



**Landcare Research**  
**Manaaki Whenua**

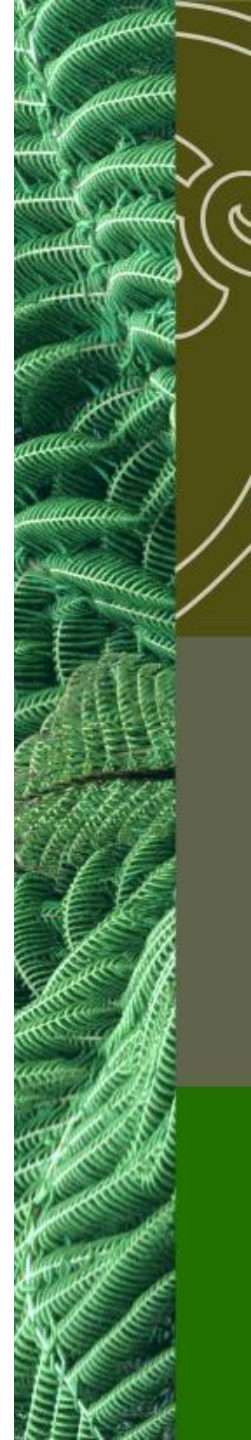


# **Collaborative Processes for Freshwater Decision-Making**

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&  
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Landcare Links  
Seminar  
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# Collaborative processes

## Underway



Canterbury



Hawkes Bay

## In design



Waikato

## Under consideration

- Auckland
- Greater Wellington
- Bay of Plenty

# Making decisions

- Power of collaborative processes
  - Social capital
  - Collective decision-making
  - Innovative & durable solutions



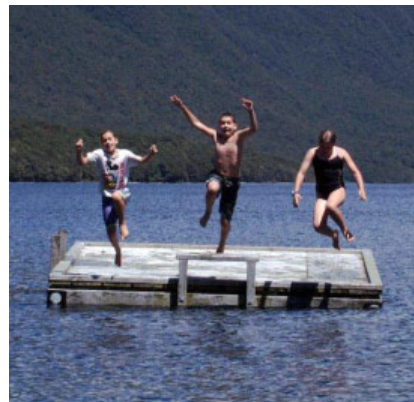
# Collaborative Processes

- What **not** to expect
  - All processes will reach consensus
  - Cheaper/shorter in the short term



# Observations

- Roles
- Setting up a process
- Tools to support processes



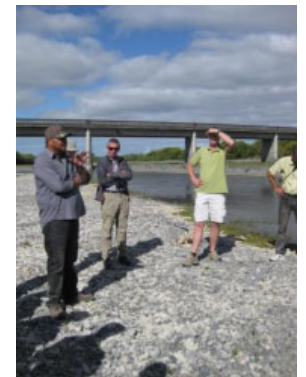
# Roles

- Role of council
  - Potentially multiple roles
    - Sponsor, Technical Expert, Analyst/Advisor, Stakeholder, Facilitator, Leader
  - Independent/professional facilitation recommended
  - Defining scope e.g., when overlapping processes
  - Councillors in the process
    - represent those not easily represented (e.g., swimmers)
    - Link to other councillors, council responsibilities & past council decisions



# Roles

- Role of Scientists
  - involve them early
  - need to establish trust within process too
  - need to understand what the stakeholders are asking



# Setting up processes

- Mandate for the process
  - clearly stated scope and mandate
  - preferably a “good faith” undertaking to implement consensus recommendations
- Recruiting stakeholders
  - all stakeholders represented vs selected committee
  - challenge to include full range of ‘voices’
    - clarity of representation
  - Māori representation(iwi, runanga, hapū, marae)
    - who speaks for whom





# Tools to support processes

- Structured Decision Making
  - Decision process

Values =>	Objectives =>	Performance Measures	Management Variables
Primary Production	Create new jobs in Hawke's Bay	New full-time jobs in horticulture & farming	Minimum flow; allocation regime & volume
Trout fishing	Improve river for trout fishing	Trout habitat as % of maximum	Minimum flow; nutrient levels; riparian vegetation
Mauri of river	Restore mauri of river	Cultural health index	Minimum flow; stock exclusion; nutrient levels

# Tools to support processes

- Structured Decision Making
  - Consequences table

	<b>Option A:</b> Raise min flow Nutrient cap	<b>Option B:</b> Current min flow Stock exclusion	<b>Option C:</b> Current min flow Stock exclusion
New full-time jobs in horticulture & farming	Loss of x jobs (how many?)	No change in jobs	Gain of x jobs (how many?)
Trout habitat as % of maximum	90% of trout habitat	70% of trout habitat	50% of trout habitat
Cultural health index	Good	Fair	Fair – Poor

# Tools to support processes

- Bayesian Belief Network
  - Facilitates shared learning & system understanding
- Other tools
  - agent-based models, mediated modelling, systems models
- Analysis of impacts, e.g.,
  - Impact of changed flows & water quality on ecology, water availability....
  - Economic analysis (farm, catchment & regional impacts of policy scenarios)



# Understanding the Impacts

- Comparing policy options
- e.g. impact of different allocation design options

Scenario	Net Revenue (mill \$)	N Leached (t)	Net GHGs (t)
Allocation Design Option A	-17%	-53%	-134%
Allocation Design Option B	<b>-37%</b>	-53%	-114%

# Challenges moving forward

- Past experiences & conflict
- Time to make a decision vs perceived need for haste
- People don't like the solutions
- Allocation
- Adaptive management
- Co-governance/management



# Many thanks

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