

Canterbury Water Management Strategy – a case study in collaborative governance

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Executive Summary

Collaborative governance and its significance

Collaborative governance is a deliberative process for building informed consensus amongst accountable stakeholder representatives about how to resolve a policy issue. It is one of a range of approaches to public participation in decision-making, distinguished from other approaches by its 'common good' rather than individual focus; its emphasis on deliberative consensus-building; and the high degree of empowerment of its participants. It is becoming more widely used in resource management, and is arguably an important institutional innovation in New Zealand for three main reasons.

First, collaborative governance has shown it can deliver a broadly supported, stable strategy for resource management, in situations where governance systems of electoral majoritarianism, supplemented by traditional public consultation, struggle to deliver on their own. The establishment of such strategies is beneficial, in part for economic reasons - because agreed strategies can lower the transaction costs of new investment (such as litigation and delay), and improve investment certainty.

Second, collaborative governance can increase the rate of uptake of new policies for environmental sustainability.

Third, collaborative governance can assist in making a Treaty-based approach politically workable in resource management governance. It does this by building wider stakeholder awareness of, and respect for, iwi perspectives; and especially where agreements can be achieved, it enables the Crown to move forward more confidently and responsively in its relationships with iwi.

Focus, scope and method of this study

This report presents an in-depth, qualitative case study of an important experience of collaborative governance: the development, by a small Steering Group, of the Canterbury Water Management Strategy (CWMS).

The report analyzes the development of the CWMS through asking three questions about the process: First, in what sense was it democratic? Second, how effective was it in achieving an integration of different policy perspectives? Third, how did it alter the institutional norms, incentives and risks facing resource users and the Government? In approaching these questions, the report aims to illuminate what happened in Canterbury, and also to provide insights which might be useful in considering collaborative governance in other situations.

The report does not attempt to judge the policy merits of the CWMS, nor its sustainability from environmental, economic, social or cultural points of view. Information is not yet

available to make such judgments, since in particular, the Strategy-writing process is only the first step in an implementation process involving multi-layered national, regional and local (zone committee) engagement processes which are currently under way and are integral to the evaluation of successful outcomes.

For reasons of timing and cost, this is an *ex post* study, based on analysis of documents and interviews. In that respect, the method used in this study differs from that used in a companion report on the Land and Water Forum (LWF), which was based primarily on observations made during meetings. The latter type of report is obviously better placed to illuminate issues such as the quality of deliberation among members of the group, and the way in which participant behaviours and the conduct of the process shaped the outcome.

Key elements of the CWMS

Three conceptual elements of the Strategy are of key significance:

- **Parallel development** is a philosophy under which environmental objectives and production-related objectives are advanced step-wise in parallel going forward, so that actions taken for each reinforce the overall commitment to balanced progress. This is an approach which shows good faith to all stakeholders, maintaining and building the trust between them.
- **New water** is a resource that can be used both to expand irrigated areas, and to restore healthy flows to lowland streams and rivers. New water can be sourced both from irrigation efficiency improvements, and from building water impoundments in alpine river catchments, which can store snowmelt water at times when it is plentiful, and release it at times when it is in demand for both irrigation and environmental/recreation purposes.
- **Brokering** is the idea that an existing right, such as a water permit, or a perceived right, such as the right to farm with unlimited nutrient discharges to water, might be voluntarily relinquished in exchange for the offer of new water, if the new water is either a lower-cost source or a more reliable source, or both.

Democratic legitimacy of the CWMS process

It is too early to assess policy effectiveness, but eight normative criteria of procedural legitimacy were derived from the literature and used to assess the process. In summary, the criteria were: Representativeness, Accountability, Inclusiveness, Deliberativeness, Impartiality, Empowerment, Transparency and Lawfulness. Below, each criterion is defined, and conclusions are drawn.

Representativeness and Accountability: *A representative process ensures that the interests of all relevant stakeholders are effectively advocated. An accountable process ensures that all participants in the process are answerable to those they represent.*

Officials selected those individuals who would represent different interests on the Steering Group, and there was an evolving ambiguity about whether they were there as knowledgeable individuals or as representatives, a situation which appears to have weakened their accountability. Despite this, the actual selection of participants for the Steering Group did tend to emphasize recognized leaders of key organizations, who were trusted by their members; and their accountability was enhanced by four separate rounds of public input into the process.

However, the Steering Group lacked a direct representative of those who advocate greater sharing of the economic benefits of the commercial use of water by irrigators. The exclusion of this constituency has left a major public issue effectively unresolved (see sec 10.3 below).

Overall the approach used in the CWMS may be characterized as “guided collaborative governance.” This approach may have reduced the political risks of embarking on the process, and it does not appear at this stage to have detracted much from its perceived legitimacy or effectiveness. This conclusion can be drawn in part because the effectively excluded issue, about sharing the economic benefits of commercial use of water resources, is widely acknowledged as being largely an issue for central government rather than the regional council to resolve.

Inclusiveness: *This criterion considers how far the process allowed input from those outside, and to what extent it then properly considered all the issues raised.*

The four rounds of public input provided during the collaborative process, and especially the opening round which identified the range of issues of public concern, together with the widely representative Steering Group membership, appeared to ensure that most issues were heard and considered.

A partial exception was the handling of the issue of healthy ecosystems in lowland streams and coastal lagoons. This suggested that, where participants believe that their best or only chance of resolving issues of concern to them lies outside the collaborative forum, then a process of this kind cannot be relied upon to bring key differences into the open for explicit recognition and resolution. A more substantial exception was the handling of the issue of fairness in sharing the economic benefits of irrigation, discussed further below.

However, the interviews suggested that the experience of building mutual trust and respect through a collaborative forum can enable ongoing relationships, processes and norms to become established among the stakeholders. These may increase the likelihood of eventual resolution of any still-divisive issues, because key players develop a belief in the power and efficacy of collaboration, and a commitment to making it work. Although

not investigated in any detail, it appears that such norms are at work in the ongoing processes of the Canterbury Water Management Strategy.

Deliberativeness: *This characterizes a process in which views are exchanged, arguments are critically examined, and shared knowledge is built up in a context of civility, respect and trust.*

While it is difficult to assess the quality of deliberation in an *ex post* study of this kind, it appears from the interviews, and from a review of the documents, that a high level of deliberativeness characterised the process. This was disrupted at a late stage in the process by the sudden enactment of the ECan Act, but in the end, the cohesion and trust developed by the Steering Group was sufficient to maintain the deliberative quality of the process despite this disruption.

Impartiality: *An impartial process treats all parties equally. This is a distinct quality of the process that makes for good deliberation.*

While the impartiality of the chairman was highly rated by participants, the lack of a formal procedure for recording and adopting decisions at meetings of the Steering Group raised concerns that undue power was shifted to the officials who were drafting the report. In addition, the advent of the ECan Act late in the process detracted from the impartiality of the process, because its summary changing of the criteria for water conservation orders in Canterbury was widely perceived as a tilting of the playing field against environmental interests.

Empowerment: *This focuses on the extent to which participants are empowered to have a substantial influence on policy outcomes.*

While the Steering Group was potentially constrained by the Mayoral Forum and two officials' committees, these entities did not in practice detract much from the empowerment of the Steering Group to write the Strategy. On the other hand, major irrigation projects with the capacity to pre-empt much of the Strategy were proceeding through statutory processes in parallel with the Strategy-writing process. In addition, a range of members of the Steering Group felt constrained by the view that major irrigation developments were inevitable, because of the power of irrigation interests and their relationship with the Government.

A key question around empowerment is, to what extent had the lead public agencies agreed to abide by the recommendations of the group? Credible political commitment to the implementation of consensus outcomes is regarded as a pre-disposing factor for successful collaborative governance and, in the Nordic countries, compromises are elicited from participants through an established convention that, where consensus policy solutions are agreed, these will be closely followed by the final decision-makers.

Steering Group members were encouraged and reassured in this regard in a number of ways, including after the disruption caused by the ECan Act. The ultimate test is whether

consensus recommendations are indeed adopted and implemented, and the targets set by the Strategy are achieved. These targets are of a long term nature. The implementation process is largely on track at this stage, and the evidence that the Steering Group was genuinely empowered seems strong. Obviously, however, implementation has a long way to go, and future events may affect this judgment.

Transparency: *A transparent process governs itself through clear and public rules.*

There was no written protocol agreed about how members of the Steering Group would conduct themselves. Rather, an informal set of participant norms appears to have evolved which, despite some testing episodes, appears to have been followed sufficiently consistently that the group was able to operate cohesively. Some members of the Steering Group were critical of failures to record decisions, and there appears to have been a lack of clarity about the extent to which the Steering Group's thinking could be shared with outsiders. Overall transparency may be regarded as adequate, but this is an aspect that could be improved in collaborations of this nature in future.

Lawfulness: *A lawful process upholds all existing statutes and regulations.*

There appear to be no questions around the lawfulness of the CWMS process.

Overall conclusions on democratic legitimacy:

To cast some light on the democratic legitimacy of this type of collaborative governance process in a generic way, it is appropriate to set aside the economic fairness issues, on the basis that they are outside the jurisdiction of local government, and the enactment of the ECan Act, on the basis that it was a one-off and exceptional intervention. If these factors are excluded from consideration, the overall democratic legitimacy of the CWMS Steering Group process rates highly.

Another way of viewing this assessment would be to compare the legitimacy of the CWMS Steering Group with that of the original ECan Council, before it was abolished by the ECan Act. The Council's most often and most emphatically cited claim to legitimacy lies in its direct electoral accountability. However, while democratically elected, the ECan Council was not well-known to its electors. A series of public awareness surveys conducted by its own staff every two years since its formation shows a fairly consistent pattern: only about 2 percent of Canterbury residents can name their local, elected ECan councilor, and only about 10 percent can name the chairman of the council. Moreover, the ECan Council was at odds with the region's elected mayors. The Council had also struggled over many years to produce policies and plans.

On this basis, the democratic legitimacy of the CWMS Steering Group may be said to differ from that of the pre-existing ECan Council in two main ways:

- **Accountability of decision-makers:** While ECan councilors were directly accountable through three-yearly regional elections, the Steering Group was

indirectly accountable. First, it was appointed by the elected Mayoral Forum, which also endorsed the Strategy it produced. Second, Steering Group members feel accountable to sector groups in Canterbury, of which there is a balanced mix represented; and in the Steering Group those sector groups have engaged with each other directly rather than relying on elected politicians to hand down decisions to them;

- **Effectiveness of policy outcomes:** While the ECan Council had been unable over many years to resolve fundamental differences amongst stakeholders in Canterbury, within 25 months of its appointment in June 2008, the Steering Group had produced an agreed Strategy for water management which is now being rolled out through the work of zone committees and irrigation storage development in Canterbury.

This report's positive findings about the democratic legitimacy of the CWMS Steering Group process imply that the democratic nature of a regional council's decision-making may be enhanced by the use of a collaborative governance process such as that used to prepare the CWMS. This conclusion holds even if, as in this case, the approach used can best be described as "guided collaborative governance." However, it should be noted that the ongoing willingness of sector representatives to exchange compromises and reach agreement in such processes is likely to depend on the development of a convention that elected decision-makers do not substantially change the consensus outcomes of collaborative processes.

The legitimacy and ultimate effectiveness achieved by the CWMS process, both in its initial Steering Group phase and in the subsequent implementation phases which are also collaborative in design, will also provide an interesting test of the extent to which the RMA policy-making functions of a regional council could be overseen and directed through a different governance model, which combines centralized accountability to a Minister with collaborative policy development at regional and local levels.

Policy integration achieved by the CWMS process

This study has particularly sought to identify issues being raised by the public; to track how well these are taken up by the learning process of the CWMS, including the gathering of relevant information by officials; and to understand why in some cases, issues raised by the public were not taken up by the process.

Findings highlight the value of combining collaborative governance with opportunities for individual public participation. As seen in the long history of the Canterbury water debate, the RMA's emphasis on individual rights of public participation characteristically produces extreme and polarized views, and often fails to advance policy integration and resolution; while the linkage of participation processes to a core collaborative governance process has enabled relatively skilled and experienced representatives to play an

intermediating role, building trust, reducing conflict and ultimately producing a Strategy which appears to be widely supported.

The complexity of the Strategy remains a barrier to public understanding and awareness, but the convergence of views of interest group leaders, if it can be maintained, appears to have substantially reduced the risks for politicians of taking needed decisions over Canterbury water issues.

The CWMS Steering Group process was relatively successful at achieving integration of issues in the policy process. This was achieved through a learning process involving both impressive amounts of technical information, and improved mutual understanding of other participants' interests, concerns and perspectives. The tracing of issues in this report establishes however that the process fell short of properly addressing, resolving and integrating two critical policy issues in public dispute:

- Whether the extent of proposed land use intensification across Canterbury was consistent with the restoration of healthy ecosystems in lowland streams and coastal lagoons; and
- Whether the allocation of public water resources to private landowners would result in a fair sharing of the economic benefits.

In an act of faith in the effectiveness of ongoing collaboration, the first issue was effectively shifted to the ten zone committees to resolve at catchment level within a framework of potentially conflicting targets. It is unclear at this stage whether this move will be successful or not.

The second, economic fairness issue lacked a clear champion within the Steering Group, and in any case, the introduction of significant measures to share the wealth generated from irrigation would have conflicted with the Group's overall approach, which requires Government financial support for providing low cost, stored water to incentivize landowners to improve their environmental performance. However, there is much evidence that the economic fairness issue is a strongly felt public concern, and it is likely to re-emerge as an ongoing political issue.

Institutional changes driven by the CWMS process

The outcomes of the Steering Group process were shaped by five main institutional and policy elements affecting participants' decision-making. These may be summarized as:

1. The extended stalemate between irrigation and environmental interests, in which neither side was confident it could achieve its objectives without the agreement of the other side;
2. The persistent framing of the main policy problem as water not being available where and when required, thus implying a need for storage as part of the solution;

3. The centrally-determined selection of Steering Group members and in particular, the non-inclusion of advocates for sharing of the economic benefits of irrigation;
4. The options facing group members, either within or outside the collaborative process, for progressing their interests and projects; especially the existence of alternative statutory processes and litigation opportunities; and
5. The expectation that central government funding would be available to assist the provision of irrigation storage schemes in Canterbury and thus overcome the economic and financial barriers to their being built.

The resulting architecture of the Strategy, as agreed upon by representatives of central, regional and local government, as well as regional stakeholder representatives, relies heavily on two key assumptions.

The first assumption is that rural landholders *can successfully be incentivized* to cooperate in the achievement of the water quality and quantity targets which the Strategy propounds, through provision of new, low cost, more reliable water for irrigation from new water storage infrastructure.

The second assumption is that the three proposed water storage projects will indeed be provided, *whether or not they are economically viable and capable of being privately financed*.

Subsequently the Government has announced budget allocations totaling \$435 million to support accelerated development of irrigation projects, although there are important uncertainties about the costs and revenues of the projects, and the extent of Government financial support required.

The counterfactual case, absent the Strategy, involves continued reliance on RMA regulation by ECan, without provision of water storage and low-cost water as compensation for meeting regulatory limits. Across most of Canterbury, the counterfactual would involve significant reductions in the magnitude of farmers' existing water take permits, and of their assumed rights to discharge diffuse contaminants into freshwater ecosystems. In the counterfactual case, the burden of bringing water use within regulatory limits would be borne entirely by water users.

In the case of implementing the CWMS, in contrast, the Crown is (to the extent necessary to deliver the water storages), effectively shouldering a significant, albeit uncertain, portion of the cost of restoring stream flows and reducing water pollution in Canterbury – costs that in the counterfactual case, as noted, would have been borne directly by water users. The Strategy has, therefore, changed the institutional framework for water management in Canterbury. The change involves moving away from the polluter-pays principle, to an extent that will become evident in the years ahead.

Once they had accepted the two key assumptions on which the Strategy is built, members of the Steering Group were not in a strong position to pursue successfully the 'economic fairness' notions advocated in public submissions, of eschewing subsidies for irrigation

water, and of raising a substantial levy for community purposes from the private commercial use of water. The modest proposal for a biodiversity protection and restoration levy on water users (funded in the interim from public sources at the level of \$1.44 million a year) does however establish in principle that some kind of charge on water users for public purposes is acceptable, at least where new water is being provided from publicly-funded storage infrastructure.

The Strategy's two key assumptions also allocate risks. While these are essentially political rather than legal risks, they could entail substantial costs to central Government, if it is to deliver on its commitment to the Strategy. Achieving CWMS targets through brokering deals with landholders is dependent on offering new, low-cost, high reliability water. Brokering will not succeed if the water offered is too expensive, or is delayed too long, or if alternative water becomes available more cheaply to many irrigators through Canterbury's fast-developing water market.

Under the Steering Group process, agreement on the Strategy became possible through shifting these risks on to the Crown. In effect, to deliver on its political commitment to the Strategy, the Government must be prepared to fund particular storage projects at a level that is able to produce low-cost, high reliability water regardless of project costs, consent conditions, and whether or not significant amounts of hoped-for private finance eventuate for these projects.

It is too early to say whether collaborative approaches can resolve the difficult issues around economic allocation in natural resource management. A note of caution is appropriate here, with two, somewhat conflicting points to be made on the basis of the Canterbury experience. First, it will be difficult to resolve water management issues in isolation from economic fairness issues, because it is evident that such issues are integral to concerns felt by both water users and the wider community about water management. Second, the prospects for using collaborative governance for resolving water policy disputes in other regions are likely to depend, as they have in Canterbury, on central government providing financial support. Such support reflects both the water users' reluctance to pay for water, and the move away from the polluter-pays principle which the collaborative governance process evidently requires if, in over-allocated catchments, it is to achieve farmer agreement.

1. Introduction

This study is one of a series of studies in a programme entitled *Building Capability in Collaborative Governance* carried out by the Ecologic Foundation. This programme was funded by FRST on behalf of MoRST (now the Ministry of Science and Innovation) through the Cross Departmental Research Pool (CDRP). The applicant departments who have been overseeing this CDRP project are the Ministry for the Environment, Ministry of Fisheries, Ministry of Agriculture and Forestry, and Department of Conservation. Other studies in the series include a literature review of collaborative governance, and studies of the Land and Water Forum and of policy processes for Lakes Taupo and Rotorua.

The *Canterbury Water Management Strategy – Strategic Framework* is a 157-page document setting out in a detailed and comprehensive manner a policy and governance framework for resolving issues of water quality, water allocation and water storage in Canterbury. It is commonly referred to as the CWMS for short. The proposal to develop the CWMS was conceived by ECan and adopted by the Canterbury Mayoral Forum in December 2007. It was published in July 2010. The preparation of the document was primarily driven over this two-and-a-half year period by a 16-member Steering Group comprising major stakeholding interests, including irrigation, business, environmental, recreational and tangata whenua interests, and officials from local, regional and central government (for full membership, see Appendix 1).

The Steering Group process is the focus of this study. Because of its wide representation of stakeholding interests and its reliance on consensus decision-making, the Steering Group's work can be analysed as an exercise in collaborative governance. Moreover, as discussed in more detail in this report, the process appears at this stage to be a successful example of collaborative governance.

