

The Canterbury Water Management Strategy as a Collaborative Planning Initiative: a preliminary assessment

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Abstract

This report is a preliminary assessment of the *Canterbury Water Management Strategy (CWMS)* as part of a longer term longitudinal monitoring study of institutional arrangements for sustainable water management in Canterbury. The CWMS is an innovative regional initiative to address exacerbating conflicts over allocation and management of freshwater resources in the region. Past attempts to satisfactorily address these concerns within the framework of the statutory RMA planning regime have encountered significant barriers¹. The CWMS is expected to overcome these barriers by adopting a collaborative, non-statutory process combined with statutory backing (in particular via the Canterbury Regional Policy Statement²).

The above expectation of the CWMS poses a number of research questions including:

- What difference, if any, will the CWMS make in overcoming RMA related statutory planning barriers towards sustainable water management in Canterbury?
- Have the processes of crafting the CWMS been sufficiently robust in terms of informed deliberation in order to withstand contestation further down the line?
- Reflecting on the Canterbury 'experiment' from a wider conceptual stance, how should collaborative water governance processes be designed to be successful?

The answer to the first question will become evident through the course of monitoring the CWMS over the next six years as part of future research at Lincoln University (subject to funding). As the first step in this exercise, this particular report will focus on addressing the second question above. Thus, the specific aim of this report is to provide feedback from a group of key informants who have been closely involved in the development of the CWMS and who have been interviewed on three dimensions of the CWMS:

- the processes of developing the CWMS;
- content of policies in the CWMS to manage water resources; and
- perceived anticipated challenges and opportunities of implementing these policies.

In the discussion and conclusion, a preliminary appraisal of the CWMS is offered on the basis of the above analysis.

1. Introduction

Allocation and management of water resources in Canterbury has become highly contested during the last two decades, a reflection of rapidly increasing water demand for multiple and competing uses. The recently released *Canterbury Water Management Strategy (CWMS)* –

¹ For example, the completion of the natural resources regional plan and policy statement, and the ability to defend water allocation limits.

² This process was notified in a Canterbury Regional Council public briefing paper on 19 May 2005, and ratified at the meeting of the Canterbury Regional Council on 26 May 2005.

Framework Document, (hereafter called the Strategy) by Canterbury Water³ is an innovative planning initiative based on a collaborative governance model. The Strategy is a framework to manage Canterbury's water resources sustainably by articulating a series of agreed principles and targets relating to allocation of water for competing uses and also for water quality. It proposes novel nested governance arrangements to undertake these functions on a management zone and regional basis, with linkages to national level arrangements (Canterbury Water, 2009a).

An attribute of this strategy of particular interest to researchers and environmental practitioners is its relatively informal collaborative development process. As a deliberate decision, the Strategy has been developed outside the ambit of the statutory regional water planning processes. As explained later, the Strategy is a product of sustained and informed deliberation by a Steering Group under the guidance of the Canterbury Mayoral Forum⁴. Community engagement was undertaken via Local Government Act 2002 (LGA) processes and additional expertise provided by an Officials Group (see Appendix 3 for group membership details). The provisions of the Strategy reflect a high degree of consensus within the Steering Group and the Strategy has been endorsed⁵ by the eleven individual Canterbury local authorities and the Canterbury Mayoral Forum.

The Strategy is akin to a social contract and currently carries no formal status except to the extent that its visions and principles have been included in the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act enacted in April 2010⁶. However, to be successful as a pathway towards sustainable management of Canterbury's water resources, statutory backing for the provisions of the Strategy (water allocation and water quality as well as the provisions of the regional and zone implementation programmes) is proposed through district, regional and national statutory planning instruments prepared under the Resource Management Act 1991 (RMA) and the Local Government Act 2002 (LGA).

A key reason for adopting the non-statutory pathway under the auspices of the Canterbury Mayoral Forum relates to a widely shared concern amongst key water stakeholders in Canterbury about the RMA's adversarial, costly and time consuming planning processes and the assumption that a collaborative governance model was better suited to management of a commons resource such as water. The collaborative governance model proposes that informed

³ Canterbury Water is the domain name established by Environment Canterbury to retain material relevant to the Canterbury Water Management Strategy.

⁴ The Canterbury Mayoral Forum is a non statutory body made up of the mayors and chief executives of the regional territorial authorities and Environment Canterbury.

⁵ The Federated Farmers group is also expected to endorse the Strategy and Ngāi Tahu are supporting the process (without formal endorsement at this stage).

⁶ The Act replaced the governing body of ECan with appointed commissioners. It gives commissioners power to impose moratoria on new applications for water and discharge permits, sets up a new regime for water conservation orders in Canterbury, and alters certain aspects of the process for approving regional policy statements and plans.

deliberation amongst relevant stakeholders in a non-statutory process will lessen the risks of subsequent conflicts under the RMA processes during the course of implementing the Strategy⁷.

The above expectation that underpins the Strategy raises a number of related research questions including:

- What difference, if any, will the Strategy make in overcoming RMA related statutory planning barriers towards sustainable water management in Canterbury?
- Have the processes of crafting the Strategy been sufficiently robust in terms of informed deliberation in order to withstand contestation further down the line?
- Reflecting on the Canterbury 'experiment' from a wider conceptual stance, how should collaborative water governance processes be designed to be successful?

The answer to the first question will become evident through the course of monitoring the Strategy over the next six years under the ambit of future research programmes based at Lincoln University (subject to funding). As the first step in this exercise, this report will focus on addressing the second research question. The specific aim of this report is to provide feedback from a group of key informants who have been closely involved in the development of the CWMS and who have been interviewed on three dimensions of the Strategy:

- the processes of developing the CWMS;
- content of policies in the Strategy to manage water resources; and
- perceived anticipated challenges and opportunities of implementing these policies.

In the discussion and conclusion, a preliminary appraisal of the Strategy is offered on the basis of the above findings.

2. Research Methodology

A series of confidential in-depth interviews with key informants, a majority of whom were members of the CWMS Steering Group or Officials Group, was undertaken in late 2009 and early 2010, soon after the release of the Canterbury Water Management Strategy – Framework Document in November 2009.

In total, 21 key informants were interviewed in 14 separate interviews, either individually, in pairs or, in the case of two interviews, as a group of three. In the main, the informants interviewed were closely involved in more than one stage of the development of the Strategy and hence were knowledgeable about it. They were also selected to reflect a broad cross section of the organisations and interests represented during the Strategy development stages.

⁷ Thus, the Strategy expects that “[o]verall there will be increase in pre-planning activity (informal processes) and a reduction in the need for hearings and other formal processes. This should produce better outcomes with less compliance costs.” (p. 58, Canterbury Water, 2009a)

Informants were asked to participate in a semi-structured interview of around one hour in duration and were sent a copy of the questions (Appendix 1) before the interview. Permission was sought to record each interview. Participants were also asked to recommend other potential interviewees if appropriate.

Interviews were conducted by one or two researchers, with the key points of the interview being recorded by a note taker. The notes were written up, with occasional reference to the digital recording to clarify the written notes. Interviewees were able to request a copy of the recording and/or the notes.

The questions formed the basis of each interview, but were not rigidly adhered to. In some interviews more than one interviewee represented an organisation and each individual contributed their views. Interviews lasted from just under one hour to almost two hours. All respondents were promised confidentiality and no one is identified individually in this report.

The questions were divided into three broad sections: Part A, the process of developing the Canterbury Water Management Strategy as a non-statutory deliberative exercise; Part B: the substantive policies in the Canterbury Water Management Strategy to allocate and manage water; and Part C: implementation of the Canterbury Water Management Strategy. The questions were worded in a very open way to give respondents room to raise issues and concerns as they saw important.

All interviews were analysed to tabulate responses and comments (Appendix 2). Areas of commonality and divergence were collated, with key quotes used to illustrate points that were made by the key informants. The insights garnered from the interviews are supplemented by recent documentary sources including newspaper reports.

Following a brief overview of the CWMS in section 3, section 4 will present feedback from the interview respondents about the Strategy. Section 5 will discuss the results and section 6 presents our conclusions.

3. Overview of the Canterbury Water Management Strategy (CWMS)

3.1 Precursors to the development of the Strategy

The CWMS is a non-statutory framework document that provides strategic direction on management of available freshwater resources in Canterbury. It was developed through informed consensus amongst local Canterbury government elected leaders, senior officials and

key water stakeholder groups. As shown in Table 1, the Strategy is based on investigations and deliberations dating back to 1998 regarding freshwater supply and demand in Canterbury. The first three stages analysed whether it was possible to meet the reasonably foreseeable, long-term water needs of environmental, urban and rural sectors. These stages included the assumption that complying with current water allocation rules would result in environmental water requirements being met. The scope in Stage 4 was significantly broadened to consider water quality issues and whether environmental needs were greater than previously assumed.

Table 1. Steps leading to the CWMS

Stage	Date	Lead organisation(s)	Outputs
Canterbury Strategic Water Study (Stage 1)	1998- 2002	MAF & MfE; Report prepared by Lincoln Environmental	Sub-regional water balance; evaluation of current and likely future water supply and demand
Canterbury Strategic Water Study (Stage 2)	2004 - 2008	Environment Canterbury; Report prepared by Aqualinc	Identified potential water storage projects in Canterbury and their hydrological feasibility
Canterbury Strategic Water Study (Stage 3)	2006 - 2008	Canterbury Mayoral Forum; Report prepared by Ian Whitehouse, Andy Pearce and Grant McFadden	Evaluation by regional and local multi-stakeholder reference groups and some interest groups of the environmental, social, cultural and economic impacts of the water storage options identified in CSWS Stage 2
Canterbury Water Management Strategy (Stage 4)	2008 -	Canterbury Water; Report prepared by the Steering Group	A collaborative long term strategy for the management of freshwater water in the region based on measurable targets.

