



Mātauranga Māori for planning and policy

Shaun Awatere (Ngāti Porou)

Landcare Research, Private Bag 3127, Hamilton
awateres@landcareresearch.co.nz

MĀTAURANGA MĀORI

MĀORI KNOWLEDGE



Mana Kaitiaki



- Kaitiakitanga
- Rangatiratanga
- Whakapapa

Western Planning

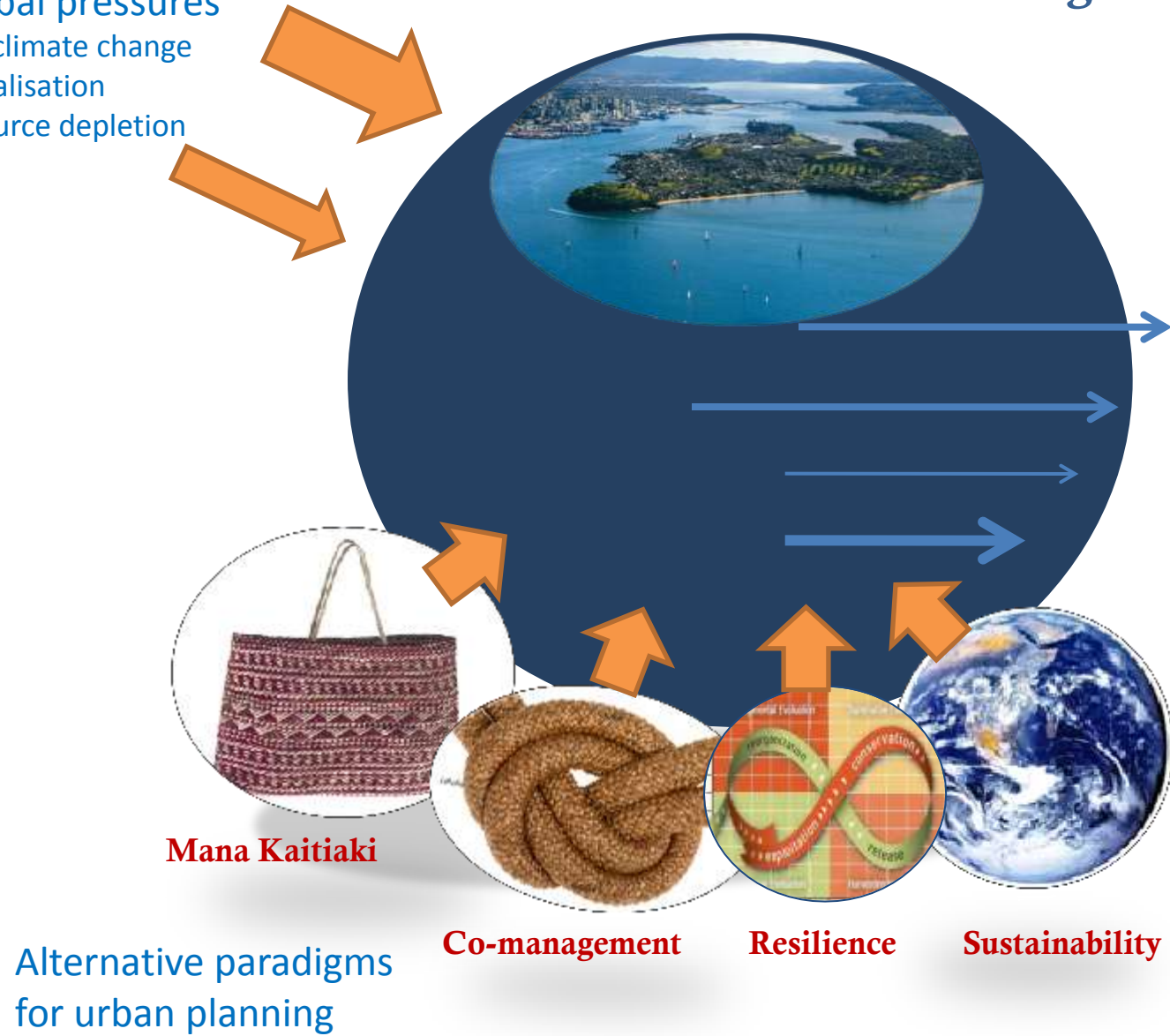


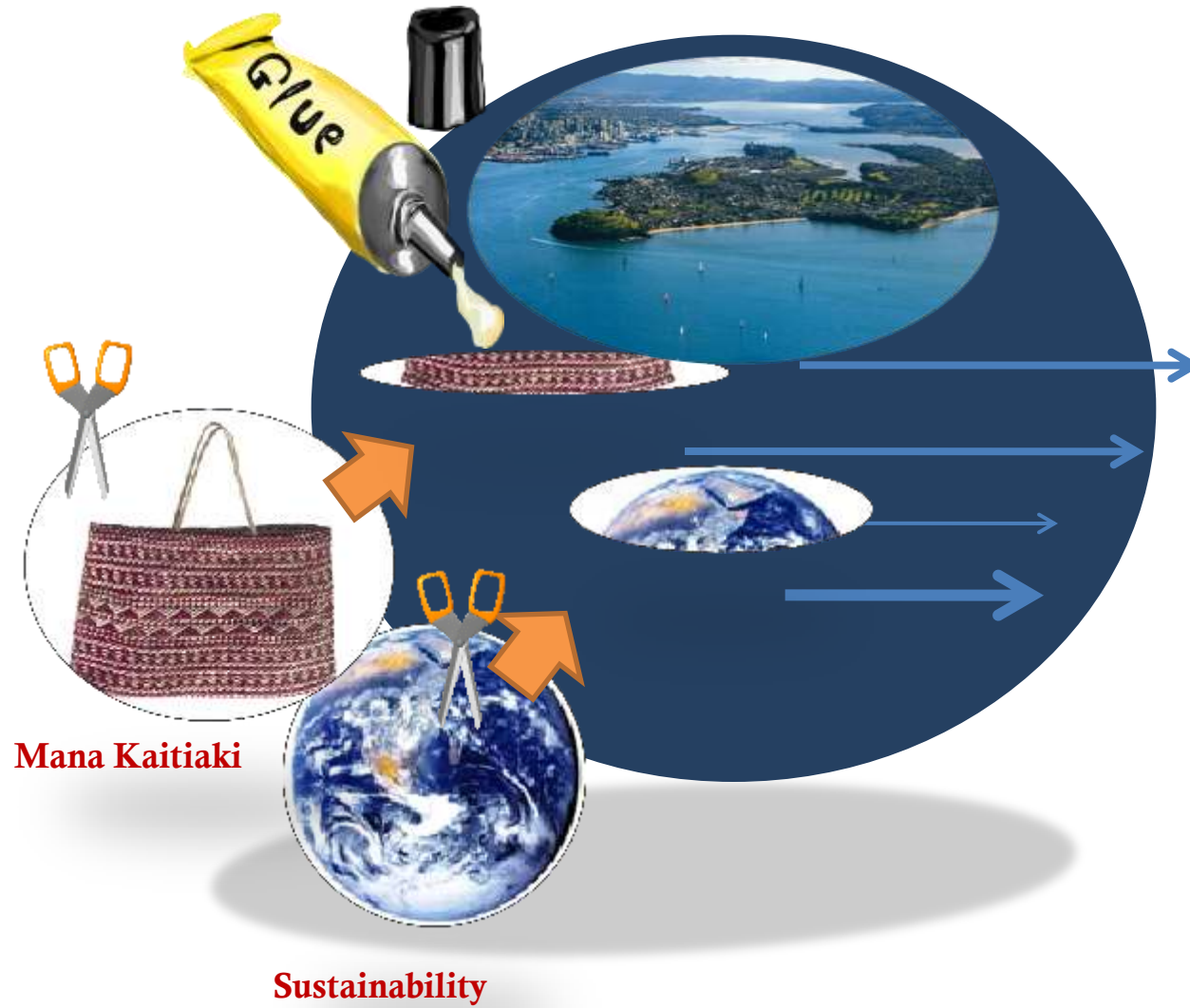
- Western-centric
- Neo-liberal economics
- Globalised economies