What is collaborative governance? The Land and Water Forum distilled the understanding of its members into the list of 'defining attributes' reproduced at Appendix 2 of this report. At the time, they noted that this was not a definitive statement, but a contribution to a continuing discussion. One of the interesting features of the CWMS process is that, in part, it has departed from the first of the Land and Water Forum's defining attributes: "It is open to all interested groups to send their own representatives..." As discussed in this report, the CWMS may be viewed as "guided collaborative governance." This modification may have reduced the risks of embarking on the process, and as discussed below, it does not appear at this stage to have detracted much from its perceived legitimacy or effectiveness.

This report defines collaborative governance as a deliberative process for building informed consensus amongst accountable stakeholder representatives about how to resolve a policy issue. It is one of a range of approaches to public participation in decision-making, distinguished from other approaches by its 'common good' rather than individual focus, its emphasis on deliberative consensus-building, and the high degree of

empowerment of its participants. It is becoming more widely used in resource management, and is arguably an important institutional innovation in New Zealand for three main reasons.

First, collaborative governance has shown it can deliver a broadly supported, stable strategy for resource management where governance systems of electoral majoritarianism, supplemented by traditional public consultation, have struggled to deliver on their own.¹ The establishment of such strategies is beneficial, in part for economic reasons - because agreed strategies can lower the transaction costs of new investment (such as litigation and delay), and improve investment certainty. Given the contestation around the recent suspension of electoral democracy at Environment Canterbury, it should be stressed here that Canterbury is far from unique in the difficulties it has faced with water issues. Twenty years after the enactment of the Resource Management Act, it is hard to see much progress in the management of the major water issues facing most of our key regions (Technical Advisory Group 2009, pp53-60). Collaborative governance may have a useful role to play in other regions and other policy contexts, although in making such a suggestion, the particularities of the Canterbury situation that made it successful there need to be understood.

Second, based mainly on cross-country comparisons, proponents of collaborative governance argue that it can increase the rate of uptake of new policies for environmental sustainability (Salmon and Zilliacus 2007; Salmon 2007). This comes about because of the capacity of collaborative governance approaches to achieve wide stakeholder buy-in to sustainability goals, in tandem with agreement on the terms and conditions under which resource use can move on to a more sustainable basis, at least in transitional terms.

Third, New Zealand has been struggling to make a Treaty-based approach politically workable in resource management governance. The focus in the partnership-based concept of Treaty implementation is on the special relationship between iwi and the Crown. It is widely acknowledged that this model has been constrained in practice, and especially in respect of water, by the reluctance of the Crown to make commitments, given likely negative reaction from stakeholding interests and the electorate. Without claiming that collaborative governance can or should replace the Treaty relationship, it seems plausible that collaborative governance could be helpful to the Treaty relationship in two important ways. These include first, building wider stakeholder awareness of, and respect for, iwi perspectives; and second, especially where agreements can be achieved, enabling the Crown to move forward more confidently and responsively in its relationships with iwi, at least over resource management and governance issues.

This leads directly to the main issue around collaborative governance, which is also the main issue explored in this report: in what sense is collaborative governance really democratic? Concerns about the democratic character of collaborative governance have arisen from a number of quarters. Some see it in terms of powerful people doing deals in

¹ Within New Zealand, at time of writing both the Land and Water Forum and the CWMS are evidence of this proposition.

secret in a closed room with others excluded, and deprived of regular information about what is going on. Others see it as a challenge to the right of properly elected politicians to make decisions on behalf of the people who elected them, in effect expecting them to relinquish their decision-making role to others.

This study is primarily focused on analyzing the democratic credentials of the process used to write the CWMS. Secondly, it examines the performance of this process in achieving integration of policy perspectives, and its effect in altering the institutional norms, incentives and risks facing resource users and the Government. In approaching these questions, the report aims to illuminate what happened in Canterbury, and also to provide insights which might be useful in considering collaborative governance in other situations.

However, the report does not attempt to judge the policy merits of the Strategy, nor its sustainability from environmental, economic, social or cultural points of view. Information is not yet available to make such judgments, since in particular, the Strategy-writing process is only the first step in an implementation process involving multi-layered national, regional and local (zone committee) engagement processes which are currently under way and are integral to the evaluation of successful outcomes.

The author would like to acknowledge peer review comments received on an earlier draft version of this report from John Pennington (Ministry for the Environment) and Murray Doak (Ministry of Agriculture and Forestry). Also helpful in shaping the report, were discussions following presentations by the author at conferences of the NZ Agricultural and Resource Economics Society (26 August 2011) and NZ Political Studies Association (1 December 2011). Final responsibility for the conclusions reached in this report is the author's alone.

2. Research Framework and Methodology

For reasons of timing and cost, this an *ex post* study, based on analysis of documents and interviews, although the interviewing of Steering Group members was carried out during a period (April to July 2010) which overlapped the final stages of the Group's work, so the interviewee's recollections were fresh. However, it is not an observation-based study: no observations were made of the Steering Group's meetings in progress. In that respect, the method used in this study differs from that used in a companion report on the Land and Water Forum (LWF), which was primarily based on observations made during meetings.² The latter type of report is obviously better placed to illuminate issues such as the quality of deliberation among members of the group, and the way in which participant behaviours and the conduct of the process shaped the outcome.

The design of the interview questions, and the gathering and analysis of the data, has been guided by three theoretical/analytical perspectives, which are inter-related.

The first perspective aims to assess the extent to which the collaborative CWMS process was successful when judged against normative democratic criteria; and to identify what factors may have contributed to, or detracted from, that success. The democratic credentials of the CWMS process are of particular interest in Canterbury, where an alternative, electorally-based governance mode through Environment Canterbury, the regional council, was judged by many to be not functioning effectively, and has since been suspended. Also of particular interest are differences between the CWMS approach to collaborative governance, and that used in other, comparable exercises in New Zealand and overseas.

The second analytical perspective is that of environmental integration. This seeks to examine the extent to which the CWMS process has contributed to a reasonably complete integration of all the issues and perspectives that were being raised by the public to be taken into account in policy-making for sustainable development of Canterbury's water resources. This perspective includes the question of whether the perceived success of the CWMS process may have depended in part, on excluding some of these matters from consideration, or from resolution, during the process; and if so, whether there are risks that the apparent consensus around the water management strategy may come unraveled at a later stage.

The third analytical perspective used in this report, albeit more briefly, is an institutional one. This seeks to examine the extent to which the shift from ECan's pre-existing, regulatory approach to a collaboratively negotiated framework has systematic consequences for the distribution of entitlements, incentives and risks. It also considers the relationship of the CWMS process to the model of self-organising communities outlined by Ostrom (1990).

To provide a framework for evaluation from the first perspective, it would be ideal to use a framework such as that provided by Kronsell and Bäckstrand (2010), which relies on

² Baines & O'Brien 2012

the notion that democratic legitimacy rests not just on meeting procedural criteria (“input legitimacy”) but also on meeting effectiveness criteria (“output legitimacy”): Table 1 (next page).

Table 1: Dimensions of input and output legitimacy

Input legitimacy (Procedural legitimacy)	- Participation/inclusion - Control/accountability - Deliberative quality
Output legitimacy (Effectiveness)	- Policy effectiveness - Institutional effectiveness - Compliance effectiveness - Environmental effectiveness

Source: Kronsell and Bäckstrand 2010 p 42

However, the implementation arrangements for the CWMS are still being developed at time of writing, and it will be some years before anyone is in a position to make judgments about output legitimacy of the CWMS. While flagging the importance of this dimension for evaluating the CWMS, we are obliged to focus at this stage upon input legitimacy.

For this purpose, we have adapted a framework from Leach (2010), who develops and uses it to analyse the democratic merits of “watershed partnerships” in the American states of California and Washington. The importance of Leach’s framework is that it is derived from the full range of arguments used in the collaborative governance literature. The framework employs seven normative criteria: representativeness, inclusiveness, impartiality, transparency, deliberativeness, lawfulness and empowerment. While these criteria overlap with, and expand, the input criteria focused on by Kronsell and Bäckstrand, they do not explicitly include the latter authors’ second criterion, of control or accountability: ‘when those who govern are subject to control and held accountable, that is those in positions of influence should be responsive to the interests of their constituencies.’³

The partnerships evaluated by Leach appear mostly to be smaller-scaled and local in nature, and to be dealing with issues that are generally less complex, and are more project- than policy-oriented, by comparison with the subject matter of the CWMS. In general Leach’s criteria still seem useful and appropriate to illuminate the key issues with the CWMS, but with two qualifications. First, Leach’s representativeness criterion

³ Kronsell and Bäckstrand 2010 p 40

abstracts from the notion of accountability, but arguably the two concepts, while linked, should both be considered explicitly, especially given that the CWMS Steering Group process operated on a regional rather than a small, local scale. Accountability is therefore a separate additional criterion employed in this report. Second, not all of Leach's criteria are of equal analytical significance, especially in the context of the CWMS, and given the research method available for this report.

In this report, the main focus is on analysis of four criteria: representativeness, accountability, inclusiveness, and empowerment. Leach's other criteria will be treated more briefly. The rationale for this is:

- This is an *ex post* study. Issues around deliberative quality and impartiality are difficult to assess reliably without observation of the meetings themselves. We are confined to reporting participants' comments after the event, which may be affected by selective memory loss and tempered by consideration of ongoing relationships.
- This study includes an environmental integration perspective, which we approach through an expanded treatment of the criterion of inclusiveness.
- Transparency and lawfulness have not emerged as important issues in the CWMS context and are treated here more briefly.

As regards the second theoretical perspective used in this study, the environmental integration literature springs from a perception that while environmental considerations have historically been treated as add-ons or mitigations at a project level, desired outcomes can only be achieved if they are effectively integrated as a fundamental pillar of wider sustainable development policy, institutional and governance frameworks. Recent work by Bührs (2009) contends that environmental integration implies a process of changing values, interests and views, rather than just balancing or trading off; and it points to the need for integration at cognitive, policy and institutional levels. A recent Swedish survey of environmental policy integration in practice (Nilsson and Eckerberg 2007) concludes that the notion of *learning* is the key to successful integration. Four important framework conditions are suggested for this to happen: *trust* in the processes used; sectoral actors taking *ownership* of the issues; institutions having the *capacities* to engage in knowledge assimilation, interpretation, strategic thinking and interaction with different stakeholders; and *knowledge* of the environmental ramifications of strategies and activities.⁴

The integration perspective does not lend itself to being added to the list of appraisal criteria: rather it informs our treatment of several of the criteria, especially the four main ones. Particular attention is given to the integration perspective in section 6, where the focus is on identifying issues being raised by the public; tracking how well these are taken up by the learning process of the CWMS, including the gathering of relevant information by officials; and seeking to understand why in some cases, issues raised by the public were not taken up by the process.

⁴ Nilsson 2007, p 167

The third theoretical perspective through which the CWMS is viewed in this report is that of institutions (Bromley 1989; Vatn 2005). Institutions may be defined as “the conventions, norms and formally sanctioned rules of a society. They provide expectations, stability and meaning essential to human existence and coordination. Institutions regularize life, support values and produce and protect interests.”⁵ This broad conception offers potential for a variety of analytical perspectives, but for the purposes of this report the focus is narrowed to considering changes in the broad distribution of entitlements in relation to water, including rights to create adverse effects, known to institutional analysts as negative externalities. “Externalities only have meaning against the status quo constellation of entitlements. People are exposed to risk because of the prevailing institutional arrangements; change that structure, and the level and incidence of risk will change.”⁶ Of particular interest is the question of whether a change in the distribution of entitlements was inherent in the collaborative nature of the process itself.

As to data, the core of this study comprises observations from semi-structured interviews with ten members of the Steering Group regarding the collaborative discussions through which the Group generated the main pillars of the *Strategic Framework* – the Principles, Strategy and Targets. Six of these interviews were with stakeholder interests – two from each of the primary production and environmental sectors, and one each from Maori and recreation interests. The remaining four interviews were with governmental representatives on the Group – two from the elected side (including the chairman) and two from officials (one each from central and regional government). The selection of interviews aimed to reflect the main viewpoints together with widely perceived sources of leadership within the group.

These core interviews were supplemented by:

- Three semi-structured interviews with members of the Officials Group;
- Eight short, informal interviews – mostly by telephone – with key stakeholding groups around Canterbury, to check on perceptions of the Steering Group and its output;
- Document analysis, focused mostly on the numerous papers produced by the CWMS process and its predecessor the CSWS;
- Analysis of the summaries of public participation input;
- A content analysis of letters to the editor of the main daily newspaper in Canterbury, “The Press” during the month of April 2010.

The semi-structured interviews – thirteen in total – were of one to two hours each. An information sheet and consent form was provided prior to each interview. Question lists formed the basis of each interview, but were not rigidly adhered to. Where interviewees had key areas of focus or particular contributions they wanted to make, and time was limited, not all questions were pursued in all cases. Notes were taken on each of these

⁵ Vatn 2005, p 60

⁶ Bromley 1989, p 30

interviews, supported in most cases by recordings, and the interviewees were offered the opportunity to receive a copy of the recording. All interviews were on the basis that comments made would not be attributed without the permission of the interviewee.

To summarise, the core questions which this report seeks to answer about the CWMS Steering Group process are:

- Did the process rate well on normative criteria for democratic legitimacy, and if so, what factors contributed to that?
- Did the process achieve a reasonably complete integration of all the issues that were being raised by the public in relation to decision-making on Canterbury's water resources?
- Did the Strategy which was developed through this process change the institutional norms, incentives and risks in relation to water and if so, to what extent could this be viewed as a distinctive product of the collaborative nature of the process?

3. Context for the Strategy's development

Prior to the appointment of the Steering Group, there had been three previous phases of work on what was then known as the Canterbury Strategic Water Study (CSWS). This study had been initiated following the 1998 drought and had focused on the need for water storage for future irrigation purposes. Stage 1 produced sub-regional water balance information and an evaluation of current and likely future water supply and demand. Stage 2 identified potential water storage projects throughout the region and assessed their hydrological feasibility. Stage 3 subjected these water storage projects to an evaluation of their environmental, social, cultural and economic impacts, using regional and local multi-stakeholder reference groups and some interest groups.⁷

This CSWS work had been promoted by MAF and irrigation interests, and although ECan became increasingly involved, it was initially at least a reluctant participant. ECan's view was that the proving up of regional water resources and the advancing of irrigation projects was a matter for water users and irrigation proponents. It viewed its own role as being an independent regulator. If it was to regulate water use and water quality impacts to ensure sustainable management, it felt it could not also be an irrigation promoter. However, by not assuming a role in public planning for water infrastructure, ECan arguably sharpened the emerging conflict over water resources as well as the "gold rush" of water permit applications that later occurred. Moreover, ECan's ability to perform its regulatory role effectively was being hampered by a number of factors. These included the existence of a wide range and divergence of views within and between its governance and staff; the associated difficulties and delays in drafting its Natural Resources Regional Plan (NRRP) and getting agreement to progress water metering; a long history of difficult relationships with the district councils in the region; and competing views within the scientific community about how best to model groundwater resources.

The CSWS Stage 1 report, published in August 2002, highlighted that smaller rivers were stressed from excessive abstraction of water, that ECan had failed to set abstraction limits on water resources, and that water supplies was unable to meet existing and future irrigation demand in many parts of Canterbury unless water storage was provided. The growing evidence that ECan had over-allocated water permits for abstraction from groundwater was eventually accepted and advocated by ECan itself. Loss of healthy flows in lowland streams during summer upset environmentalists and recreationists, while irrigators themselves became concerned at falling groundwater levels which

⁷ The earlier CSWS reports and other technical reports are available at: <http://www.canterburywater.org.nz/background-documents/technical-reports.php>. There is also a CSWS Stage 4 Report, dated December 2009, which examined new water resources potentially available from efficiency improvements and re-configuration of consents between groundwater and surface water. This was a major input into the work of the Steering Group.

necessitated increasing pumping costs and reduced security of supply.⁸ After the arrival of a new chief executive, ECan finally took a decision in February 2004 to introduce “red zones,” where water was believed to be over-allocated and where further permits would not be issued without better information; and the NRRP’s proposed water chapters, introducing a basic regulatory framework, were finally notified for public submissions in July 2004. It briefly appeared that ECan was regaining effective control of the region’s water resources.

What then followed was a perceived major breakdown of ECan’s ability to deliver on this regulatory strategy. With a continuing “gold rush” of water permit applications, ECan decided to take one of them to the Environment Court as a test case for its red zone limits. The resulting *Lynton Dairy* decision⁹ held in August 2005 that the standard of evidence submitted by ECan was insufficient to justify its refusal to issue consents. As the same scientific modeling whose adequacy was rejected by the Court had underpinned ECan’s proposed abstraction limits on groundwater takes in red zones, the implication of the decision was that ECan would be unable to defend its red zones against further new applicants. By March 2008 ECan reported it was swamped with applications for water permits, annual applications having recently grown from 2,000/year to 3,500/year.¹⁰ Batches of new applications for water permits in red zones were progressively considered by independent commissioners, which then in a series of decisions overturned ECan’s recommendations against granting the consents.¹¹ While considering it could not appeal these decisions, ECan continued to champion the view that water resources were over-allocated, contesting the scientific models being relied on by the independent commissioners in their decisions.¹² ECan also launched its Restorative Programme for Lowland Streams, which involved reviewing existing water consents,¹³ but made only slow progress.¹⁴ ECan’s finalizing of the NRRP was bogged down with the processing of over 8,000 public submissions; once decisions on these had been made, appeals to the Environment Court were expected. This meant that the earliest date the NRRP could be made operative was 2013, and by then, the major decisions the NRRP was intended to direct would likely have been overtaken by the avalanche of new water permits and the

⁸ The picture of what was happening during this period was somewhat obscured by the overlay of a series of dry years, which allowed the causes of water shortage problems to be contested.

⁹ *Lynton Dairy Ltd and Canterbury Regional Council*, Decision C108/2005 22 August 2005.

¹⁰ “Dairy consent applications swamp ECan” *The Press* 29 March 2008.

¹¹ These are the commissioners’ decisions on water applications for the following zones: Rakaia-Selwyn (March 2007), Selwyn-Waimakariri (October 2008) and Valetta and Ashburton River (June 2010).

¹² See “Canterbury water ruling dubbed ‘insane’” *The Press* 22 October 2008; “Lucky run for farmers may dry up” *The Press* 23 October 2008; “Water access at risk if aquifers leaky” *The Press* 18 December 2008.

¹³ ECan’s press release of 21 July 2006 said the purpose of the Restorative Programme was “to return water to streams which have dried up, sustain adequate flows in other lowland streams, and ensure reliability of supply to existing consent holders.”

¹⁴ The Programme involved reviewing over 600 groundwater consents in the Rakaia-Selwyn area under RMA sec 128, with a view to imposing annual volume limits on the permits, which were commonly absent; adding provisions for reduced takes during periods of low stream flow; and requiring water metering. A commissioners’ decision issued in February 2010 set a timetable through to June 2015 for implementing such changes on most of these permits, but decisions on hundreds of the permits are under appeal to the Environment Court, and the matter is ongoing.

consenting of major irrigation schemes that were already in the application pipeline.¹⁵ In the meanwhile ECan councilors rejected (in December 2005) the option of seeking legislative powers to impose a moratorium on new water permits.¹⁶

During the period of these events, the region's irrigated land area had been growing rapidly, summer flow and water quality in lowland streams had declined, and Canterbury public opinion had become increasingly polarized around water issues. The divisions were manifested, for example, in regional election processes and around the council table at Environment Canterbury (ECan); in the delay and difficulty in progressing the NRRP; in prolonged legal contestation over proposed irrigation projects; and more widely, in extensive news media coverage, pressure group activity, and the high-profile publication of Sam Mahon's book *The Water Thieves*.