Following the impacts of a severe drought and frustrated by a perception of ad hoc water allocation decision making, the decision to embark on these studies in 1998 was the initiative of two relatively influential individuals from key central government agencies (MAF and MfE). An ECan employee also participated as an interested observer and information facilitator (Whitehouse et al., 2008, p.2).

The agencies – MAF and MfE – jointly commissioned a study of water supply and demand in Canterbury, the *Canterbury Strategic Water Study (CSWS)*, (Lincoln Environmental, 2002). Taking a strategic and long term view, it examined potential demand from all sectors, availability of ground and surface water resources, and reliability of natural systems. The report concluded that, although in principle there is enough water in Canterbury to meet the long-term needs of

all sectors, current demand could not be adequately met at all times and additional storage would be required to meet the region's long term water needs. It recommended that options for storage should be considered on a regional basis to ensure no options are ruled out because of ad hoc development (Lincoln Environmental, 2002, pp.5-6; Winstanley et al., 2007, p.5).

Beginning with the commencement of Stage 2, the Canterbury Mayoral Forum, comprising elected leaders and chief executives of the regional council and all the local territorial authorities in Canterbury, has emerged as a lead player in overseeing efforts to respond to opportunities for increasing agricultural production via increased irrigation. It established a Steering Group to oversee the process and commissioned Stage 2 of the Canterbury Strategic Water Study. This commenced in 2004 and examined whether it is practical to meet environmental needs and potential water demands through the use of storage as a core component of integrated ground and surface water management in the Canterbury region. The members of the Steering Group were appointed on the basis of their individual expertise and interest in this issue, but also in order to gain broad representation across the principal stakeholder interest groups within the region⁸. The final Stage 2 report was presented in 2008 (Aqualinc Research, 2008). It produced a suite of water supply options for each part of Canterbury, with water sources, storage and water conveyance facilities as well as management components such as river allocation rules.

Stage 3, which began in 2006, involved taking the proposed water storage options to multi-stakeholder groups for further comments and evaluation of the environmental, social, cultural and economic impacts via sustainability assessment processes. This stage considered options based on major reservoirs (more than 50 MCM), the option of on-farm storage and the option of "no more major storage". The first phase of the Stage 3 consultation involved the formation of a regional reference group made up of 20 selected individuals who were tasked with developing a sustainability framework to evaluate hypothetical storage options. The second phase saw the formation of three separate locality based reference groups (south, mid and north Canterbury) consisting of 15 – 30 people and included a number of the members of the original reference group plus local stakeholders. These groups carried out an evaluation of the options for their area. In addition, there was limited consultation with interest groups (Phase 3) including local government, Fish & Game NZ and Aoraki Conservation Board (Winstanley et al., 2007 pp.5 – 6; Whitehouse et al., 2008 p.3). The feedback made it clear that "*Water storage is only one of the things that need to be considered in a water strategy for Canterbury. Other issues that need to be considered include land use intensification, water quality, cultural values, tangata whenua objectives, and recreation uses.*" (Whitehouse et al., 2008, p.4). In response to this, the focus in Stage 4 was broadened to address such issues.

⁸ Chaired by the Mayor of the Ashburton District, the steering committee members included representatives of central and local government, tangata whenua, and community group representatives including environmental, farming, industry and recreational interests.

The start of Stage 4 coincided with local body elections in late 2007. The steering committee was significantly expanded and new public engagement processes initiated. The name of the project was also deliberately changed from Canterbury Strategic Water Study to Canterbury Water Management Strategy to indicate that the brief had changed to a stronger parallel development focus with a strategy as the key output. The Steering Group, chaired by a local authority mayor and led by the chief executive of ECan, was supported by an expert Officials Group. They developed a strategy for integrated management of Canterbury's water resource and considered a wide range of issues, including those identified in the Stage 3 report. Arguably, the information assembled during the first three stages enabled more informed deliberation during Stage 4 than would have been feasible otherwise. Stakeholder meetings in 2008 and early 2009 led to the establishment of a set of fundamental principles and the identification of four options for managing water resources, which were released for public comment in April 2009. This was followed up with a series of public meetings, including a participatory sustainability appraisal exercise (Canterbury Water, 2009b).

A draft *Canterbury Water Management Strategy* was released for comment in September 2009 and the final strategy, following feedback on the draft, was released in November 2009.

Alongside the community engagement and consultation regarding outcomes and principles, a number of other workstreams have been progressed by the Steering Group. These have contributed to the development of the Strategy and will impact on its implementation. The workstreams include groups considering the details of the proposed draft targets contained in the Strategy, groups looking specifically at potential governance arrangements, including liaison with central government, and an investigation which has been commissioned to advise on the options for "a Water Infrastructure and Services Entity to take on the role of designing, building, financing and operating the larger elements of the regional water storage and distribution system." (Canterbury Water, 2009a, p.47).

3.2 Key elements of the Strategy

The Strategy is three pronged, as follows:

- Based on an informed assessment of the water supply and demand situation in Canterbury and possible opportunities for enhanced irrigation, it articulates an agreed-upon vision based on desired outcomes and fundamental principles. Considerable collective effort has gone into crafting these vision statements and some interview respondents who took part in this process accorded strong weight to these statements as signifying emergent group consensus amongst environmental and development stakeholders and Māori.

- Based on the above, the Strategy lists a series of targets relating to management of water resources. The short, medium and long term measurable outcome targets expected to be achieved by specified dates include: ecosystem health/biodiversity; natural character of braided rivers; kaitiakitanga; drinking water; recreational and amenity opportunities; water-use efficiency; irrigated land area; energy security and efficiency; and regional and national economies. These draft targets, included in the Strategy and which were updated in March 2010, are yet to be finally confirmed and will be monitored at zonal and regional levels to track progress on the Strategy.
- Finally, it makes recommendations for new water governance institutional arrangements for Canterbury to implement the Strategy.

In a number of respects, the Strategy is a work in progress. At the time of writing (May 2010), there are key issues still to be determined such as finalising boundaries for the proposed catchment-based management zones, the targets against which progress will be measured, and the terms of reference for establishing new institutional arrangements. Likewise, the Cabinet decision to replace the elected regional council by a group of appointed commissioners will also have implications for the future of the Strategy. Outcomes of other national initiatives such as the Land and Water Forum may also impact on implementation of the Strategy.

3.3 Proposed Water Governance Institutional Arrangements

Key attributes of the nested and devolved water governance institutional arrangements for managing Canterbury water resources proposed in the Strategy are as follows:

- A **regional water management committee** will be formed, along with ten **zonal committees**. It is envisaged that these committees will be formed from stakeholder representatives and be managed by a new semi autonomous **Water Executive**. The prime function of zonal and regional water management committees will be to develop the zone and regional implementation programmes. They will not be regulators but will act as facilitators and contribute to RMA plan and policy making.
- The Strategy proposes a **tripartite forum**, made up of relevant Cabinet ministers, Ngāi Tahu and the Canterbury regional and district councils, which will address issues that cannot be resolved by zonal and regional committees. Ngāi Tahu have not endorsed this section, as their Treaty partnership is with the Crown only. Their position is that local government can only engage as an agent of the Crown with whatever role is delegated to them by the Crown.

- It is envisaged that the above committees and associated activities will operate as “nested” levels, with decisions about specific issues being allocated to the most appropriate level.
- The establishment of a **Water Infrastructure and Services Entity** is planned to take on designing, building, financing and operating the larger elements of the regional water storage and distribution system. This entity is still under investigation but is likely to involve public (local authority) and private investment.
- The implementation of the CWMS will be initiated under the RMA and LGA, with the RMA setting environmental limits, efficiency requirements, guiding resource consent decisions and review/transfers of existing permits. The LGA instruments will set funding and priorities of committees. The current review of the Regional Council’s Regional Policy Statement will provide an opportunity to incorporate the fundamental principles of the CWMS into statutory documents.
- Legislative changes may be required to ensure the implementation programmes produced by the regional and zonal committees are given appropriate legal status under the RMA and LGA. These changes could also provide better linkage between the two Acts, with the aim of providing long-term planning stability.

It is anticipated that zone and regional programmes will enable:

- a shift from effects-based management of individual consents to integrated management, including management of the cumulative effects of water abstraction and land use intensification based on these zones;
- water allocation decisions that address sustainable environmental limits and climate variability;
- actions to protect and restore freshwater biodiversity, amenity values and natural character; and recognition of kaitiakitanga.

4. Analysis of interviews

A summary of the responses from the interview respondents is included as Appendix 2. As noted earlier, the interview questions were divided into three parts.

4.1 The Process

The first part, Part A, was intended to elicit responses relating specifically to the *process* of development of the Strategy, beginning with the respondents’ perception of the key strengths and weaknesses.

