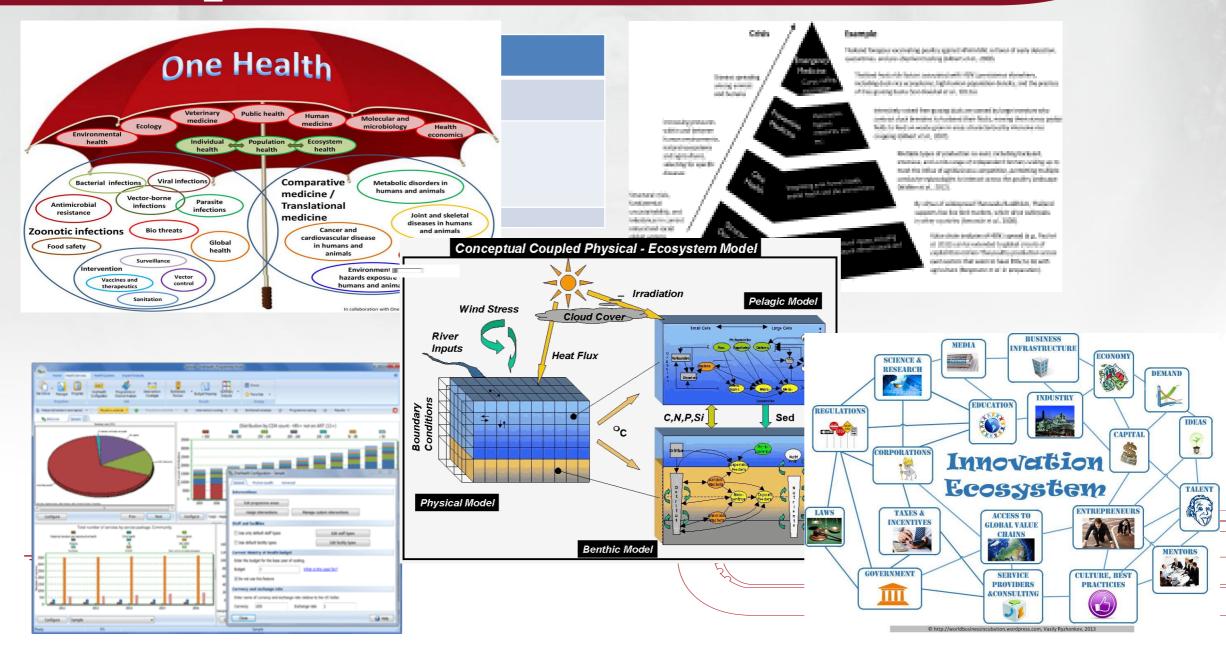


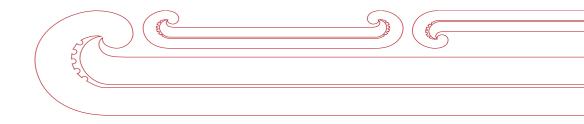
Complex?





Health

- WHO
- Ottawa Charter
- Bangkok Charter for Health Promotion
- Te Wheke
- Whare Tapa Wha
- Te Pae Mahutonga



...and environments?

Life principle, life force, vital essence, special nature, a material symbol of a life principle, source of emotions — the essential quality and vitality of a being or entity. Also used for a physical object, individual, ecosystem or social group in which this essence is located.





Approaches

Mauri; framework, indicators

CHI – UCHI

Cultural Flows







A Maori ecosystem

Ki uta ki tai

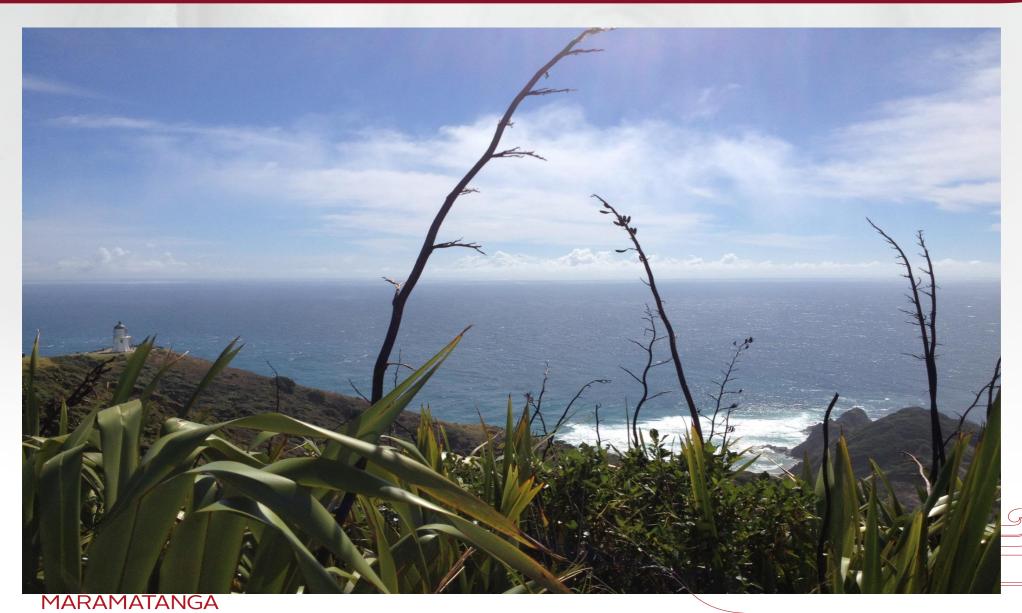
Tangata whenua

...mauri, wairua, whanau, kaitiakitanga....