Against this background, the leadership of ECan formed the view that there was limited scope for resolving Canterbury water issues by simply following existing procedures under the Resource Management Act (RMA), and that a collaboration-based strategy was needed that drew on the potential for meeting the demand for new water through storage projects. While the CSWS had built up much of the knowledge base needed for this, and had especially in Stage 3 some experience in public engagement, it was perceived by environmental, recreation and iwi interests as being essentially a developer-driven process. Following advice from a public relations firm, the decision was therefore taken to re-name and re-position the CSWS as the Canterbury Water Management Strategy (CWMS), de-emphasizing the overt push for water storage for irrigation in favour of a wider water planning approach, and introducing a more balanced governance structure that took greater account of environmental, recreational, tangata whenua and wider public interests. A further important aspect was to shift from the previous focus on water availability and storage, to a broader concern with the impacts of irrigated land use intensification on water quality and ecosystems. The key change from the CSWS to the CWMS was in the conception of the Steering Group's task: it moved from being a facilitator of irrigation development to the broader role of balanced consideration of a water strategy for Canterbury. Notwithstanding these changes, a core of CWMS Steering Group members had also been involved in one or more of the earlier CSWS processes.

An important aspect of the circumstances leading up to the adoption of the CWMS as a solution-finding innovation was the sense of stalemate in the "Canterbury water wars." On the one hand, those who wanted to regulate freshwater use in Canterbury found themselves in politically too weak a position to set limits on water takes or water quality. The result was that ECan itself had in effect lost control of the situation, with water permit issuance and land use intensification proceeding in a manner which had no regard to limits which ECan staff and environmental interests believed ought to be established and enforced. On the other hand, irrigation proponents found themselves in a commercially weak position, for a number of reasons. First, given the community and political divisions in Canterbury, they faced high regulatory risks and high process costs

¹⁵ The ECan Act – itself a reaction to the perceived break-down of effective performance at ECan – later removed the right of appeal to the Environment Court on the 8,000 submissions on the NRRP.

¹⁶ Moratorium powers did not become available until the passing of the ECan Act in 2010.

in obtaining RMA consents for community irrigation schemes. Even were consents to be granted, the high costs of scheme development and the difficulties of persuading farmers to invest meant these schemes usually were not bankable projects without external financial support. While the Christchurch City Council and Selwyn District Council had earlier contributed funding for irrigation scheme development, rising contention in the community caused these contributions to be challenged and jeopardized the prospects of central government funding. While individual irrigators relying on pumping from groundwater were initially beneficiaries of the stalemate, the rising cost of pumping from falling groundwater levels, associated with over-commitment of the aquifers, gradually led to a recognition of the need for better regulation of the resource.

Once formed, the CWMS Steering Group focused initially on the development of principles and a strategy, and published this as a draft for public submissions. The need for more specific targets was identified about this time and these were added later, with a separate public engagement process. This addition moved the Strategy as a whole, much further into the realm of defining desired outcomes. The Targets are much the most specific part of the CWMS, albeit with the caveats that they should be read as a whole, and will be reviewed again in only three years. The role of the Targets is primarily to guide the preparation of the implementation plans which are to follow, and to provide a basis for annual monitoring and reporting on progress.

While the Steering Group's work was proceeding, other statutory processes were not on hold but were also proceeding in parallel, with considerable scope for pre-empting any strategy. These existing processes included the hearing of submissions and determination of decisions on:

- The Natural Resources Regional Plan (NRRP), which sets out objectives, policies and methods for addressing (amongst other things) water quality, water allocation and wetlands management issues;
- Major irrigation project applications, including the Central Plains Water and Hunter Downs projects; a separate application involving impoundment structures and irrigation in the Hurunui catchment was well-flagged but was at pre-notification stage;
- The Hurunui Water Conservation Order application.

In May 2006, irrigation interests organized a visit to the Murray-Darling basin in Australia, a visit which proved influential in shaping the views of a number of officials and other individuals who took part and later became members of the Steering Group. This trip spawned interest in audited self-management of irrigation developments, infrastructure efficiency improvements, and community governance, while also putting participants off the idea of water trading as a useful early innovation in Canterbury.

As noted at the outset of this report, at the time of writing, the development of the CWMS is widely regarded as having been successful in providing a widely supported basis for resolving highly polarized stakeholder issues around water management in Canterbury. Relationships between irrigators and other stakeholders appear greatly

improved, and Canterbury water disputes have dropped from the headlines, at least for the time being. Importantly, the stakeholders involved in the CWMS process are continuing to engage with each other in carrying the Strategy forward (albeit with some modifications) into further work to resolve more specific issues at both regional and local levels, through the preparation of detailed implementation plans. Consistent with recommendations in the Strategy, a network of ten zone committees have been established to work collaboratively on these plans at the local level, and there is also a widely representative regional committee which has taken over from the Steering Group to guide the overall implementation of the Strategy, again on a collaborative basis.

A complicating factor for any assessment of the success of the collaborative governance approach was the Government's intervention in March-April 2010 by sacking Environment Canterbury councilors and replacing them with appointed commissioners; removing rights of appeal to the Environment Court on both the NRRP and water conservation orders; and changing the decision criteria for the latter. As discussed later, these measures, while initially controversial and divisive, also had the effect of significantly narrowing the scope for parties to use methods other than collaboration to achieve their objectives. The vehicle used for this intervention was the ECan Act.¹⁷ The Act also gives statutory recognition to the Vision and Principles of the CWMS – which are important and foundational, albeit more general, components of the Strategy itself.

An evaluation of the overall success of the CWMS will have to await the outcome of the implementation process which is now in its early stages. The present report is focused on the initial step, the collaborative writing of the Strategy by the Steering Group. While the Steering Group played a central role in developing the CWMS, it did not operate in isolation, but was influenced to some extent through at least five major linkages, as follows:

- The Mayoral Forum, comprising mayors and chief executives of Canterbury's local and regional authorities (see Appendix 2) appointed the Steering Group's members and chairman, had three representatives on the Steering Group, received three-monthly briefings on progress, and adopted its report;
- The Canterbury Officials Group, comprising experts from central, regional and local government and two consultants, played a significant role in providing policy-relevant information and conceptual leadership, and generally supported the work of the Steering Group;
- The Wellington Officials Group, comprising departmental representatives, provided a wider sounding board for the central government representatives on the Steering Group, dealt with Steering Group requests for central government resourcing and legislative support, and kept Ministers informed;
- The public consultation processes, including three iterations of submissions and hearings, provided information on the views of the wider public;

¹⁷ More formally known as Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010

- Personal networks of Steering Group members, including the organizations with which members were associated, also provided a degree of influence and accountability, albeit this was constrained insofar as members were explicitly selected and appointed as individuals and not as representatives of particular organizations.

4. Overview of the Strategy

The published Strategy, a 157-page document, is extremely complex. Three concepts are fundamental to understanding how it coheres, and why participants feel bound together in a shared commitment to it. None of these crucial concepts is explicitly defined in the document, and none receives more than fleeting mentions, but each concept was heavily used in the Steering Group's own discourse, as revealed in the interviews.

The first is “parallel development” (discussed on page 9 of the Strategy, and first mentioned in a December 2007 presentation by the ECan chief executive to the Mayoral Forum). This is a philosophy under which environmental objectives and production-related objectives are advanced step-wise in parallel going forward, so that actions taken for each reinforce the overall commitment to balanced progress. This is an approach which shows good faith to both sides (ie farming and environmental/recreation/iwi¹⁸ interests), maintaining and building the trust between them. Parallel development does however include a dimension of acknowledgement that much environmental degradation has already occurred as a result of agricultural activities in Canterbury. It therefore includes an element known as the Immediate Steps ecosystem protection and restoration programme (Strategy, page 61), which it was intended, subject to funding, would get under way ahead of any further development of the irrigation infrastructure.

The second key concept is “new water.” As discussed above, ECan acknowledges that the groundwater resources of Canterbury were over-committed in recent years by its having issued too many permits to take water. The main farming areas belatedly became classified as “red zones” where ECan's policy now is to decline the issue of further water permits, despite high demand. Over-pumping of the aquifers has also depleted the region's lowland, spring-fed streams and some rivers to the detriment of their ecological health and recreational values.¹⁹ Given these realities, finding “new water” is a mission that has value for solving the problems facing both irrigators and environmental/-recreation/iwi interests. New water can be used both to expand irrigated areas, and to restore healthy flows to lowland streams and rivers. There are only two possible sources of new water:

- Improving the efficiency of use of the water already allocated, so that some of it can be relinquished for re-allocation; there are said to be substantial opportunities for this;
- Creating water impoundments in alpine river catchments, which can store snowmelt water at times when it is plentiful, and release it at times when it is in demand for both irrigation and environmental/recreation purposes.

While it is legally possible that the existing regional allocation of water could be reduced by reviewing the permits already issued under the RMA, this is a very slow and difficult

¹⁸ Iwi have strong environmental interests in this strategy, but they also have farming interests. Ngai Tahu has actively advanced a vision of kaitiakitanga which seeks to integrate these.

¹⁹ Rainfall variability also played a role in these outcomes.

process, as shown by the Lowland Streams Restoration Programme. Interviews for this project suggested that both farming and environmental interests felt they had a shared interest in finding new water.

The third key concept in the Strategy is “brokering.” This is briefly discussed in the Strategy at pages 14, 50 and 53 in the context of water allocation and use efficiency, and the same concept underpins the Steering Group’s thinking about how to improve water quality (p 51). Brokering is the idea that an existing right, such as a water permit, or a perceived right, such as the right to farm with unlimited nutrient discharges to water, might be relinquished in exchange for the offer of new water, if the new water is either a lower-cost source or a more reliable source, or both. The brokered deal might involve a farmer:

- relinquishing an expensively pumped groundwater permit, and
- committing to introduce more efficient irrigation techniques and practices which require less water, and
- committing to adopt and implement a best practice land management plan to minimize nutrient leakage and other water quality impacts;
- all in exchange for receiving a new but smaller entitlement of low-cost, high reliability irrigation water from a storage dam.

The brokering concept is well-regarded in principle in the farming community, because its voluntary nature is respectful of the rights which the farmers consider they hold, including a loosely defined ‘right to farm’. For those in the environmental, recreation and iwi communities, it is viewed as a pragmatic way to achieve goals that might not otherwise be achieved unless with great political difficulty.

The above is a simplified outline of the fundamental building blocks of the Strategy. There are many other dimensions of it which are perceived to provide benefits to each side, for example, less groundwater pumping is expected to yield significant reductions in the South Island’s electricity demand, which could have both economic benefits on-farm, and environmental benefits elsewhere in the South Island.

From the irrigation interests’ perspective, two key unresolved issues that had dominated the earlier CSWS process were satisfactorily resolved by the CWMS: first, the agreed target that 850,000 ha of land should be irrigated in Canterbury; and second, the agreement on three general locations for water storage development, although *how* these locations would be developed remains for later decision-making.

5. Representativeness and Accountability

5.1 Context

The representativeness of the Steering Group process in relation to politically active stakeholder groups, the accountability of Steering Group participants to these constituencies, and the sense of ownership of all concerned of the process outcomes, is widely recognized as being of great importance to the legitimacy and durability of the Strategy.

This is particularly the case in Canterbury where the normal operation of an elected regional council has been suspended by the ECan Act. The legitimacy and ultimate effectiveness achieved by the CWMS process, both in its initial Steering Group phase and in the subsequent implementation phases which are also to be collaborative, will provide an interesting test of the extent to which the policy-making functions of a regional council could be overseen and directed through a different governance model, which combines centralized authority to a Minister with collaborative policy development at regional and local levels.

5.2 Analytical framework

Leach defines representativeness in this way:

A representative process ensures that the interests of all affected individuals are effectively advocated, either in person or through proxies.²⁰

He also refers to the modern-day public management notion of stakeholder and adds:

The basic logic behind the stakeholder-centered model is that having a moral or economic stake in the outcome of a public decision-making process entitles each faction to a seat at the table.²¹

The notion that individual stakeholders are represented at the table through proxies raises the question of how these representatives, deliberating in closed, collaborative setting, might be accountable to those outside the room. The concept of accountability has its origins in more hierarchical models of governance, in which there are clear principal-agent relationships, and accountability leads to legitimacy if and when there are sanctions available when actions or decisions are incompatible with the values and preferences of principals. Accountability becomes more complex in new governance modes, such as collaborative or network governance, because there is often no coherent principal, and

²⁰ Leach 2006, p101

²¹ Leach 2006, p101

here, reputational accountability and credibility become crucial.²² The availability of information, public access and transparency, and monitoring mechanisms are important dimensions of accountability.

5.3 Views in public submissions

The Steering Group's work proceeded against the background of fairly negative initial attitudes about its representativeness, and about the lack of balance in the whole strategy-writing process, as reflected in the February 2009 summary of public submissions under 'Recurring Stakeholder Perspectives':

*A large majority of stakeholders feel that the current CWMS process is unbalanced and developer led, and that it is not, therefore, a truly democratic or community-informed process. This is due to multiple factors – dissatisfaction with the Mayoral Forum as proportionately representative of regional preferences, dissatisfaction with the balance in composition of the Steering Group (perceived as developer-dominated), dissatisfaction with the balance in composition of the range of stakeholders included in the process to date (also perceived as developer-dominated), dissatisfaction with the lack of up to date, comprehensive information about the process widely available and accessible, and dissatisfaction with the low profile of the process and the perceived bypassing of possible interested participants. However, many stakeholders have also made positive comments about the concept of a regional initiative, and about the cooperation and contributions of the various community sectors who have contributed so much to the debate so far.*²³

5.4 Views elicited in interviews

In interviews for this report, the stakeholder members of the Steering Group were asked how they came to be on the Group, and the extent to which they networked with and were accountable to, their respective stakeholder groups. In addition, all members interviewed were asked whether they thought any important stakeholder interests were not represented on the Group.

Stakeholder members of the Steering Group mostly said they were appointed by the Mayoral Forum on the nomination of officials, as *individuals* familiar with particular stakeholder viewpoints, but not as nominees or as representatives of the organizations with which they were associated. This view of their role, and their selection as individuals, was confirmed by officials in interviews. It differs from the practice used in the Land and Water Forum, and in several Nordic case studies of collaborative governance. However, the view that Steering Group members were not representatives included some acknowledged exceptions, notably those government officials who were also members. In addition, there was an understanding that David Perenara-O'Connell

²² Kronsell and Bäckstrand 2010, p41

²³ Open Strategy, Summary of Stakeholder Content – Social Dimensions p4 February 2009

was an exception: he had from an early stage insisted he was acting as a representative of Te Runanga o Ngai Tahu and not as an individual. Later, when the ECan Act abolished the role of ECan councilor, the two councilors on the Steering Group were replaced with new ECan commissioners – again reflecting a representation-based view of these roles. As the Steering Group process wore on and consensus appeared to develop across sectors, the view that members were there as individuals not representatives became less emphasized, and in the text of the final report, several of the stakeholder members are actually listed as “representatives” (see Appendix 1 of this report).

Several stakeholder members formed the view that they had been appointed originally because they had been perceived by the authorities as being more ‘balanced’ or more ‘accommodating’ than some others who might have been chosen. In two cases, interviewees were able to nominate the precise occasion on which they thought that perception had been formed of them. Others who were appointed said they had been involved in earlier phases of the CSWS, indicating they were known quantities to the authorities. Comments from officials confirmed that they were “very careful” in selecting individuals were prepared to “sit down and discuss issues.” Avoided were those with “entrenched views that don’t necessarily accept what might be considered as the common wisdom”. After the 2008 regional council elections, at which candidates supporting the protection of water resources made significant advances, the Steering Group had some membership changes which made it “greener” – providing an example of the interaction of elected governance with collaborative governance.

Members of the Steering Group were encouraged to consult on their personal networks, but the extent to which this actually occurred varied greatly. There were regular briefings of the ECan council, a roadshow to TLAs, hui with various Ngai Tahu runanga, discussions on the committees of several of the non-governmental organizations, and some informal networking. However, some of the environmental and recreational sector members appear to have relied more on their reputations with supporters than on any detailed consultation with them, let alone the obtaining of agreement for key elements of the Strategy. Interviews with some groups not directly represented on the Steering Group revealed perceptions of a lack of transparency in the process, especially a lack of sharing of information about what was under consideration. The status of Steering Group members as knowledgeable individuals rather than as representatives of organizations was cited by some members, and given the already-high demands of the process on members’ time, this perceived status may have reinforced a non-consultative pattern of behaviour.

When it came to defining the CWMS Targets, officials identified this lack of network consultation as a significant gap, and decided to initiate a formal round of stakeholder consultation on the Targets. This was widely cited as an effective and worthwhile exercise after the event. It appears that this weakness in the operation of network consultation within and among stakeholding organizations was to a significant extent mitigated by the extensive, formal public consultation processes including on the initial draft Strategy, and later on draft Targets. These processes provided transparent information and monitoring opportunities, and triggered feedback both formal and

informal, which helped to improve the accountability of members of the Steering Group. Interviewees asked, tended to agree that it was this combination of collaborative governance and traditional consultation processes which has lent the CWMS much of its success and momentum.

Some of those members who did feel accountable faced some difficult issues. One of the members associated with irrigation interests experienced strong tension with supporters of a particular irrigation project, a tension which he believed led those interests to go directly to the Minister to seek a national intervention affecting Water Conservation Orders in Canterbury, which was subsequently agreed to (and given effect via the ECan Act.) These events, and the subsequent crisis of trust within the Steering Group, raise questions about the relationship between collaborative and electoral governance systems which are discussed further in our conclusions.

As regards interests which had not been represented on the Steering Group, a majority of the interviewees nominated hydro-electric generation interests, or Federated Farmers, or both; but their addition to the Group was not generally supported. There was a generally negative view about the ability of both these groups to enter into the collaborative process in a flexible and constructive way. However two interviewees also indicated that the absence of these interests, and of major businesses in the food processing sector, meant that the advocacy for production interests was too narrowly focused on the irrigation question. Notwithstanding the statement in the Strategy (p14) that “*Co-operation and participation from hydro-electricity generators will be critical to the success of the strategy,*” electricity generation interests were generally considered to have been adequately dealt with by merely being given an opportunity to be heard by the Steering Group. Similarly, farming interests were said to be represented by a range of other group members and there was therefore no need to involve Federated Farmers. Other concerns mentioned in response to questions about representation were that Ngai Tahu interests, although invited to attend, had a relatively thin participation at the Steering Group’s meetings, although this was stronger during the target-setting phase; that the District Health Board member seemed to be quite silent; and that while there were three active members from the Ashburton district, there was only one member from the South Canterbury area, an area that had long been sensitive about being neglected or misunderstood by ECan.

Sample comments from interviews:

The process was dependent on selecting people who could show this leadership and make compromises.

We had a big debate about the generators. The fear was that they would dominate, would kick us to death because they are so powerful. Even the farmers felt that. They are a kind of proxy regulator of water. They didn’t help their case by turning up to hearings with three lawyers and two PR guys and saying there was nothing wrong with the status quo.