There are some clear attributes that emerge as key strengths of the process. Firstly, with more than half of the respondents specifically identifying it, the breadth of participation and inclusiveness was identified as a key strength:

“We needed to get together with those with different views.” (respondent 14)

“The multi interest steering group [was a strength]. Old baggage got aired early on.”
(respondent 6)

Secondly, the use of research and science was raised by half the respondents, in a variety of contexts:

“The background provided by the Canterbury Strategic Water Study was a good base to start from.” (respondent 14)

“Another strength has been good technical work this allows decision makers to visualise what is happening.” (respondent 12)

“It wasn’t ‘decide and defend’. It was much more hearing from people what their values and concerns were and providing them with technical information.” (respondent 5)

However, two respondents noted that it is about more than scientific and technical data:

“Its not about facts – it’s about values and outcomes.” (respondent 8)

“It’s always a question of relative importance of issues and values. You can’t easily weigh water quality for recreation against economic return against biodiversity.” (respondent 4)

The collaborative nature of the process and the effort expended on consultation were mentioned by over a third of respondents and transfer of information and the growth in understanding were also significant for around a third of respondents:

“It’s a collaborative layered approach – not operating on a representative model but a participatory one.” (respondent 17)

“It educated us about each others’ values.” (respondent 11)

“Top down, bottom up worked well, with information moving in both directions.” (respondent 4).

Practical aspects which were mentioned included the use of a neutral facilitator for parts of the process and the improved participation which resulted from changing the design of the workshops to a 'world café' model⁹:

"The world café model of facilitation did get people to listen to other people's point of view."
(respondent 12)

Another point raised by one respondent (18) was that the success of the process was dependent on the skills and personalities of the individuals involved, who were specifically selected because of their background:

"People are there not as representatives of organisations but because they have been identified as having knowledge, experience and collaborative skills.....it all hinges on the nature of the people involved. They have to approach the exercise from the point of view of wider community interest. People who work best tend to be people with a range of experiences in their background, more than one job or one interest."

The focus on the region as a whole was mentioned by three respondents. Different perceptions of the rate of progress are apparent with one respondent seeing the speed of the process as a strength and others (respondents 5 and 15) noting that not rushing allowed trust between participants to develop. Another respondent (respondent 17) described the process as a "fast-slow process", with the discussion and consultation aspects of the process being considered slow but the use of up to twelve different work streams as fast. This enabled the development and implementation of the Strategy to move forward very quickly.

Some respondents identified a better understanding of each other and the building of trust as a key strength:

"The opposing sectors have a better appreciation of each other's views." (respondent 11)

⁹ The world café is a system of exchange based on conversations exploring a specific topic, and aiming to tap directly into the social nature of much of our learning. Participants split into small discussion groups, ideally around café-style tables, and are encouraged to listen and talk, and not edit their thinking. Participants swap tables, taking ideas to a new group, and a permanent host remains at each table. As the ideas move about the room, they bear fruit in unexpected ways, networks are established and knowledge is shared. (Source: International Labour Office. 2006. *I went to a knowledge sharing workshop and all I got was this guidebook* (ILO, Geneva), p. 28)
<http://www.ilo.org/public/english/support/lib/knowledgesharing/meetings.htm#WC>

“There are fewer obstructions and less position taking as a result (of this process). There’s not the usual tensions, they are just looking for the best answers.” (respondent 13)

There was less agreement between participants on the weaknesses of the process. Four respondents noted the lack of engagement from the wider public. This is despite the consultation process being seen as a strength by eight respondents. One (respondent 12), although citing the wide consultation as a strength, raised concerns about the lack of research on what the “silent majority” think:

“How do you empower stakeholders and who are the stakeholders. Who speaks for the silent majority?” (respondent 12)

Several other areas of weakness were cited by more than one person. The time taken to produce the Strategy was a concern for three respondents and the way existing irrigation projects are proceeding without any recognition of the Strategy also concerned three respondents:

“Major projects are being consented which are removing options for the Strategy.” (respondent 11)

The lack of science was identified as an issue by three respondents, although two of the three also noted the use of the science and research that is available as a strength:

“We realised there is knowledge out there we need to know and know together. We organised a series of workshops from experts and covered many topics..... but not enough. We did it with the steering group but you need informed meaningful engagement from everyone. It was too expensive.” (respondent 8)

The perception of predetermined agendas was also raised by three respondents:

“The environmental agendas were clear but there were also development agendas. Those dynamics had an influence.” (respondent 2)

“A weakness of the process is the perception of a predetermined agenda and the capture of the process by irrigation and developers.” (respondent 9)

Specific sector positions on how different stakeholder groups influenced the process are also apparent:

“Sometimes the NGOs have disproportionate influence.” (respondent 14)

Other points raised include the reliance on others to provide the statutory backing, the lack of direction from central government, the lack of direct engagement between the Steering Group and the Canterbury Mayoral Forum, the lack of engagement around institutional arrangements, concerns about lifting understanding and the lack of analysis of previous attempts at water management processes. One respondent (3) noted that as the process evolved and changed it was hard for some people to cope with the changes.

The lack of continuity in participants and historical discussions was a related concern:

“One frustration for me in Stage 4 has been that only 3 people survived the Stage 3 steering group. I don’t think new people were briefed enough – we seemed to be relitigating it again. One failing in Stage 3 was that good minutes weren’t kept.” (respondent 19)

Concern was also expressed about the lack of resourcing for the stakeholders:

“The process seems to expect us to participate at our own cost which is probably not sustainable in the long term. It is galling to see the cash flowing to facilitators and consultants and to see volunteers having to front up at their own expense.” (respondent 11)

It was also noted (respondent 18) that the interests of women were not well represented during Stage 3 of the process:

“[A weakness was] the extent to which we have [failed to] capture the interest of women, and they are different from the interests of males.”

The wider issue of participation and any obvious gaps was the basis of one of the questions. Several respondents noted the lack of Ngāi Tahu representation during parts of the process, although there seemed a general understanding that there was high level engagement in the Steering Group, separate discussions with the Regional Council as well as participation in related national initiatives such as the Land and Water Forum. It was also mentioned by more than one respondent that Ngāi Tahu were also likely to have been investing energy into direct iwi/Crown discussions, similar to the negotiations that have taken place in the Waikato region with Waikato-Tainui¹⁰. A lack of resources and internal Ngāi Tahu restructuring during Stage 3 were mentioned as possible challenges to wider participation:

¹⁰ In that instance a Deed of Settlement has been signed which envisages a co-management arrangement with a number of new agencies and the agreed vision and strategy given the status of a National Policy Statement under the RMA, meaning that it has to be given effect to by local authorities (Tainui, 2008). The Waikato River Settlement Act was passed on May 6, 2010. It added the vision and strategy to the regional policy statement and established a co-governance entity, the Waikato River Authority, plus the Waikato River Clean-Up Trust to administer a contestable fund of \$210 million from the Crown over 30 years for environmental restoration.

“Ngāi Tahu have been active at some levels but I think they get a bit stretched. It would be nice to hear their views.” (respondent 14)

“The rūnanga bother me. We had real trouble getting any representatives to turn up in Stage 3 processes.” (respondent 18)

“Māori were there all the way through. Also with the Land and Water Forum – Māori are very involved. That’s a national CWMS really.” (respondent 19)

Recreational interests and power companies involved in the generation of hydro electric power were also identified as groups that had not been fully engaged in the process:

“It was a real job to get some recreational people there. Hugh Canard came and was an excellent person, but the rest of them weren’t there. I guess they think this won’t affect them.” (respondent 19)

“The electricity generators were marginalised through the process. They have been invited but they didn’t see the relevance to their set of interests. Now, with choices being made regarding allocation they are right in amongst it. They are getting more involved now.” (respondent 1)

It was also noted that some groups did not always participate with an open mind:

“There have been a few different interests who have been quite circumspect or remote at times. Certainly in environmental areas they have preconceived ideas.” (respondent 17)

“Some people did not have an open mind, the Opuha people, some from farming.” (respondent 4)

It was mentioned by one respondent that Forest and Bird chose not to participate in the early stages, possibly as they had found that adversarial RMA processes were better able to meet their needs:

“They wanted to wait until an official document came out that they could submit on under the RMA relying on the RMA was seen as in their best interest at the time. They had had some good wins.” (respondent 18)

The respondents identified a variety of unresolved issues that arose during the process of development of the Strategy which may have implications for implementation. The lack of historical data for the rivers (respondent 10), lack of knowledge of the role played by groundwater fauna (respondent 4) and the effects of hill country land use (respondent 3) were all mentioned. There was also concern expressed about the membership and role of the zonal

committees, although this was an issue that was being discussed and resolved at the time the interviews were undertaken.

In relation to scientific and technical inputs, one respondent noted:

“What is the problem that we are trying to solve? Actually the problem is not a technical and scientific problem, it’s a people problem. The problem is the inability to make (and defend) decisions. Canterbury has not had the institutions to make and carry through these decisions. What we are doing here is building those institutions in a long term sense. Then technical and scientific information becomes a strategic input that you need to make decisions. But if you don’t have the machinery to make decisions no amount of information is going to help that situation.” (respondent 17)

It was also noted (respondent 18):

“Zonal committees are going to have to decide where they can and can’t progress without more information. There will be situations where the best information will have to do.”

4.2 Views on the Policy Contents of the CWMS

Respondents were asked, in Part B of the interview, about their views on the substantive policies in the Strategy to allocate and manage water. There was quite a spread of comments from the interviewees, perhaps reflecting the lack of detail in the final strategy.

