Open Access Assessment in Collaborative Planning, A New Zealand Case Study

Paper presented to the International Association for Impact Assessment Annual Meeting, Florence, Italy, 20-23 April, 2015.[1]

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Introduction

There is presently widespread public concern in New Zealand about the adverse impacts of projected, current and historic human activity on freshwater systems. At a national level, responses have included an inquiry into the science and state of water quality by the Parliamentary Commissioner for the Environment (PCE, 2012), the creation of a national collaborative/water-stakeholder advisory group known as the Land and Water Forum (LWF, 2012) and the development of the National Policy Statement for Freshwater Management (NPSFWM, http://www.mfe.govt.nz/fresh-water/freshwater-management-nps), which came into effect in 2011.

The NPSFWM requires regional councils to establish resource allocation limits within their land and water regional plans (Taylor and Mackay, 2013). The "limits" – a combination of river nutrient loads and water allocation measures – must be set at a level to at least halt any decline in the quality of local waterbodies, while also achieving community-defined social, economic and cultural outcomes (Snelder et al, 2013). Given the need for the community to define these values, the NPSFWM *recommends* councils adopt a *collaborative* approach to "limit-setting," involving the community and water stakeholders. It is up to each regional authority to design their process. In the Canterbury region (of New Zealand's South Island) a collaborative limit setting process is underway.

In this paper we reflect on the use and management of (open access) information in Canterbury's collaborative limit-setting process, and the challenge such an operational environment presents impact assessment practitioners. Before elaborating and to provide the necessary context for this paper, we briefly discuss the rise of collaborative processes in the context of water management.

Collaborative planning in theory and practice

Collaboration has become a popular concept in the New Zealand and international freshwater policy arenas, and is currently the topic of much discussion (e.g., Lamers et al. 2010; Leach et al, 2002; Sabatier et al. 2005; Taylor et al, 2012). It is a new operational paradigm involving official "rule makers" working with communities and stakeholder groups to develop new rules and regulations for the sustainable use of land and water. The approach represents a major shift from traditional top-down (consultative and often adversarial) government decision-making to a more participatory and inclusive *governance* approach (Ansell & Gash, 2007; Jones and Little, 2000).

[1] The authors acknowledge the comments of two anonymous peer reviewers.

The rise of collaboration is linked to the idea that top-down "expert-based" (Bijlsma et al. 2011) policy and plan production does not always create rules which will be accepted and supported by the public and/or stakeholder groups and, therefore, will not be likely to result in sustainable outcomes. Top-down approaches are thought to place too much policymaking power "...in the hands of agency experts, many of whom reside far from the local controversy and [therefore] lack democratic legitimacy" (Kamieniecki & Kraft, 2005, p.vii). Human and Davies (2010, p.645) also describe the traditional method as potentially "exclusionary" and "elitist". There is also "...scepticism about the ability of highly legalistic agency processes and the accompanying litigation to craft viable, long-term solutions to complex water quality and water resource problems" (Kamieniecki & Kraft, 2005, p.vii).

Collaboration is thought to significantly improve the planning process because it allows community representatives and industry stakeholders to collectively and directly inform the development of the rules under which they must live and/or operate (Kamieniecki & Kraft, 2005, p.viii; Trachtenberg & Focht, 2005; Bijlsma et al. 2011). Kamieniecki & Kraft (2005, p.viii) comment that collaboration, at least in the context of fresh water management, seeks to generate win-win solutions to very complex problems encompassing a set of interrelated social, economic and environmental issues at the catchment level.

In practice, collaborative planning provides a platform for all participants to express their view on an issue of mutual concern (e.g., a water resource problem or proposed water policy change). Such a process demands that there is wide sharing of knowledge and participants *listen* to each other's' views (including differing scientific perspectives). Considerable respect and status is also given to local knowledge in the assessment process (Baines et al., 2003). Then, through ongoing dialogue and debate, participants work together towards building mutually beneficial and sustainable policy options and solutions. While this is the *ideal* outcome, the process can take (a long) time, with potentially adversarial groups *progressively* and *incrementally* working towards a new and shared understanding of the issue(s) at hand, for the benefit of finding collaborative solutions that will ultimately be supported by the majority.

The Canterbury approach

In the Canterbury region of New Zealand's South Island, where water quality is a key concern, a collaborative process has been designed and is underway with communities in 10 water catchments (see: http://ecan.govt.nz/publications/Plans/selwyn-te-waihora-focus-group-info-sheet1.pdf). Each catchment has its own Zone Committee (ZC), a local water governance group comprising appointed community, local government and industry representatives. ZCs, with the help of technical advisory teams (including social and economic impact assessment specialists), explore the interrelated impacts of land-uses and water management options on local waterways, social life, culture and economy. The approach uses "change scenarios" that provide the participants with a basis on which they can debate and derive preferred water quality and quantity limits for their catchments and develop options for change. ZCs must involve water stakeholders and the local community in their considerations, which, at the end of the process, are compiled as a set of official planning recommendations.

Typically, the process in Canterbury has involved a series of workshops held in local community centres or halls. These generally have been well attended. They start with a broad conversation about the state of water quality in each catchment and emerging/changing trends in land-use and the impacts of these changes on water systems, local economy, cultural values, water-based recreation and community life. The conversation is informed by insights delivered by a core group of technical advisors

(including economic, environmental and social impact assessors) who present their interpretations of the "current state" or baseline. In subsequent workshops, the community typically explores the impacts of a range of change scenarios or "limit options" (Norton et al, 2012) that, in broad terms, range between expansion of intensive farming focused on achieving economic outcomes and reductions in intensive farming with associated farm mitigation practices to achieve a "green" set of outcomes. The technical team inform the conversation by using the best available science to predict the future consequences of each change scenario across a set of agreed social, economic, environmental and cultural values. The aim is to stimulate an informed debate within the community about preferred development pathways so that decisions on limits can be made.