The iwi situation was more of a concern than the generators. The iwi were present, but the Treaty relationship was with central Government... We knew we couldn't solve Ngai Tahu's issues. The real discussion would have to take place in Wellington, but we had to make sure what we were doing was not inconsistent with their aspirations.

If you have got people like [name], people like [name], you have some people with some pretty strong farming views, clearly in favour of irrigation from their positions. But also if you look at what Waimak Irrigation have been doing, and also Opuha, they have been far more engaging with their communities than the straight, more political approach that comes from Federated Farmers in terms of their normal style.

One of the reasons the Feds weren't invited is that they are so rabid. You can have a cultural connection with farmers but when you get the Feds' advocates, they're too one-eyed. They denied that their noses were in the middle of their faces at times. Whereas ordinary farmers would say, "that's not true, is it?"

Quick checks were made, mainly by telephone, with excluded organisations and a range of other community groups about how they saw the adequacy of overall representation on the Steering Group. These checks were made after the final CWMS report was published and indicated that lack of representativeness no longer appeared to be a major issue. Organisations left out of the Steering Group tended to play down their non-involvement, and there was a widespread reluctance to criticize the Steering Group or its report. Two environmental groups who were not part of the Steering Group maintained that the process was basically undemocratic, but said they supported what it had come up with, as far as it went. Moreover, the various parties in the water debate have, since the CWMS report was published in July 2010, intensified their engagement in working with each other, through the extensive network of zone committees and the regional committee. While these observations in no way amount to a thorough investigation of whether the initially negative attitudes about the representativeness and balance of the CWMS still persist, they do suggest that the process has succeeded in creating a degree of legitimacy in the eyes of protagonists.

The initial setting-up of the Steering Group appears to have sought to minimize risks of failure by positioning the group midway between a reference group/sounding board concept, and a genuinely accountable collaborative governance process, allowing the group to evolve in either direction as events unfolded. As described above, the initial emphasis on Steering Group members being present as knowledgeable individuals morphed over time, as confidence in the process grew, toward an emphasis being placed on their being representatives of organized interests. This conferred greater legitimacy on the published Strategy.

This transition had credibility in part because the appointees were in fact, of senior officeholders or esteemed leaders in key organizations, including the chair of Irrigation NZ, the chair of the Water Rights Trust, the patron of Whitewater NZ, the chief executive

of the Opuha Dam Company, the chair of Fish and Game North Canterbury, the chief executive of the Canterbury Chamber of Commerce, and the chair of the Canterbury District Health Board. A weakness of representation that is discussed further below is that there was no direct representative of those interests advocating a wider sharing of the economic benefits of irrigation.

A disadvantage of the shifting and somewhat ambiguous conception of members' roles was that some members took less seriously than they might otherwise have done, the need to consult widely and deeply on their networks; a disadvantage that was partly overcome by the use of formal public consultation episodes. Nonetheless, by the end of the process the bottom line was, that there had been no formal public commitment by stakeholder organizations to the Strategy and, as indicated at the end of section 5.6, there exists only a limited understanding of its complex provisions amongst most Cantabrians, including most of the rank-and-file members of stakeholder organisations.

Thus despite the Strategy's successful co-optation of the policy elites, and its appearance of legitimacy, the lack of clear and formal stakeholder buy-in may heighten the possibility of disputes opening up once again when ECan moves to formalize the Strategy in regional plan processes, or if impasses are reached in the zone implementation committees set up by the Strategy. However, this qualification needs to be viewed in the context of the great improvement in inter-stakeholder relations, including ongoing working together, which the Strategy process appears to have engendered in Canterbury, as highlighted in section 1 above.

A side point which can be drawn from the above discussion, and was apparent from interviews and comments, is that those responsible for the CWMS process were working out how to do it as they went along. The whole approach was relatively novel in a New Zealand context and was shaped by learnings as the process proceeded. A key role in this regard was that of the Project Manager, Geoff Henley of Network Public Relations, who was widely acknowledged in our interviews for his strategic guidance and ability to keep the various groups moving forward in relative alignment.

Three additional issues highlighted by Leach²⁴ are worthy of brief discussion:

- **That resource constraints may preclude participation by certain segments of society.** ECan found it necessary to provide honorarium payments and travel expenses, and resource constraints do not seem to have been a factor restricting participation in the CWMS Steering Group, although interviewees suggested it is a significant factor for the ten local zone committees now being established. ECan has promoted a proposal to increase honorarium payments for these, but has not won support from district councils who would have to share the cost of making these payments.
- **That environmental interests, which are predominantly urban-based, are effectively excluded from participating in local resource management**

²⁴ Leach 2006, pp101-102

collaborative meetings in local rural areas because of the remoteness, local focus and sheer number of these meetings. Again, while not an issue for the CWMS Steering Group, several interviewees considered this an important problem for the ten zone committees being established by ECan to implement the CWMS. There was an effort on the Steering Group, not successful, to reduce the number of zone committees. This appears to have been one of the relatively few issues where the rural district councils, acting through the Mayoral Forum, exercised a significant influence in the CWMS process.

- **That local environmentalists are not always equipped to play competitively with industry professionals in local collaborative processes.** Again, this did not appear to be an issue in the CWMS Steering Group, but interviewees saw the issue arising for the zone committees, albeit in a slightly different formulation. The concerns expressed are twofold. First, that those zone committee members whose personal economic future depends critically on access to irrigation water will be much more motivated to prepare for meetings, absorb technical information and argue effectively for their private interests than those individuals whose role is to represent the wider public interest in their spare time. Second, that environmentally-minded members of zone committees will feel a need to play a more muted role in their advocacy, because of their need to maintain good relationships in local communities that are overwhelmingly focused on obtaining access to irrigation water.

The issues raised by Leach will need to be considered in due course, in an evaluation of the effectiveness of the zone committee approach adopted by the CWMS.

The issues discussed in this section around representativeness and accountability are part of a wider picture, in which the CWMS process can be seen as a relatively centrally-directed and actively managed process. In effect, it constitutes a distinctive variant of the collaborative governance model. While it is too early to draw firm conclusions, there is evidence that the CWMS process has indeed advanced the resolution of a series of divisive issues. The “guided collaborative governance” approach may have reduced the risks of embarking on the process in the first place, and it does not appear at this stage to have detracted much from its perceived legitimacy or effectiveness.

6. Inclusiveness

6.1 Analytical framework

Leach, in his study of western American water partnerships (2006), recognizes the issue of inclusiveness as being of key importance. However, data constraints for his meta-study framework led him to assess these partnerships on the relatively simple basis of whether their membership was open to all comers or whether they had restricted memberships. For the CWMS Steering Group, operating at a regional rather than local scale, restricted membership was a practical necessity. In these circumstances our critical questions relating to inclusiveness must focus first, on the extent to which members of the public were able to make an input into the deliberations of the Steering Group; and second, on the extent to which the issues raised in public submissions and hearings were actually taken up as part of the policy integration achieved by the Steering Group. In short, the inclusiveness criterion here considers how far the process allowed input from those outside, and then properly considered all the issues raised.

These questions are also central to the analysis from an environmental integration perspective, and are therefore dealt with here at some length. In his landmark text on environmental integration, Bührs writes:

Environmental integration, though, is more than just a process of balancing or weighing different and conflicting values, interests and views, as is often implied in discussions of integration under the heading of “sustainable development.” In line with the general definition referred to above (“combining parts into a whole”), it implies a process of changing values, interests and views to bring them in line with one another, to make them compatible and mutually supportive... Environmental integration implies adapting knowledge bases (cognitive frameworks), actions (policies), and human systems (institutions) on the basis of collectively decided environmental parameters, so that they become “environmentally rational.” Where values and interests are only balanced or traded off against one another, this is not environmental integration but the common practice of bargaining and politics...

What is environmentally rational is socially constructed, not an objective truth that is easily uncovered. This applies even more so to the notion of environmental rationality, which includes a “human well-being” dimension... than to the notion of ecological rationality. This conundrum, one might argue, makes talking about environmental rationality and environmental parameters meaningless, as their definition, too, is subject to conflicting views, interests and ideologies...

The answer to this conundrum lies not in denying the reality (and value) of diversity and conflict, but in recognizing that, de facto, in collective decision-making (often through governments) groups and societies always do assign

different priorities and weights to values, and interests, and that those who advocate more specifically environmental values and interests often do not have much of a say and tend to lose out, leading to aggravated environmental damage. In practice, then, environmental integration is about enhancing the incorporation of environmental knowledge, values and interests in human thinking, decisions, actions, and institutions, as well as about promoting the consistency between environmental management efforts by a variety of ways and means. Environmental integration depends on and requires the strengthening of environmental advocacy in the processes and institutions of collective decision-making with the ultimate aim that all policies and institutions are “greened” so that they no longer cause avoidable and unnecessary environmental harm and can thus be considered environmentally rational.²⁵

The environmental integration perspective on the inclusiveness criterion raises research questions around the extent to which the views of participants were changed by the Steering Group process. Ideally, this would involve collecting data on participants’ views before and after the process. Unfortunately, by the time the present study was finally commissioned the Steering Group process was already well advanced. The approach taken here necessarily relies on *ex post* interviews and self-reported accounts of how attitudes changed. It also involves analysis of how issues raised in public submissions were dealt with in the process, including whether, and to what extent, they were integrated into the finally agreed Strategy.

6.2 Opportunities for stakeholder or public input

The importance of the formal public consultation processes has already been alluded to in discussing the accountability of members of the Steering Group, but here we describe the processes in more detail.

Salmon et al (2008) describe a tension between the New Zealand ideal of wide public participation in resource management processes, and the effective operation of collaborative governance processes in the Nordic style, which involves a comparatively small group of stakeholder representatives and officials deliberating amongst themselves. Their analysis draws on Mutz (2006) who writes “Unfortunately, everything we know suggests that the people most likely to take advantage of increasing opportunities to participate in politics will tend to be systematically more extreme in their views and thus unrepresentative of the general population... Participation itself could [thus] be detrimental to the extent that extremists prolong conflicts and prevent compromise.”²⁶ By drawing on accountable interest group representatives with negotiation skills and experience to play an intermediating role, the collaborative governance model appears better able to build trust and resolve conflict. However the collaborating group still needs to inform itself of wider views and to meet expectations of public participation.

²⁵ Bührs 2009, pp10-11

²⁶ Mutz 2006, p 136

In an effort to manage this tension constructively, there were four separate rounds of public input during the CWMS process:

1. An initial phase of identifying, scoping and sorting issues put forward by stakeholders. This involved over 300 people with meetings across the region during 2008, and was conducted by consultants Open Strategy™.
2. A brochure with four broad options for water management and a reply form was published in April 2009, with comments due by June. Again a range of meetings was held across the region. Around 1100 responses were received.
3. The first draft of the Strategy was published for public comment in September 2009, with 70 submissions received in October.
4. Parallel with this, stakeholder consultations were taking place on the draft outcome targets, significantly changing those in the August 2009 version of the draft Strategy, and leading to publication of the revised targets for public comment in February 2010.

A particularly innovative feature here was the opening effort, which was designed to stimulate the multi-stakeholder community to identify and feed in all their issues of concern without restriction. The consultancy Open Strategy employed an internet-based system for recording public and stakeholder valuations and an ingeniously structured approach for analyzing them in relation to a framework of projects, results, uses and benefits.²⁷ However, given the complexity of the Canterbury resource issues, this approach produced a plethora of detail.

6.3 Views of interviewees on opportunities for public input

All interviewees felt that public input was essential to inform the work of the Steering Group and to provide public legitimacy. The efforts made to get stakeholder and public consideration of the draft targets attracted widespread and particular praise. Some felt that the targets were particularly robust as a result of this, even though the mutual compatibility of the targets was also felt by some to be unresolved.

The views of interviewees on the initial Open Strategy exercise were more varied, and fell into four camps.

One interviewee saw it as:

A big waste of money – dreadful.

Several interviewees, mainly those on the environmental side, saw it as valuable:

There was a genuine attempt to engage stakeholders widely and report accurately what people said. The themes that people raised have not been used as much as

²⁷ Driver and Armstrong 2005

they should. But it influenced the need for targets. The group realized we had to be more explicit.

Another group saw it primarily as a necessary step in that it provided opportunity for useful input, while acknowledging it may have provided too much detail to encourage online discussion:

We are dealing with 20 years of fighting – this was moving people into thinking mode. Too much detail – maybe – but the key thing was moving the community along.

It was important to give people a say, especially those on the edge who see the Strategy as a Trojan horse for irrigators.

Officials and consultants associated with the process made these comments:

Open Strategy simply did not have the scope and scale to manage the complexity we were dealing with. It tried to break input down into bite-sized pieces and we had too many pieces. It was put on a website which nobody accessed. There was so much information it became opaque. Their methodology is good for specific uses, but not this one. We did use it to create the fundamental principles but I wouldn't have gone to so much trouble to do that.

It was more than just uses and benefits, it was values that people were particularly concerned about, and they were able to distill some key principles that you would want to have for any strategy. But if you look at the complexity of Canterbury water management and the Open Strategy type system, it actually provides you with too much information. If you are trying to link up projects, results, usage and benefits, you actually end up with so many lines between so many things that the complexity is not actually reduced by Open Strategy.

While the website treatment of projects, results, uses and benefits may have been unnecessarily complex and therefore opaque, and the complexity of the methodology seems to have passed into folklore, the present researcher was impressed with the quality of the summaries produced by Open Strategy. They are intelligently and perceptively written, and have provided a valuable basis for assessing how far the subsequent process reflected the concerns being expressed by stakeholders.

6.4 Uptake of stakeholder themes

Open Strategy produced six briefing documents in February 2009 which summarise the mass of “stakeholder content” received. The majority of this material was picked up in some way and dealt with in the draft Strategy, which was released for the next round of public comment in August 2009. Two of the major issues prominent from the outset in stakeholder content were not, however, effectively dealt with in the draft Strategy. This

failing flowed through to a significant extent into the final version of the Strategy published in July 2010, and although there was some attempt to address them through the addition of Targets to the Strategy, the compatibility of the various Targets with each other does not appear to have been resolved. It is illuminating to analyse more closely the handling of these two major issues through the strategy process, which is done in the next two sections. The two issues are:

1. Whether the extent of proposed land use intensification across Canterbury was consistent with the restoration of healthy ecosystems in lowland streams and coastal lagoons; and
2. Whether the allocation of public water resources to private landowners would result in an equitable distribution of the economic benefits.

We discuss the treatment of these two issues in sections 6.5 and 6.6 below.

6.5 Impacts of land use intensification on restoration of stream and lagoon ecosystems

The Open Strategy Summaries of Stakeholder Content reflect considerable concern about the impact of land use intensification on the quality and safety of drinking water supplies, a topic which receives considerable attention in the Strategy. However the expressed stakeholder concerns about water quality are not limited to protecting community drinking water supplies:

It is widely accepted that water quality is essential to the enjoyment of many social, recreational and tourism uses of water, particularly contact activities, in order that people feel safe and healthy and can enjoy the environmental aesthetics of clean water and healthy ecosystems.²⁸

Within the themes relating to biodiversity, natural character of water bodies/systems, and environmental flows and levels, there is... a very strong stakeholder emphasis on the restoration and enhancement of existing biodiversity 'remnants' and of currently degraded or depleted systems... A minority of stakeholders are content with the concept of 'mitigating' measures being included in development proposals to protect the status quo.²⁹

In a key statement, the draft Strategy provides this assurance (August 2009 p 7):

Modeling suggests it will be possible to substantially increase agricultural output while maintaining groundwater quality within acceptable limits as long as technologies and management practices that reduce nitrogen are applied across the region.

²⁸ Open Strategy, Summary of Stakeholder Content – Water Quality p3 February 2009

²⁹ Open Strategy, Summary of Stakeholder Content – Biodiversity p3 February 2009

The term “acceptable limits” is unexplained here, but is clarified in an annex to the Strategy (at p67) where it is made clear that the above statement relates only to the drinking water standard for nitrates of 11.3mg/L. Where groundwaters discharge into surface waters, as occurs in Canterbury’s characteristic spring-fed streams, nitrate concentrations much lower than 11.3mg/L can have significant impacts on stream health. A footnote on page 67 notes that NIWA recommends the guideline value for avoidance of chronic aquatic toxicity should be 1.7 – 3.6mg/L, while the guideline value for maintenance of aesthetic and recreational values is 0.034mg/L.

Interviewees were asked why the draft Strategy had endorsed the idea that “it will be possible to substantially increase agricultural output” when the basis for this statement assumed that recreational and ecosystem health guidelines did not have to be met.

Responses to this question fell into three groups:

- One group of interviewees cast the issue in essentially technical terms. They were either unaware of what they regarded as a matter of detail, or saw it as unrealistic to control nutrients to low levels, given present land uses. One interviewee maintained that – in relation to Lake Ellesmere –

We are going to be really challenged to get Ellesmere to be much better than what it is now. It may have had irreversible changes, unless you go to quite dramatic reforestation of the catchment...

- Another group of interviewees highlighted that the protection of lowland streams and coastal lagoons from nutrient impacts of land use intensification was being argued separately in the Environment Court following appeals against two big irrigation projects, Central Plains Water (CPW) and Hunter Downs. This issue would essentially be resolved in key sites like Te Waihora (Lake Ellesmere) in those appeal processes; therefore it would be unnecessary and perhaps unhelpful to take the argument at a general level to the Steering Group as well:

Our appeal on CPW, it will be there, it’s well underway... we suspect from what we hear [our organization] will be the only person standing up in a big principled way... we will be standing up there for the Waihora environment and the bigger issues of irreversibility.

The Steering Group members are all involved with statutory processes – so they have choices as to which chute to go down. So for example you might appeal against the CPW consent over its discharges rather than disrupting relationships on the Steering Group; or on the other hand, where WCO statutory options become difficult, you can push on the Steering Group process to get no dams on braided rivers.

- A final group said that the issue had subsequently been taken up in the Targets exercise, and went on to characterize the real underlying issue here as being uncertainty that the stated target of irrigating 850,000 ha of agricultural land was compatible with other stated targets relating to protecting ecosystems and recreation. A strong theme from this group, also mentioned by most other interviewees, was that the zone committees and regional committee would have the role of reconciling the various targets in local contexts, and that therefore the most important thing was to maintain the relationship and trust between the stakeholders going forward.

The decision of some key players not to challenge the statement that *“it will be possible to substantially increase agricultural output while maintaining groundwater quality within acceptable limits,”* given their belief that the issue was better resolved elsewhere, meant that the final version of the Strategy retained the statement; and it did so without explaining the basis for the limits.

In the technical annex to the final version there are wording changes which make the assumptions clearer, and a modeling option of reducing nitrogen leakage from farming by larger amounts (up to 40%) has been added. The addition of targets in the final version of the Strategy better addresses the ecological and recreational values of water bodies, but the important question of the targets’ compatibility with each other remained unresolved in the minds of interviewees.

Interviewees illuminated this key question with these perspectives:

The 850,000 ha irrigation target clearly conflicts with all the other targets. But there was no support for a moratorium while studies are done to resolve the issue – [one member] pushed for it time and time again, but [another member] vetoed it. Also, the question of what weight will be given to the targets, and the linking of them to the regional plan was not well thought through.