Four respondents identified the concept of parallel development as a key strength:

“Parallel development – taking forward environment, recreation, storage type goals and activities in parallel. You need to build trust and confidence. We’re absolutely deliberate in saying these things have to go in parallel.” (respondent 17)

This is perhaps linked to an observation by respondent 18:

“It takes us back to the sorts of things that came out of the Soil and Water Conservation Act (1976) – multiple water use concepts.”

Another respondent (5) noted that *“This is a proactive, strategic approach, not reactive, rules based.... it has provided us with a range of proactive strategies, and the basis for sustainability appraisal.”*

The increased focus on science and research and the establishment of the fundamental principles were also mentioned by three respondents. Other points raised included the

increased focus on the environment, the expected local involvement in the committees, potential gains from an audited self-management approach and the very strong mandate for change apparent from the submissions made during the process. It was also noted by respondent 16 that *“Water is identified as the number one priority in community outcomes across the region”*, which is a very clear indication of a common purpose behind the development of a water management strategy and a mandate from the communities of all the local authorities involved.

Regarding the key weaknesses, seven respondents identified the current lack of statutory backing as a weakness. Concerns were also expressed by five of the respondents about the targets, including that some are not finalised, may potentially be in conflict, or may be unrealistic:

One respondent commented:

“It’s a vulnerability of the CWMS that environmental interests are quite wary and won’t fully buy into it until they see the ecological restoration components of the Strategy happening.” (respondent 7)

This concern was echoed by some of the points raised in connection to implementing the Strategy and noted below. However, one respondent was concerned that environmental goals would be put ahead of irrigation, commenting:

“Until we address the year round availability of water I believe we shouldn’t be looking at rehabilitation.... Those who have a big investment in irrigation should have priority over rehabilitation which may not be successful because of a drought.” (respondent 15)

The lack of funding and the implications of that were raised by one respondent:

“Finding finance for the restoration goals [is a weakness] and the threat of community backlash [when asked to pay higher rates].” (respondent 16)

This concern was also reflected in a local newspaper article:

“A “king hit” from the regional water management strategy may inflate Environment Canterbury rates next year.” (Williams, 2009, February 12)

However, another respondent noted:

“It very closely reflects what they asked for. I just hope people know what they have asked for and the implications.” (respondent 18)

4.3 Views on the Challenges of Implementing the CWMS

In the final part of the interview, Part C, respondents were asked to consider the implementation phase of the Strategy. Many more comments were made regarding perceived challenges than about the opportunities. These were not necessarily negative comments; rather, they may be reflecting the unknowns and the aspects that are still to be decided such as the terms of reference for the committees.

Around a third of respondents mentioned the potential gains from reducing legal conflict:

“There is a huge benefit from cutting out legal processes. It will lessen conflict.” (respondent 1)

“Potentially there’s a big benefit if we can agree on the development of large projects – so they can happen without a costly adversarial process.” (respondent 14)

Four respondents highlighted the opportunities from a more integrated approach to addressing other natural resource issues as well as water:

“There can be integrated solutions. For farmers some of the greatest cost savings, as part of a brokerage system, is the reduction of energy use for pumping.” (respondent 5)

Three respondents noted the opportunities that will exist for looking at alternative types of farming:

“The recognition of other forms of farming that we are yet to develop expertise in and which may be better for sustainability – grapes, seeds etc.” (respondent 1)

Three also identified achieving a balance between economic development and environmental restoration as an opportunity.

There was a considerable spread of concerns about the implementation of the CWMS. However, eleven of the twenty one respondents specifically focused on the process of gaining a statutory mandate, particularly in relation to compliance:

“One of the things is getting the legislative mandate. You can get some of it but not all of it under the RMA.” (respondent 18)

“In terms of compliance you must have something more than a collaborative, cooperative approach – you need a sledgehammer.” (respondent 1)

“What happens if the collaborative process falls over? It may be that we’re relying on people not liking the status quo. The zone committees may need statutory backing.” (respondent 6)

The specific relationship between the CWMS and historical RMA implementation was raised by a number of respondents, with respondent 18 observing that *“It was an attempt to find a process not in conflict with the RMA.”* Respondent 3 also noted, *“The problem in Canterbury is the history it’s not a problem with the RMA, it’s the history.”*

Other related points included:

“The challenge is the interface between zonal and regional committee programmes and RMA processes.” (respondent 8)

“Having decided on the big picture, how do we cause a consent application to fit that picture? That’s still to be worked through.” (respondent 18)

“Potentially it will be easier [when the two systems are interfaced].” (respondent 13)

“We have to structure a way of using the RMA.” (respondent 17)

And it was also noted:

“There are collaborative mechanisms in the RMA which haven’t been used as well as they could have been.” (respondent 12)

In a more general context it was noted by respondent 18 that some groups prefer RMA processes, and this was reinforced by respondent 12: *“The benefit of the current RMA is that it does slow it down and you get more information”* and conversely, by respondent 14: *“Under the RMA, small groups can have a disproportionate effect and hold things up for a long time.”*

Four respondents were concerned about getting existing users to change practices and, linked to this issue, two mentioned the need for education and three raised the issue of compensation or other incentives to change:

“The challenge is that an increase in land intensification will not only require improved practices from new applicants but also from existing users. The RMA does not deal with this. Trying to change existing use is a real challenge.” (respondent 5)

“Intensification may not be the biggest part of the issue. Managing existing land use practice is more significant. The easy ones will be the new users coming under new irrigation so I’m not too worried about further expansion. They will have to meet conditions. It’s how to apply the same principles to existing users.” (respondent 18)

“Some things won’t proceed without compensation, like losing access to water. There’s no provision for compensation. To optimise the greatest good, not everyone will win.” (respondent 18)

Several respondents raised other concerns about funding. Six expressed general concern about where the funding will come from, and three saw finding the balance between public and private investment as a key challenge:

“To get the right balance between investment and risk is a challenge. Finding a model to balance public and private interest in a time of capital scarcity is a challenge.” (respondent 5)

Four respondents were concerned about the risk of capture:

“There is also the chance of capture by the eloquent and powerful.” (respondent 2)

And six also raised concerns about challenges at the zonal level to find appropriate members with the requisite skills, not to mention an appreciation for the capacity and trust building that was occurring at other levels:

“[We’re] now passing it down to potentially poorly resourced, not fully informed and maybe not intellectually competent people at zone committee level.” (respondent 2)

There were also concerns expressed by three respondents about the lack of accountability:

“Devolution is risky as [the zonal committees] are not accountable. But then conservation boards are appointed so there are other models where it works.” (respondent 12)

Uncertainty and the need for more scientific research was mentioned by three respondents:

“[We need] a realistic understanding of the link between activities and effects of those activities – not what might be possible but what is realistic and has actually been achieved elsewhere.” (respondent 13)

Another concern noted by three respondents related to the risk of political inference:

“This has got to get beyond political interference. There’s too much power in a body that is elected on a 3 year cycle, it’s too much of a limitation. It may be better to have a board with a longer tenure rather than elected. There for their skills and understanding.” (respondent 15)

An issue that was raised by three respondents in the context of challenges of implementing the Strategy was the risk of stakeholders withdrawing support at a later stage as more detailed decisions are made:

“There’s nothing stopping any group breaking away a later stage and fighting against it.” (respondent 10)

“Sooner or later someone will throw their toys out of the cot.” (respondent 14)

Many issues were raised in the discussions that do not readily fall under the specific questions that formed the basis of the interview but, nevertheless, are of interest.

For example, it was clear that the prospect of changes to legislation by central government and the backdrop of political and personal tension between the Local Territorial Authorities and the regional council was of concern to many respondents, particularly in the later interviews when the release of the central government report on ECan was imminent (Creech et al. 2010). However, there was some confidence in the Strategy:

“The Strategy is now at a stage that whatever the outcome it will continue.” (respondent 16)

“In some form it’s definitely going to happen now, I’m sure of that.” (respondent 18)

It would seem from some comments made during the interviews that there were many more layers of meetings contributing to the process of development and implementation of the Strategy than the clearly visible Canterbury Mayoral Forum, Steering Group and Officials Group. Within the CWMS process itself several respondents mentioned sub group meetings being held to finalise the targets and develop terms of reference for the committees.

However, there were also meetings referred to which seemed outside the process. It was mentioned by respondents 9 and 10 (in the same interview) that there have been many meetings between local territorial authorities and developers, and respondent 11 noted that different sector groups have met outside the CWMS process to discuss the issues. Respondent 15 noted that the Canterbury Mayoral Forum are not privy to everything and various other respondents referred to other meetings that have taken place, particularly with central government around enabling legislation.

The role of central government in the implementation phase was raised in various contexts including as a possible source of funding (respondent 16), and noting that too much responsibility has been devolved to local government (respondent 3).

Respondent 1 noted, in relation to the targets around environmental restoration that:

“People get anesthetised to what is happening – it becomes accepted. How do you generate through public discontent the political will to change.”

This was echoed by a comment from respondent 9:

“There is a loss of institutional memory in the wider public – what’s the starting point? As people get used to streams without water it becomes the baseline. They don’t remember what it was like 30 or 40 years ago. The irrigators play off this.”

Three respondents also questioned the underlying assumption that all the irrigable land in Canterbury should be irrigated.

