



## Māori Values and Perspectives to Inform Collaborative Processes and Planning for Freshwater Management

Garth Harmsworth, Shaun Awatere and Mahuru Robb, Landcare Research

### KEY FINDINGS

The Treaty of Waitangi is the essential foundation for forming meaningful partnerships between government and iwi/hapū. Treaty principles can guide good collaborative process and decision-making from start to finish. Effective collaboration is achieved by using the correct (tikanga) decision-making processes, through a greater understanding and appreciation of Māori values that can be supported by a variety of kaupapa Māori-based assessment tools.

Local and central government are eager to include iwi/hapū in freshwater management planning through meaningful engagement and collaboration rather than consultation. Keys to the success of collaborative processes are enduring relationships between councils and Māori and adequate resourcing for all collaborative partners.

Māori membership in a collaborative process should be considered carefully. Māori should be represented by as many or as few individuals as necessary to represent their status, values, perspectives, and interests, to achieve the desired outcome of the collaboration.

A large number of shared governance and management models have emerged in New Zealand over the past 20 years and some recent examples are summarised. While co-governance, co-management and co-planning are terms used interchangeably in New Zealand, we provide some discussion to improve their definition.

### INTRODUCTION

The rights, roles and responsibilities of Māori are stated in many of New Zealand's legislative frameworks. The National Policy Statement for Freshwater Management 2014 (NPS-FM) refers to the Treaty of Waitangi as the underlying foundation of the Crown/iwi/hapū relationship in regard to the management of freshwater resources. The Resource Management Act 1991 (RMA) directs regional councils to recognise and provide for the relationship of Māori and their culture and traditions with waters as a matter of national importance. The purpose of the Local Government Act (LGA) 2002 is to provide for democratic and effective local government that recognises the diversity of New Zealand communities.

Māori values, perspectives and Māori knowledge systems (mātauranga Māori) are being increasingly used to inform collaborative processes to help manage freshwater ecosystems as councils, iwi/hapū groups, and communities engage collaboratively in decision-making, planning, and managing natural resources (Sinner & Harmsworth 2015). However, governance structures and legal status of various collaborative agreements tend to vary markedly from council to council, and region to region.

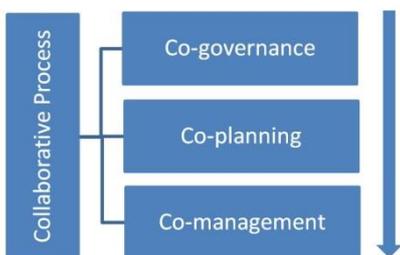
This policy brief gives examples of some of the existing and emerging models to clarify definitions and provide a more stable foundation for relationships between government and iwi/hapū groups to embark on a collaborative process.

### CLARIFYING TERMINOLOGY

A large number of co-governance and co-management models and arrangements have emerged to describe the role of iwi/hapū in resource management. The terms **co-governance**, **co-planning** and **co-management** are often used interchangeably but are not well defined. This increases the confusion about the role of Māori and expectations of different Māori groups and councils. The following explanations and definitions were developed from a Māori perspective (Robb et al. 2015) to provide clarity and inform discussion:

- **Co-governance:** Formal arrangement to share decision-making. In terms of iwi/hapū and the Crown this should be based on the Treaty of Waitangi. Through principles and collaborative guidelines, the Treaty provides the basis for meaningful ongoing relationships. **Co-governance agreements between iwi/hapū and the Crown are essential early on in the collaborative process.**
- **Co-planning:** Planning together under co-governance agreements. A shared process where iwi/hapū/tangata whenua interests and values, and the use and understanding of mātauranga Māori are incorporated into local or regional planning, including the development of policies, goals and objectives in council, regional and district plans, and/or urban design.
- **Co-management:** Actions and responsibilities implemented jointly by the parties. Deciding how a desired goal, objective or outcome is best achieved (e.g. catchment, wetland, and farm plans, consents, riparian planting, river clean-ups, restoration, etc.). Iwi/hapū groups work together with partner agencies.