Global pressures
e.g. climate change
globalisation
resource depletion

Dominant Western Planning





Mana Kaitiaki



Western Planning



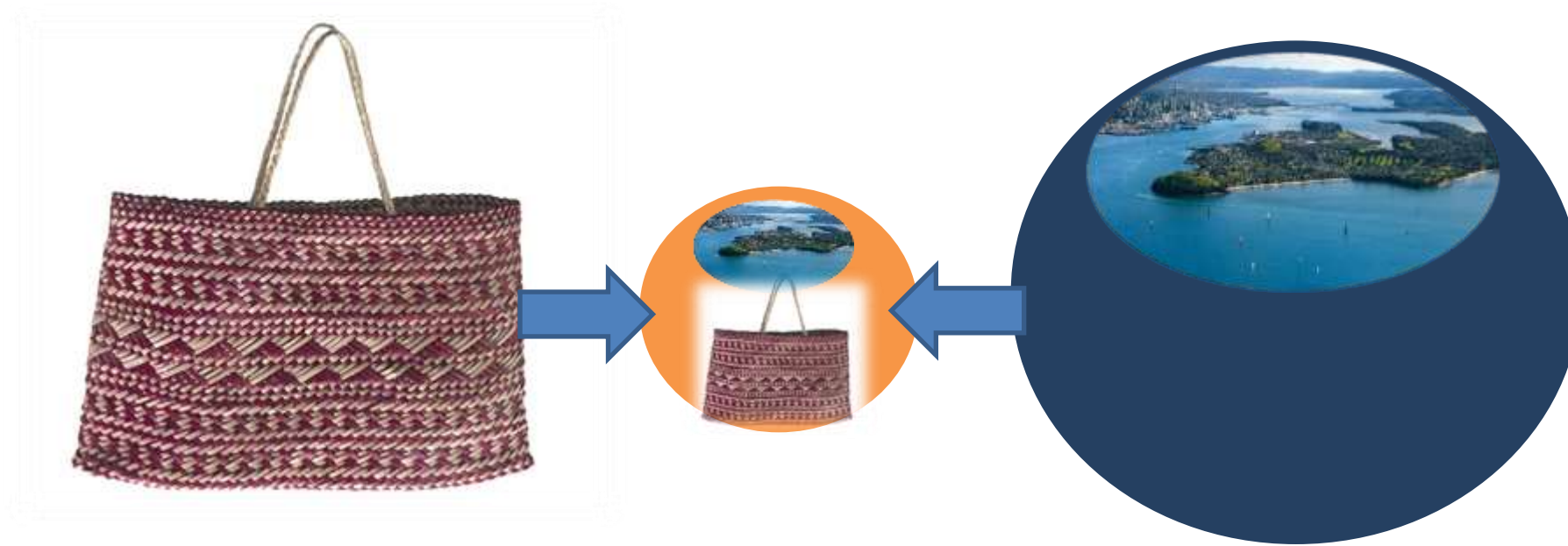
Common approach

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



Mana Kaitiaki

Western Planning



Co-planning

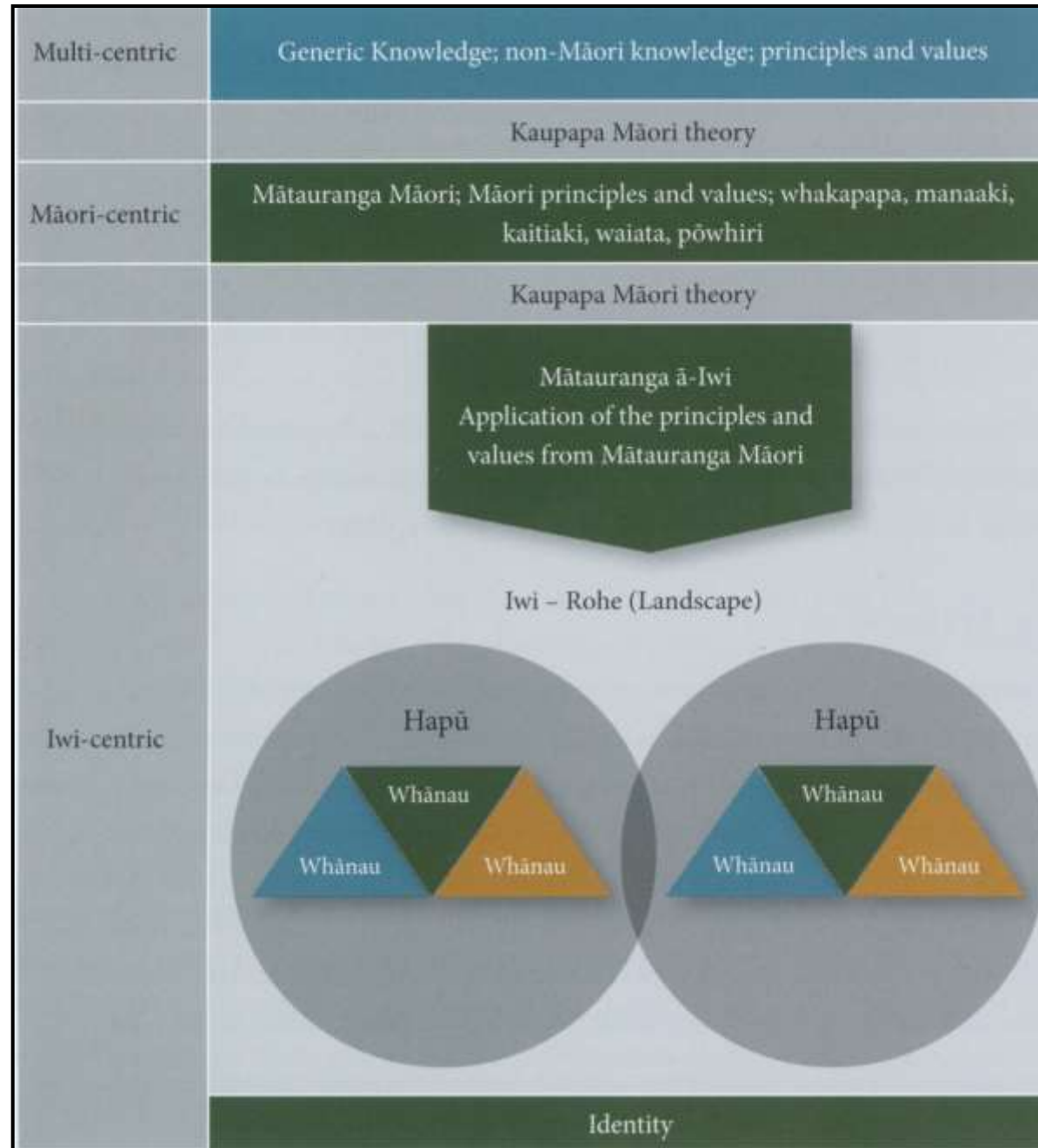
- Mana whenua empowered
- Mātauranga Māori acknowledged as valid
- Mātauranga Māori informed planning