“The underlying assumption is that irrigating all of Canterbury that is irrigable will happen and is desirable – perhaps that’s unspoken.” (respondent 13)

“I’m not sure we have to have a target to irrigate another 250,000ha. It should hinge on the sustainability of the farming practice.” (respondent 9)

5. Discussion

The Strategy crafting process has been most successful in having laid a broad strategic foundation for purposes of reaching agreement on contentious water issues in the Canterbury region. As is evident from the findings presented in the previous section of this report, the exercise of developing the Strategy is perceived by all informants as a major step forward in terms of resolving current water conflicts and, from a longer term perspective, as an exercise in social learning. This is a significant, albeit fragile, achievement in Canterbury’s hitherto fractured socio-political setting.

The process of crafting the Strategy has been a valuable trust building exercise for the participants to address water issues which they agreed need addressing – although different sectors framed the problem differently. Environmental groups saw it as too much about water abstraction while irrigators saw it as problems of water availability and reliability. Parties have attempted to find a mutually acceptable solution, having all acknowledged that there is a problem. There has been a shift in the level of understanding and willingness to work collaboratively, even though it may be limited for the moment to the specific individuals who participated in crafting the Strategy.

Notwithstanding these achievements, it must be remembered that the Strategy is a work in progress in terms of aligning competing water interests in the region. This is evident in the

conflicting expectations embedded in the Strategy and best summed up in the words of one of the respondents in follow-up correspondence:

“We all know that people come to this issue with a variety of motivations, and the purpose of the Strategy is to provide the framework where we have a coherent approach towards getting the best of both worlds. Not everyone will be satisfied and at present there are undoubtedly those on either side of the issue who see the Strategy as a Trojan Horse that will realize their personal aspirations. There is still a lot of learning to happen, and much of this learning will occur in the ongoing collaborative processes that the various committee structures will enable. The expectation is real that people will eventually buy into what is in the interests of the greater good.”

The measure of agreement about the Strategy process reflects a deliberate tactic on the part of the two or three leaders who oversaw the formulation of the Strategy to hand pick people who could work collaboratively. They also stressed to participants that they were not there to represent organisations but to contribute their individual skills and expertise from a diversity of perspectives.

Regarding the specific attributes of the Strategy development process, the clear points that emerge are that the breadth of participation, the use of research, and the collaborative nature of the process were regarded very positively. Some of the practical aspects, such as design of the workshops and the way participants were hand picked for some stages were also important. Respondents also mentioned the increased understanding among stakeholders of other positions as a positive factor. Criticisms of the process related to concerns about a pre-determined agenda, the time taken, the need for more science/research and the lack of public engagement despite the measures taken to consult. The lack of timely detail around aspects such as the targets and the zone committees were also identified as a weakness.

In comparison to the strong consensus on the merits of the process of developing the strategy, there is relatively less consensus apparent on how respondents felt about the strengths and weaknesses of substantive policy proposals in the Strategy and the way forward. For example, regarding implementation opportunities and challenges, a variety of opportunities were identified but a far greater number of challenges were raised. Key challenges include the development of statutory backing and a range of concerns about the composition and terms of reference for the committees to be formed under the Strategy. The CWMS Strategic Framework document focuses on high level outcomes but as some respondents reminded us, the devil lies in the detail which is still to be worked out. The preparation of implementation programmes by zonal and regional committees will require a significant amount of effort and support. It is unclear at this point in time where the necessary expertise and resources will come from; the emphasis is on local representation and not all zones may have access to potential committee members with the requisite skills and experience, particularly within the timeframes set out in the Strategy.

Drawing on Innes et al. (2007), who identified a number of process conditions for producing high quality outcomes during deliberative planning processes, and the research findings presented above, the attributes of the CWMS development process in terms of satisfying these conditions are summarised in Table 2.

Table 2 Extent to which process conditions for deliberation are satisfied by CWMS development process

<i>Process condition</i>	<i>Extent to which condition satisfied</i>
There is a practical shared task	<ul style="list-style-type: none"> • General agreement that not enough water in right place at right time • Frustration with adversarial process, legal battles – must be a better way
All interests are included	<ul style="list-style-type: none"> • People were hand picked to make sure about this • But very limited representation of women in Stage 3 • Breadth of recreational interests under represented in some processes and energy sector declined to be involved at first • Ngāi Tahu – limited involvement at hapu level • But flexible process allowed groups to join later in process eg energy • Open invitations in media to several public meetings • All had opportunities to comment on options, draft etc • Numerous additional informal meetings
The process is self organising rather than externally controlled	<ul style="list-style-type: none"> • Initiated by small group of people • Became more self organising to the extent that it passed to the steering group which was set up for that task
There is high quality, agreed upon information	<ul style="list-style-type: none"> • High degree of satisfaction with scientific and technical knowledge • Some agreement that uncertainty exists with respect to issues such as groundwater • Ongoing need for more research
There is productive dialogue	<ul style="list-style-type: none"> • Produced concrete outputs – sustainability assessment process, fundamental principles, strategy itself, draft targets and now proposals of strategy are being operationalised as zonal committees set up, staff appointed to water executive
There is creative thinking	<ul style="list-style-type: none"> • Novel suggestions for ways to identify community preferences and incorporate into existing statutory processes or develop new statutory processes – details not yet clear

The status quo is challenged	<ul style="list-style-type: none"> • Yes
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In hindsight, based on the findings of this study, the process of crafting the CWMS has been very successful as an exercise in building consensus around a strategic framework to manage a highly contested resource. Nevertheless, and notwithstanding the longer-term impacts of the recent Cabinet decision to sack the elected regional councillors, there are still deep seated unresolved tensions embedded within the Strategy which could potentially derail consensus if not addressed satisfactorily prior to embarking on the RMA statutory process to implement the provisions of the Strategy. As discussed below, these tensions relate to big picture questions:

- long-term sustainability of intensive, irrigation-based agriculture in Canterbury;
- conflict within the local government sector in Canterbury about institutional arrangements to implement the Strategy; and
- conflict with central government’s short-term macro economic objectives.

Firstly, the Strategy is based on a fundamental but unstated assumption that there is a considerable amount of land in Canterbury which could be irrigated and farmed more intensively by building water storage facilities fed by the large Alpine rivers, and that this potential should be fully harnessed provided significant adverse environmental impacts can be remedied or mitigated. In other words, the Strategy recognises that the key water challenge in Canterbury is not lack of water for irrigation but lack of sufficient water *in the right place at the right time*. The target is 850,000 ha irrigated land in Canterbury by 2040 (Canterbury Water, 2009a, p.108) and most discussion during the strategy development process focused on how technically feasible this is, rather than whether it is desirable or sustainable.

The first phase, the *Canterbury Strategic Water Study*, was a response to a series of droughts in the 1990s so it is perhaps understandable that initially there was a focus on irrigation and water storage during the strategy development process. However, the longer term sustainability of agriculture based on increasing total area under irrigated farming was not resolved during the subsequent stages of the process despite attention to this issue in Stage 3. The issues that would underpin sustainable agriculture and rural land use futures for Canterbury have been skirted by the Strategy even though agriculture is a major driver of water allocation and quality concerns in the region. For example, Target 1 (Drinking Water) includes a requirement for nutrient management plans for 80% of all agricultural land by the year 2015. Nevertheless, there is a lack of detail, particularly around how the behaviour of existing farm users can be changed and how rural land use will need to be better regulated by district councils under the RMA, which will be required if the drinking water target is to be met without deepening relevant wells. These are contentious issues still to be resolved by local government within Canterbury regionally and on a catchment-by-catchment basis.

Secondly, it is debatable as to what extent the exercise of developing the Strategy has resolved the long standing history of distrust between the local territorial authorities and the regional council in Canterbury over governance matters. The involvement of the Canterbury Mayoral Forum in Stage 2 was a strategic move to enable collaborative development of and responsibility for the Strategy by the local territorial authorities and the regional council. This move was not without political risk. For example, there is no secret about the long standing drive on the part of Canterbury territorial local authorities to advocate for increased water storage infrastructure for farm irrigation and the Strategy as an avenue for achieving this objective. More importantly, notwithstanding progress in developing the Strategy collaboratively, the deeply embedded territorial local authority distrust of ECan was demonstrated by an orchestrated move on their part to pressure the Local Government and Environment Ministers for a review of ECan. The subsequent central government investigations have precipitated a highly contentious decision to sack the elected regional council and replace it with appointed commissioners who are only accountable to central government.

To what extent this decision by central government will impact on the goodwill of the Canterbury environmental and Māori stakeholders to continue to collaborate with the territorial local authorities to implement the Strategy remains to be seen. Even though the Canterbury local authorities have formally endorsed the Strategy and Ngāi Tahu are supporting the process (without formal endorsement at this stage), the Strategy is not legally binding¹¹. It is possible that once the Strategy is translated into statutory planning instruments, when policy details are fleshed out, some parties may withdraw support and contest specific provisions in the Strategy in the adversarial RMA arena¹².

Thirdly, it is unclear whether the Strategy's parallel development goals are in conflict with the current government's own short term national macro-economic objectives. In a recent Statement to Parliament (9/2/10), Prime Minister John Key stated:

"The Government will also take action this year to remove particular regulatory roadblocks to water storage and irrigation in Canterbury. This will be in addition to the work already being carried out by the National Infrastructure Unit and the Land and Water Forum on progressing water storage infrastructure throughout the country.

