Managing freshwater resources:
Insights from New Zealand’s changing management regimes for the nation’s freshwater resources

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Source: Peter Scott (AboveHawkesbay.co.nz 2013)
Agriculture in New Zealand

- Agriculture important sector of NZ’s economy
  - 15% of GDP including downstream processing
  - Large proportion of export value
  - Government goal is to double value of primary industry exports by 2025

Intensification of pastoral farming
- ~ 5 million dairy cows
- Seeking new access to irrigation
Agriculture in New Zealand

• Contrast to US
  – No agricultural subsidies (abandoned in 1984)
  – Dominance of pastoral agriculture
  – Willingness to regulate agriculture

• Key source of environmental impacts
  – GHG emissions & carbon sequestration
  – Nutrient discharge, sedimentation & E.coli
  – Water use

• Devolved resource management decisions to the regions
NZ’s Policy Context

Objectives: Water Quality

To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of fresh water, in sustainably managing the use and development of land, and of discharges of contaminants.

The overall quality of fresh water within a region is maintained or improved while:

a) protecting the quality of outstanding freshwater bodies
b) protecting the significant values of wetlands and
c) improving the quality of fresh water in water bodies that have been degraded by human activities to the point of being over-allocated.
NZ’s Policy Context

Policies: Water Quality

By…regional council…to ensure plans”

a) **establish freshwater objectives and set freshwater limits** for all bodies….having regard to…..
   i) ….impacts of climate change
   ii) the connection between water bodies

b) Establish methods (including rules) to avoid over-allocation

Where water bodies do not meet freshwater objectives….Policy A1…council is to **specify targets and implementation methods (either or both regulatory and non-regulatory)** … to assist the improvement of water quality in the water bodies, to meet those targets, and within a defined timeframe
NZ’s Policy Context

Objectives: Water Quantity

To safeguard the life-supporting capacity, ecosystem processes and indigenous species including their associated ecosystems of fresh water, in sustainably managing the taking, using, damming, or diverting of fresh water.

To avoid any further over-allocation of fresh water and phase out existing over-allocation.

To improve and maximise the efficient allocation and efficient use of water.
NZ’s Policy Context

Policies: Water Quantity

By every regional council making or changing regional plans to the extent needed to **ensure the plans establish freshwater objectives... and set environmental flows and/or levels for all freshwater management units in its region** (except ponds and naturally ephemeral water bodies) to give effect to the objectives in this national policy statement, having regard to at least the following:

a) the reasonably foreseeable impacts of climate change;
b) the connection between water bodies; and
c) the connections between freshwater bodies and coastal water
No longer seen as relevant ways of doing things

Current, now, standard, accepted ways of doing things

Ideas that are gaining momentum

Leading edge, prospective ideas

WAVE OF CHANGE
From 2009 to 2016
Changing practices

- Integration & the future of freshwater management
- Role of Regional Council & their staff
- Engagement with civil society
- The nature of science & information
More holistic approaches
- Integrate land & coast
- Outcome focus
- Whole system analysis

Only point sources
Reliance on regs

WAVE OF CHANGE:
Integration and the future of freshwater management
Institutional silos
Single focus planning

Outsourcing decisions (e.g. collaborative decision-making)
Cross-disciplinary teams
## Legal & Governance Change

**Then**

- Draft plan notified
- Submission & Regional Council Plan hearings
- Negotiation of outstanding appeals
- Environment Court (merit appeals)
- Draft Court decision
- Final Court decision
- Appeals to High Court (points of law only)

**Now**

- Initiate collaborative process
- Collaborative policy development
- Translate policy into plans
- Submission & hearings process
- Draft decision
- Final decision
- Appeals to Environment Court (points of law only)
Practice Change

Collaborative Decision-making Processes

- Canterbury
- Greater Wellington
- Hawkes Bay
- Waikato
- Gisborne
- Northland

More Involved Decision-making Processes

- Bay of Plenty
- Southland
- Tasman
- Nelson
- Marlborough

38% of all regions

31% of all regions
Decide & defend
Maori excluded from decision making

Partnership with Maori
Involvement of communities in decisions

WAVE OF CHANGE: Engagement with civil society

ESTABLISHED NORMS
- Involving community groups in decision-making
- Consultation on RMA plan changes
- Councils are looking beyond traditional consultation practices (still unresolved issues with power)

EMERGING TRENDS
- Treating iwi/hapū as partners rather than stakeholders
- Fit for purpose engagement
- Partnership models with Māori organisations
- Agonistic planning—accepting a place for political conflict, and seeking to channel this positively

DYING PRACTICES
- Decide and defend mentality within councils
- Decision-making without iwi (hard one to kill)

NEW HORIZONS
Co-governance & Partnership

Waikato-Tainui Taupatu Claims (Waikato River) Settlement Act 2010

Single co-governance entity responsible for the Waikato River.

Te Awa Tupua (Whanganui River Claims Settlement) Act 2017

Provides the Whanganui River with legal status equal to that of a person.
Ignoring some values
Only consider financial & quantifiable values

Incorporating social, economic & Maori knowledge with biophysical science
Transdisciplinary assessments
Groundwater Challenges within the Wave of Change

• Integration & the future of freshwater management
  – Outcome focused planning
    • What/where are surface & groundwater connections

• Role of Regional Council & their staff``
  – Single focus water allocation planning
    • Separation of surface- & ground- water

• The nature of science & information
  – Poor groundwater knowledge ➞ hard for integration
  – Communicating uncertainty

All have implications for engaging with civil society
Key take homes

• Collaboration takes time
  – Far longer than you expect
  – Not a panacea
  – Benefits are likely not really felt until the second time round

• Takes massive capacity building
  – Greater interrogation of science
  – New skills in science translation
  – Challenges around multiple values
  – Smarter appeals
Collaborators

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Thank you

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