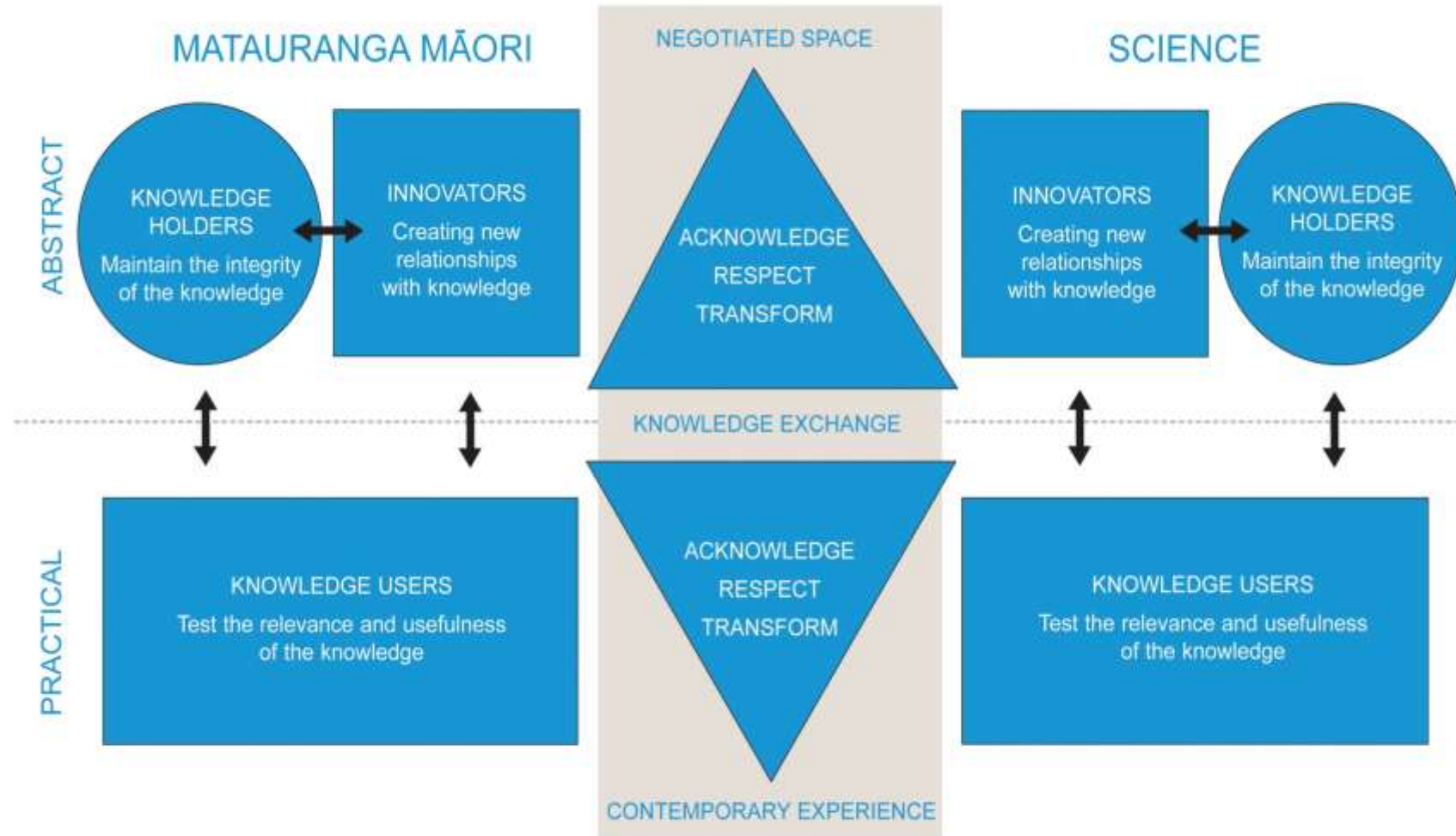


HE ANGA

FRAMEWORK







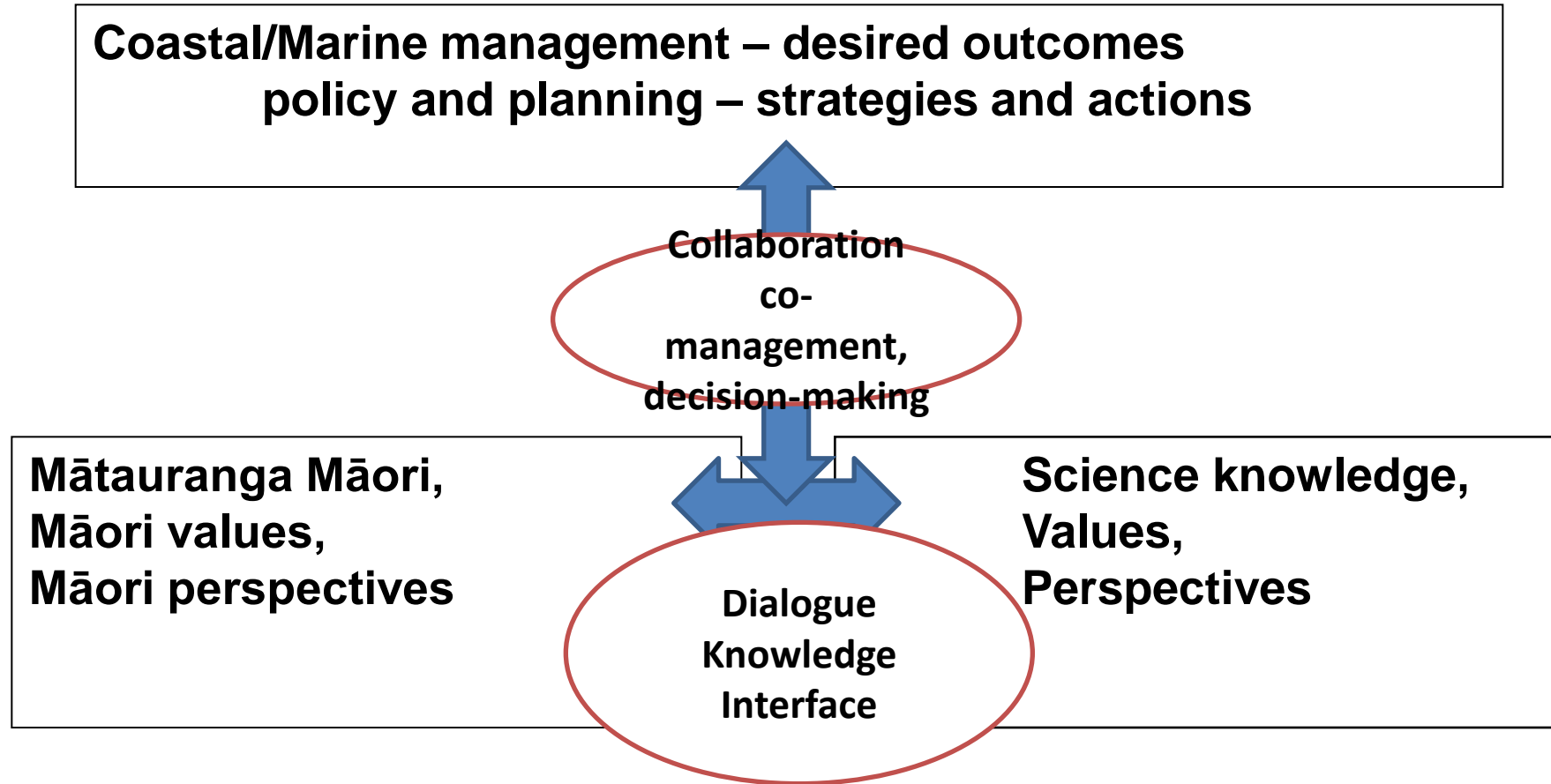
**Coastal/Marine management – desired outcomes
policy and planning – strategies and actions**

**Collaboration
co-
management,
decision-making**

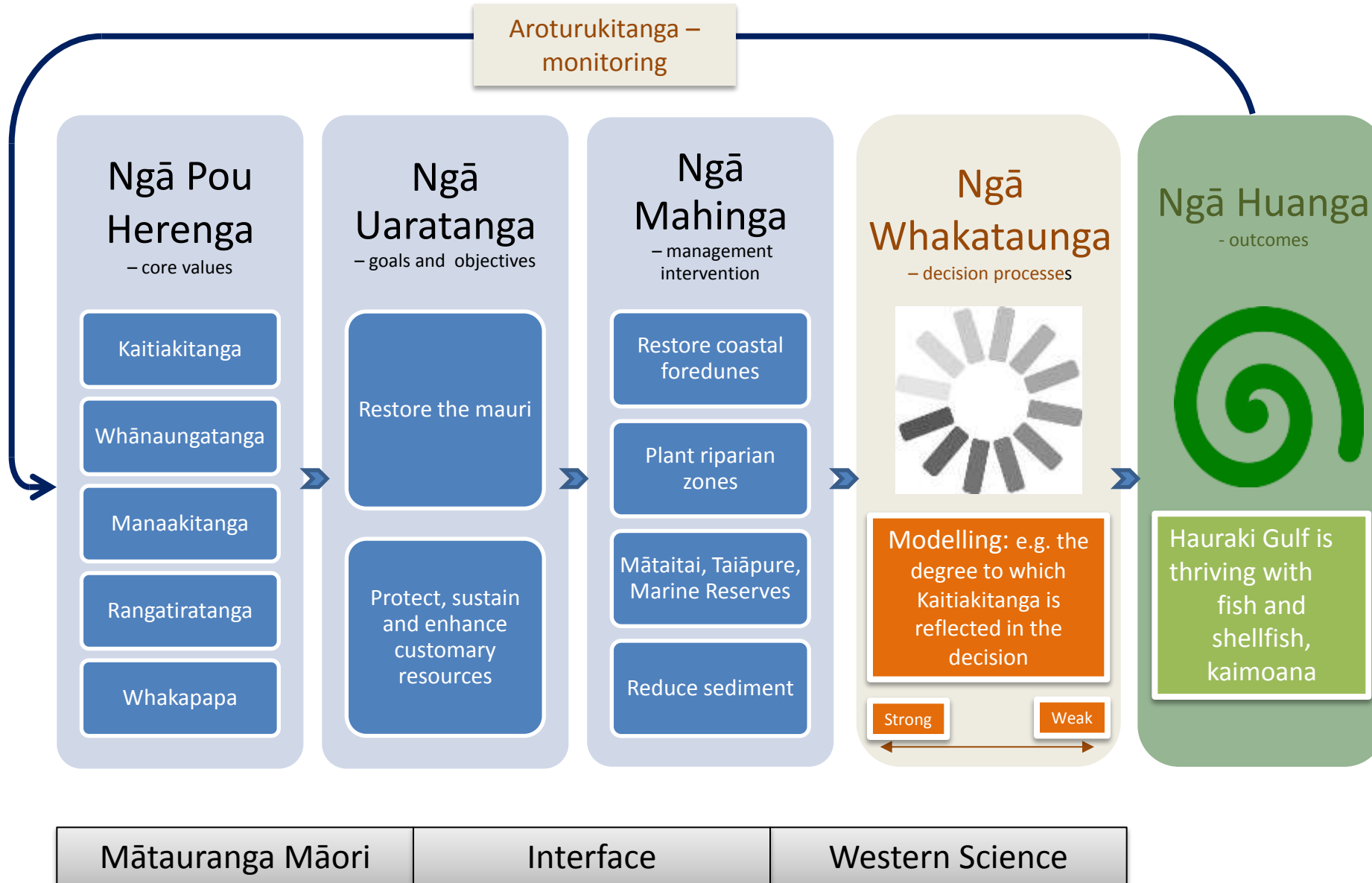
**Mātauranga Māori,
Māori values,
Māori perspectives**