Challenges for IA with open access

In practice, the Canterbury limit-setting process is information-intensive, integrating science from a variety of fields, including local knowledge. The approach has, for example, the social and economic analysts working alongside those on catchment hydrology, water quality, land-use and nutrient modelling. The result of this effort is usually a series of technical summaries and presentations (a set for each change scenario explored), which are emailed to the ZC members and other stakeholders who have expressed interest, and also made available more widely on the zone website. These reports are the centre pieces for discussion at the community workshops based on slide presentations and handouts of slides and material. The ensuing discussions often generate requests from the community for tweaks to the change scenario being explored, requiring the technical experts to return to the drawing board for another iteration.

To manage the considerable flow of information (including relevant scientific reports) and to provide open access to data (an essential ingredient of any collaborative process), a webpage is developed for each catchment (for one example see: http://ecan.govt.nz/our-responsibilities/regional-plans/regional-plans-under-development/south-canterbury-coastal-streams/Pages/outcome-scenario-discussions.aspx). The webpages are invaluable communication channels between councils, ZCs, technical advisors and local communities. Ostensibly, the provision of information online leads to more informed and transparent community discussions, but (from the vantage point of social impact assessors in the Canterbury collaborative process) the use of webpages for open-access to technical information also presents issues.

First, pressure goes on technical teams to post reiterations of material online, meaning the presence of a lot of *changing* technical information for the community to track, download and digest prior to each workshop. However, provision of information online does not always equate to accurate information *interpretation* and, therefore, open access needs to be supported by good technical communication, with space in workshops for the community to enquire into and verbally debate the technical matters presented in the reports. The technical teams must also communicate effectively amongst themselves prior to the issuing of public documents, so that their individual assessments are as complete as possible and consistent across the different areas of expertise. New Zealand farming communities and other catchment stakeholders are adept at picking up any problems with data provided to them.

Second, tight planning timelines, when combined with the speed of the internet, create a sense of process-hurriedness which can face criticism (and potentially a loss of trust in the authority overseeing the process). In the Canterbury process, the period between workshops can be little more than four weeks. There is an expectation that the technical team has their reporting circulated and posted online prior to the workshops, in order to

give the community adequate time to digest the information. The careful integration of different types of impact assessment, however, takes time to achieve. For example, it is difficult to assess the social or health impacts on shallow household wells without information from the modelled impacts of extra catchment nitrogen on groundwater systems. This complex relationship highlights the importance of establishing sound processes and expectations around the timing of the flow of information between members of technical teams and the wider community.

Third, the expansiveness of the world-wide-web provides "collaborators" with a seemingly endless source of information around which counterarguments can be lodged in workshops against the reports provided by the technical team. While such counterarguments can often fuel useful discussions, they can also place technicians in a difficult position, unable to dismiss or agree with the findings of the report in question on the basis that they have not assessed its content nor have an understanding of the context in which it was written. Limitations around the undertaking of new scientific research need to be recognised. Room is needed in the process to record questions and disputes about data and provide responses. In Canterbury this has been achieved by written question-and-answer documents available online. Also, some of the catchment websites have bibliographies on line with links or downloadable copies of available reports. With such open access, agreement might then be reached about the nature of new or ongoing research or monitoring and the timeframes required.

Fourth, one of the central tenets of collaborative planning is that local/community knowledge is embraced as much as scientific assessments. While technical reports are easily publishable online, the same cannot be said for local knowledge. As above, space needs to be provided in workshops to ensure published science does not trump local experience and observations, and, as with other aspects, local knowledge is recorded and available on line. One caveat here is where local knowledge has particular sensitivities. Dealing with such sensitivities is a basic tenet of ethical social impact assessment (Baines et al., 2013) and also of cultural (indigenous peoples' assessments) in New Zealand.

Fifth, open access does not automatically mean "access for all". It should not assume that all people – all participants in the collaboration – have access to the internet and are able to download, print in colour or view the reports and participate (equally) in an informed manner. This is not always the case in New Zealand, particularly in rural areas where internet connectivity is sometimes problematic. There needs to be, therefore, an alternative method for accessing information, so that the most informed are not just those who are digitally connected. The simplest way of achieving this goal is to provide hard copies at meetings – even still, opening up the possibility of criticism that the material should have been posted (snail mail) in advance!

Conclusions/suggestions

Collaborative planning can be viewed as a mechanism to help policymakers construct regulations which are better aligned with the needs, expectations and aspirations of the wider community. Experiences from the Canterbury limit-setting process show, however, that in practice, collaborative planning is complex and information intensive, involving the sharing, integration and interpretation of a considerable amount of social, cultural and economic data, and local knowledge on catchment hydrology, water quality, land-use and nutrient modelling. The need to establish sound data management protocols and very good communication channels (between planners, experts and the community) is therefore essential. This is certainly made easier in the digital era, where the signposting and sharing of relevant information can be achieved by establishing publically accessible project-based

websites and email lists, as is the case in Canterbury, where scientific reports are posted alongside community updates, bibliographies other relevant research links. But the use of digital technology within such processes also creates a new set of challenges as outlined in this paper. Most of these can be related to new expectations about the timing, speed and quality of science delivery and impact assessments.

In the emerging operational context, collaborative planners, impact assessors and scientists, community members and stakeholders need to communicate and plan well together and keep what they hope to achieve to a manageable level. Integrated impact assessment and collaborative processes, backed by open access to information, should result in improved environmental and social outcomes, as tested by ongoing monitoring.

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