From a Māori perspective, co-governance, co-planning and co-management (Fig. 1) are key steps in a collaborative process, and are important to achieve desired and mutually agreed outcomes.



**Figure 1.** A collaborative framework for freshwater planning and policy making (Robb et al. 2015).

There are few examples of effective co-planning between councils and iwi/hapū. Ideally co-planning occurs before co-management. However, this is often not the case and may reflect some of the challenges of power sharing within collaborative processes.

## GUIDANCE, FRAMEWORKS AND TOOLS TO INFORM COLLABORATIVE PROCESS

One of the challenges with any collaborative process is for different parts of the community to be able to articulate and demonstrate the value they place on a freshwater resource. To support iwi and hapū, a diverse range of kaupapa Māori-based guidance frameworks and tools have evolved. These can be used individually or in combination to generate effective and meaningful Māori-Crown dialogue to support partnerships, co-governance and co-management, thereby helping to achieve desired freshwater outcomes. In many instances, iwi/hapū management plans (IMPs) are available and will be an important source of information for articulating Māori issues, values, objectives, and priorities within a given area, supported by local mātauranga Māori.

### Guidelines and protocols for engagement

Extensive information has been documented on guidelines and protocols for appropriate process for Crown-iwi/hapū

engagement in New Zealand and for collaborative processes (e.g. Sinner & Harmsworth 2015; Harmsworth 2005). There are also a number of case studies across New Zealand (e.g. Robb et al. 2015) that provide important lessons and reflection for iwi/hapū engagement and collaboration with the Crown and councils.

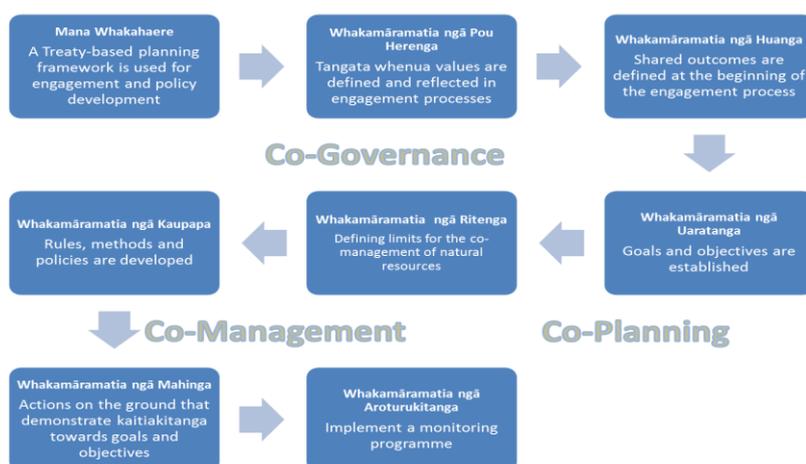
### Frameworks

A number of frameworks have been developed to enhance iwi/hapū relationships and participation in collaborative approaches, for example:

*Tikanga-based frameworks* – Tikanga are custom- and protocol-based and drive ‘correct’ (tika) process for engagement. The building of meaningful relationships between the Crown and iwi/hapū is the foundation for any collaboration with iwi/hapū. These relationships should be maintained and strengthened over time and should exist beyond a single project. Tikanga-based frameworks (Awatere & Harmsworth 2014) are developed with iwi/hapū when forming the initial relationships that guide collaborative process, behaviour and responsibilities.

*Values-based frameworks* – These frameworks identify, organise, and demonstrate connection between key Māori values as a basis for freshwater management (e.g. Ngā Matapono Ki Te Wai (Ngai Tahu 2013), Te Mana o te Wai (NPS-FM 2014), Te Arawa Cultural Values Framework (Te Arawa Lakes Trust 2015), and Wai Ora Wai Maori (Awatere et al. 2015)). These frameworks can be used to set freshwater limits and standards connected to Māori values.

*Collaboration framework for Māori* – A tikanga-based framework was developed with an eight-step process (Fig. 2; Robb et al. 2015; Harmsworth et al. 2013) to achieve desired freshwater planning and management outcomes for Māori. Step 5 (Whakamāramatia ngā Ritenga) was added in 2014 to define limits to sustain and enhance cultural values, such as mahinga kai (Awatere & Harmsworth 2014).