**Science knowledge,
Values,
Perspectives**

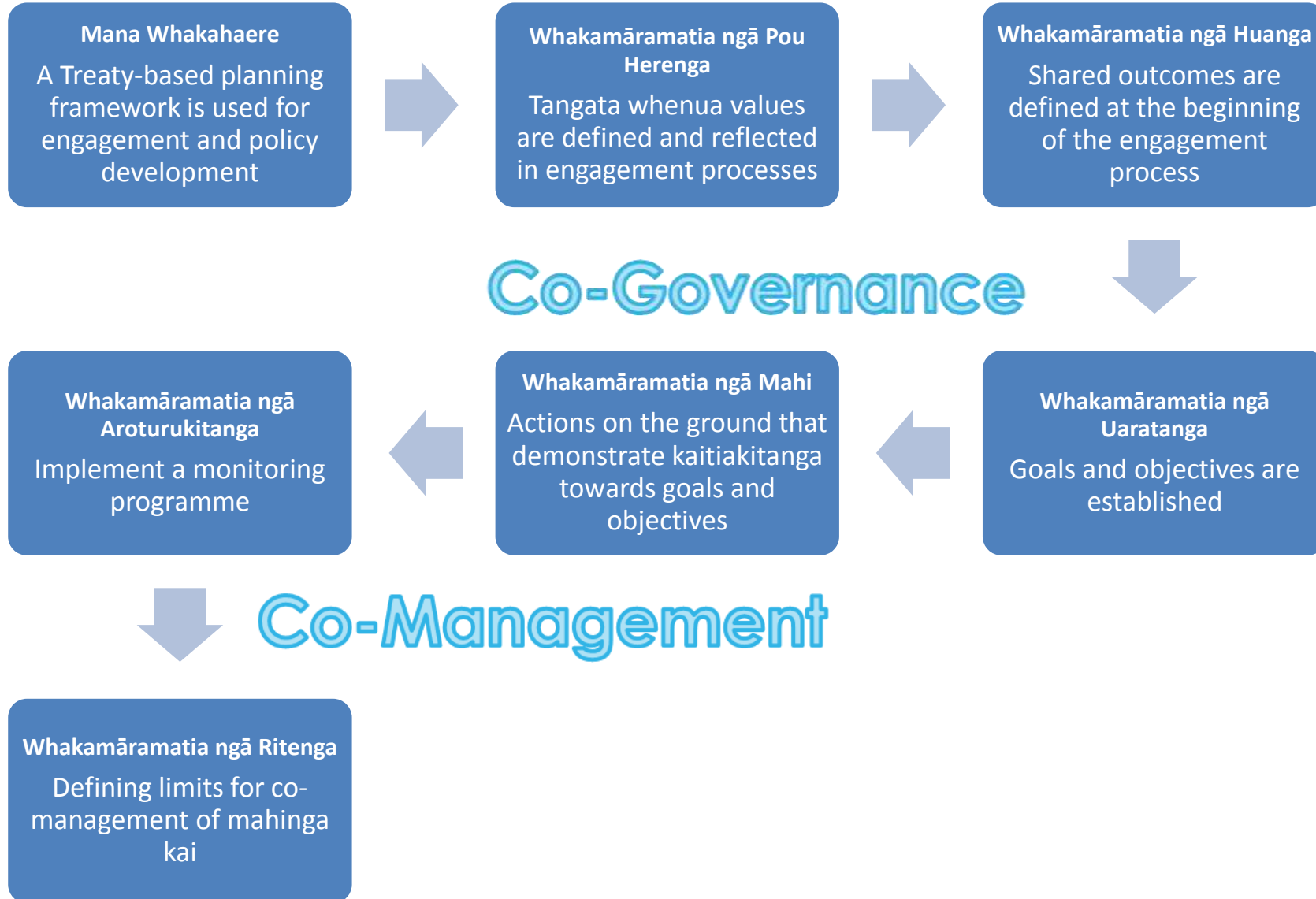
**Dialogue
Knowledge
Interface**



Mātauranga Māori and Modelling Interface



Tikanga Māori framework for policy

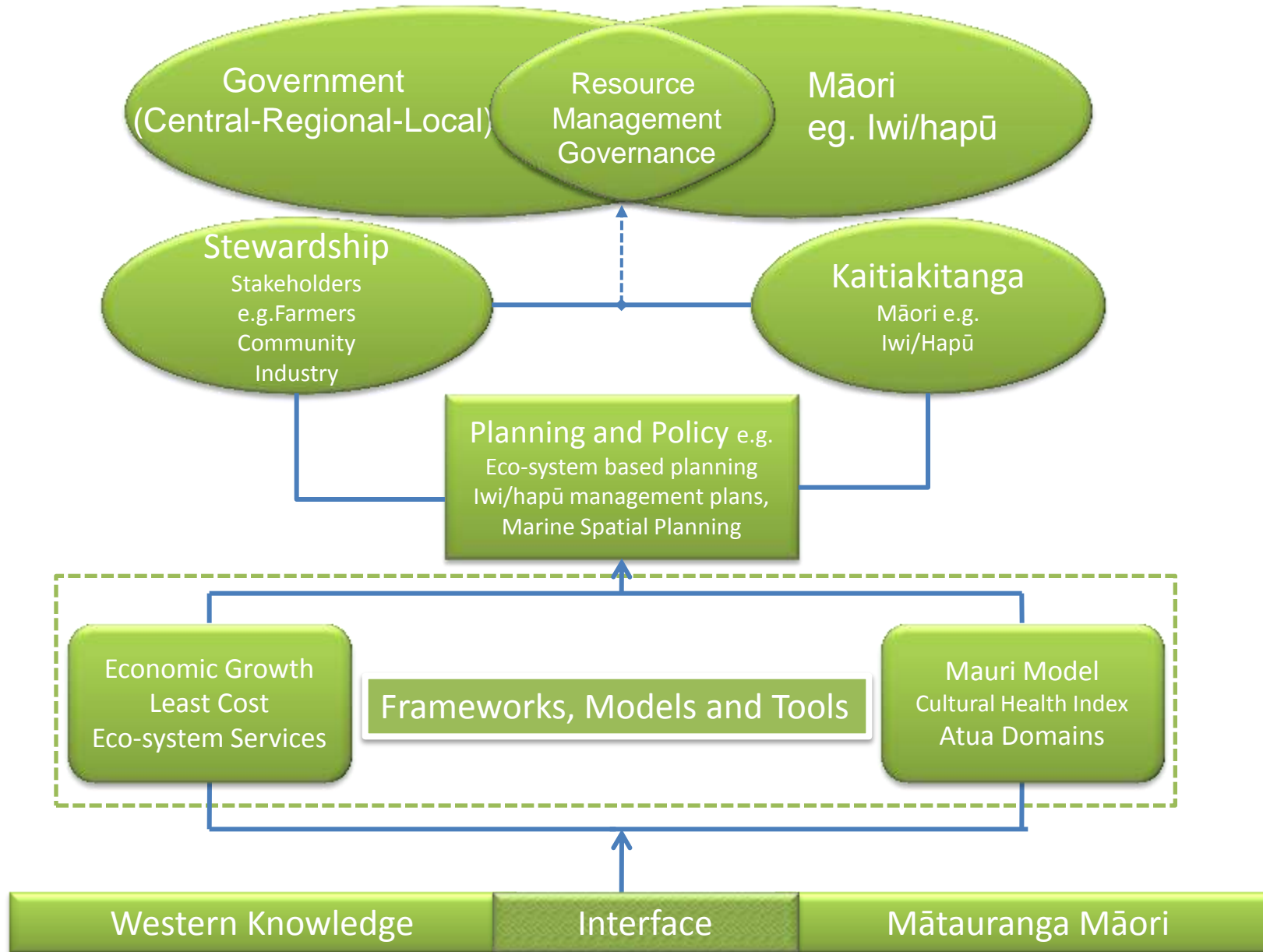


MANA WHAKAHAERE

TREATY BASED FRAMEWORK



Treaty Based Planning Framework



NGĀ POU HERENGA

CORE PRINCIPLES



Core Principles

- Whakapapa (cultural identity): Does the policy provide a connection to, and/or protect and enhance, the local ecology and iwi/hapū identity and integrity?



Core Principles

- Mana Whenua (authority): Does the policy acknowledge, recognise and provide for tangata whenua or tangata kaitiaki involvement?



Core Principles

- Kaitiakitanga (sustainable resource management): Does the policy reduce the discharge of waste and pollution to air, land, and water?



Core Principles

- Wairuatanga (spirituality): does the policy enhance the spiritual well-being of our coastal/marine environment? If the mauri or life force of our natural environment is strong then we too as a people are strong.



Core Principles

- Manaakitanga (nurturing relationships):
Does the policy nurture and care for our coastal/marine environment in order to furnish us with the resources we require to provide hospitality to our manuhiri, kaumātua and whānau members.



Core Principles

- Whānaungatanga: (community development): Does the policy provide work and business environments where iwi/hapū and manuhiri alike are welcome, encouraged, and proud to be involved?



NGĀ MOEMOEĀ

THE VISION AND OUTCOMES



Hauraki Gulf Forum

- Tikapa Moana / Te Moananui a Toi, the Hauraki Gulf is “celebrated and treasured”, is “thriving with fish and shellfish, kaimoana”, has a “rich diversity of life”, supports a “sense of place, connection and identity” and a “vibrant economy”.

Integrated Kaipara Harbour Management Group

- Common Vision: A healthy and productive Kaipara Harbour





Landcare Research
Manaaki Whenua

NGĀ UARATANGA

GOALS & OBJECTIVES



IKHMG Objectives

- 1) To protect and restore native biodiversity,
- 2) To restore sustainable use of fish and invertebrate stocks,
- 3) To protect and restore the Mauri of Kaipara,
- 4) To increase understanding of Climate Change impacts,
- 5) To promote socio-economic opportunities, and
- 6) Integrated co-management of Kaipara ecosystems, catchment and harbour.



Hauraki Gulf Act 2000

- The protection and, where appropriate, the enhancement of ...
 - the life-supporting capacity of the environment and the natural, historic and physical resources of the Hauraki Gulf...
 - those resources with which tangata whenua have an historic, traditional, cultural, and spiritual relationship
 - those resources which contribute to the recreation and enjoyment of the Hauraki Gulf for the people and communities of the Hauraki Gulf and New Zealand.