A lot of the discussion on targets came up against scientific realities – that is, is this target realistic? A related area not entirely resolved was, are these targets totally aligned with each other? Out of the zone committees will come a much more robust road-testing of the targets, and they will be reviewed after three years.

We haven’t done the scientific work yet to know what the impact of groundwater N on other surface water quality values [besides drinking water] will be – IRAP³⁰ didn’t get that far. So we’re putting our aquifers up in the AquiferSim model – this will take two years. We can’t meantime do an analysis of the effects on surface water. Also we don’t know the number for N for trout spawning... What the strategy should have said is, “we know how to keep the N concentrations at current levels”. The arable sectors say they can farm with no nutrient loss and I

³⁰ “IRAP” is a reference to Integrated Research on Aquifer Protection, a publicly funded research programme.

would agree...³¹ I think we could reconcile the targets if the plains were all in cropping – so the question then becomes, how much of it can be in dairying?

There is a tension in the targets between the 850,000 ha and the environmental targets – but it says they have to be achieved together, so much depends on parallel phasing. You're never going to have enough information to be sure you can do them together by 2040 – so does it mean you don't do it? We need to jump off the cliff as long as there is a balance.

Whilst it is a strategy we have agreed on today we have got to have it continually in front of us and being prepared to make swift adjustments should we find that targets for example are conflicting and then there has to be a robust discussion about how those things work and what gets adjusted... That's why for myself I have always said, who has the responsibility for this living document – because it has to be that – and there has to be that ownership by a body to continually monitor the targets and the activities and take responsibility for the adjustment as those things are evidenced and become real.

When asked what important issues remained unresolved in the Steering Group process, four of the ten Steering Group members interviewed nominated incompatibility between the irrigated land target and the other targets (other unresolved issues, referred to less frequently, were specific storage sites, funding, and water conservation orders).³² This lack of agreement appeared to stem, in the first instance, from a lack of scientific information to resolve the issue, and secondly, from a lack of agreement about placing a moratorium on further irrigation in sensitive areas until the issue could be resolved.

But significantly, all but one of the interviewees had some degree of confidence in a future resolution, which may be expressed in the following way. It lay first, in continuing to gather information, and second, in *trusting* the proposed follow-on bodies – the zone committees and regional committee – to sustain the strong relationships between stakeholders, and their commitment to parallel development, so that these bodies could drive forward adaptive management as the needed information came progressively to hand.³³

³¹ This interviewee referred at this point to a statement to this effect on page 52 of the Strategy. This statement reads: “High yielding cereal and potato crops can be grown with minimal nitrate leaching risk through the use of deep-soil N tests, efficient irrigation practices and appropriate crop rotations.”

³² The number citing lack of agreement on this issue might have been higher but for the fact that four of the ten interviews with Steering Group members had taken place before the relevant Targets discussions on this issue.

³³ However the ambiguity of the CWMS around what sort of water quality objective is really required has flowed through into the agreed draft Hurunui/Waiarau Zone Implementation Plan, which says (p 33): “The results of the Land Use and Water Quality Project in the Hurunui recommend load limits be placed on rivers to maintain the quality of the water and life in those rivers. While this should be supported in principle, meeting those standards must not result in the imposition of costs on farmers alone that unacceptably negatively impact on their individual financial performance or reduce the economic return to the nation.”

The faith in the follow-on bodies stems not so much from their particular architecture – about which there remain various concerns – but rather from a belief that was developed in *the efficacy of collaboration itself*. When asked to name three things they had learned from the Steering Group process, it was striking that almost all stakeholder members of the Steering Group gave prominence in their replies to the idea that they had learnt the importance of building respect, relationships and trust.³⁴

I think the biggest thing that you learn is you learn to respect other people's opinions. They may not be your opinions but you need to respect them. Even if you don't agree with them, even if you would like to shout at them. You have to respect that because if you listen to someone long enough, that's what's driving them. And when you get people to do that, when they trust the people around the table enough, to say what they really think, then you actually know your way through things, you know?

Those of an environmental bent realized they had to educate and build social capital with the other side. The other side moved from opposition to appeasement, but that isn't enough – you need mutual respect and mutual understanding, and there's no way you can speed that process up. It takes time.

I have probably got a greater appreciation for the strength of relationships and the need to take on board other viewpoints and how those things can be accommodated without compromising your own values or your own principles... Probably the other is learning and adapting your approach to conveying values and principles that aren't shared by the majority and what extra steps you need to take to ensure people understand or can at least be in a position to weight up whether they agree or disagree with those things.

The casual reader of the Strategy, seeing both the headline statement that “*it will be possible to substantially increase agricultural output while maintaining groundwater quality within acceptable limits*” and also the list of Targets including 850,000 ha of irrigated land alongside targets to restore ecosystem health and recreational opportunities in streams and lagoons, might assume the parties believed that the proposed level of irrigation could occur without damaging effects. That is not the case. What has actually been agreed is a way of working through the issue, and some considerable trust and confidence has been built for that process.

The discussion in this section (6.5) leads to two key findings of this research.

The first stems from the discussion above of why key players did not challenge the draft Strategy's statement about water quality impacts of land use intensification. It is clear that participants seated at a multi-stakeholder, strategy-making forum run on consensus lines face choices as to how the issues of concern to them can be resolved. The existing

³⁴ The other main learnings, each mentioned much less frequently, were: the frustrating lack of science to resolve issues; the importance of setting limits for nutrients entering water bodies; and the sheer complexity of the issues, leading to support for the idea of strong government leadership.

statutory processes remain available to them, culminating in the Environment Court. These processes include submissions and referrals on statutory plans; promoting water conservation orders; and promoting developments such as irrigation schemes through the permitting process. The option of replacing councilors through an electoral process would also normally be available (although it is not at this time in Canterbury). ***If participants believe that their best or only chance of resolving these issues lies outside the collaborative forum, then the collaborative process cannot be relied upon to bring key differences into the open for explicit recognition and resolution.*** This appears to be true even if, as in the case of water quality impacts on recreation and ecosystem health, the issues are regarded as quite fundamental in the input received from the public.

Second, and partly mitigating the first finding, the experience of building mutual trust and respect through a collaborative forum can enable ongoing relationships, processes and norms to become established among the stakeholders. ***These may increase the likelihood of eventual resolution of the still-divisive issues because key players develop a belief in the power and efficacy of collaboration, and a commitment to making it work.***

While the signs appear promising at time of writing, it is too early to judge whether the beliefs and commitments evident among the leading CWMS participants will carry through to others to a degree to bring about a lasting change in Canterbury's political culture. Much will depend on nurturing of the shared commitments and understandings, and careful managing of the risks.

6.6 Equitable distribution of benefits

The Open Strategy summary of stakeholder content highlights not just environmental issues, but also economic issues. The economic issues being raised focus primarily on equitable distribution of the benefits of any irrigation development. But because they emphasize internalizing of costs and avoidance of public subsidies to irrigators, there is also a strong implication that any investment in water storage facilities and irrigation infrastructure should be economically viable in the first place. The following extracts from the Open Strategy summary³⁵ highlight the issues:

- *There is... very little stakeholder confidence in the 'trickle down' economic theory because there is a lack of evidence in support of the claim. A development-oriented minority consistently argue that primary sector wealth is distributed in such a way, however no technical evidence has been presented except for some reasonably generic, inconclusive figures. The Opuha Scheme has been repeatedly cited by proponents of both sides – ie. it is asserted by a few individuals that the economic benefits generated for primary industry players have been widely and equitably distributed among the community, and by many more individuals that they have not.*

³⁵ Open Strategy, Summary of Stakeholder Content – Economic Implications, pp3-4 February 2009

- *Furthermore, many stakeholders are dissatisfied with the purely individual profit margin in terms of capital gains and feel that this profit margin ought to be redistributed by way of a tax or charge. However, this desire to redistribute benefits more equitably is generally expressed in connection with the idea that the wider public is required to bear the costs of development (whether financial or through loss of formerly public amenity values etc). Stakeholders on all sides are quite fair-minded and are not seeking to ‘get something for nothing’, but are seeking a proportionate distribution of costs and benefits ...*
- *A majority of stakeholders feel strongly that all of the costs of any economic activity (financial, environmental, social etc) should be fully internalised and born by the users/beneficiaries (no public subsidisation, only private investment) ...*
- *Stakeholders are polarised as to whether or not financial compensation should be available to existing consent holders who are required to share their current allocations. It is difficult to determine a majority either way. The two key perspectives are: either they should be compensated because they may have invested time/effort/resources on the basis of the perceived security of their allocation; or there should be no compensation because the water never belonged to anyone but the Crown/the public and the former system of allocations (first in first served) was manifestly unjust.*

The continuing existence of a major, underlying public issue of an economic rather than environmental character is confirmed in a content analysis of the 125 letters to the editor of the Christchurch Press which appeared during the month of April 2010, immediately following the introduction to Parliament of the legislation abolishing the ECan council.

These letters are clearly dominated by the loss of democracy issue (including loss of control over rates),³⁶ but there are many letters which go beyond the democracy issue to address the question of why the Government was motivated to get rid of the councilors, or what the effect would be. Of these, an approximately equal number pointed respectively to environmental issues and to economic/equity issues (Table 2). The latter group was made up entirely of letters opposed to the abolition of the council, and they tended to focus on the idea that the intervention would secure private profits for irrigators and the business interests behind them, at the expense of the public, who were seen as the owners of the water resource.

Table 2: Letters to editor of The Press, Christchurch, during April 2010

Referring to abolition of ECan council:

- in favour: 21
- opposed: 99

³⁶ The dominance of the democracy theme, while real, is probably exaggerated because many of the letters were shortened by the editor to two or three sentences and placed in a special column entitled “In a few words...” Letter writers may have had additional points about underlying environmental or equity issues in their letters, but these points were not necessarily published.

- not clear: 5
- total: 125

Citing issues about democracy: 98
 Citing issues about environment: 29
 Citing economic/equity issues: 28

The following extracts from letters which have an economic/equity focus give a flavour of the public discourse on this aspect of the Canterbury water debate³⁷:

The real issue is money. Canterbury farm prices reflect Canterbury rainfall and water rights. If farmers can secure access to dairy-farm levels of water, the value of their farms will rise. If this water comes free or at low cost, each farmer will gain from many hundreds of thousands to a few million dollars. This money is tax free (New Zealand is the only developed country in the world without capital gains tax). It also comes without effort. The water right itself, without the work to convert to dairy farming, hands out the money like the flick of a switch. Canterbury water is a multi-million dollar public asset. If we are going to develop this asset then private interests should pay an economic rent for it.

It's timely to recall some words of President John F Kennedy: "Each generation must deal anew with the raiders, the scramble to use public resources for private profit and with the tendency to prefer short-run profits to long-run necessities."

We witness a Government captured by big business and working surreptitiously against the public good; paying lip-service to environmental protection while private interests swallow the common water right.

The whole operation was to ensure that the irrigator did not pay for water use and wastage.

Hi-jacking on the waters off Somalia is highly profitable for those financing the pirates. Hijacking of the waters in Canterbury is expected to be the same.

Preventing a cleanout, and averting the end of the stranglehold of representatives of the dairying and irrigating mafia, was clearly part of the object of the conspiracy that culminated in Key's Canterbury coup.

Watch the rivers dry, while deep, dark pockets swell. This is bad for us all.

We all need good business people, they're a vital part of our community. But they are only a part. We all contribute in our own ways, and therefore we must all

³⁷ Another rich source of data not analysed here also provides ample evidence of the importance of economic equity issues in the public debate over water: this is the online Canterbury Public Issues Forum, <http://forums.e-democracy.org/groups/canterburyissues>

have an equal voice, not be dictated to by a business cabal, including agri-business, whose only interest is to raise their own profit at everyone else's expense.

Interviewees for this report were asked whether they were satisfied the Strategy would be economically beneficial for Canterbury as a whole. Responses tended to focus on the economic modeling report prepared for the CWMS,³⁸ and they were generally equivocal about the economic viability and benefits of the CWMS package of infrastructure development:

Simon Harris has done an economic report – this is favourable, but it's based on the assumption of damming the Hurunui, which we oppose. The scenarios for the other sites we haven't seen yet.

It's a bit of a template – it needs more development. Of the three sites, Lees Valley is the biggie. The farmers will never afford it. Canterbury will never afford it. So it needs the government or super funds or something. It's the same as building a hydro dam – you put them there for 20 or 30 years before they get taken up. Someone has got to fund that in the interim. Broadband is being funded for the same reason.

The economic study is facile, a traditional economic analysis. No externalities are taken into account – not for want of trying to get them to do so. Officials have the ability to commission studies of these things, but nothing seems to happen. But this was a failure of us on the Steering Committee – I should have been getting recorded resolutions. The result was that the process was captured by officials.

With the Harris economic modeling and assumptions, our aim was to create the model into which we can feed assumptions. But we haven't decided on the assumptions yet – we need to do that well down the track to avoid the cost of doing it again and again. We've made a distinction here between strategy development and strategy implementation – the Water Executive is now running the latter. So if the irrigation economics don't stack up, it will be an issue for the council – though also for the stakeholders. It's a poor distinction. The tensions between the interests that have found accommodations leave us only at the beginning of how this might work in implementation.

In the absence of clear information about the economic viability of the Strategy or about how far the benefits would be spread through the wider community, the Steering Group dealt with the issue through identifying another Target, albeit a sketchily drawn one (Strategy, p122). Headed “Contribution to regional and national economies” the Target includes:

- *By 2015: The value added per unit of water is increasing*
- *By 2020: Still to come – awaiting economic study*

³⁸ Harris Consulting et al 2009

- *By 2040: Production through the direct application of water to agriculture contributes an additional \$1.7 billion per annum (tentative number) value added (economic impact) to the Canterbury economy....*

There is also a note that economic modeling will help understand the achievability of these targets.

There is no mention here of the idea expressed in public submissions that “*profit margin ought to be re-distributed by way of a tax or charge.*” However, a separate target dealing with biodiversity includes a note under “Tools” that biodiversity protection and restoration funding will be provided through a development levy, while noting that this will be publicly funded in the initial years as an “Immediate Steps” programme by Environment Canterbury.

For the latter programme, a range of expenditure levels and funding options up to \$20 million over five years is set out in Appendix I of the Strategy. ECan commissioners initially deferred the funding question, and then subsequently agreed to fund the programme on an interim basis from rates at the lower level of \$1.44 million a year.³⁹ The duration of the initial years of public funding commitment, and exactly what happens after them, is not however the subject of any agreed commitments in the Strategy itself.

Crucially, the question of whether a sum such as \$1.44 million a year (if this were eventually to be raised entirely from water users) would represent an adequate return to the community for the allocation of water sufficient to irrigate the target area of 850,000 ha of private land, and to generate the targeted \$1.7 billion of economic value, is not discussed.

The idea promoted in public submissions that there should be the assurance of no public subsidization of water development was not taken up. The Strategy goes only so far as to say (pp45-6) that:

Any new water storage proposals of any scale will require private investor-involvement and... will have to demonstrate a reasonable economic rate of return.

However the whole Strategy depends on somebody financing the three proposed new water storages, whether economic or not (p8):

The key incentive mechanism to drive these changes will be the availability of reliable water from new storage and distribution infrastructure.

It is fair to conclude that the key concern of public submitters, that there should be a fair sharing of costs and benefits, including a levy on profits from the commercial use of

³⁹ An initial, informal approach to the Government for a contribution to this was rebuffed. ECan’s Annual Plan for 2010-11 (p83) now provides for \$1.44 million/year for the Immediate Steps programme, with the intention to maintain this until 2013/14, and with the suggestion that this will transition over time to being funded, “at least in part” by water users.

water, and an assurance of no public subsidies to the irrigators, has not been squarely addressed in the Strategy. At one level, this is because of the ongoing uncertainty about the assumptions to be fed into the economic model, an uncertainty that will progressively be resolved over time as the details of proposals for the three proposed water storage sites are fleshed out. Also, there were no primary advocates for economic fairness on the Steering Group; members all had other more pressing interests.

But at a deeper level, the Strategy is unable to face the economic fairness issue squarely because it is itself built on the fundamental assumption that farmers will initially be *incentivized* to comply with the limits which the Strategy propounds, rather than *required* to do so by rule-setting (which over much of Canterbury would almost certainly reduce the magnitude of both their existing water take permits, and their assumed rights to discharge contaminants into freshwater ecosystems). Further, the incentive to be provided to the farmers involves the construction of three major water storages, which the Strategy is obliged to *assume* will be provided, whether or not they are economically viable and capable of being privately financed. Given these two fundamental assumptions, members of the Steering Group were not in a strong position to pursue successfully such notions as eschewing subsidies for irrigation water, or of raising a meaningful levy for the community from the private commercial use of water.

This analysis suggests that the underlying logic of the Strategy's design assumptions has left the Steering Group unable to resolve the fundamental concerns raised by the public about the Strategy's economic viability and economic fairness.⁴⁰

This conclusion raises two further issues of importance for our study which are best dealt with at this point. These are:

- Whether these design assumptions, a distinctive product of the needs of the collaborative process, have actually left the Strategy itself facing significant implementation risks; and
- Whether the evident difficulty of grappling with these economic allocation issues highlights an inherent limitation of the collaborative governance approach.

For convenience, these two issues are briefly discussed in the next two sections.

6.7 Whether the demands of collaborative process have generated risks for the Strategy's implementation

⁴⁰ The notion that the CWMS relies initially on an incentive-based rather than regulatory approach to aligning water and land use with limits might be contested on the basis that Target 10, for setting environmental limits, does include provision for a programme beginning in 2015 to 'apply environmental flows to existing consents.' A similar programme to review consents where necessary and align them to catchment load limits is to begin in 2020. However, these hints of distant regulation are well down the track and are unlikely to occur unless the main parts of the Strategy, which are incentive-based and rely on provision of water storage, are put in place first.

For Environment Canterbury, there have been two alternative pathways forward for resolving the region's water issues. The first path, pursued consistently albeit with many difficulties until about 2007, was a regulatory strategy. Its elements, described in section 3 above and progressively being introduced, included setting abstraction limits; curbing the issue of water permits beyond those limits; reviewing permits which had already been issued in over-allocated catchments; and setting limits to discharges of contaminants into receiving water bodies. The second path, embarked upon with the CWMS in 2007, involves developing a strategy that is collaboratively agreed amongst stakeholders. In a context in which rural water users have long resisted regulation, and are currently unable to meet their needs for reliable water supplies, it is unsurprising that this strategy would need to be based on incentivizing irrigators, and on the provision of stored water for them, if it were to be agreed collaboratively. As described in the previous section, this approach has necessarily included making the assumption that the water storages would be provided whether or not they were economically viable and capable of being privately financed. However a collaborative strategy along these lines gives rise to risks, for example:

- The water storage projects may not prove to be financially viable for private investors (especially the largest one, in the Lees Valley); and the Government, which has always been looked to by would-be irrigators for financial support, may not be willing to find sufficient money, or assume sufficient financial risk, given its constrained fiscal circumstances over the next few years.
- Brokering of water, the Strategy's key approach to reducing irrigation water takes and improving discharge quality, is crucially dependent on a **low cost of water** from storage dams. Brokering is likely to work best where farmers are currently taking low reliability surface water, or high cost groundwater, and where they can be offered cheap reliable stored water in exchange for relinquishing their existing permits and changing their existing land use practices. But if the water from the big new storage dams does not represent better value for the farmers than their existing water, the brokering strategy will fail. Far from avoiding effective subsidies, as called for in public submissions, the Strategy may end up depending on them if it is to work.
- If the storage projects do not eventuate or are delayed, or the water they provide is too expensive, the other major source of "new water," that from on-farm investments in more efficient use, may also be lost, at least to the extent that its realization depends on brokered offers of smaller quantities of cheaper or more reliable water from storage dams.
- The lack of thorough economic analysis in the Strategy appears to have made it vulnerable to another risk: the growing development of a free market in water. This alternative, potentially less costly alternative to building storage dams is not addressed in the Strategy, although it is already operating across the plains (see <https://www.hydrotrader.co.nz/auction/index.jsp>). Especially if freed up by further deregulation, this market incentivizes individual farmers to sell "new water" from

efficiency investments on their own farms to other irrigators, empowering the latter to avoid both storage investments and the brokering process.