**Figure 2.** A Tikanga process model (Robb et al. 2015; Awatere & Harmsworth 2014).

*Mātauranga Māori to inform collaborative process* – Mātauranga Māori includes Māori beliefs, perspectives, and knowledge (e.g. traditional, holistic, local and contemporary) and can be used to articulate modern local interests, values and resources (e.g. customary resources, mahinga kai). Tribal and generic knowledge systems are used to determine the values to be managed and protected, and these can then be used in collaborative processes (Fig. 3) to identify attributes and limits, as well as mechanisms for co-management and co-planning.



**Figure 3.** Dialogue space for understanding mātauranga Māori and science knowledge used to inform decision-making.

### Tools

A large number of tools can be used to support Māori articulation of ‘values’ for decision-making. Some of the more commonly used tools are listed below.

*Māori cultural monitoring:* Several sophisticated cultural monitoring and assessment methods and tools based on a blend of mātauranga Māori, traditional concepts, and western science have been developed in different parts of New Zealand and are being continually adapted for local use (Fig. 4, Table 1; e.g. Tipa & Teirney 2006; Harmsworth et al. 2013; Awatere & Harmsworth 2014; Robb et al. 2015). These are being used to varying degrees to inform and improve local and regional collaborative processes and enhance understanding of mātauranga Māori. Examples are:

- Taonga species monitoring and harvesting e.g. kōura, tuna, kanakana/pihirau, native fish species such as inanga, kōkopu, koaro, plants such as kuta, raupō, harakeke, etc.
- Cultural Health Index (CHI) for rivers and streams (Tipa 1999; Tipa & Teirney 2003, 2006; Townsend et al. 2004; Pauling et al. 2007; Nelson & Tipa 2012; Harmsworth et al. 2011) and many adaptations (Walker 2009) and CHI for estuarine environments – Tiakina Te Taiao; CHI has been used extensively by iwi/hapū groups as part of the collaborative process
- Cultural indicators of wetlands (Harmsworth 2002); wetland habitats along the Waikato west coast, e.g. Toreparu wetland assessment approach (Robb 2014)
- Linking cultural and science indicators (Young et al. 2008; Harmsworth et al. 2011)

- State of Takiwā “toolbox” iwi environmental monitoring and reporting tool Te Waipounamu/South Island – Ngāi Tahu (Mattingley & Pauling 2005; Te Rūnanga ō Ngāi Tahu 2007)
- Mauri compass (Ruru 2015)
- Mauri Assessment model (Morgan 2011)
- Mauri of Waterways Kete and Framework (Jefferies & Kennedy 2009)
- Significance assessment method for tangata whenua river values – Te Waipounamu/South Island (Tipa 2010)
- Kaitiaki tools: an internet-based Iwi Resource Management Planning Tool (<https://www.niwa.co.nz/freshwater/management-tools/water-quality-tools/kaitiaki-tools>)
- Ngā Waihotanga Iho: Iwi Estuarine Monitoring Toolkit (Rickard & Swales 2009a,b)



**Figure 4.** Freshwater CHI monitoring with Te Uri o Hau kaitiaki at Hanerau Farm, Ōtamatea, northern Kaipara.

An example of how cultural monitoring can be used to support decisions within a collaborative process is outlined in Table 1. This shows the relationship between tangata whenua values and monitoring, and provides some examples of management variables that are required collectively to meet iwi/hapū goals and aspirations.

*Geographic Information Systems (GIS):* Identifying, recording, classifying, and mapping Māori values, significant sites or special interest areas, has been used extensively in New Zealand since the mid 1990’s (especially through the Treaty claims process), and improves the understanding and expression of locational Māori values in planning. Spatial and temporal mapping and assessment and indigenous approaches to using GIS are well documented (e.g. Harmsworth 1997, 1998; Robb et al. 2015).

