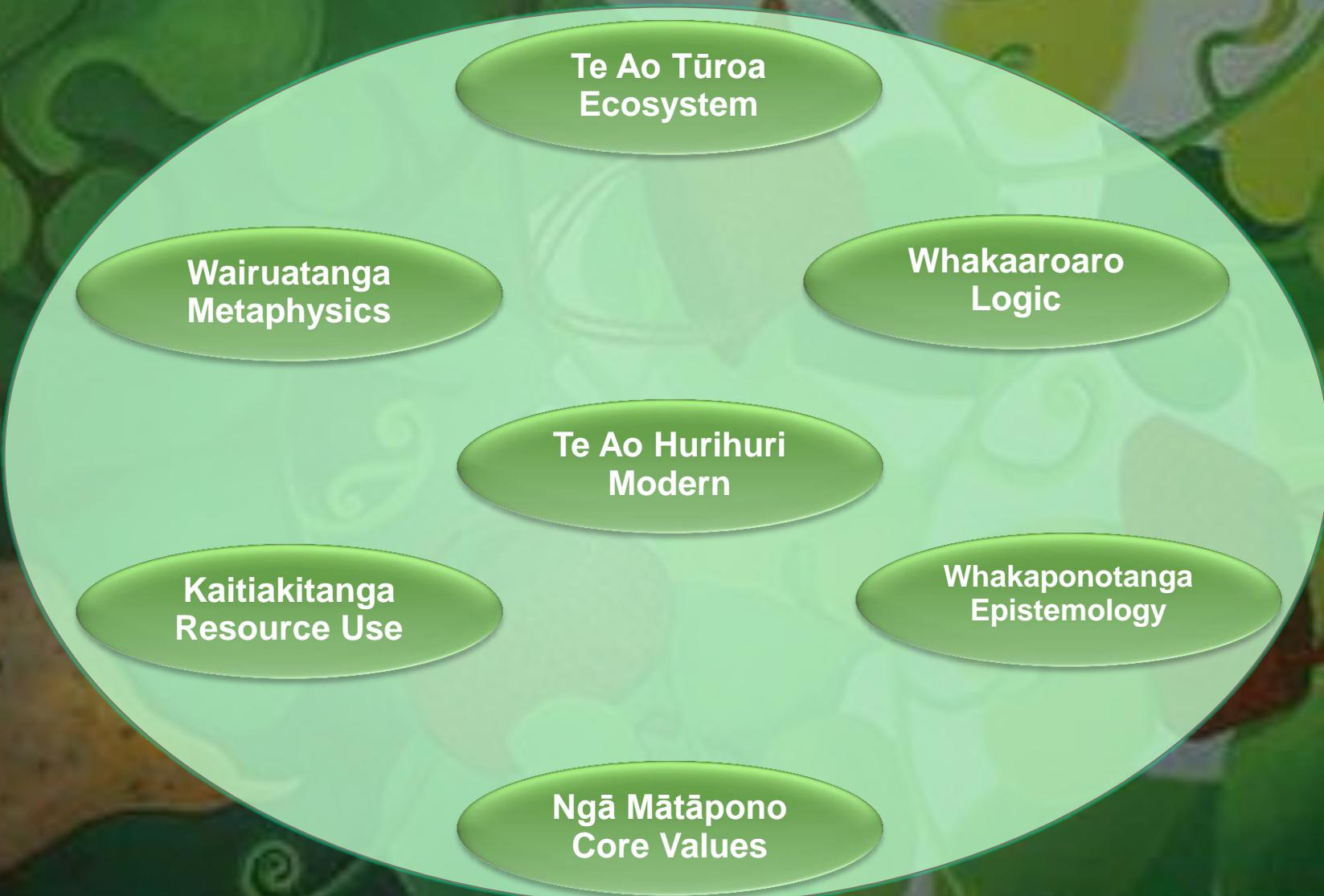
- Mana whenua empowered
- Mātauranga Māori acknowledged as valid
- Mātauranga Māori informed planning