- Such a “free market” strategy would not, at least in the continuing absence of regulation, allow water use to be scaled back to ecological limits, and it would not allow all areas of the plains to be fully irrigated. Nonetheless, the continued growth of water trading might be sufficient to undermine the Strategy, by increasing the supply of “new water,” and enabling those who want reliability to obtain it at a price; and in either case it would reduce aggregate willingness-to-pay for large storage dams in Canterbury.

Steering Group members indicated in interviews they were aware of the existence of water trading, but spent very little time discussing water markets on the Group. In part, this appears to be because the topic raises issues that were perceived as too difficult to resolve. Ngai Tahu have made clear that if water is to be traded, the tribe wants a share in what it considers is customary property. Mark Solomon, Kaiwhakahaere of Ngai Tahu, was quoted in a 2008 report on the question of transferable water permits as follows:

I'll tell you now, if they are going to make them transferable, then we say give us our share.⁴¹

The notion of allocating water permits, or beneficial rights in water of some kind, to a Maori tribe has proved politically too difficult to date, but that has not slowed the growth in water trading in Canterbury. It appears that Ngai Tahu, while carefully ensuring its customary rights are not encroached on by the Strategy, has not so far been politically strong enough either to curb the growth of water trading, or to achieve an allocation for itself.

Given the various risks set out above, the Strategy might be more robust over the long term if it were better known and better understood by the public. However, despite the public interest shown in its earlier consultation stages, the CWMS has largely disappeared from public awareness. It has a strong internal coherence, effectively integrating key political interests, and its future appears to depend heavily on this feature, together with the relationships of trust built up between the various individuals involved in developing it. But its future is widely seen to depend very much on early progress on building water storage projects. One of lead architects of the Strategy commented in an interview:

There are very complex concepts in this strategy – they're very hard to communicate to a public audience. The whole process of getting it out through the concentric circles of stakeholders to the general public is extremely difficult, and we're simply not going to do it in the short term. We rely enormously on the

⁴¹ Ngai Tahu: we're in it together. *Dairy Exporter*, August 2008 p34

intrinsic logic of the strategy. That saved it during the Creech revolution.⁴² But I worry about the passage of time blurring the vision – it has to produce an outcome before too long.

The Government's announcement on 9 May 2011 may have partially mitigated the first of the above risks for the meantime, by promising to consider public funding of up to \$400 million in future years for building irrigation infrastructure projects.⁴³ The other risks remain, although further Government action could mitigate them, especially by subsidizing the price of water from storage schemes, albeit at potentially high fiscal and economic cost. The Government's announcement was welcomed by various irrigation interests, including by a spokesperson for the Hurunui Water Project, who foresaw the Government money being used to build a storage dam in the Waitohi basin, promoted as a more environmentally acceptable alternative to a dam on the Hurunui South Branch, albeit at more than twice the cost.⁴⁴

6.8 Whether economic allocation issues are inherently too difficult to resolve using a collaborative governance approach

The discussion in the last two sections highlights that much of the capacity of the CWMS process to achieve a collaboratively agreed outcome has depended on the willingness of the Crown to shoulder additional cost, and this situation is likely to continue as implementation moves to the local level in catchments like the Hurunui. Is this a case of parties within the room being able to agree only because someone outside the room is able and willing to pick up the resulting bill?

The Government was represented on the Steering Group and was presumably aware of, and comfortable with, the assumptions being made by the Group in the Strategy process. Its announcement of 9 May 2011 is consistent with that interpretation. The situation was similar during collaborative discussions in the Lake Taupo catchment when a previous (Labour) Government was also willing to make possible an agreement by contributing a large part of the \$81.5 million fund that was used to facilitate farmer agreement to nutrient controls in the Taupo catchment (Salmon 2012, in prep). But what of cases where Government is not prepared to contribute and some stakeholders are potentially exposed to large costs? And what of cases, such as the CWMS, where some stakeholders believe that public assets should not be transferred to private hands free of charge?

The Land and Water Forum was unable to agree on whether, if water trading was allowed, those capturing the rents associated with scarce water resources through on-selling their water permits should have to pay something for getting the water permit in

⁴² This is a reference to the review of effectiveness of Environment Canterbury by Wyatt Creech and colleagues, whose report led directly to Government decisions to change the governance of the organization through the ECan Act.

⁴³ "Budget 2011: Lifting investment in irrigation" Hon David Carter, Minister of Agriculture, Media Statement.

⁴⁴ "CPW hails Govt plan for \$435m water fund" *The Press*, 10 May 2011.

the first place.⁴⁵ In Canterbury, the Lowland Streams Restoration Programme, a lengthy process of reviewing Rakaia-Selwyn water permits through a series of cluster groups designed to achieve an agreed common approach to capping of water permit volumes was unable to reach agreement, and the process eventually moved to hearings before commissioners and then, appeals to the Environment Court. In both these cases, large amounts of money were at stake for stakeholders, and there was no apparent way of easing the financial impact of deciding the issues one way or the other.

There are more optimistic views of the possibilities of achieving collaborative agreement on economic allocation issues in the policy literature, notably a desktop review of case studies by Hearnshaw et al (2011) for the Ministry for the Environment.

In a classic study, Ostrom (1990) shows how, under certain conditions, groups can and do self-organise to negotiate governance arrangements over scarce common property resources. Her theory applies well to a group of irrigators sharing a common groundwater resource. By pumping too much, they can do harm to each other, and therefore they are motivated to self-organise to establish and allocate amongst themselves a sustainable yield. Depending on costs, they may also be motivated to devise and fund a water storage project. But where those affected by the group's actions are an unorganized or poorly organized group of people downstream (such as Christchurch urban families wanting to enjoy a weekend river swimming hole or picnic place) it becomes more difficult to effectively represent them in a collaborative process. This is especially the case if the costs to irrigators of acting to protect the downstream resource from depletion or pollution are high, in which case they may be motivated to act collusively, as a cartel against the interests of downstream users. Ostrom herself imposes often overlooked limitations at the outset of her study on the types of common property resource situations which her body of theory covers. She includes "situations in which the users can substantially harm one another, *but not situations in which participants can produce major harm for others*. Thus, all asymmetrical pollution problems are excluded, as is any situation in which a group can form a cartel..." (Ostrom 1990, p 26, emphasis added)

In a recent Canterbury study, Weber, Memon and Painter (2011) argue that scientific disagreement over water resource limits in the Rakaia-Selwyn zone cannot be resolved, partly because there may always be significant uncertainties associated with the groundwater science in this case, and partly because the goals of stakeholders are poorly aligned in what they term a "societal impasse." They then use this example to make the case for the use of civic science in a collaborative setting to resolve such problems. However, they do not explore the cluster group processes used in the Rakaia-Selwyn zone, and they stop short of suggesting directly that the collaborative approach could have resolved the over-allocation issues in the Rakaia-Selwyn.

They do however highlight a number of institutional process factors which "appear to increase the probability of transitioning to successful co-operation" and which include "[to] adopt a shared 'cost of compliance' approach and be persistent in the search for

⁴⁵ Land and Water Forum 2010, p 37

project funding... [this] means that individual landowners do not have to shoulder the entire burden or responsibility of compliance, whether in terms of funding compliance efforts or of seeking out external funding sources” (Weber et al p 61).

In common property situations involving New Zealand freshwater resources, the existence of a community of “downstream” users whose interests may be adversely affected by self-organised governance arrangements advanced by upstream water users is more common than not, even when groundwater systems are being considered. Whether and how such interests can be included in collaborative processes, and can be represented in an accountable way as discussed in the present study, is a critical issue warranting further research. The Canterbury zone committees, which set out to provide a place for “downstream” parties, may provide opportunities for exploring this question.

At present, it is too early to say whether collaborative approaches can resolve the difficult issues around economic allocation in natural resource management, but a note of caution is appropriate in this regard. Two points seem clear at this stage. First, it will be difficult to resolve water management issues in isolation from economic issues, because it is evident that such issues are integral to the concerns felt by both water users and the wider community about water management. Second, the prospects for using collaborative governance for resolving water policy disputes in other regions are likely to depend, as they have in Canterbury, on central government financial support. Such support reflects both the reluctance to pay for water, and the move away from the polluter-pays principle which the collaborative governance process normally requires if it is to achieve farmer agreement.

7. Deliberativeness and Impartiality

As discussed in the methodology section above, there are difficulties in trying to make a reliable assessment of deliberativeness in an *ex post* study. In assessing this factor, the ideal is to observe the meetings as they take place. Because this study is confined to reporting participants' comments after the event, and because these comments may be tempered by consideration of ongoing relationships, as well as by a perception of a successful outcome which can lead participants to 'paper over' earlier difficulties in the process, limited time was spent in interviews exploring this aspect.

Leach (2006) in his *ex post* survey of western American watershed partnerships, appears to have faced similar difficulties of assessment on this criterion. For making his assessments of partnership processes, he has translated the concept of deliberativeness into three indicators, the first two of which have the advantage of lending themselves to a degree of objective assessment *ex post*. His indicators are (p107):

- The amount of effort a group devotes to the mutual education of its members before or during negotiations.
- The extent of 'joint fact-finding' — the practice of working together to determine the scope or root causes of alleged problems.
- The maintenance of civility, respect, and trust to allow diverse groups of stakeholders to communicate freely and genuinely.

We initially consider Leach's first two indicators together. The CWMS Steering Group appears to have undertaken a great deal of mutual education and joint fact-finding. A series of technical studies were done for the group, and 30 reports in total are listed on the Canterbury Water website as having been considered by the Steering Group, not counting submissions and summaries of submissions from the public. As well, a very large number of meetings brought members of the Group into direct contact with a great diversity of perspectives.

Members of the Group were asked in interviews about their learnings during the process, and of any changes which they noticed in the views of others in the Group. Quite a mixed picture was presented by responses to this question. There was wide generalized agreement that change in views had occurred as a result of mutual education and joint fact-finding. Changes in others' stance were noted more commonly than acknowledgement of changes in one's own position. However the sense of learning and change was tempered in several cases by a degree of scepticism or frustration:

I think the person that has changed most for me is [name]. He would say, these are the things we need to get, we need to get higher flows in the river, this thing we need to get and all those other bloody things that he wants. Then he said one day, 'that's not to preclude the fact that we can have more irrigation too, but we

need to get these things first'. So that was a big change, and that was probably a year ago, maybe longer. I thought about what he said and I thought, 'well you are actually not right down the other end of the continuum, [name], you are down there, but you are not right down there.' So what I think is what we tended to do in time is that we moved closer together.

The key to the whole thing was that a narrow view of the world was expanded by education – in two aspects. One was technical information – about birds and bees and kayakers, visits to Opuha and so on – the other was understanding other people's points of view – spiritual, recreational, non-economic.... The other thing is, we had to tap the broader sense of life in the community. At meetings I would do presentations on behalf of the group. The silent people are the rural women who don't agree with what the loudmouths are saying.

[One member] has acknowledged the downside of the Opuha dam on the Opuha and Opihi rivers. And [another member] has shifted his ground on nitrates quite significantly. He would previously say it was just a localized issue.

Most frustrating was the lack of science. The Ministry of Health came out talking about blue babies – that was frustrating and unprofessional. Many of the experts sat on the fence. The debate was hamstrung by lack of scientific and technical information. We were never able to get the debate back on to a factual basis – at least, that never flowed through into the public debate. If we had been able to conquer the public relations aspect of the nitrates from the start, the urban population in Christchurch might have been brought into the Strategy earlier than they did.

Recognition of kaitiakitanga and traditional use has shifted in an appropriate way. But this is just the beginning. Within the runanga it's a space they will watch to see if the commitment is genuine, and the mechanisms used to implement it are genuine.

Another interviewee provided details of many water storage schemes that were dropped from consideration during the process not so much because members of the Steering Group were influencing each other, but because of technical, legal or engineering problems. However, from a deliberativeness perspective, the Steering Group was successful in ensuring these technical disqualifications were uncovered by the scrutiny which the deliberative process provided, and were accepted as such by the Group members.

Leach's third deliberativeness indicator – that civility, respect, and trust were maintained so as to allow diverse groups of stakeholders to communicate freely and genuinely – is the most difficult to reliably assess after the event. There was no written protocol regarding how members should conduct themselves. Rather, a set of implicit participant norms (Memon and Weber 2010) appear to have evolved within the group, which more or less covered such matters. Despite this, interviewees often made reference to some

people talking too much, and not listening well. There were divergent personalities, with tensions between the desire for authentic expression, and the maintenance of civility:

I am saying, like this stuff is about emotional confrontation, water is, and you have got to be prepared to listen. I find it quite hard actually... Now she is very good on the stuff she's good on. She's not good on the emotional stuff, but she comes at the argument from her position in terms of her legal mind and she got a very good legal mind...

I guess I'm a different personality. I'd fire a couple of shots and come back and see who was dead. In my own mind I would be getting something achieved. But [name] was all about consensus and he wanted to build consensus around things but I don't think he was a consensus builder, he aggravated people. And again it's a personality thing really.

Interviewees were sometimes coy about difficulties within the process. For example, two interviewees indicated that one of the Group's members twice threatened to walk out of the process, but the person about whom this allegation was made said when interviewed: "I never felt like getting up and walking out on the process."

Whatever may have occurred on a few difficult occasions, the overwhelming impression gained from interviews was that civility, mutual respect and trust were, with the exception of one major episode, very successfully built and maintained during the CWMS process.

The exception was the disruption caused to the Group's mutual trust by the sudden enactment of the ECan Act, at a late stage in the Group's deliberations. The ECan Act contained a number of elements. The replacement of ECan councilors by temporary commissioners was widely expected following the Creech Report⁴⁶ which inquired into the performance of Environment Canterbury, and this aspect of the Act was broadly supported by a number of the organizations whose officeholders were members of the Steering Group, including Te Runanga o Ngai Tahu, Water Rights Trust and Irrigation NZ.⁴⁷

What caused more consternation, mainly on the environmental side, was a significant change to the criteria and procedures for granting Water Conservation Orders (WCOs), a change which had not previously been foreshadowed in the Creech Report or anywhere else, and had never been discussed at the Steering Group. The change was clearly perceived to favour irrigation interests, and the legislation attempted to balance this in a political sense by providing ECan with powers to impose moratoria on new water-related

⁴⁶ Creech, W et al 2010

⁴⁷ The district and city councils represented on the Mayoral Forum played a role in persuading the Government to remove the ECan council and clearly supported the action. On the other hand, some of the ECan councilors who lost their jobs as a result had felt threatened by the CWMS process, seeing it as a creature of the Mayoral Forum and/or as an entity that circumscribed their own power to take decisions about water.

applications, a provision long sought by environmental interests. In addition, the legislation gave some statutory status to the vision and principles (but not the targets) of the CWMS itself.

Overall however the impact of the ECan Act on the trust in the process felt by environmental participants was profoundly negative, in two respects. It reinforced the sense that irrigation interests were politically powerful enough to over-ride other interests regardless of whatever might be agreed through the CWMS process. Moreover, the suspicion that irrigation interests and/or officials had gone behind the backs of the Steering Group and procured these changes at a political level created mistrust within the Steering Group. This is reflected in interviews conducted a few weeks after the sudden enactment of the ECan Act:

Trust has gone out the window with recent events. Steering Group members are making Official Information Act requests. They have got caught up in the emotion on the issue. When the Steering Group meets next, I will be looking around the table and thinking, have we got the same level of trust?

Collaboration doesn't work without trust – and that was breached by MAF who sat in on the process and then undermined the WCOs.

The ECan Act did have an effect on the environmental side, making them vulnerable to the WCOs-will-be-gone-by-lunchtime view. Broadly it had the effect of splitting them into those that were committed to continue, like WRT, and those that are prevaricating about standing outside the CWMS.

The recent dramatic changes have certainly meant that re-establishing trust is going to be one of our biggest issues... There is no doubt for the collaborative models to work, the maintenance of trustworthy behaviour is just crucial, because people are taking risks and they want to be certain they are taking risks in a environment that is supportive of them going into some area of discomfort.

Government's action on the water conservation orders was really a kick to the Strategy. It had a polarizing impact on the membership of [my organization], with pressure on us to pull out of the Strategy process. There are powerful forces outside of the Steering Group who will push for water as hard and fast as they can. If that happens, people like myself will have to walk. If we do, there'll be people on the streets, riding out of the hills on horseback and gunning down the cows...

Fundamentally, there was a breach of trust. I have no confidence that the ecological side will be upheld. The process has returned to being an irrigation facilitation process... The collaboration has broken down.

Despite these comments, the Steering Group did in the end decide to complete its work on the Strategy, albeit with the two Steering Committee members who were ECan

councilors being replaced by two of the new ECan Commissioners. Significantly, by the time the Steering Committee met again after the April 2010 enactment of the ECan Act, its work had already been mainly accomplished, with most of the Strategy having been finalized and the Targets being in near-final form. If the ECan Act had arrived at an earlier stage in the Steering Group's work, it might well have been fatal for the process. In the event, the Ministers of Environment and Agriculture persuaded the Steering Group to continue:

The two Ministers got quickly down to the Steering Committee and gave assurances – about adhering to the CWMS framework, not talking about wholesale changes to WCOs, and still a lot of process to make changes – but they got a real drubbing, and not just from environmental interests either. At the end of it, people said, “do we believe these assurances?” They decided, “we trust enough to take the next few steps.”

Besides the advanced state of their work, and the assurances provided by Ministers, another factor which appears to have influenced environmental interests to remain engaged with the Steering Group despite the imposition of the ECan Act was a view, strongly promoted by officials associated with the process, that the Act's provisions on water conservation orders had not actually changed the balance of power very much. One official who had reviewed the evidence in relation to the Hurunui issues was of the view that, even after the passage of the ECan Act, the applicants for a water conservation order on the Hurunui River remained in a strong position; and that even if the WCO application were not successful, it would be difficult to get consent for the Hurunui Irrigation project in its present form. Another interviewee endorsed these conclusions, saying they also had implications for irrigators and the Government:

The ECan Act hasn't made a huge difference to irrigators' motivation to collaborate. Irrigators had to be involved in the process because their schemes will not proceed in the face of environmental opposition. They are a strong enough force to block you, and the ECan Act hasn't changed that. The commissioners were put in to get outcomes – sure, for some in Government, it's to build dams. But the Government realizes it isn't that simple – unless they do it with the CWMS they are going to struggle. They could strong-arm through one project – but that would be the last one they'll get through in 20 years. I think they understand that.