**Table 1.** Cultural monitoring to assess freshwater limits to maintain/enhance cultural values

Values	Objectives	Performance measures/tools	Management variables (examples)
Kaitiakitanga Mauri Mahinga kai	Set limits to restore the mauri of freshwater, cultural resources, mahinga kai areas (define standards/limits/bottom lines to support life supporting capacity/ecological integrity for taonga spp. and habitats)	Monitoring such as CHI and mauri assessment – identify change/trends in the state or mauri  Abundance/condition of cultural resources, taonga spp., mahinga kai	Minimum flows Nutrient management/reduction Water clarity & sediment loads Habitat extent and condition Groundwater-surface water Connectivity Pathogens (e.g. <i>E. coli</i> ) levels Stock exclusion Catchment management –land use

*Cultural Opportunities Mapping and Assessment: Cultural Opportunity Mapping Assessment (COMA) and Cultural Opportunity Mapping Assessment and Responses (COMAR) are tools that provide a framework for incorporating cultural perspectives, values, and interests into freshwater management and contemporary resource management (Tipa & Nelson 2012; Tipa 2010; Tipa and Severne 2010).*

### CO-GOVERNANCE, CO-MANAGEMENT AND CO-PLANNING IN PRACTICE

Local government, iwi/hapū groups and communities are increasingly engaging in collaborative processes for decision-making, planning, and managing natural resources. A range of co-governance and co-management structures and arrangements have emerged, along with the legal status of these agreements. Agreements typically have an intent to achieve mutually agreed outcomes for resource management and freshwater (Fig. 5).

Under modern Treaty settlements, many statutory co-management regimes are now in place for defined freshwater catchments including: [Te Arawa Lakes](#), [Te Waihora](#) (Lake Ellesmere), [Waikato](#) river and [Waipa](#) river.

Existing and emerging models of Māori co-governance and co-management for freshwater are listed in Table 2. An expanded version of this table can be found in Robb et al. (2015).

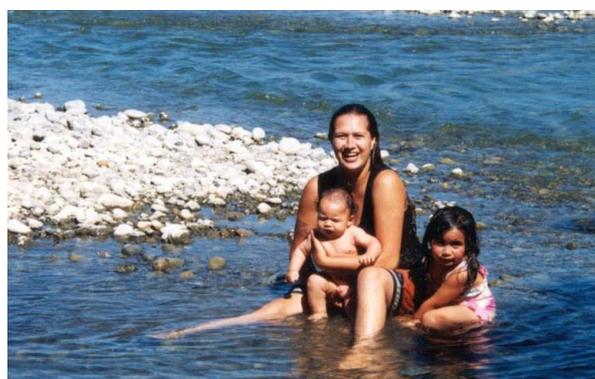
### FUTURE CHALLENGES

The emergence of these new relationships between the Crown (or delegated agency) and iwi/hapū are not without their challenges. Many of these challenges highlight the issue of power sharing in newly-formed arrangements between Māori and Government, especially clarity of the role of the Treaty of Waitangi in local government, and the rights and representation of iwi/hapū in future collaborative process. There is also uncertainty about the role of regional/local councils as representatives of the Crown, and there is a need to clarify their status. This requires legal opinion and can only really be resolved through legal challenges and case law. Collaborative processes are increasingly being promoted across the country to address

future freshwater management. To enable collaborative processes to develop and advance, issues regarding indigenous rights and ownership of freshwater resources need to be urgently addressed.

### KEY MESSAGES

- The Treaty of Waitangi is the essential foundation for forming meaningful partnerships between government and iwi/hapū and should guide good collaborative process and decision-making from start to finish.
- Co-governance, co-planning and co-management are important terms within freshwater management and require clarification for ongoing use and application.
- Guidelines and protocols, frameworks, tools, provide deeper understanding of Māori values, perspectives and Māori knowledge systems (mātauranga Māori) and can build bicultural capacity for both local government and iwi/hapū, to inform the collaborative process at each step.
- Key to the success of collaborative processes are enduring relationships between councils and Māori along with adequate resourcing for all partners contributing to the collaborative process



**Figure 5.** Māori aspirations for waterways can be achieved through good collaborative process and co-management. (Waiapu river catchment Gisborne-East Coast).

