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Collaborative Planning for Freshwater the challenge of a new paradigm

As New Zealand embarks on a new way of doing freshwater planning it is important to consider the forces driving this change, and some of the fundamental ideas about knowledge and democratic institutions that are being redefined along the way. Understanding these changes will help us to identify some of the challenges we must address to realise the potential of collaborative planning.

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This article draws upon the international and emerging New Zealand literature on collaborative planning, as well as the authors' experience with a collaborative planning process for the greater Heretaunga plains of Hawke's Bay.

Global pressure on resources and institutions

We now share this planet with seven billion people, and global markets enable consumers in China, India, North America, Europe and Africa to buy food and other products from New Zealand. As incomes rise there is an increasing demand for protein from milk and meat. This growing demand puts pressure on land, water, air and biodiversity in New Zealand as businesses respond to global markets. Resources in New Zealand become increasingly scarce, which means that one person's use of a water body increasingly affects other people and their ability to enjoy that same water body.

Our institutions ... have proven to be insufficient to deal with increasing pressure on water quantity and water quality. Highlighted below.

Meanwhile, more New Zealanders are expressing their concerns about the environment. In a 2010 survey, water pollution and water-related issues were rated by New Zealanders as the most important environmental issue facing New Zealand (Hughey, Kerr and Cullen 2010).

As a society we manage conflict through our institutions – the laws, norms and cultural practices that guide our behaviour. New Zealand's existing institutions were mostly designed and have evolved in times of relatively abundant resources. These institutions, and in particular our collective practice in how we use them, have proven to be insufficient to deal with increasing pressure on water quantity and water quality, especially during the summer months.

A call upon values

After more than ten years of reports and policy papers to successive governments on how to fill this institutional need, the national policy statement for freshwater management (NPSFM) was released in May 2011 (New Zealand Government, 2011). The NPSFM directs councils to set limits for water allocation and water

quality. Overall water quality within a region must be maintained or improved, and over-allocation must be remedied. Over-allocation means that community goals set out in a regional plan are not being met and water quantity limits have been exceeded.

The NPSFM says that limits are to be set regionally, based on values. The terms 'value', 'values' and other variants occur 24 times in the policy statement's nine pages of text. There is a list of 'important national values' of freshwater (ibid., 2011, p.4), but no indication of how catchment-level values are to be identified, assessed or balanced to arrive at limits. This is left up

to regional decision-making processes.

There are some bottom lines, however. The Resource Management Act 1991 (RMA) provides broad guidance, for example in section 5 ('safe-guarding the life-supporting capacity of air, water, soil and ecosystems'), and sections 70 and 107 prohibit certain adverse effects on water quality. The NPSFM itself requires that there be no overall decline in water quality within a region, and in late 2013 the minister for the environment released proposals to amend the statement to establish a national objectives framework to set minimum water quality standards for human and ecosystem health. But, assuming that the implementation of the national policy statement is not just about setting limits at these bottom lines, communities will need to identify, assess and balance values to reach decisions on where the limits should be. How is this to be done?

The paradigm of 'scientific management'

Over the last two decades or more, at least since the enactment of the RMA, resource management in New Zealand has been operating under the paradigm of what has been called 'scientific management'. As defined by Brunner and Steelman,

Scientific management aspired to rise above politics, relying on science as the foundation for efficient policies made through a single central authority – a bureaucratic structure with the appropriate mandate, jurisdiction, and expert personnel. (Brunner and Steelman, 2005, p.2)

This paradigm suggests that through use of science and experts we can compile enough evidence about ecosystems to determine the 'correct' or even 'best' objectives for each freshwater body. In recent years we have added values to this equation. The scientific management paradigm would see this as just another scientific challenge: to identify, measure and balance values so that experts can determine the 'right' management objectives and approaches.

This paradigm has led, for example, to attempts to define objectively 'Water Bodies of National Importance' (Chadderton, Brown and Stephens, 2004), and also to a method to assess the significance of rivers for a range of uses and values (Hughey and Baker, 2010). And there is a growing literature on non-market valuation using techniques such as choice modelling to estimate the monetary value of things that are not traded in markets (Pascual et al., 2010).