Overall, the Government is committed to ensuring that water storage and irrigation projects which meet environmental standards, and which are good economic propositions, can happen in a decent time frame."

<http://www.beehive.govt.nz/speech/statement+parliament+0>

¹¹ The Federated Farmers group is also expected to endorse the Strategy.

¹² This has been the case with Canterbury's *Urban Growth Strategy* which is currently going through the statutory planning process.

Further detail was provided in the first national Infrastructure Plan released in March 2010:

Irrigation can increase productivity in large tracts of arable land and the productivity improvements enabled by irrigation are often much higher than the financial cost of providing it. However, competing uses, environmental concerns and Treaty issues also need to be considered. Farmers attempting to develop irrigation schemes face significant 'collective action' problems and must overcome a number of regulatory barriers. Clearing these hurdles has typically been taking 10-15 years.

The Government wants to ensure that appropriate schemes can be built. Tensions between competing uses for water will never be eliminated but the Government believes that wasted effort and uncertain outcomes can be reduced. Cabinet has therefore agreed to a new strategic direction for fresh water. This includes a three-pronged approach to improvements to fresh water management:

- ☐ a stakeholder-led collaborative process run by the Land and Water Forum that will develop shared outcomes, goals and long-term strategies for fresh water;*
- ☐ engagement between ministers and the iwi leaders group to advance discussions on resolving high-level freshwater issues, including iwi/Māori rights and interests, particularly in freshwater management and allocation initiatives, and*
- ☐ concurrent scoping of policy options on matters including freshwater allocation, quality and infrastructure.*

In particular, the Government is looking at ways to improve the regulatory framework to support optimal rural water infrastructure development as part of the resource management reforms and 'New Start for Fresh Water' work programme.

(NZ Government, 2010, pp19-20)

These statements appear to be in line with the highest polling first preference Strategic Option D (Storage led) from Stage 4 community consultation (Canterbury Water, 2009a), but may not be in line with the significant support for Strategic Options B (Environment led) and C (Efficiency led) – particularly when the second preference is also taken into account.

The recent decision by central government to enact new procedures for Water Conservation Orders (WCOs) for Canterbury through Part 3 of the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act (2010) has been met with a threat by Fish & Game, Whitewater NZ and Forest & Bird to walk away from the CWMS. However, another respondent noted that WCOs were “*on the table in Stage 3*” so these groups should not be surprised that they are included in an attempt to align WCO processes with the vision and principles of the Canterbury Water Management Strategy.

6. Concluding comments

The fate of the CWMS, at the moment (May 2010), lies at cross-roads. The current water governance institutional landscape in Canterbury has become fluid as a result of intervention by central government to temporarily replace electoral democracy with a form of command-and-control governance. The future of the Strategy will be decided as the implementation of this most recent round of local government institutional restructuring in Canterbury unfolds on the ground. It is already evident that this will be a contested process as illustrated by the launch of a 'no votes, no rates' citizen campaign in opposition to the sacking of elected councillors.

Arguably, while the Commissioners are accountable to the Cabinet, they will exercise discretion in terms of how they choose to interpret their three year water governance mandate. At this point in time the biggest challenge to building on the accomplishments of the CWMS as a pathway towards sustainability appears to be the maintenance of trust and informed engagement as new people are brought into the nested processes and implementation issues are tackled. Two key aspects of this challenge were noted in an interview after the ECan Act had been passed:

"What's the connection between the steering group and the new people? The only connection is the Water Executive and they're all brand new. We're struggling now with the implementation. The Strategy goes to a new set of hands that haven't been through that educative, relationship, trust building process. This is a weakness and it could lose its agenda and buy-in as new agendas take over." (respondent 21)

"You can't look at the CWMS outside of the context of the current situation. The zonal committees and the regional committees require an elected rep (from ECan) – is that a commissioner? There aren't enough of them, so now the zonal committees won't have a regional council representative. We have real questions about this." (respondent 21)

The fragility of the current situation was noted by an earlier respondent in follow-up correspondence - *"I think matters are now so uncertain with the ECan legislation that most comments made previously in my interview are now 'reviewable'."*

A final point worth making is how the provisions of the CWMS are woven into the RMA regional and territorial local authority planning instruments in order to be given effect. This could prove to be a contested and costly process as has become manifest with implementing the Greater Christchurch Urban Development Strategy. If that were to happen, it could bring into question the merits of adopting a collaborative approach to resolve such water conflicts. Collaborative approaches are widely advocated in the current international literature on water governance, but successful implementation is highly dependent on the people and politics in a particular situation.

References

Aqualinc Research Ltd (2008) *Canterbury Strategic Water Study (Stage 2) Report No. L05086/1*. Retrieved March 6, 2010, from

http://www.canterburywater.org.nz/downloads/CSWS2_MainReport_Final.pdf

Canterbury Water. (2009a). *Canterbury Water Management Strategy: Strategic Framework November 2009*. Retrieved November 5, 2009, from

<http://www.canterburywater.org.nz/downloads/011%20Canterbury%20Water%20Management%20Strategy%20document%2024%2011%2009..pdf>

Canterbury Water. (2009b). *Creating a sustainable future for Canterbury Water - Have your say!*

Retrieved March 6, 2010, from <http://www.canterburywater.org.nz/downloads/Water-Strategy-16-April-FINAL.pdf>

Creech, W, Jenkins, M, Hill, G and Low.M. (2010). *Investigation of the Performance of Environment Canterbury under the RMA and the LGA*. Wellington.

Lincoln Environmental. (2002). *Canterbury Strategic Water Study*. (Report No 4557/1).

Retrieved March 6, 2010, from <http://www.canterburywater.org.nz/downloads/Stage-1-report.pdf>

Ministry for the Environment (2010). *National Environmental Standards*. Retrieved March 8, 2010, from <http://www.mfe.govt.nz/laws/standards/>

Ministry for the Environment (2008). *National Policy Statements*. Retrieved March 8, 2010, from <http://www.mfe.govt.nz/rma/central/nps/>

NZ Government. (2009, July 23). *Waikato River Co-Management Arrangements - Review of the Independent Panel*. Retrieved November 18, 2009 from

<http://www.beehive.govt.nz/release/waikato+river+co-management+arrangements+-review+independent+panel>

NZ Government. (2010.) *National Infrastructure plan*. Retrieved March 9, 2010, from

<http://www.infrastructure.govt.nz/plan/mar2010/nip-mar10.pdf>

Tainui. (2008). *Deed of Settlement between Waikato-Tainui and the Crown in relation to the Waikato River: Summary*. Retrieved November 16, 2009 from

http://www.tainui.co.nz/docs/Release_Summary_Waikato_River_Claim220808.pdf

Whitehouse, I., Pearce, A. & McFadden, G. (2008) *Canterbury Strategic Water Study (CSWS) Stage 3: Multi-stakeholder evaluation of water storage options*. Retrieved March 6, 2010, from <http://www.canterburywater.org.nz/downloads/Stage-3-report.pdf>

Williams, D. (2010, February 12). Tide is high for a jump in rates. *The Christchurch Press*, p.3.

Winstanley, A., Lange, M. & Wood, D. (2007). *Canterbury Strategic Water Study: Evaluation of Stage Three*. Institute of Environmental Science & Research Ltd (ESR)

Appendix 1

Stakeholder interviews regarding Canterbury Water Management Strategy (CWMS) development and implementation – December 2009

Interviewers: Prof. Ali Memon and Adrienne Lomax (Lincoln University), Dr Brett Painter (Lincoln Ventures Ltd)

Introduction

As part of the FRST-funded Sustainable Groundwater Allocation research programme, Lincoln Ventures Ltd are currently analysing potential institutional arrangements for integrated resource management planning under potential institutional governance scenarios that include the Canterbury Water Management Strategy (CWMS). In this set of interviews we wish to briefly reflect on the most recent stages of CWMS development, and the challenges and opportunities for the next steps. We would appreciate the opportunity to record the interview to aid our analysis, and a consent form will be offered if this is acceptable. All data from these interviews will be kept confidential and no respondent will be identified personally.

Part A: The process of developing the Canterbury Water Management Strategy as a collaborative initiative

Key Questions

1. What do you see as the three key strengths of the process of developing the CWMS?
2. What do you see as the three key weaknesses of the process of developing the CWMS?

Supplementary questions (where relevant)

3. Are you aware of any key stakeholder groups who chose not to participate in CWMS development process? What challenges could this provide for CWMS implementation?
4. Are you aware of any unresolved issues around disputed information/knowledge that may hinder CWMS implementation? Are there processes in place for addressing these issues?

Part B: The Canterbury Water Management Strategy

Key Questions

5. What do you see as three key strengths of the CWMS to date? How can these strengths be capitalised upon in the implementation stage?

6. What do you see as three key weaknesses of the CWMS to date? What is being done to address these weaknesses?

Part C: The implementation of the Canterbury Water Management Strategy

Key Questions

7. What do you see as the main opportunities to be gained from implementation of the CWMS through statutory and non-statutory means? How can these opportunities be maximised?

8. What do you see as the main challenges in implementing the CWMS through statutory and non-statutory means? How can these challenges be addressed?