 - the social and economic well-being of the people and communities of the Hauraki Gulf and New Zealand
- The protection of the cultural and historic associations of people and communities in and around the Hauraki Gulf with its natural, historic, and physical resources



NGĀ INENGA

CULTURAL MONITORING TOOLS



Links between science and cultural indicators



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

Māori knowledge based	Community – scientific based	Scientific based
<p>Māori indicators – In depth Māori understanding and knowledge of particular environments. Understanding of Māori values, goals, and aspirations required. Examples:</p> <ul style="list-style-type: none"> • Taonga lists; • Key sensitive taonga indicators; • Te Mauri/ wairua; • Knowledge on uses and preparation of taonga; • Land-uses, point discharges, modification, impacting on cultural values and uses. • Key pest species 	<p>Community based indicators – requiring low levels of technical input and skill but scientifically robust and part-value based. Cost effective, relatively simple and short duration. Examples:</p> <ul style="list-style-type: none"> • Hydrology; • Soils/Nutrients; • Intactness of wetland; • Connectivity/Buffering or Fragmentation; • Introduced plants; • Animal damage; • Modifications to catchment hydrology; • Water quality within catchment; • Other landuse threats; • Key undesirable species; • % catchment in introduced vegetation; • Animal access. 	<p>Scientific indicators – requiring higher levels of technical input and skill, robust sampling strategies, analysis and interpretation. May be time consuming. Examples:</p> <ul style="list-style-type: none"> • Chemistry, water quality, nutrients; • Hydrology; • Water table modeling; • Botanical mapping, classification of plants; • pH; • Bacterial counts; • Giardia; • Cryptosporidium; • GIS applications; • Satellite imagery; • Studies of fish, macro-invertebrates, macrophytes.



Cultural Monitoring

- Provides a Māori perspective on how the environment is changing – Based on Māori values
- Identifies issues from Māori perspective
- Measures progress towards Māori goals and aspirations (outcomes)
- Use of mātauranga Māori (knowledge) and Māori values (relationship or connection to place)
- Use of indicators and assessment
- Links environmental health to Māori wellbeing
- Provides a basis for planning, policy and reporting
- Necessary to implement and monitor actions and activities (e.g., restoration projects, mahinga kai, capacity building, GIS)



Integrating Māori Values into Policy

WHAKATAKOTO MAHERE



Integrating Maori values into Policy

- Recommend starting at a high level
 - Outcomes
 - Goals/objectives
 - Monitoring
 - Indicators
- Values inform all aspects of policy