However, research over last decade has made it increasingly clear that value and values are often constructed in context: that is, how people value something depends on when, how and by whom the question is asked. If someone asks you, 'What is the value of this lake, river, wetland?', before you answer you are likely to want to know, 'Value to whom? For what? And why do you want to know?' And further, 'How will you use my answer?' This is not necessarily because people are being strategic in their answers – trying to influence a study with policy implications, for example – although they might be. More generally people look for context because they actually need it to define meaning.

The key point here is that value is not always objective and cannot necessarily be determined or measured by experts in ways that are immune from contest in places like council hearings or the

Environment Court. As an example, our case study in the Tasman district in 2012 showed that it is not possible to separate the documentation of values from how those values will be prioritised and given effect to in a regional plan (Sinner and Tadaki, 2013); that is, we cannot describe or measure values without reference to how that description or measurement will be used. Categorisation and measurement of values inevitably also involve framing and value judgments, and they provide the language in which policy options are discussed.

A new paradigm

Thus a shift is occurring from a scientific management paradigm to a paradigm of collaborative governance to address complex problems. In this new paradigm there is no 'right answer' or optimal solution. Science is still important to help explain how things work, but cannot tell us what is 'best'. Rather than seeing resource management issues as 'problems to be solved or optimised', we see them as complex systems and 'situations to be improved'.

This paradigm shift has been influenced by Jürgen Habermas, a leading philosopher of the 20th century. Habermas argued that human interaction and social life require agreed meanings to enable coordinated action – for example, to agree on policy for freshwater management – through a process he called communicative reason. Knowledge, Habermas argued, can only be determined based on what people can agree on in 'authentic (open and balanced) dialogue' (Flyvbjerg, 1998; Innes and Booher, 2010). The validity of an argument, and knowledge more generally, is defined as consensus reached without the influence of power: 'all concerned in principle take part freely and equally, in a cooperative search for truth, where nothing coerces anyone except the force of the better argument' (Habermas, quoted in Flyvbjerg, 1998, p.213).

A premise of collaborative governance is that, when considering complex problems with high uncertainty, elected politicians cannot perform authentic dialogue on behalf of their constituents;

people have to speak for themselves, to test their arguments against those of others. When this authentic dialogue occurs we can get a basis for collective action. In other words, we can get agreement on how a community will address a challenge such as how much water to allocate for abstraction and how to manage land use to protect water quality, aquatic ecosystems and mauri (meaning *life force or principle – the essential quality and vitality of a being or entity*).

recognise collaborative processes for freshwater management more formally via amendments to the RMA (Ministry for the Environment, 2013). Yet New Zealand's transition to collaborative planning is still tentative, as councils and stakeholders ponder how it will work and what outcomes it will produce.

Collaborative planning is much more than consultation; it is delegating decision-making to a group of stakeholders (Ansell and Gash, 2007). It requires

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New Zealand's experiment in collaborative planning

Collaborative planning is an experiment in deliberative democracy, a different way of practising democracy at a local level based on the Habermasian notion of authentic dialogue (Dryzek, 2001; Innes and Booher, 2010). We are interested, here, in collaborative planning that explicitly seeks to involve all parties with a stake in a decision. However, collaborative processes may also involve inter-agency co-operation, rather than diverse stakeholders, and hence might not be *per se* 'democratic' (e.g. see Fuller, 2009).

Collaborative planning has 'bubbled up from many local experiments' out of dissatisfaction with the current way of doing things (Ansell and Gash, 2007, p.544). In New Zealand, councils have not set limits or made plans to achieve them (especially for water quality) and a range of stakeholders are not comfortable leaving those decisions with elected politicians. The Land and Water Forum recommended collaborative planning to the government as a new way to set catchment-level limits. This followed research by Guy Salmon and others based on experiences with collaborative governance in Nordic countries (Salmon et al., 2008). The government has accepted this proposition and has proposed to

people to listen to each other and learn to appreciate other values and ways of seeing the world. The central idea of collaborative planning is the Habermasian notion of exploring, constructing and testing values in context to build a vision of the future that everyone can live with, and a consensus on the plan for heading there. If all parties are fully involved and can reach consensus, then the sponsoring agency, for example a regional council, can adopt the consensus agreement without political risk. Conversely, a council decision that deviates from the consensus would be seen as a breach of trust.