Defining the Māori world view

# MĀTAURANGA MĀORI

# DEFINING MĀTAURANGA MĀORI

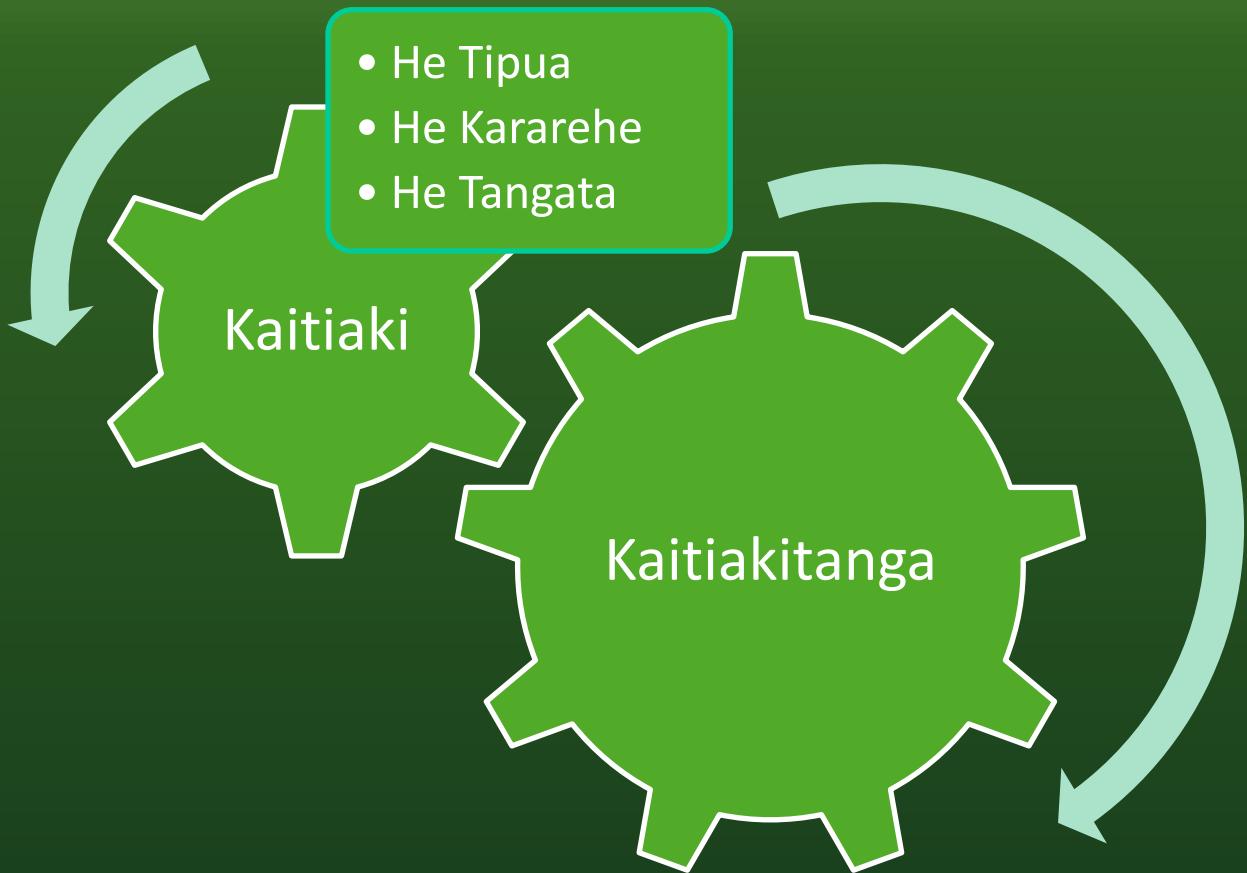


KAITIAKITANGA  
MANAAKITANGA  
WHAKAPAPA  
MANA WHAKAHARE



NGĀ MĀTĀPONO

Core Values



# KAITIAKITANGA

Sustainable Resource Management

Ngā Atua

Ngā Tangata Whenua

Ngā Iwi me ngā Hapū

Tangata Kaitiaki

He Aotūroa

# WHAKAPAPA

Interconnectivity

# PROVISION OF TAONGA SPECIES

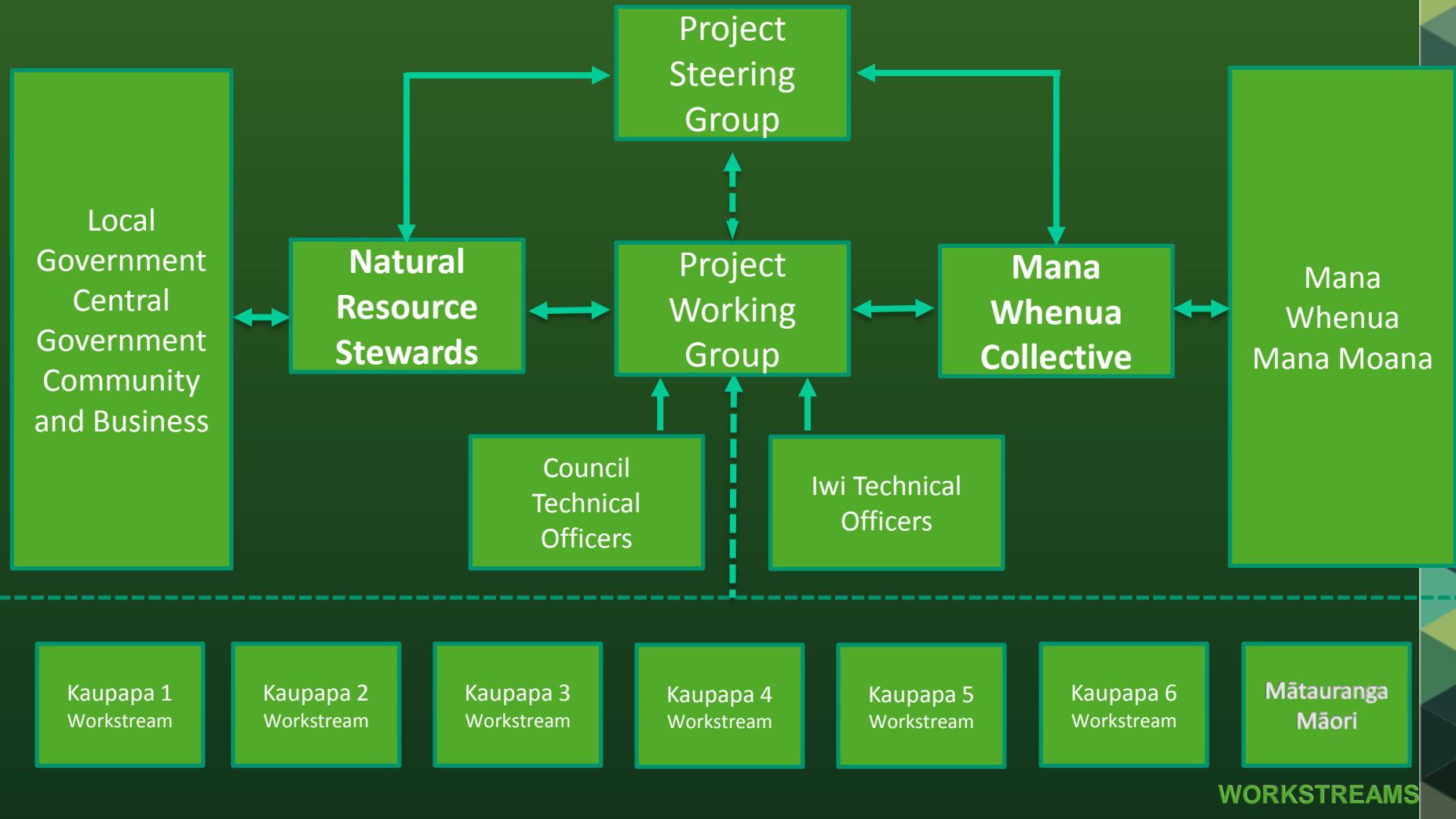


**MANAAKITANGA**  
Reciprocity

# MANA WHAKAHARE

Decision Making Rights

# Treaty of Waitangi collaborative planning framework for natural resources



Integrating Mātauranga Māori into Policy

**KIA WHAKAURU MĀTAURANGA**

# Kaupapa

Policy

- Ngā Wawata Outcomes
- Ngā Huanga Goals and Objectives
- Arotakenga Monitoring and Evaluation

**KIA WHAKAURU MĀTAURANGA**

Integrating Policy

Ngā  
Wawata

- A marae can provide traditional kai – tuna, tītī, and koura for manuhiri (manaakitanga)

Ngā Huanga

- Access to mahinga kai and sustainable catch/take limits
- Enhanced water quality
- Enhancing and Protecting Biodiversity

Arotakenga-  
taha wairua

- Cultural Health Index, Te Mauri model, identify change/trends in the state or mauri, presence/absence of kaitiaki/tipua

Arotakenga-  
taha tinana

- Nutrient management/reduction, Sustainable species management and practice, Mahinga Kai Reserves, Condition of cultural resources

# HE TAUIRA

An example

HE PĀTAI TĀU?  
HE WHAKAARO KĒ?