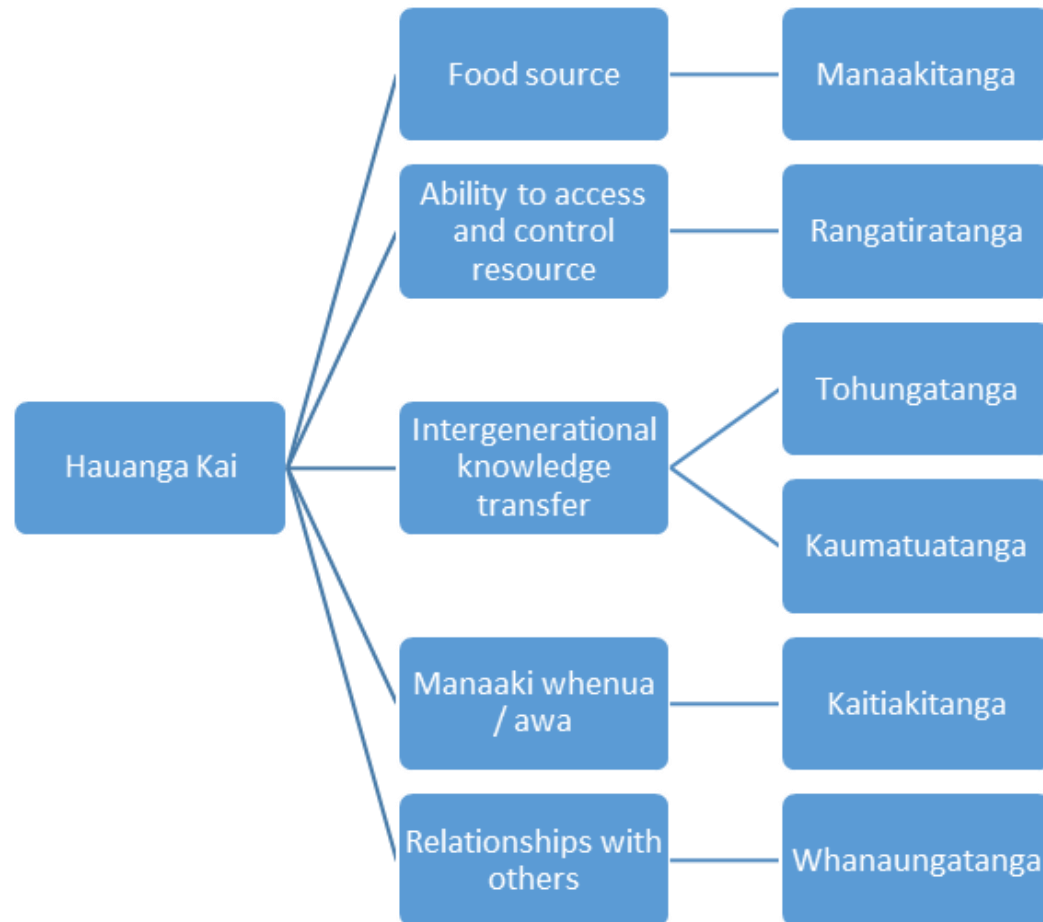


Integrating Maori values into Policy

- Outcome: A marae can provide traditional kai – pipi, kūtai, kina, koura, for manuhiri(manaakitanga)
- Goals/Objectives
 - Access to mahinga kai
 - Sustainable catch limits
 - Water quality
- Monitoring
 - Performance Measures
 - Cultural Health Index, Te Mauri model, identify change/trends in the state or mauri
 - Management Variables
 - Nutrient management/reduction, Sustainable fisheries management and practice, Marine Reserves, Condition of cultural resources



Another example: Why are mahinga kai important?



He Pitopiko Korero: Logic Wheel



Unitary Plan Objectives

- 1. Mana Whenua values and interests, mātauranga and tikanga are properly reflected and accorded sufficient weight in resource management decision-making.
- 2. The mauri and the relationship of Mana Whenua with freshwater, geothermal, land, air and coastal resources is enhanced.
- 3. Mana Whenua is involved and empowered in the management of natural resources.
- 4. The relationship of Mana Whenua and their customs and traditions with areas scheduled for natural heritage values is recognised and provided for



Unitary Plan-Policies

1. Enable Mana Whenua to identify and articulate their values and interests associated with:

- a. ancestral lands, biodiversity, water, air, coastal sites, wāhi tapu and other tāonga
- b. freshwater, including rivers, streams, aquifers, lakes, wetlands and associated values
- c. air, geothermal and coastal resources.

2. Integrate Mana Whenua values and interests, mātauranga and tikanga:

- a. in the management of natural and physical resources within the ancestral rohe of Mana Whenua, including ancestral lands, biodiversity, waters, sites, wāhi tapu and other tāonga
- b. in the management of freshwater and coastal resources, such as the use of rāhui to enhance ecosystem health
- c. to find innovative solutions to remedy the longterm adverse effects on historical, cultural and spiritual values from discharges to freshwater and coastal water
- d. in resource management processes and decisions relating to freshwater, geothermal, land, air and coastal resources.

3. Provide opportunities for Mana Whenua to be involved in the integrated management of natural resources in ways that:

- a. recognise the holistic nature of the Mana Whenua world view
- b. recognise any protected customary right in accordance with the Marine and Coastal Area (Takutai Moana) Act 2011
- c. restore or enhance the mauri of freshwater and coastal ecosystems.

4. Establish:

- a. minimum water quality standards for freshwater, including groundwater, and coastal water
- b. maximum allocation limits for freshwater resources, including groundwater that incorporates Mana Whenua values and interests in addition to the ecological values of the water resource



Integrating Maori values into Policy

- Positive working relationships
- Capability development
- Mātauranga Māori is context specific
- Achieves joint aspirations/outcomes
- What is the role of property rights?



