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# Integrated Freshwater Solutions

## Changing Conversations – Changing Outcomes

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# Content

## Part I

- The Integrated Freshwater Solutions (IFS) project – a case study of collaboration on the Manawatū River

## Part II

- Changing conversations – changing outcomes?

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# The Manawatū River Catchment

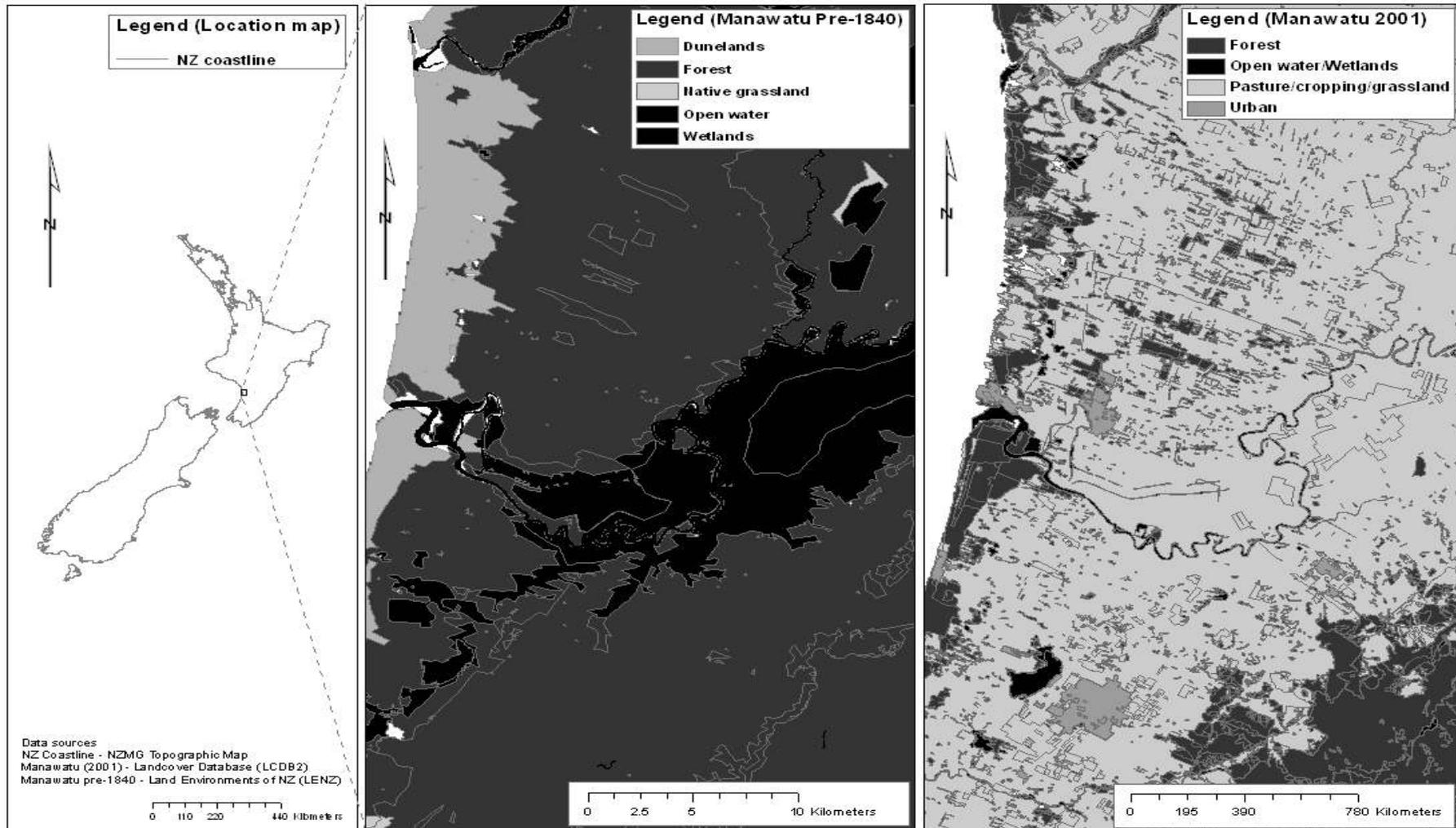


# Manawatū River

- Total catchment area 594,400 ha
- Unique river as it cuts through a mountain range to get to the sea
- 9 sub-catchments: 4 highly erosion prone
- ~133,000 people, ~320,000 cows, many sheep