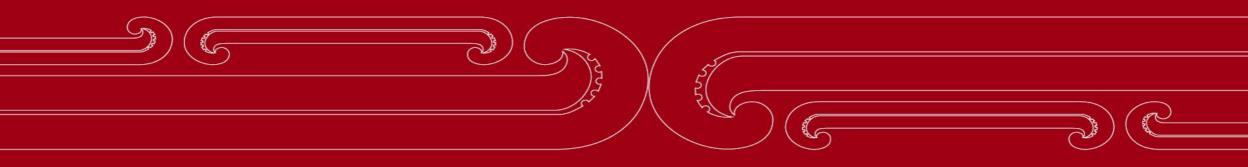


Living with complexity





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The research

- Action research cycles
- Methods vary from site to site; interviews, monitoring and evaluation of initiatives.
- Key outcome: provide sustainable solutions (cultural, economic, social and environmental) for the benefit of the numerous stakeholders, their whānau and the wider community.





Mauri and wellbeing



Cultural monitoring, Te Uri o Hau, Kaipara



Table. Links between values, objectives, monitoring, and actions to sustain or enhance the mauri

Values	Objectives	Performance measures/tools	Management variables (examples)
Kaitiakitanga Mauri Mahinga kai	Restore the mauri of freshwater to a standard Sustain/enhance cultural resources, mahinga kai, taonga spp. Define standards/limits/ above bottom lines to support cultural values, life supporting capacity, ecological integrity, and ensure human wellbeing	Monitoring such as CHI and mauri assessment — identify change/trends in the state or mauri, or other indicators e.g. taonga spp. Condition of cultural resources, taonga spp., mahinga kai	Catchment management, Riparian, planting, landuse, erosion, Nutrient management/reduction Water clarity & sed Pathogens (e.g., E coli) Stock exclusion Connectivity Habitat extent and condition

Māori iwi/hapū networks

- lwi/hapū projects explore associations between environmental actions and health
- Wananga, hui community engagment
- Kaupapa Maori Participatory Action Research
- Study sites: Te Hiku, Waitaki





Te Hiku o Te Ika: approach

- Post-settlement collective and individual lwi in planning mode; aspirations, knowledge, experience, new structures informing strategies
- Social, cultural and economic factors alongside environment
- Te Hiku Taiao research symposium Researchers, iwi, community, funders; understanding, potential collaborations





Te Hiku o Te Ika initiatives: linked projects

- Tāngonge and Dune lake restorations, Climate change, Warawara pest control
- Noho taiao; reclaiming local learning spaces and places
 - NPM Pūtaiao seeding grant
 - NPM summer studentship
- Integrated support and action







Waitaki initiatives

- Whanau based approaches
- Waitaki water allocation
- Multiple new projects









Initial explorations with whanau groups in the Waitaki

Quality outcomes enhance Whanau wellbeing

Creative initiatives and improved resource use

Whanau engagement with the catchment

Cultural/environmental outcomes		Research into practice		Matauranga generation & use			
Whanau initiatives across the catchment			Enhance Whanau kaitiaki capacity				
Reintroduce weka √			Replant riparian margins & sensitive areas (started with Takiroa) 🗸				
Restore Takiroa as a signficant cultural landscape ✔			Strategic partnerships (eg irrigation company seeking international accreditation) ✓				
Whanau engagement in monitoring			Increase visible presence of Ngai Tahu whanau across the landscape (seeking new nohonanga) ✓				
Eel study, Ahuriri WCO, Mataitai							
Innovate							
Resource use innovation		New ideas	Share innovations with Ngai Tahu whanui		Explore commercial options (e.g using mahinga kai allocation)		
Enable Our Whanau		Support Sustainable Infrastructure		Pathways to financial Independence			
Skill growth and leadership J	Build ca	pacity 🗸	improved resource use efficiency ✓	Assisted Assisted whanau to secure funding to en negotiation asset holding (mahinga kai water allocation)		_	
Support whanau engagement √	_	ize good tice √		outcomes √	Resource consent for the mahinga kai allocation still required		
Promote intergenerational learning J							

Develop a "reference condition" of Ngai Tahu wellbeing in the Waitaki



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