Appendix 2. Summary of Responses

Part A: The process of developing the CWMS as a collaborative initiative	Respondent	
1. What do you see as the three key strengths of the <u>process</u> of developing the CWMS?	<ul style="list-style-type: none"> • The Collaborative nature of process 	1,3,5,9,15,17,18,19, 20, 21
	<ul style="list-style-type: none"> • Breadth of participants/inclusiveness 	1,6,7,8,9,10,12, 13,17,16, 19, 20, 21
	<ul style="list-style-type: none"> • Use of research/science 	1,4,6,11,12, 13,14,15,18
	<ul style="list-style-type: none"> • Design of workshops – world café 	6,12
	<ul style="list-style-type: none"> • Outside facilitator 	9,11
	<ul style="list-style-type: none"> • Central government support 	5,7
	<ul style="list-style-type: none"> • Ngāi Tahu actively engaged 	12, 20, 21
	<ul style="list-style-type: none"> • Open process 	4
	<ul style="list-style-type: none"> • Information transfer in both directions – hearing concerns, providing technical information 	4, 5, 8
	<ul style="list-style-type: none"> • Growth in understanding/shared understanding 	4,8,11,13,18, 20, 21
	<ul style="list-style-type: none"> • The degree of consultation 	1,4,12,14,15
	<ul style="list-style-type: none"> • The speed of the process 	12
	<ul style="list-style-type: none"> • It is non – statutory so not restrictive 	5
	<ul style="list-style-type: none"> • Looks at the whole region 	7,9,19
	<ul style="list-style-type: none"> • Gains from thinking of it as an integrated system 	5,19
	<ul style="list-style-type: none"> • It's a question of relative importance of issues and values /It's not about facts – it's about values and outcomes 	4,8
	<ul style="list-style-type: none"> • Buy in from the public 	13,17
	<ul style="list-style-type: none"> • People have made compromises 	13,14,15, 20, 21
	<ul style="list-style-type: none"> • The trust that has built by not rushing 	5,15
	<ul style="list-style-type: none"> • Support, endorsement and leadership of the Canterbury Mayoral Forum/mandate of the MF 	16,17
	<ul style="list-style-type: none"> • We have a carefully thought out strategy 	17
	<ul style="list-style-type: none"> • Pace – a fast-slow approach/over 8-9 year period 	17,18
	<ul style="list-style-type: none"> • Talking about outcomes that will meet the needs of all 	18
	<ul style="list-style-type: none"> • People were handpicked for their knowledge and collaborative skills 	18
	<ul style="list-style-type: none"> • It came out of ... the RMA process. People are sick of conflict and antagonism 	18
2. What do you see as the three key weaknesses of the <u>process</u> of developing the CWMS?	<ul style="list-style-type: none"> • Time taken to get to this stage 	1,13,14
	<ul style="list-style-type: none"> • Implementation moving too fast 	3
	<ul style="list-style-type: none"> • Lack of wider public engagement, what do the silent majority think? 	2,3,6,12
	<ul style="list-style-type: none"> • Lack of national level direction 	2
	<ul style="list-style-type: none"> • Lack of science 	4,8,13
	<ul style="list-style-type: none"> • Lack of balance in gender, interests in early stages 	8,18
	<ul style="list-style-type: none"> • Perception of predetermined agenda/too narrow focus on irrigation 	2,9,12
	<ul style="list-style-type: none"> • No moratorium on applications for consents 	1
	<ul style="list-style-type: none"> • Existing applications continue without any recognition of the Strategy 	2,11,13
	<ul style="list-style-type: none"> • Lack of engagement around institutional arrangements 	2

	<ul style="list-style-type: none"> • Lack of engagement between groups in CWMS processes 	20, 21
	<ul style="list-style-type: none"> • Process evolving – many people can't cope with change 	3
	<ul style="list-style-type: none"> • Turnover of people involved in process and lack of meeting minutes to inform new participants 	19
	<ul style="list-style-type: none"> • Too much flexibility could undermine the Strategy 	3
	<ul style="list-style-type: none"> • Lack of analysis of previous process (good and bad) 	4
	<ul style="list-style-type: none"> • NGOs had too much influence 	14
	<ul style="list-style-type: none"> • Capture by irrigators and developers 	9
	<ul style="list-style-type: none"> • Challenge to lift people's understanding 	8
	<ul style="list-style-type: none"> • Environmental groups spread too thinly, lack of resourcing 	9,11
	<ul style="list-style-type: none"> • Lack of commitment when it is not a statutory process 	20, 21
	<ul style="list-style-type: none"> • We're doing the work and relying on others to provide the statutory backing 	16
3. Are you aware of any key stakeholder groups who chose not to participate in CWMS development process? What challenges could this provide for CWMS implementation?	<ul style="list-style-type: none"> • Power companies (came in late to process) 	1,3,4,5,9,18
	<ul style="list-style-type: none"> • Ngāi Tahu – engaged primarily at a higher level/lack resources to participate fully, rūnanga not engaged 	1,3,8,9,12,14,18,19,20, 21
	<ul style="list-style-type: none"> • Some groups did not always participate with an open mind/preconceived ideas 	4,16,17
	<ul style="list-style-type: none"> • Some groups already involved in consent application reluctant to engage 	5
	<ul style="list-style-type: none"> • Power company did not engage initially 	8
	<ul style="list-style-type: none"> • Breadth of recreational interests not present 	19
	<ul style="list-style-type: none"> • DoC not at most meetings (lack of resources) 	9
	<ul style="list-style-type: none"> • Women 	12
	<ul style="list-style-type: none"> • Forest and Bird (early stages) 	18
4. Are you aware of any unresolved issues around disputed information / knowledge that may hinder CWMS implementation? Are there processes in place for addressing these issues?	<ul style="list-style-type: none"> • Lack of historical data for rivers 	10
	<ul style="list-style-type: none"> • Lack of baseline for irrigation efficiency 	10
	<ul style="list-style-type: none"> • Groundwater fauna 	4
	<ul style="list-style-type: none"> • Effects of hill country land use 	3
	<ul style="list-style-type: none"> • Water nutrient levels – what is it being managed for 	1,4
	<ul style="list-style-type: none"> • How to design a charging regime based on volume 	1
	<ul style="list-style-type: none"> • Membership and role of zone/regional committees 	1,14
	<ul style="list-style-type: none"> • Ecosystem management – not just about flows 	3
	<ul style="list-style-type: none"> • Future of water conservation orders 	2
	<ul style="list-style-type: none"> • People will dispute information they don't agree with 	17
	<ul style="list-style-type: none"> • It is the inability to make decisions, not the lack of scientific and technical information 	17
	<ul style="list-style-type: none"> • Big picture, eg more on impact of Lees valley 	18
	<ul style="list-style-type: none"> • What influences braiding 	18
Part B: The CWMS		
5. What do you see as three key strengths of the CWMS to date? How can these strengths be capitalised upon in the implementation stage?	<ul style="list-style-type: none"> • Non negotiable fundamental principles 	1,5,17
	<ul style="list-style-type: none"> • Increased and focused science/research 	1,4,10
	<ul style="list-style-type: none"> • Interesting, innovative approach 	8
	<ul style="list-style-type: none"> • Better understanding from stakeholders of each others positions/established trust/ cooperative rather than adversarial/collaborative approach to decision-making 	11,13,14,15,18
	<ul style="list-style-type: none"> • Targets 	1
	<ul style="list-style-type: none"> • Community empowered by increased knowledge 	4
	<ul style="list-style-type: none"> • Different types of decisions at different levels 	5
	<ul style="list-style-type: none"> • Proactive, not reactive/ basis for sustainable appraisal 	5

	• Potential for increased funding for environment	11
	• Infrastructure/restoration/efficiency advancing in parallel	9,14,17
	• Environmental protection at the leading edge of the Strategy	11
	• Zonal committee members will be selected	13
	• Potentially a better way forward	14
	• Local involvement in committees	14
	• Appropriate decision making at appropriate level (but subject to auditing)	19
	• A list of specific projects that could be developed	14
	• New water which will drive revenue for environmental restoration	17
	• The interconnected nature of things	17
	• Multiple water use concept	18
	• Reflects what people asked for	18
	• Mandate for change very strong/number one priority in community outcome	18, 16
	• Reflects both the need for new water and the need to be more efficient with existing water	18
	• Provides a process to address the issues	18
6. What do you see as three key weaknesses of the CWMS to date? What is being done to address these weaknesses?	• Lack of awareness of the social & economic impacts	1,18
	• Lack of appreciation of the level of change needed	1,3
	• No national framework for environmental values	2
	• Canterbury Mayoral Forum has no legal basis/lack of legislative mandate to agreed solutions	2,5,14,16
	• Uncertainty about composition/role of committees	4,14
	• Lack of connection between different committees	20,21
	• Lack of recognition of biodiversity decline	4
	• Targets not finalised	4
	• Targets may be in conflict/not robust enough/unrealistic	10,11,12,14
	• Wariness of environmental groups to fully commit until restoration underway is a vulnerability	7
	• Scientific uncertainty – affects ability to make decisions	5
	• Risk that decisions will be driven by economics	9,12
	• Focus on irrigation rather than sustainable farming practices	9,12
	• Focus on taking water from rivers is short sighted	11
	• Lack of funding/funding requirements of local government unknown – needs central government support to get users to pay share	12,16
	• Irrigators think they can have what they want	13
	• Emphasis on environment ahead of water availability	15
Part C: The implementation of the CWMS		
7. What do you see as the main opportunities to be gained from implementation of the CWMS through statutory and non-statutory means? How can these opportunities be maximised?	• Involvement beyond water issues/ Interface with other natural resource issues – eg energy	1,4,5
	• Better appreciation of different (more sustainable) types of farming	1,15,16
	• Avoiding legal conflict/will slow litigation/keep lawyers out/fast track through RMA process	1,4,13,14,16,18
	• Better use of time and money	4
	• Better understanding of ecological limits/improved flows and nutrient levels	4,9
	• Multiple gains through clear targets	20,21
	• More buy in from community	4