Collaborative planning is, therefore, a way to negotiate a plan of collective action while recognising that people may have different values and different ways of understanding the world.

That is the theory of collaboration. However, Michel Foucault argued that Habermas' ideal conditions are never satisfied, because politics is always subject to power (Flyvbjerg, 1998; Pløger, 2001). And therein lies the fundamental challenge facing New Zealand's venture into collaborative planning for freshwater management: how can we construct dialogue to develop a shared understanding among all interested parties, while minimising power

imbalances that could lead to outcomes that are not trusted and supported by the wider community?

Sources of uneven power

To address this challenge, the first step is to identify and acknowledge how power imbalances can arise. One of the most obvious is that it is not possible to have everyone in the room: there will be individuals, organisations and discourses that are proportionally under-represented or are not represented at all. It is possible that collaborative planning processes could actually decrease opportunities for public participation, especially if they are

a collaborative planning process it takes good facilitation to ensure that individual viewpoints are heard.

Fourthly, power imbalance can arise around the presentation and use of science (Pløger 2001). In the current planning process under the RMA schedule 1, submitters engage their technical experts to conference with the technical experts of councils at pre-hearing meetings, and to present information at hearings. This conferencing and questioning at hearings allows for a rigorous, robust debate of the scientific facts: in other words, the evidence base for decisions.

In collaborative processes for regional

some of the control of planning processes and empowering people who have not traditionally had decision-making power. Some councils will be more comfortable with this than others, depending on their internal culture.

Will councils embrace the collaborative planning model? Factors which might contribute to reluctance include uncertainty of outcomes and the fear of losing control of the process. What if the participants in the process agree on recommendations that the council is not comfortable with? Councils might also be reluctant because of perceived cost and time requirements. At this stage there is little comparative data on the cost and time required for collaborative planning versus traditional planning processes. Proponents argue that it will cost less in the long run, or will produce more durable outcomes, but the costs might be 'front-loaded' without an assurance that savings will occur later.

Some stakeholders have been reluctant to embrace collaborative planning, with one describing it as 'a surrogate for compromise ... an insidious slippery slope that is fundamentally destructive of our interests' (Johnson, 2013). While participants are unlikely to achieve everything they might like in a collaborative process, the more relevant question is whether they can get a better outcome, in both the short and long term, than if they had pursued a more traditional planning approach.

There is the possibility that through power imbalances and group think environmental outcomes after collaboration could be worse than under the current planning process, if the values of participants are tilted towards jobs and development. The converse also is true (of course): economic outcomes could be worse if the values of participants are tilted towards the environment.

Another challenge with collaborative planning processes is that freshwater management is essentially a wicked problem: that is, there are dozens of interrelated complex issues to address. It is difficult for a roomful of people, each with their respective viewpoints and interests, to stay within the pre-defined scope of the process. This is a boundary problem: what's

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linked to restrictions of appeal rights, and increase the opportunity for capture by powerful interests (Rydin and Pennington, 2000).

Another potential source of uneven power arises when sponsoring councils are aligned with politically powerful groups. This is most likely to happen where agency management and elected representatives predominantly share the world view of those politically powerful groups. Council staff can influence a collaborative planning process by organising and directing who gets included in a stakeholder group, meeting agendas, and how agreements are recorded and translated into policy outcomes, for example.

Power imbalances can also develop as a result of 'group think' (Dryzek and Niemeyer, 2008). Studies have shown that a person who has correct factual information about a situation will often not volunteer that information in a group setting if everyone else is united in offering alternative (even if inaccurate) information (Mauboussin, 2009). It takes brave people to resist group think, and in

freshwater planning, council-provided science appears to be the norm. In planning exercises governed by the RMA, this means that scientific debate between the technical experts is not likely to happen until a plan change is notified, i.e. after the collaborative consensus has been reached. Considering alternative science arguments at this stage would seem to be both inefficient and ineffective in terms of process outcomes. Indeed, debating the science at this stage could undermine the entire collaborative process. So ways are needed to provide opportunities to test scientific analysis during the collaborative process.