# Manawatu land cover: Pre- and Post Settlement



# 2009 Headline: ‘Manawatū New Zealand’s River of Shame’ – Case for Action and Collaboration

## Integrated Freshwater Solutions

- MBIE funded applied research programme (2010 – 2013)
- End-user collaborative research involving: Iwi/hapū (Māori tribe/sub tribe), local government, farming, business and environmental stakeholders
- Integrating economic, environmental, social and cultural interests
- Adaptive management and capacity building
- Utilising a modelling toolkit to facilitate dialogue

## Manawatū River Leaders’ Forum

- Regional Council initiated programme
- End-user collaborative goal setting and action planning with: Iwi/hapū government, farming, business and environmental stakeholders
- Integrating economic, environmental, social and cultural interests
- Delivery of a Leaders’ Accord (signed off in July 2010)
- Delivery of an Action Plan (6 months October 2010 – March 2011, signed off in July 2011)

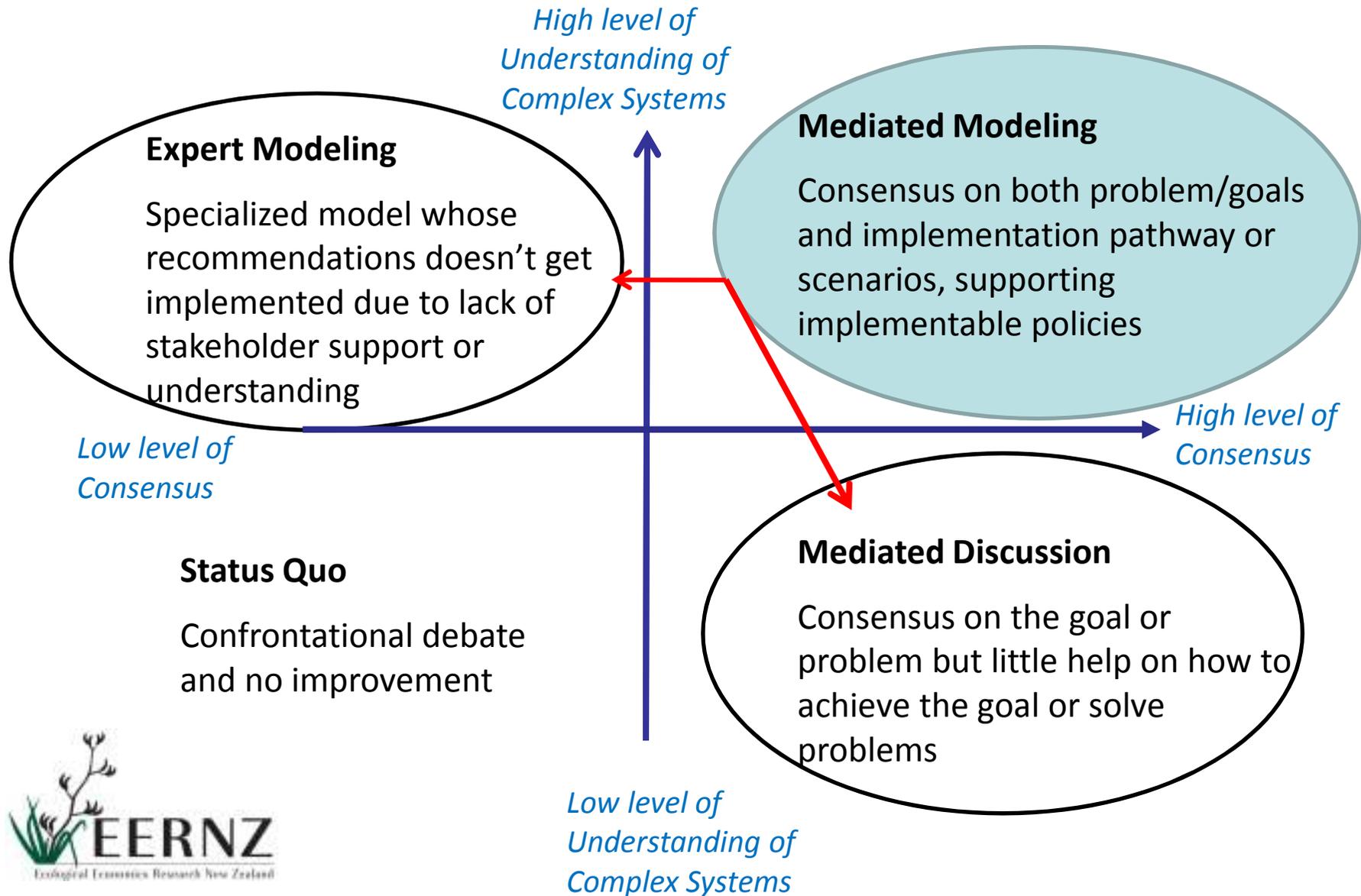
# Leaders' Accord - Goals

- The Manawatū River becomes a source of regional pride and mana (status)
- Waterways in the Manawatū Catchment are safe, accessible, swimmable, and provide good recreation and food resources
- The Manawatū Catchment and waterways are returned to a healthy condition
- Sustainable use of the land and water resources of the Manawatū Catchment continues to underpin the economic prosperity of the Region

# Chosen Approach: Mediated Modelling

- A series of workshops with up to 20 stakeholders – additional numbers can be managed through different tools
- Commitment per stakeholder of about 50 hours
- Considering facts, beliefs, and trade-offs
- Develops a scoping model that can be used for ‘what-if’ scenarios
- Communication tool to explain complex trade-offs
- Spread over variable period:
  - 6 months to support the development of an action plan
  - 1 to 2 years to develop adaptive capacity

# Adaptation of Chosen Approach



# The Action Plan

- Delivered on time
- 6 Key Action Groups, addressing:
  - Sedimentation, non point and point discharges, habitat loss, water allocation, river engineering
- 130 Tasks
- Signed off by all stakeholders
- Successful application to government's 'Fresh Start for Fresh Water Fund' – bringing an additional \$ 5.2m to the region
- A commitment to implementation
- Transparency

**The Question: Will it deliver the desired outcomes?**

# What the Model Indicates

- Upward trend of nitrogen runoff likely to continue, due to more dairy intensification
- Nitrogen management through mitigation is expensive
- Upward trend of sediment runoff could be reversed due to Sustainable Land Use Initiative, however additional effort is required
- Ecosystem services are included in the model and provide a space for additional conversations about 'values propositions' to strengthen the case for action

