



Landcare Research
Manaaki Whenua



Collaborative Processes for Freshwater Decision-Making

Suzie Greenhalgh (Landcare Research)
&
Jim Sinner (Cawthron)



Landcare Links
Seminar
June 2013

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



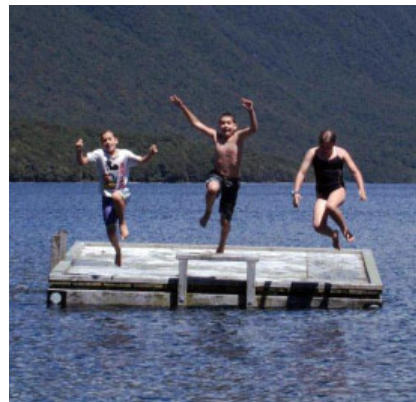
Collaborative Processes

- 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



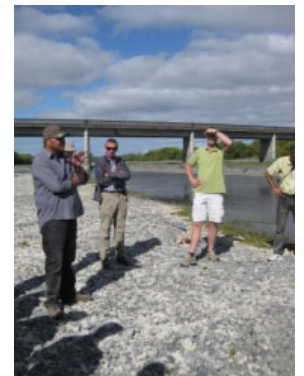
Roles

- 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

	Option A: Raise min flow Nutrient cap	Option B: Current min flow Stock exclusion	Option C: 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	-37%	-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

Suzie Greenhalgh

greenhalghs@landcareresearch.co.nz

Jim Sinner

Jim.sinner@cawthron.org.nz