Not business as usual

Enabling constructive, authentic dialogue through a collaborative planning process is likely to require a shift in mindset for council staff and elected representatives. There will need to be recognition that making decisions is not the only way to lead: that is, a council can lead or sponsor a process but allow others in the process to make the decisions. This is another change for regional councils: giving up

in and what isn't? Define the problem too broadly and the complexity will overwhelm the process; define it too narrowly and stakeholders will be disempowered and the options will be too limited for diverse stakeholders to construct an outcome that has something for everyone.

Finally, there is still no clear guidance on how to actually 'do' collaborative planning. Without adequate design, failures are more likely to occur. There may be situations where recommendations cannot be agreed upon, and some processes may 'blow apart', creating as much controversy as, or more than, existed before a collaborative process began. The possibility of failure is risky for politicians, who are generally conservative and mindful of election cycles.

Implications for policy analysis

Having considered some of the ways in which power can influence constructive dialogue and some of the challenges of collaborative planning, it becomes clear that design is all-important to achieve successful outcomes.

The promise and the potential for constructive dialogue to deliver freshwater management that is trusted and supported by the communities is most likely to be realised if the following criteria are met:

- the sponsoring council is fully committed to the process and the process is well-resourced;
- the roles of participants, including those of the council, are well understood;
- the scope of the process is well-defined;
- participants are recruited carefully in order to engage a diverse range of views;
- deliberations are informed by science and all parties have an opportunity to present knowledge from their perspectives; and
- skilled facilitation ensures that all perspectives get a fair hearing and that scientific analysis and other forms of knowledge are tested.

As for the provision of expert advice, there are some further implications:

- Those conducting impact assessments and policy analysis

should be conscious of power imbalances and the potential for these to influence how assessments are done and how they are used. How can expert analysis be made accessible to lay people, including those not around the table? How can we ensure that it is not just the powerful who determine the questions and the methods?

- What to assess and how to assess it should be determined together with those involved in a collaborative process, rather than predetermined by the council or an outside expert.
- Categories, indicators and assessment methods have policy implications and are not value neutral. The choice of these can privilege one way of understanding a situation over other ways. For example, assessing a river for 'whitewater kayaking' rather than for 'boating' will engender different meanings and different results (Tadaki and Sinner, 2014). Reporting impacts on GDP will give rise to different conversations than reporting the change in the number of jobs.
- Information is power, and there is also power in choosing the categories of information. While this cannot be avoided, it needs to be recognised and care taken in the choice of categories, indicators and assessment methods. Again, this should be done with stakeholders, not separately by the council or an outside expert.
- For assessments that involve responses from human participants, the answers they provide to questions depend not only on how the questions are asked but on who is asking and how the respondent thinks the information will be used. To take this further, there are many ways to contribute information: should we require people to answer someone else's questions, or can we provide other ways for people to communicate their knowledge, values and opinions?
- Assessments and evidence provided to a collaborative process should be tested during that process rather than at a later hearing, because if it is

found to be inaccurate or incomplete, a consensus can come unstuck.

- In a collaborative process, the expert's role is to inform the discussion, to provide the best science about how A is related to B, and to challenge others' assumptions, intuitions and group think with evidence as a means of promoting a better understanding of a social-ecological system.
- In doing so, the expert or analyst needs to be open to the views of people who see the world differently, and to engage in authentic dialogue with them. Experts might realise and articulate some of their own assumptions and values and how these have shaped their thinking. This raises the further question of who is in fact the expert, and the need to recognise local knowledge as equally legitimate in getting a fuller understanding of a complex system.
- The task of policy analysis should also include consideration of how stakeholders can be involved in monitoring the things they care about – for example, including the impacts of a new development – and how this can be constructed to enable adaptive management with active involvement of stakeholders.

In a true collaborative planning process, the policy analyst or other expert does not have the last word on how to represent policy alternatives. What matters is not what an expert considers to be correct or true, but rather how the stakeholders agree to understand how something works, and how they will work together to monitor and achieve their desired outcomes over time.

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