# Part II

## Changing Conversations – Changing Outcomes?

# The Opportunity to Keep Advancing

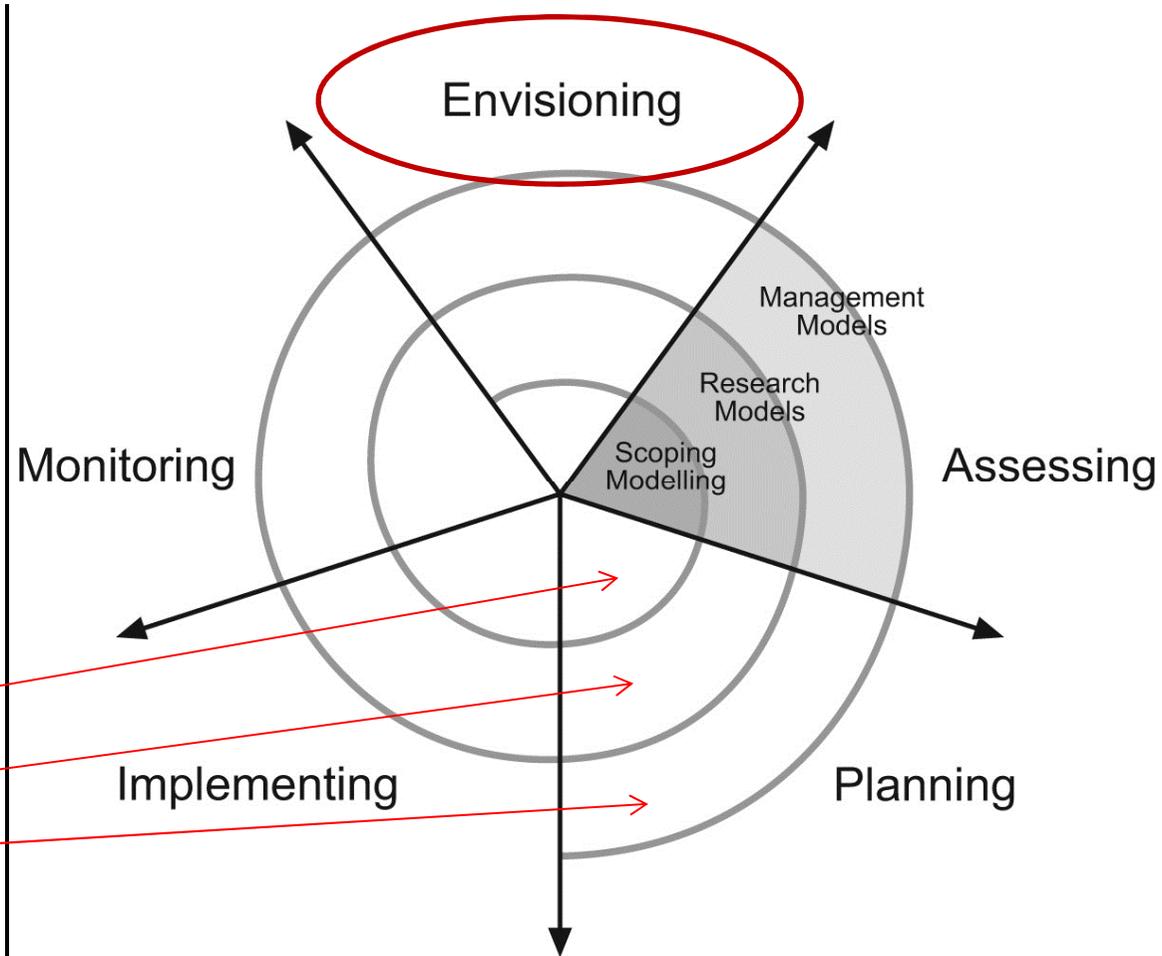
Not a linear process

Ideally several iterations

Iteration I

Iteration II

Iteration III



# Freshwater – A Resource or a Treasure –Two Worldviews – Two Lenses

## Exploitable Resource

- “What mining is for Australia and oil for Saudi Arabia, is freshwater for NZ – a great asset” Nick Smith at Foxton, Sign off ceremony for the Manawatū River Action Plan
- Water in the Western worldview is a resource that can be freely exploited
- National Policy Statement on Freshwater - one value of water = the dilution of waste
- Concept of water rights being linked to landownership
- Value of water is driven by economic = \$ interests

## Taonga – Treasure

- Treaty of Waitangi – freshwater is a Maori taonga = treasures
- Concept of ‘Mauri’ = the life force of water
  - Water is a life entity in its own right
  - Water flows through us
  - Healthy water provides for land and people
- Kaitiakitanga – guardianship rather than exploitation
- The value of water has a spiritual as well as social and economic dimensions

# The Opportunity to Change Conversations

## Solutions Developed from an Issues - Problem Paradigm

- Identification of problems
- Analysis of cause and effect
- Risk of creating a sense of burden and negative energy
- Basic assumption: water is a problem to be treated

## Solutions Developed from a Possibility Paradigm

- Appreciative Inquiry (AI)
- What is working well – what would we like to see more of
- Likelihood of creating a sense of positive energy and empowerment
- Basic assumption: Water is a treasure to be enjoyed and safe guarded

# 5 Principles to Consider

- Constructionist principle – the way we know has a direct effect on what we do
- Simultaneity principle – inquiry is intervention – with the first question we ask we start the process of change
- Poetic principle – through our stories we reshape our reality and focus our listeners attention
- Positive principle – the power of language in creating a positive field that will draw people in
- Anticipatory principle – collective imagination and discourse about a desired future create common ground

# A Matter of Reciprocity

**Phase II of the research is about exploring solutions applying the principle of reciprocity:**

Water provides for us – how can we provide for water?

# Vision

## Leaders' Accord Vision

Kei te ora te wai,  
Kei te ora te whenua,  
Kei te ora te tangata.

If the water is healthy,  
The land and the people  
Are nourished