	• Water executive will be answerable to all the bodies	4
	• NRRP at regional level but also statutory plans at smaller scale	5,6
	• Ability to make decisions without always asking for more information, and keep to a timeline	6,18
	• More than collaborative – got to be solution seeking	8
	• Lift decision making to a more strategic level	8
	• Balance between environment and development	11,14,16
	• Regional committee can make the big decisions/set targets in the regional context	11
	• Possibility of introducing new commercial models to regulate water use/trade, Potentially it will be easier	13
	• Flexibility	14
	• A visionary approach	14
	• Zonal committees will communicate the expectations and needs of the local community	15
	• Regulatory reform to assist implementation	16
	• Using a non statutory approach to get a statutory outcome	17
	• Structuring a way of using the existing RMA legislation, enabling legislation	17
	• Diverse stakeholders have already shown they can work together	18
	• More decisions at local level	18, 19
8. What do you see as the main challenges in implementing the CWMS through statutory and non-statutory means? How can these challenges be addressed	• Need to make hard decisions about land use	1,13
	• Education required to ensure people understand the decision making process and previous agreements	1,4, 20,21
	• Uncertainty/need a better understanding of what is realistic/need to keep working on the science	1,13,14
	• Statutory mandate needed – more than a collaborative approach to compliance	1,4,5,6,8,9,14,18,19, 20,21
	• Getting existing users to change their practices/farmers slow to implement new technology/farming practices	1,5,15,18
	• Brokerage of incentives for people to change/There's no provision for compensation/ Property rights and the issue of compensation and equity/	7,8,18
	• Zone committee members may lack skills, organisations spread too thin, may mean it takes time to get committees working well	2,8,9,12,20,21
	• Risk of capture by better resourced groups, especially irrigation interests/political pressure on how committees will be formed	2,4,9,12
	• Water executive may not be seen as having sufficient separation from ECan	3,8
	• What will central governments role be?	2
	• Zonal and regional committees members appointed, not elected, could be a lack of accountability	2,3,12
	• Where will funding come from/We need to look to central government for long term funding	4,5,9,15,17,16
	• Finding the right balance between investment and risk and balance public and private interests	5,17,18
	• No one will invest for the long term if local authorities keep changing their minds	17
	• Some ecological limits not recognised	4
	• Balancing multiple values	4,5
	• Different staffing skills needed	5
	• Additional workload	5
	• RMA Stage 2 reforms will change things (in 2010)	2

	• Not enough integration between the CWMS and the RMA/making consent applications fit in with regional plans	8,12,18
	• There are collaborative mechanisms in the RMA which haven't been used as well as they could have been	12
	• Lack of mechanisms to address improving efficiency of water use	10
	• Zonal committees being established before the regional implementation programme is in place. Regional committee needed first	9,18
	• Lack of information about role of zonal committees – may not be acceptable to all stakeholders if they have too much power	8,10
	• New legislation or plans subject to consultation will take a long time	10,12
	• Risk of stakeholders walking away	3,4,10,14
	• Potentially a dual structure	12
	• Consents can be continue to be issued	12
	• A lot of change/upheaval likely	1,12
	• Can we genuinely engage the people	12
	• Need the full support of all the TAs	13
	• Water Executive reporting to two bosses – ECan and the Canterbury Mayoral Forum	13
	• Moving too fast	14
	• Risk of loading the zonal committees with NGOs	14
	• Needs to get beyond political interference – needs more continuity than a 3 year electoral cycle/ A change of government is a threat	15,16, 20,21
	• Committee members will need a lot of information	18
Other points raised	• The language used is critical, especially for Māori	1,20,21
	• People get anesthetised to what is happening – it becomes accepted/loss of community memory	1,9
	• The personality of the key players is important	2
	• Too much has been devolved to local government without the necessary resourcing	3
	• It's not a problem with the RMA, it's the history	3
	• The politics of the regional council influences the way they deal with matters best left to science	3
	• You have to have faith and trust in the process or else it won't work	4
	• It's a continuous process – forever and a day	4
	• There won't be a memorandum of understanding – it will be through implementation programmes – a way forward with specific actions	5
	• You need the best experts and processes that allow people to interact with the experts so they can trust the information	8
	• Efficiency is the key. We're pushing irrigation too much/it's an irrigation document/there seems to be an underlying assumption that all the irrigable land should be irrigated	8,10,13
	• There are other processes happening as well eg TAs meeting with developers but not environmental groups	9
	• The RMA slows things down, allowing for better information and understanding	12
	• Included kaitiakitanga - it's quite radical	12
	• Hot Science workshops very influential/the series of lectures in the Town Hall started to help	8,12
	• Central Government (MfE) have been unhelpful	13
	• There has been strong support all the way from cabinet	18

	<ul style="list-style-type: none"> • The issue of water is too big for a Unitary Authority to deal with - should be national or regional 	15
	<ul style="list-style-type: none"> • Very little support from other local authorities (outside of Canterbury) 	16
	<ul style="list-style-type: none"> • The new government has increased the pace 	16
	<ul style="list-style-type: none"> • Central government are inherently conservative 	17
	<ul style="list-style-type: none"> • Couldn't get traction with Ministers because of the LWF 	16
	<ul style="list-style-type: none"> • If we can't put a business case we shouldn't be doing it 	16
	<ul style="list-style-type: none"> • We are sincere in our goals 	16
	<ul style="list-style-type: none"> • Whatever the outcome of the ECan review the CWMS will continue/will definitely happen now 	16,18,19
	<ul style="list-style-type: none"> • We're discussing enabling legislation with the government 	16
	<ul style="list-style-type: none"> • It's good if we have created a model with some applicability elsewhere 	17
	<ul style="list-style-type: none"> • Not a technical issue, but a social and economic one 	18
	<ul style="list-style-type: none"> • Collaborative approaches can be threatening to some groups 	18
	<ul style="list-style-type: none"> • RMA processes preferred by some groups 	18
	<ul style="list-style-type: none"> • It was an attempt to find a process not in conflict with the RMA 	18

Appendix 3. Membership of the Canterbury Mayoral Forum, Steering group and Officials group, as at November 2009

(CWMS, November 2009)

Canterbury Mayoral Forum

The Forum is made up of the mayors and chief executives of the regional territorial authorities and Environment Canterbury.

Mayor Bede O'Malley - Ashburton District Council
Brian Lester - Ashburton District Council
Mayor Bob Parker - (Chair) Christchurch City Council
Tony Marryatt - Christchurch City Council
Sir Kerry Burke (then Alec Neill) - Environment Canterbury
Dr Bryan Jenkins - Environment Canterbury
Mayor Garry Jackson - Hurunui District Council
Andrew Dalziel - Hurunui District Council
Mayor Kevin Heays - Kaikoura District Council
Stuart Grant - Kaikoura District Council
Mayor John O'Neill - Mackenzie District Council
Glen Innes - Mackenzie District Council
Mayor Kelvin Coe - Selwyn District Council
Paul Davey - Selwyn District Council
Mayor Janie Annear - Timaru District Council
Warwick Isaacs - Timaru District Council
Mayor John Coles - Waimate District Council
Tony Alden - Waimate District Council
Mayor Ron Keating - Waimakariri District Council
Jim Palmer - Waimakariri District Council
Mayor Alex FAMILTON - Waitaki District Council
Michael Ross - Waitaki District Council
Jude Pani - Environment Canterbury (Administrative Support)

Steering Group

Bede O'Malley - Chair and Canterbury Mayoral Forum representative
Mike Jebson - Central government agencies
John Greer - Central government agencies (alternate Murray Doak)
Bryan Jenkins - Chief executive representative
Brian Lester - Chief executive representative
Peter Townsend - Industry representative/regional economic
David O'Connell - Ngāi Tahu

Murray Rodgers - Community/Water Rights Trust
Grant McFadden - Historical knowledge of water management in Canterbury/water management policy
Angus McKay - ECan councillor representative
Eugenie Sage - ECan councillor representative
Graeme Sutton - Irrigation New Zealand
Peter Scott - Opihi irrigation, Minister for the Environment water advisory group and southern region representative
Martin Clements - Fish and Game NZ and Minister for the Environment water advisory group
Hugh Canard - Kayaking and recreation representative
Alastair James - Chair, Canterbury District Health Board
Edith Smith - Forest and Bird and conservation representative

Officials Group members

Murray Doak – Convenor, Ministry of Agriculture and Forestry
Ray Anderson, Selwyn District Council
Marcus Langman, Environment Canterbury
Poma Palmer, Department of Conservation
Helga Rigg, Hurunui District Council
Ken Taylor, Environment Canterbury
Jackie Curtis, Environment Canterbury
Christina Robb, Environment Canterbury
Melanie Schauer, Environment Canterbury
Mary Sparrow, Waimakariri District Council
Adrienne Anderson, WaiGroup
Geoff Henley, Network PR
Simon Whiteley, Independent contractor