In summary, deliberativeness characterizes a process in which views are exchanged, arguments are critically examined, and shared knowledge is built up in a context of civility, respect and trust. While it is difficult to assess the quality of deliberation in an ex post study of this kind, it appears from the interviews, and from a review of the documents provided to the process, that a high level of deliberativeness characterised the process. This was disrupted at a late stage in the process by the sudden enactment of the ECan Act, but in the end, the cohesion and trust developed by the Steering Group was sufficient to maintain the deliberative quality of the process.

Impartiality is a distinct quality of the process that enables good deliberation. Leach (2006, pp 102-3) states that “An impartial process treats all parties equally... Evaluating impartiality is an inherently subjective endeavour that involves making judgments about whether the mediator is treating each party equally and the structure and ground rules of the process handicap any party.”

Inquiries of interviewees on this issue elicited a high level of confidence and satisfaction in the impartiality of the chairman, Bede O'Malley. This was in spite of the fact that he was the mayor of Ashburton district, and was viewed by some as coming from “Irrigation Central.” However there was some concern about his chairmanship from a different angle:

It wasn't always clear what had been decided – so there was room for tension between steering group members and those in the officials committee who were holding the pen. This was a slight problem with Bede as chairman.

This uncertainty at times about what had been decided – mentioned in several interviews – arose from there being no formal procedure for recording and adopting decisions of the Steering Group.⁴⁸ The outcome was not that the Steering Group process was seen as being partial toward particular stakeholders. Rather, there was a sense by some members that officials gained too much control of the outcomes, a situation which they resented:

Officials have the ability to commission studies of these things, but nothing seemed to happen. But this was a failure of us on the Steering Group – I should have been getting recorded resolutions. The result was that the process was captured by officials.

There has never been minutes taken. Things could be said and then vanish into the ether, and conveniently be forgotten.

[An official] told me early in the process – “I know how this is going to turn out.” He probably got what he wanted. You rarely best him in an argument, but he has an unfortunate way of telling you you're wrong that doesn't make you feel good.

Again, the ECan Act detracted from the impartiality of the process because its summary changing of the criteria for water conservation orders in Canterbury was widely perceived as tilting the playing field against environmental interests, as well as providing a clear signal of the relative power of the various parties around the table. As noted earlier, one of the interviewees cast doubt on the extent to which the change of criteria was, in reality, a substantial change. However, it was sufficient to lead environmental advocates to withdraw their application for a water conservation order on the Hurunui River. In part, this move reflected a degree of confidence that an acceptable outcome could be achieved through the collaborative processes of the CWMS.

⁴⁸ Notes on meetings were introduced toward the end of the process, after this became an issue.

8. Empowerment

Leach (2006) notes that “An empowered process enables participants to influence policy outcomes,” but he acknowledges that this can only be assessed definitively after considerable time has elapsed. Leach proposes a series of questions under this heading, some of which cannot be fully answered for the CWMS at this stage, but preliminary assessments are offered below.

The first question is whether the public has been engaged at an early stage, before key decisions are made; or is this really an attempt to win public acquiescence by an agency that is in “decide, announce and defend” mode? The CWMS has been dogged by criticism that it is essentially a continuation of the CSWS – that is, an initiative driven by a predetermined agenda of providing water storage for would-be irrigators. This view was reinforced for some by the advent of the ECan Act. Insofar as a key objective of the irrigation sector participants always was to win support for storage projects, it was always likely that any collaboratively agreed Strategy would have to contain provision for storage projects. Nonetheless, the process proceeded on the basis that no prior decisions had yet been made on the actual sites for such projects, nor on the total volume of water that should be stored. Related issues such as the total area of land able to be irrigated, the extent to which irrigation efficiency improvements could reduce the need for storage, what the effects of land use intensification on water quality would be, and whether water storage projects could be economically justified, were certainly not ignored during the process, even though the extent to which they were really resolved is questionable, as discussed elsewhere in this report. Taking into account both the Open Strategy process of engaging the wider public, and the Steering Committee process itself, there is little doubt that the CWMS rates highly as a genuine and open attempt to engage the public on broad strategic questions at an early stage in the decision-making process. There were however limits to the ability of the participants to influence policy outcomes.

Several major irrigation projects with the capacity to pre-empt much of the Strategy were proceeding through statutory processes in parallel with the Strategy-writing process. As it happened, one major irrigation storage proposal did not receive consent, thus lessening the conflict. Nonetheless, the existence of separate statutory processes had the potential effectively to limit the empowerment of the Steering Group that was developing the Strategy. In addition, a range of members of the Steering Group felt constrained by the view that major irrigation developments were inevitable. The power of the irrigation lobby with the present government meant it had to be accommodated somehow. One described the irrigation lobby in Canterbury as a “juggernaut;” another spoke of how Federated Farmers can “pick up the phone, call the PM and change the world.” A third said:

From our perspective, we would like CPW to be put on hold, to allow the bigger principled decisions to be made before we take the next step forward. The reality is we are too late. The reality is the thing has got its momentum...

Leach's second question is, do the stakeholders at the table have sufficient decision-making authority to make commitments on behalf of their respective organizations? In the CWMS context, this question has two dimensions. First, there is the question of whether Steering Group members were delegated the necessary authority by the organizations they were representing. As discussed in section 4.4 above, there was neither an expectation at the outset that members would represent organizations, nor was there a stage at which stake-holding organizations were asked to make commitments to the Strategy prior to its finalization and publication. Second, there is the question of whether Steering Group members were delegated the necessary authority by public authorities to develop the content of the Strategy. This question relates to the relationship of the Group to the Mayoral Forum and the two officials committees that were put in place around it (as outlined in at the beginning of section 1 above). This question was not exhaustively examined in this study, but the influence of these surrounding groups was explored in interviews. The main points to emerge were the following.

First, the Officials Committees played a mainly supportive and ideas-generating role, albeit with a degree of boundary-setting in relation to budgetary, information-gathering and political parameters. For example, the Wellington-based Officials Committee, which worked closely with Ministers, indicated there would not be national funding for the Immediate Steps Biodiversity Programme, and it declined to support special implementing legislation for the CWMS. However, action has proceeded regardless of these constraints. In the case of the Canterbury Officials Committee, there was a sense by some Steering Group members that officials were too controlling of the process (see end of sec 6 above) but the alleged examples of decisions not being implemented appeared to be of limited overall impact and were not explored in detail in this study.

Second, the Mayoral Forum approved the Steering Group's initial membership and brief, and supported the broad concept of parallel development from an early stage, but it rarely sought to influence the Steering Group after the latter had began its work. It did receive detailed briefings on the Steering Group's progress every three months, in a process that tested the mayors' comfort with proposals as they were generated, and allowed for feedback. The briefings were presented not by a Steering Group member nor by an ECan officer, but by a credible independent adviser to the process. One of the interviewees commented:

I think you do need to try and de-politicize the strategic approach but make sure it has political endorsement ...

The Mayoral Forum had also installed one of its own, Bede O'Malley, as chairman of the Steering Group, along with a representative of local authority chief executives, Brian Lester, a move which helped to win Mayoral Forum support for what the Steering Group produced:

There was an interesting comment from one of the Chief Executives after we had the crucial decision on the release of the draft. He said to me "Look, I'm not

across the detail, but I know in terms of what's happened with the water steering committee, that my Mayor is accepting that if Bede says it's OK, then it's OK, and Brian Lester who was the TA Chief Executive, if Brian is happy with it, I'll be happy with it." So they had people on that Steering Group that were effectively their litmus test of the overall approach.

There is a long history of animosity between Canterbury's local authorities and ECan, and local authority members of the Mayoral Forum were working at the time to achieve a review and ultimately the dis-establishment of ECan, moves which culminated in the ECan Act.⁴⁹ Against this background several interviewees for this study felt that having ownership of the Steering Group process by the Mayoral Forum was important.

Unless you have all the players around the table designing it, not reacting to it, but designing it, you won't get the best outcome, and there is no doubt there that there was a degree of tension between regional councils and TAs that if the regional council came up with something there would be a difficult path... So when they effectively came on board and were prepared to endorse and own the Strategy, it was incredibly helpful. They might have been a little more possessive than what we had expected – I think there is a famous saying, "it's amazing what you can get done as long as you don't mind who gets the credit."

Despite the detailed oversight provided by the Mayoral Forum, interviewees for this study did not point to any substantive issues on which they believed the Forum had directed or shaped the Strategy, except (at a late stage in the Group's work) on the number, boundaries and constitution of the local zone committees, where the mayors were anxious to achieve a high level of devolution and control for local communities.

The fears expressed in public submissions, as noted above, and in some interviews, that the Mayoral Forum was developer-oriented and unrepresentative of regional views on water-related matters, did not translate into conflict between the Steering Group and the Forum. This apparent alignment of views may be explained in large measure by considering the content of the Strategy itself. As discussed in secs 4 and 6.7 above, the Strategy seeks to avoid a regulatory approach to reducing over-allocation and pollution, in favour of protecting existing rights and relying on provision of "new water" and on brokering to achieve its environmental gains. The Strategy is not, in fact, inconsistent with the tenor of local authority submissions on the NRRP and the complaints about over-zealous regulation which the mayors made in their complaint to Ministers about ECan.⁵⁰ As a result, agreeing the content of the Strategy did not really test the balance of power between the Steering Group and the Mayoral Forum.

⁴⁹ The ten Canterbury mayors wrote to Local Government Minister Rodney Hide and Environment Minister Nick Smith complaining about numerous issues with ECan in September 2009, and several mayors subsequently pressed for national intervention following the publication of the Creech Report in February 2010 (Gorman 2010).

⁵⁰ Letter of Canterbury mayors to Minister of Local Government re ECan, 18 September 2009.

For whatever reasons, it does not appear that the roles played by the Officials Committees or the Mayoral Forum detracted substantially in practice from the empowerment of the Steering Group, who wrote the Strategy.⁵¹ To answer the question posed by Leach, the Steering Group had a high level of empowerment for its task of developing the Strategy.

Leach's third question around empowerment is, to what extent have the lead public agencies agreed to abide by the recommendations of the group? Credible political commitment to the implementation of consensus outcomes is regarded as a pre-disposing factor for successful collaborative governance and, in the Nordic countries, a convention has developed that consensus policy solutions will be closely followed by the final decision-makers.⁵² There is little experience of collaborative governance on policy issues in New Zealand,⁵³ and in the case of the CWMS, the need to secure multi-layered commitment from local, regional and central government, created a complex and potentially uncertain context at the outset, for assessing the prospects for implementation.

However the confidence that each level of government would indeed adopt and act on consensus recommendations was progressively built during the process. For the irrigation interests, a key factor was a day-long meeting on irrigation infrastructure held with several senior Ministers in the new Government on 20 December 2008. Exchanges at this meeting appear to have provided reassurance of Ministers' willingness to provide financial support for irrigation projects if a water management strategy could be agreed. For environmental, recreation and iwi interests, the generally positive feedback received from the central government and ECan representatives on the Steering Group, and from the Mayoral Forum, were sufficient to encourage continued participation. As described above, this sense of confidence was first destabilized and then largely re-established following the introduction of the ECan Act at a late stage in the CWMS process.⁵⁴

Leach's fourth group of questions is, has an agreement been reached among the parties; if so, has each party carried out its commitments under the agreement; and are the participants monitoring and facilitating implementation? These questions however, reflect the nature of Leach's water partnerships, which tended to take the form of agreements between parties to undertake certain projects, rather than strategic policy recommendations to public authorities as is the case with the CWMS. Nonetheless, the various organized interests associated with the CWMS, while not having formal

⁵¹ In passing it is also noted that the experience of working in partnership with ECan on the development of the CWMS does not appear to have been sufficiently trust-building that it reduced in any way the mayors' desire for a central government intervention to curb ECan's perceived excesses.

⁵² Salmon 2007b, pp 13-4

⁵³ There is some experience of collaborative rural initiatives for biodiversity conservation and water quality improvement, but these have focused on forging action plans for hands-on activities by landowners and communities, rather than on developing consensus recommendations for government policy.

⁵⁴ The re-establishment of confidence mentioned here refers to those still participating in the Steering Group. Two members representing the ECan Council left the Group. The debate surrounding the ECan Act, as the quotes from letters to the editor cited in sec 5.6 indicate, polarized attitudes in the wider stakeholder community and is likely to have eroded trust in the CWMS.

commitments to each other, are proceeding in a spirit of partnership to engage in and facilitate initial implementing steps, including, at time of writing:

- the progressive establishment of the agreed, widely representative local zone implementation committees and the regional water committee;
- the initial funding by ECan of a modest \$1.44 million/year Immediate Steps Biodiversity Programme;⁵⁵
- the announcement⁵⁶ by central Government of a \$35 million Irrigation Acceleration Fund, and a promise to consider in a future Budget a Crown investment vehicle to invest up to \$400 million in the construction of irrigation infrastructure.⁵⁷

Leach's fifth question is, if outcome targets were identified, has progress been made toward achieving them? It is much too early to answer this question in relation to the CWMS Targets, for which the first set of deadlines is in 2015.

Leach's sixth question is, if the process resulted in consensus recommendations to external agencies or industries, were those recommendations adopted and implemented? This question is best answered by saying, as indicated in response to Leach's fourth question, that the implementation process is on track at this stage. However, it has a long way to go.

Overall, the CWMS Steering Group process rates highly in terms of the empowerment of the participating individuals during the process. As discussed earlier, the relationship of these individuals to the organized interests lying behind the process was varied and ambiguous and this factor, together with the need for more time to judge the extent to which the Strategy is actually implemented, make it too early to make a final judgment on the empowerment criterion.

⁵⁵ Disclosed in ECan's Annual Plan for 2010-11 (p83)

⁵⁶ Hon David Carter, Minister of Agriculture, *Budget 2011: Lifting investment in irrigation*. Media statement 9 May 2011.

⁵⁷ The commitment of public funds to promote irrigation development was not an explicit recommendation of the CWMS but was understood by most participants to be an essential step if the Strategy was to be implemented. As such, it may be considered in the context of Leach's question, as evidence of parties facilitating implementation.

9. Transparency and Lawfulness

Leach (2006) states that “A transparent process governs itself through clear and public rules” (p103) and “A lawful process upholds all existing statutes and regulations” (p 104).

The Steering Group process lacked clear and public rules. Rather, it relied on a series of informal understandings which, in practice, seem to have evolved over time with the growth of trust within the group, and of optimism that a substantial outcome was in sight. Examples of this included:

- There was ambiguity around the status of members as individuals or as representatives of organizations (sec 4.4 above), and an associated ambiguity about the extent of expectations around confidentiality of information and consultation with organisations. One interviewee said she shared information with certain individuals on her network but was “discreet about certain matters.” An official commented, “Some were good at networking, some weren’t – for example on the targets we were expecting Steering Group members to do consultation, but it didn’t happen.”
- As discussed in sec 6 above, there was no written protocol agreed about how members of the Steering Group would conduct themselves. Rather, an informal set of participant norms appears to have evolved which, despite some testing episodes, appears to have been followed sufficiently consistently that the group was able to operate cohesively.
- As discussed at the end of sec 6 above, there was no formal procedure for recording and adopting decisions of the Steering Group; reliance was placed on trust in officials, but this eventually gave rise to some tensions.

On the question of lawfulness, there appear to be no questions around the lawfulness of the CWMS process itself, but there has been considerable debate about whether the resulting Strategy can lawfully or practically be implemented without significant statutory changes.

Throughout the CWMS process, the ECan leadership has been critical of the adequacy of the RMA as a vehicle for delivering the sort of Strategy being developed by the Steering Committee. There was discussion about using special legislation to implement the CWMS, but this was not supported by the Wellington-based officials committee. Subsequently a range of proposals for phase 2 of the RMA reform process was provided by ECan to the Ministry for the Environment. These proposals were perceived to have not been well received, and to have had little influence on the shape of the phase 2 work programme. In part, the issues being debated here centre around RMA practitioner

mindsets, and the notion that the ‘culture’ of the RMA, while not excluding collaborative and strategic approaches, tends to make it difficult for such approaches to flourish.⁵⁸

At this stage the ECan commissioners believe they can implement the Strategy within the framework of the existing legislation, relying partly on the RMA and partly on powers under the Local Government Act. A full discussion of the issues underlying this debate is beyond the scope of this paper, but will need to be considered if collaborative governance mechanisms are to be integrated into plan development under the RMA.

⁵⁸ Another barrier, not relevant to the lawfulness issue, but equally important, is the belief held by some elected councilors that collaborative processes are a threat to their decision-making authority. The need for a harmonious marrying of collaborative governance with electoral governance will need to be carefully considered in future law reform in this area.

10. Conclusions

10.1 Research questions

This study began with three research questions about the CWMS Steering Group process:

- Did the process rate well on normative criteria for democratic legitimacy, and if so, what factors contributed to that?
- Did the process achieve a reasonably complete integration of all the issues that were being raised by the public in relation to decision-making on Canterbury's water resources?
- Did the Strategy which was developed through this process change the institutional incentives and risks in relation to water and if so, to what extent could this be viewed as a distinctive product of the collaborative nature of the process?

10.2 Democratic legitimacy perspective

While a complete assessment of democratic legitimacy must take into account the effectiveness of policy outcomes, which will not be fully apparent for a number of years, criteria for procedural legitimacy can be applied at this stage. Eight normative criteria were derived from the literature and used to assess the process. The criteria were: Representativeness, Accountability, Inclusiveness, Deliberativeness, Impartiality, Empowerment, Transparency and Lawfulness.

Representativeness and Accountability: *A representative process ensures that the interests of all relevant stakeholders are effectively advocated. An accountable process ensures that all participants in the process are answerable to those they represent.*

In the case of the CWMS, officials selected those individuals who would represent different interests on the Steering Group, and there was an evolving ambiguity about whether they were there as knowledgeable individuals or as representatives, a situation which appears to have weakened their accountability. Despite this, the actual selection of participants for the Steering Group did tend to emphasize recognized leaders of key organizations, who were trusted by their members; and their accountability was enhanced by four separate rounds of public input into the process.

However, the Steering Group lacked a direct representative of those who advocate greater sharing of the economic benefits of the commercial use of water by irrigators. The exclusion of this constituency has left a major public issue effectively unresolved (see sec 10.3 below).

Overall the approach used in the CWMS may be characterized as “guided collaborative governance.” This approach may have reduced the political risks of embarking on the process, and it does not appear at this stage to have detracted much from its perceived legitimacy or effectiveness. This conclusion can be drawn in part because the effectively excluded issue, about sharing the economic benefits of commercial use of water resources, is widely acknowledged as being largely an issue for central government rather than the regional or district councils to resolve.⁵⁹

Inclusiveness: *This criterion considers how far the process allowed input from those outside, and to what extent it then properly considered all the issues raised.*

The four rounds of public input provided during the collaborative process, and especially the opening round which identified the range of issues of public concern, together with the widely representative Steering Group membership, appeared to ensure that most issues were heard and considered.