NGĀ INENGA

CULTURAL MONITORING TOOLS



Ngā Atua domains framework

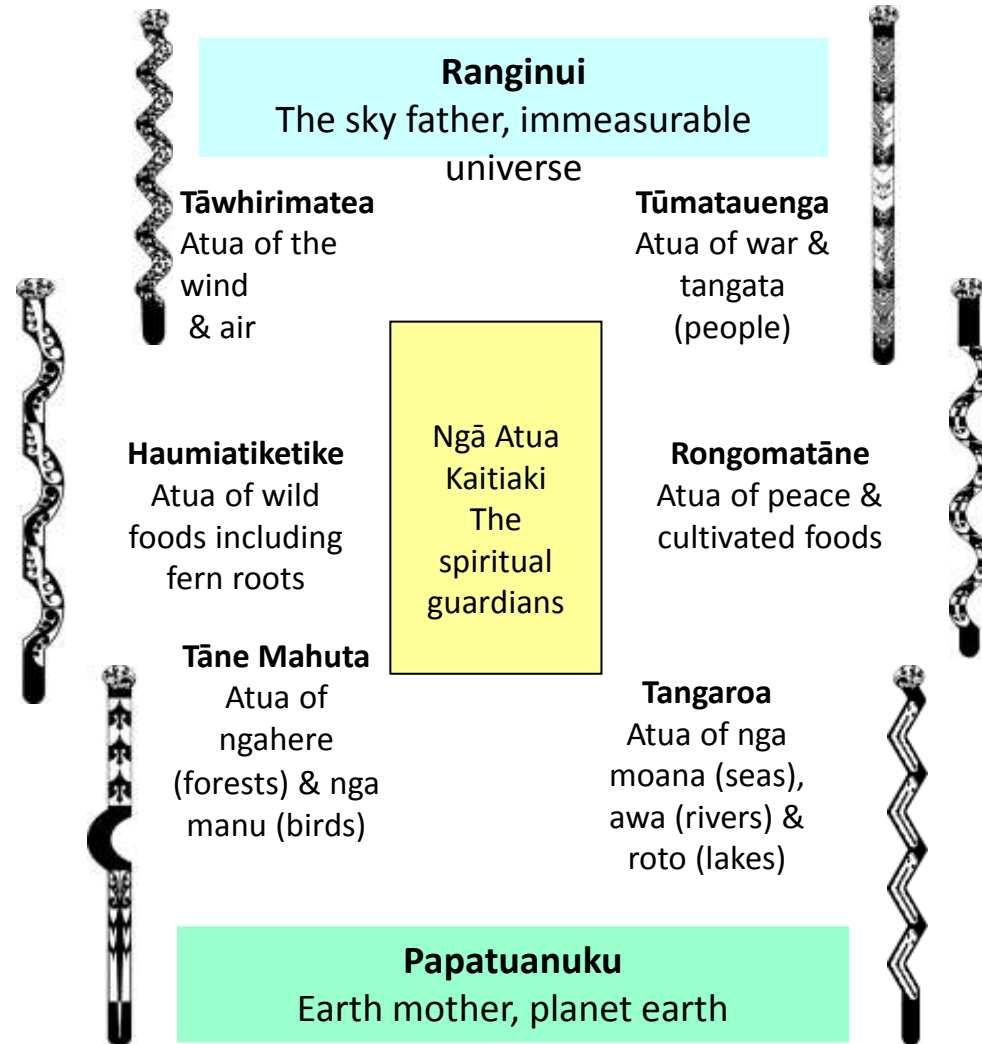


Figure 1: Atua (departmental gods) domain framework
Source: Tiakina te Taiao.

Indicators (examples)

Tangaroa

- Water Quality
- Shape and form of coast, condition, sediment
- Insects
- Fish, Shellfish

Tāne Mahuta

- Riparian vegetation
- Catchment vegetation
- Bird life (species)
- Ngahere/Taonga
- Pests

Haumia tiketike

- Mahinga kai
- Rongoa

Tūmatauenga

- Human activity, Use of river
- Access
- Cultural sites

Tāwhirimātea

- Smell

Mauri / Wairua

- Feeling, taste, wellbeing

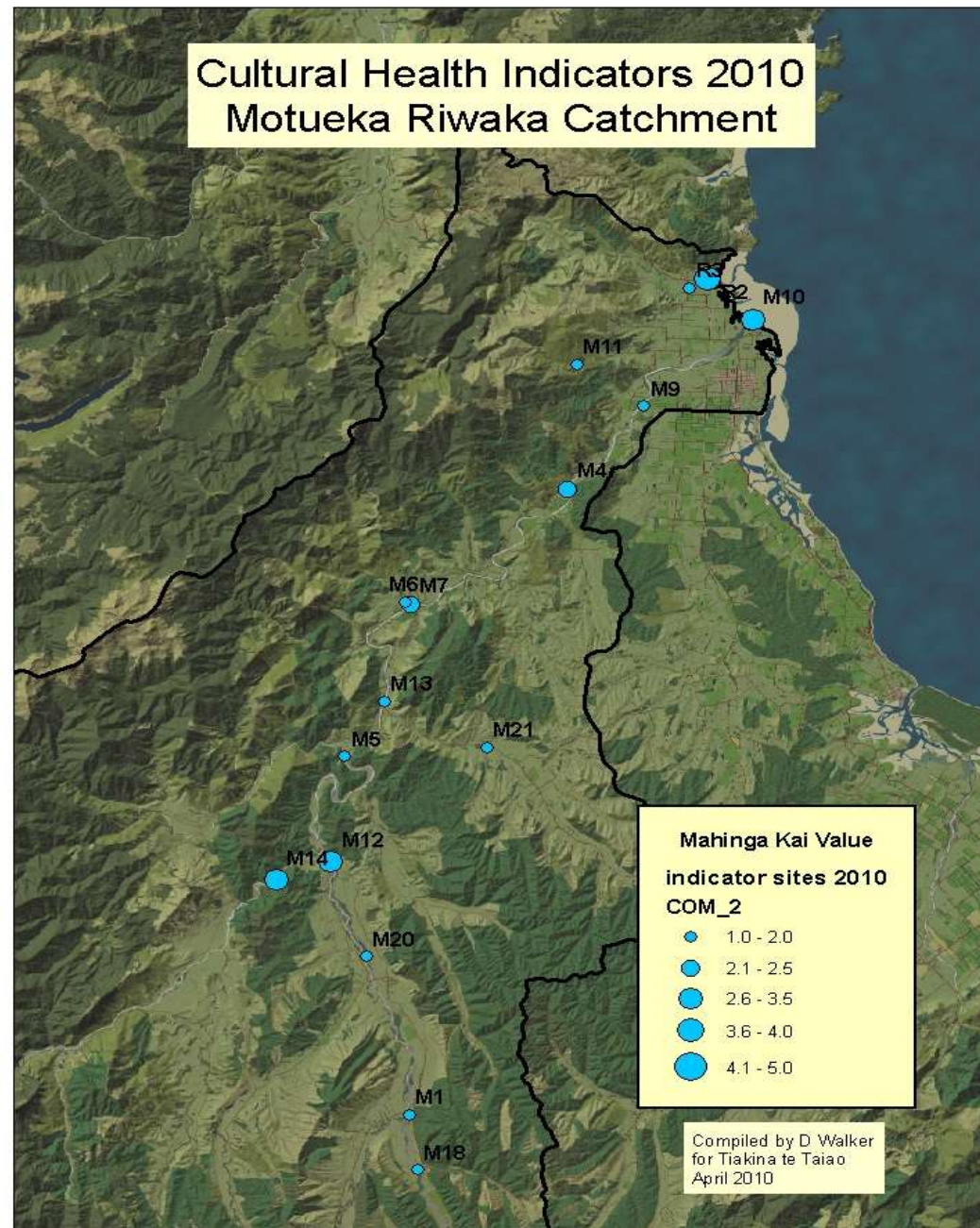
The iwi monitors in the field



Indicator assessment and recording



Cultural Health Indicators 2010 Motueka Riwaka Catchment



Cultural Health Indicators 2010 Motueka Riwaka Catchment