**Table 2.** Existing and emerging models of Māori co-governance and co-management for freshwater

Existing model and location	Structure and agreement	Examples of collaborative process
Integrated Kaipara Harbour Management Group (IKHMG) <ul style="list-style-type: none"> <li>Kaipara harbour</li> </ul>	Agreement between iwi, Kaipara community, Crown agencies, local government, industry, and NGOs.	Co-management and some co-planning: Established in 2005 to promote integrated harbour management, kaitiakitanga, and inter-agency coordination.
Co-management framework for the Waikato River <ul style="list-style-type: none"> <li>Waikato River</li> </ul>	Joint management agreements based on Waikato-Tainui Raupatu Claims Settlement Act 2010. Waikato River Authority (WRA) established 2010 as co-governance entity. Agreement between the Crown and 5 river iwi.	Co-governance, co-management (JMAs) and some co-planning: to implement Te Ture Whaimana o Te Awa o Waikato Vision and Strategy for the Waikato River.
Manawatū River Leaders Accord <ul style="list-style-type: none"> <li>Manawatū river catchment</li> </ul>	Agreement/signed 2010 accord between regional council, local council, community, and iwi-joint action to improve state of the river.	Co-governance Focus, vision, goals defined
Ngāti Tūwharetoa Joint Management Agreement (JMA) <ul style="list-style-type: none"> <li>Taupo</li> </ul>	JMA (2008) between Taupō District Council and Tūwharetoa Māori Trust Board.	Co-governance and co-management – resource consents and private plan hearings.
Te Mana o Te Awa Tupua <ul style="list-style-type: none"> <li>Whanganui River</li> </ul>	Ruruku Whakatupua, the Whanganui River Deed of Settlement 2014: Agreement between Whanganui iwi and the Crown.	New legal framework, co-governance and co-management. Statutory decision-making and collaborative process.
Te Arawa Lakes Joint Partnership <ul style="list-style-type: none"> <li>Rotorua Lakes region</li> </ul>	Based on 2004 Deed of Settlement Te Arawa and the Crown, Joint partnership between Te Arawa Lakes Trust, Bay of Plenty Regional Council and the Rotorua District Council to co-manage the Rotorua Lakes.	Co-governance and co-management, shared decision-making.
Whaitua Committees <ul style="list-style-type: none"> <li>Greater Wellington region e.g. Ruamāhanga catchment</li> </ul>	Overarching Greater Wellington Regional Council (GWRC) Te Upoko Taiao committee and catchment/regional Whaitua Committees est. – joint GWRC, iwi and community.	Māori representation on all committees. Collaborative freshwater processes, partnerships, good engagement practice for freshwater management.
Canterbury Zone Committees <ul style="list-style-type: none"> <li>Canterbury region e.g. Te Waihora (Lake Ellesmere)</li> </ul>	Managed by Environment Canterbury, Regional Management committee est., 2009 Canterbury Water Management Strategy (CWMS), water zone management committees.	Integrative collaborative planning approach, implementation plans for each zone, decision-making to implement and meet targets.
Te Tau Ihu iwi and local unitary authorities <ul style="list-style-type: none"> <li>Nelson-Marlborough</li> </ul>	Claims Settlement Bill, MOU, iwi interests, agreement between iwi and local government to manage freshwater.	Shared decision-making via pan-iwi Rivers and Freshwater Advisory Committee.

## FURTHER READING

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## CONTACT

Garth Harmsworth (Te Arawa, Ngāti Tūwharetoa, Ngāti Raukawa)  
Landcare Research, Private Bag 11-052, Palmerston North  
HarmsworthG@LandcareResearch.co.nz

Shaun Awatere (Ngāti Porou)  
Landcare Research, Private Bag 3127, Hamilton  
AwatereS@landcareresearch.co.nz

Mahuru Robb (Ngāti Awa, Ngāti Ranginui)  
Landcare Research, Private Bag 3127, Hamilton  
robbm@landcareresearch.co.nz

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