A partial exception was the handling of the issue of healthy ecosystems in lowland streams and coastal lagoons. This suggested that, where participants believe that their best or only chance of resolving issues of concern to them lies outside the collaborative forum, then a process of this kind cannot be relied upon to bring key differences into the open for explicit recognition and resolution. A more substantial exception was the handling of the issue of the fairness of sharing the economic benefits of irrigation. This is further discussed below (sec 10.3).

However, the interviews suggested that the experience of building mutual trust and respect through a collaborative forum can enable ongoing relationships, processes and norms to become established among the stakeholders. These may increase the likelihood of eventual resolution of any still-divisive issues, because key players develop a belief in the power and efficacy of collaboration, and a commitment to making it work. Although not investigated in any detail, it appears that such norms are at work in the ongoing processes of the Canterbury Water Management Strategy.

Deliberativeness: *This characterizes a process in which views are exchanged, arguments are critically examined, and shared knowledge is built up in a context of civility, respect and trust.*

⁵⁹ District councils do not have any statutory powers over the allocation and use of water. The regional council does have statutory powers to charge for water use, but these powers are limited to recovery of the reasonable costs of performing its functions (RMA, sec 36). In addition, the CWMS records agreement on a modest water levy, discussed in section 10.4 below, a measure which depends on the establishment of an infrastructure holding company with powers to levy water users. This levy, if it eventuated, would effectively capture for community purposes a small fraction of the rent associated with commercial use of water. However, the value of water allocated to private commercial users in Canterbury, as revealed in market transactions (www.hydrotrader.co.nz), runs into billions of dollars. The recovery of any significant fraction of this value for community purposes would depend on enactment of legislation by Parliament, and accordingly, is outside the powers of the regional and district councils.

While it is difficult to assess the quality of deliberation in an *ex post* study of this kind, it appears from the interviews, and from a review of the documents, that a high level of deliberativeness characterised the process. This was disrupted at a late stage in the process by the sudden enactment of the ECan Act, but in the end, the cohesion and trust developed by the Steering Group was sufficient to maintain the deliberative quality of the process despite this disruption.

Impartiality: *An impartial process treats all parties equally. This is a distinct quality of the process that makes for good deliberation.*

While the impartiality of the chairman was highly rated by participants, the lack of a formal procedure for recording and adopting decisions at meetings of the Steering Group raised concerns that undue power was shifted to the officials who were drafting the report. In addition, the advent of the ECan Act late in the process detracted from the impartiality of the process, because its summary changing of the criteria for water conservation orders in Canterbury was widely perceived as a tilting of the playing field against environmental interests.

Empowerment: *This focuses on the extent to which participants are empowered to have a substantial influence on policy outcomes.*

While the Steering Group was potentially constrained by the Mayoral Forum and two officials' committees, these entities did not in practice detract much from the empowerment of the Steering Group to write the Strategy. On the other hand, major irrigation projects with the capacity to pre-empt much of the Strategy were proceeding through statutory processes in parallel with the Strategy-writing process. In addition, a range of members of the Steering Group felt constrained by the view that major irrigation developments were inevitable, because of the power of irrigation interests and their relationship with the Government.

A key question around empowerment is, to what extent had the lead public agencies agreed to abide by the recommendations of the group? Credible political commitment to the implementation of consensus outcomes is regarded as a pre-disposing factor for successful collaborative governance and, in the Nordic countries, compromises are elicited from participants through an established convention that, where consensus policy solutions are agreed, these will be closely followed by the final decision-makers. Steering Group members were encouraged and reassured in this regard in a number of ways, including after the disruption caused by the ECan Act. The ultimate test is whether consensus recommendations are indeed adopted and implemented, and the targets set by the Strategy are achieved. These targets are of a long term nature.

The implementation process is largely on track at this stage, and the evidence that the Steering Group was genuinely empowered seems strong. Obviously, however, implementation has a long way to go, and future events may affect this judgment.

Transparency: *A transparent process governs itself through clear and public rules.*

There was no written protocol agreed about how members of the Steering Group would conduct themselves. Rather, an informal set of participant norms appears to have evolved which, despite some testing episodes, appears to have been followed sufficiently consistently that the group was able to operate cohesively. Some members of the Steering Group were critical of failures to record decisions, and there appears to have been a lack of clarity about the extent to which the Steering Group's thinking could be shared with outsiders.

Overall transparency may be regarded as adequate, but this is an aspect that could be improved in collaborations of this nature in future.⁶⁰

Lawfulness: *A lawful process upholds all existing statutes and regulations.*

There appear to be no questions around the lawfulness of the CWMS process. There is an unresolved debate, not discussed in this report, about whether the RMA might need amendment to facilitate both the implementation of the Strategy, and the uptake of more collaborative and strategic approaches in future.

Overall conclusions on democratic legitimacy:

The above discussion of legitimacy has drawn attention to the exclusion of economic issues being raised by the public, and to the detrimental effects of the enactment of the ECan Act. However, to the extent that this assessment can attempt to cast some light on the democratic legitimacy of this type of collaborative governance process in a generic way, these two specific factors could arguably be set aside. The economic issues being raised by the public were, for the most part, outside the powers of Canterbury's regional and district councils, who established the Steering Group; while the ECan Act was a one-off intervention that would not normally be part of a collaborative process such as the one being assessed here. If these factors are excluded from consideration, the overall democratic legitimacy of the CWMS Steering Group process rates highly.

Another way of viewing this assessment would be to compare the legitimacy of the CWMS Steering Group with a reference case. The appropriate reference case is the original ECan Council, before it was abolished by the ECan Act. A full analysis of the reference case is beyond the scope of this report but a few pertinent observations can be made. The Council's most often and most emphatically cited claim to legitimacy lies in its direct electoral accountability. However, while democratically elected, the ECan Council was not well-known to its electors. A series of public awareness surveys conducted by its own staff every two years since its formation shows a fairly consistent pattern: only about 2 percent of Canterbury residents can name their local, elected ECan councillor, and only about 10 percent can name the chairman of the council.⁶¹ Moreover,

⁶⁰ Learning from this experience, the Land and Water Forum has subsequently operated with an agreed written protocol and, during the second phase of its work, it has agreed to provide substantial information regarding its work-in-progress through its website.

⁶¹ Technical Advisory Group 2009, page 54

the ECan Council was at odds with the region's elected mayors. A key factor which ultimately led to its demise was repeated lobbying of central government by the mayors.⁶² The Council had struggled at length to produce policies and plans, even on a majoritarian voting basis, so that as the Creech inquiry stated, "Despite the passage of more than 18 years since the enactment of the Resource Management Act, Canterbury does not have an operative region-wide planning framework."⁶³ The last point goes to the effectiveness of policy outcomes as a component of democratic legitimacy.

On this basis, the democratic legitimacy of the CWMS Steering Group may be said to differ from that of the pre-existing ECan Council in two main ways:

- **Accountability of decision-makers:** While ECan councilors were directly accountable through three-yearly regional elections, the Steering Group was indirectly accountable. First, it was appointed by the elected Mayoral Forum, which also endorsed the Strategy it produced. Second, Steering Group members feel accountable to sector groups in Canterbury, of which there is a balanced mix represented; and in the Steering Group those sector groups have engaged with each other directly rather than relying on elected politicians to hand down decisions to them;
- **Effectiveness of policy outcomes:** While the ECan Council had been unable over many years to resolve fundamental differences amongst stakeholders in Canterbury, within 25 months of its appointment in June 2008, the Steering Group had produced an agreed Strategy for water management which is now being rolled out through the work of zone committees and irrigation storage development in Canterbury.

This report's positive findings about the democratic legitimacy of the CWMS Steering Group process imply that the democratic nature of regional council decision-making can be enhanced by the use of a collaborative governance process such as that used to prepare the CWMS. This conclusion holds even if, as in this case, the approach used can best be described as "guided collaborative governance." However, it should be noted that the ongoing willingness of sector representatives to exchange compromises and reach agreement in such processes is likely to depend on the development of a convention that elected decision-makers do not substantially change the consensus outcomes of collaborative processes.⁶⁴

The positive findings about the democratic legitimacy of the CWMS Steering Group process are also of particular interest because of the current absence of a regionally elected layer of governance at ECan, and the difficulty which the former elected council had experienced in attempting to develop a strategy to deal with water-related issues in Canterbury. Accordingly, the legitimacy and ultimate effectiveness achieved by the

⁶² The mayors both called for the inquiry into ECan's performance in the first place, and then endorsed the Inquiry's findings and its call for reform.

⁶³ Creech et al 2010, Executive Summary, page ii.

⁶⁴ See Salmon 2007b, pp 13-4.

CWMS process, both in its initial Steering Group phase and in the subsequent implementation phases which are also collaborative in design, will provide an interesting test of the extent to which the RMA policy-making functions of a regional council could be overseen and directed through a different governance model, which combines centralized accountability to a Minister with collaborative policy development at regional and local levels.

10.3 Integration perspective

This perspective inquires whether the process achieved a reasonably complete integration of all the issues that were being raised by the public in relation to decision-making on Canterbury's water resources. Environmental integration implies a process of changing values, interests and views, rather than just balancing or trading off; and it points to the need for integration at cognitive, policy and institutional levels. The capacity of a policy process to trigger learning is fundamental. While a full analysis of the CWMS from an integration perspective is beyond scope, this study has particularly sought to identify issues being raised by the public; to track how well these are taken up by the learning process of the CWMS, including the gathering of relevant information by officials; and to understand why in some cases, issues raised by the public were not taken up by the process.

Our findings in this area highlight the value of combining collaborative governance with opportunities for individual public participation. As seen in the long history of the Canterbury water debate, the RMA's emphasis on individual rights of public participation characteristically produces extreme and polarized views, and often fails to advance policy integration and resolution; while the linkage of participation processes to a core collaborative governance process has enabled relatively skilled and experienced representatives to play an intermediating role. In this case, the collaborative governance model appears better able to build trust and resolve conflict, but it was also important that the collaborating group informed itself of wider public views, and addressed wider expectations of public participation. The complexity of the Strategy remains a barrier to public understanding and awareness, but the convergence of views of interest group leaders, if it can be maintained, appears to have substantially reduced the risks for politicians of taking needed decisions over Canterbury water issues.

The CWMS Steering Group process was relatively successful at achieving integration of issues in the policy process. This was achieved through a learning process involving both impressive amounts of technical information, and improved mutual understanding of other participants' interests, concerns and perspectives. The tracing of issues in this report establishes however that the process fell short of properly addressing, resolving and integrating two critical policy issues in public dispute:

- Whether the extent of proposed land use intensification across Canterbury was consistent with the restoration of healthy ecosystems in lowland streams and coastal lagoons; and

- Whether the allocation of public water resources to private landowners would result in a fair sharing of the economic benefits.

In an act of faith in the effectiveness of ongoing collaboration, the first issue was effectively shifted to the ten zone committees to resolve at catchment level within a framework of potentially conflicting targets. It is unclear whether this move will be successful or not. The second issue lacked a clear champion within the Steering Group, and in any case, the introduction of measures to share the wealth generated from irrigation would conflict with the Group's approach, which requires Government financial support for providing low cost, stored water to incentivize landowners to improve their environmental performance. The economic fairness issue is not suited to resolution at the zone committee level, but there is much evidence that it is a strongly felt public concern, and it is likely to re-emerge as an ongoing political issue.⁶⁵

It was addressed by the Steering Group only to the extent of a modest proposal for biodiversity protection and restoration funding, to be provided through a development levy on irrigation water. Initial funding is actually being provided through general ratepayer contributions of \$1.44 million a year, although the Strategy indicates in principle that it would eventually be funded by water users (the actual level was not agreed).

10.4 Institutional perspective

This perspective inquires as to whether the Strategy which was developed through the Steering Group process has changed the institutional incentives and risks in relation to water and if so, to what extent could this be viewed as a distinctive product of the collaborative nature of the process.

It has been argued by some authors that the RMA, with its effects-based focus and lack of a precautionary principle, makes it problematic for councils to manage cumulative effects of water takes and land use intensification.⁶⁶ However there appears to be nothing in the Act itself that prevents a regional council from taking a strategic approach to managing such effects, nor to giving effect to the resulting strategy in a regional policy statement and/or a regional plan. Indeed at the time of writing, ECan is in the process of doing just that; it has also promulgated a precautionary policy in its regional policy statement. While regional councils have certainly struggled to date with the setting of limits to the cumulative effects of water takes and land use intensification, evidence suggests that the real deficiency lies not in the RMA, but in the governance and leadership of the councils themselves.⁶⁷

⁶⁵ Arguably this has already begun, with the election year announcements of party political commitments to introducing a capital gains tax (Labour and the Greens) and to charge for the commercial use of water (the Greens).

⁶⁶ See for example Gunningham (2008) p5, and Jenkins (2009) pp6-7.

⁶⁷ Technical Advisory Group on the RMA 2009, pages 53-60.

Likewise, there is no statutory obstacle to a regional council using a collaborative governance process to establish a strategy and to set binding limits to cumulative effects on water resources. The analysis of the CWMS Steering Group process, and other examples discussed in this report, suggests however that the logic and practice of collaborative governance leads away from the application of the polluter-pays principle which normally applies to RMA rules. This represents a significant change in the institutional environment for water users.

As described in this report, the outcomes of the Steering Group process were shaped by five main institutional and policy elements affecting participants' decision-making. These may be summarized as:

1. The extended stalemate between irrigation and environmental interests, in which neither side was confident it could achieve its objectives without the agreement of the other side;
2. Arising from the CSWS, the persistent framing of the main policy problem as water not being available where and when required, thus implying a need for storage as part of the solution;
3. The centrally-determined selection of Steering Group members and in particular, the non-inclusion of advocates for sharing of the economic benefits of irrigation;
4. The options facing group members, either within or outside the collaborative process, for progressing their interests and projects; especially the existence of alternative statutory processes and litigation opportunities; and
5. The expectation that central government funding would be available to assist the provision of irrigation storage schemes in Canterbury and thus overcome the economic and financial barriers to their being built.

The resulting architecture of the Strategy, as agreed upon by representatives of central, regional and local government, as well as regional stakeholder representatives, relies heavily on two key assumptions.

The first assumption is that rural landholders *can successfully be incentivized* to cooperate in the achievement of the water quality and quantity targets which the Strategy propounds, through provision of new, low cost, more reliable water for irrigation from new water storage infrastructure.

The second assumption is that the three proposed water storage projects will indeed be provided, *whether or not they are economically viable and capable of being privately financed*.

Subsequently the Government has announced budget allocations totaling \$435 million to support accelerated development of irrigation projects, although there are important uncertainties about the costs and revenues of the projects, and the extent of Government financial support required.

The counterfactual case, absent the Strategy, involves continued reliance on RMA regulation by ECan, without provision of water storage and low-cost water as compensation for meeting regulatory limits. Across most of Canterbury, the counterfactual would involve significant reductions in the magnitude of farmers' existing water take permits, and of their assumed rights to discharge diffuse contaminants into freshwater ecosystems. In the counterfactual case, the burden of bringing water use within regulatory limits would be borne entirely by water users.

In the case of implementing the CWMS, in contrast, the Crown is (to the extent necessary to deliver the water storages), effectively shouldering a significant, albeit uncertain, portion of the cost of restoring stream flows and reducing water pollution in Canterbury – costs that in the counterfactual case, as noted, would have been borne directly by water users. The Strategy has, therefore, changed the institutional framework for water management in Canterbury. The change involves moving away from the polluter-pays principle, to an extent that will become evident in the years ahead.

Once they had accepted the two key assumptions on which the Strategy is built, members of the Steering Group were not in a strong position to pursue successfully the 'economic fairness' notions advocated in public submissions, of eschewing subsidies for irrigation water, and of raising a substantial levy for community purposes from the private commercial use of water. The modest proposal for a biodiversity protection and restoration levy on water users (funded in the interim from public sources at the level of \$1.44 million a year) does however establish in principle that some kind of charge on water users for public purposes is acceptable, at least where new water is being provided from publicly-funded storage infrastructure.

The Strategy's two key assumptions also allocate risks. While these are essentially political rather than legal risks, they could entail substantial costs to central Government, if it is to deliver on its commitment to the Strategy. Achieving CWMS targets through brokering deals with landholders is dependent on offering new, low-cost, high reliability water. Brokering will not succeed if the water offered is too expensive, or is delayed too long, or if alternative water becomes available more cheaply to many irrigators through Canterbury's fast-developing water market.

Under the Steering Group process, agreement on the Strategy became possible through shifting these risks on to the Crown. In effect, to deliver on its political commitment to the Strategy, the Government must be prepared to fund particular storage projects at a level that is able to produce low-cost, high reliability water regardless of project costs, consent conditions, and whether or not significant amounts of hoped-for private finance eventuate for these projects.

It is too early to say whether collaborative approaches can resolve the difficult issues around economic allocation in natural resource management. A note of caution is appropriate here, with two, somewhat conflicting points to be made on the basis of the Canterbury experience. First, it will be difficult to resolve water management issues in isolation from economic fairness issues, because it is evident that such issues are integral

to concerns felt by both water users and the wider community about water management. Second, the prospects for using collaborative governance for resolving water policy disputes in other regions are likely to depend, as they have in Canterbury, on central government providing financial support. Such support reflects both the water users' reluctance to pay for water, and the move away from the polluter-pays principle which the collaborative governance process evidently requires if, in over-allocated catchments, it is to achieve farmer agreement.

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Appendix 1 – Steering Group membership

(as recorded in the published Strategy)

Bede O'Malley - Chair and Mayoral Forum representative
Mike Jebson - Central government agencies
Brian Lester & Bryan Jenkins - Chief executive representatives
Peter Townsend – Industry representative/regional economic
David Perenara O'Connell – Te Runanga o Ngai Tahu
Murray Rodgers - Community/Water Rights Trust
Grant McFadden - Historical knowledge of water management in Canterbury
Angus McKay & Eugenie Sage – Environment Canterbury councillor representatives
Graeme Sutton - Irrigation New Zealand
Peter Scott – Opuha Water Supply Partnership and southern region representative
Martin Clements - Fish and Game New Zealand
Hugh Canard – Kayaking, recreation and tourism representative
Alastair James – Chair, Canterbury District Health Board
Edith Smith – Forest & Bird and conservation representative

Appendix 2 – Defining attributes of a collaborative process

(Extract from Note on Collaboration March 2011 appended to Land and Water Forum report to Minister for the Environment and Minister of Agriculture 5 April 2011, available at http://www.landandwater.org.nz/index_files/releases.htm)

In the experience of the Land and Water Forum, defining attributes of a collaborative process are as follows:

- a. It is open to all interested groups to send their own representatives (and in the case of a catchment the process should be open to all landholders) and includes iwi representation
- b. It operates with a consensus rule
- c. It has a skilled independent facilitator/chair
- d. Where a consensus cannot be reached options should be set out
- e. It is supported by the provision of information on economic, social, cultural and environmental aspects of resources and their management, and by scientific information about them, in order to allow the participants to come to an integrated understanding
- f. It has a mandate from a public decision-making body to address an issue or group of related issues, and reports to that body, but it can also be an applicant-led process undertaken in support of an identified development project, or come about through a community or industry initiative.
- g. It has a realistic timetable within which it is required to complete its work. Collaborative processes take time but need time constraints.
- h. It is resourced to do its work. Funding may come from the decision-making body and participants may also contribute resources. It is important that the resources that the collaborative process has at its disposal are utilised for the benefit of the process as a whole.