

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.



COPYRIGHT FORM AND DECLARATION CONFIRMING CONTENT OF DIGITAL VERSION OF THESIS

I confirm that the content of the digital version of this thesis:

Thesis title: The legitimacy of
collaborative planning: setting
water resource limits in
Otago and Canterbury,
New Zealand.

is the final amended version following the examination process, and
is identical to the bound paper copy.

Have you published articles/material from your thesis? Yes No

If 'Yes', have you received copyright permission from the
third party to include this published material in your thesis
which will be placed in the Library's electronic repository? Yes No

Student ID number:

1	1	1	4	2	7	6	1
---	---	---	---	---	---	---	---

Student's name: Julia Crossman

Student's signature:

Date:

1	4	1	1	2	0	1	4
---	---	---	---	---	---	---	---

**The legitimacy of collaborative planning:
setting water resource limits in Otago and
Canterbury, New Zealand**

**A thesis presented in partial fulfilment of the requirements for
the degree of Master of Resource and Environment Planning**

**At Massey University,
Palmerston North, New Zealand.**

Julia Margaret Crossman

2014

ABSTRACT

Water resource management and planning in New Zealand has been a contested issue, typified by polarised positions, fragmented communities and costly court battles. Conventional top-down water planning processes have become characterised by conflicting science and opposing viewpoints. Over recent decades, a new form of planning and decision making has emerged where stakeholders and communities work collaboratively to resolve diverse perspectives and values and achieve community-accepted policy outcomes. These collaborative processes have gained momentum and become more widespread in recent years, however, so too has the level of scrutiny and the call to evaluate their effectiveness. Given the growing application of collaborative approaches in New Zealand it is timely to consider their legitimacy.

This research aims to assess the legitimacy of collaborative planning in the context of setting water resource limits. It develops an assessment framework founded on the principles of input, throughput and output legitimacy and employs a comparative case study approach to examine two regional council limit-setting processes – a conventional council-led approach in Otago, and a collaborative community-driven approach in Selwyn Waihora, Canterbury. Through a participant survey, complimented by a document analysis, the research examines the strengths and weaknesses of these differing approaches against the legitimacy principles and identifies the elements that promote or challenge legitimacy claims.

The research results indicate the collaborative Selwyn Waihora limit-setting process was perceived to be more legitimate than the top-down Otago planning approach. The Selwyn Waihora process performed relatively well against input and throughput legitimacy criteria, demonstrating that collaboration enables better local input, more buy-in and greater opportunities for information sharing and deliberation. It facilitates greater understanding of others views and a sense of commitment to involving and engaging the community. It also enhances problem-solving and innovation capability and the likelihood that common ground can be realised. The research does, however, indicate that while the Selwyn Waihora process was also more legitimate in terms of output criteria, the ratings for both the outcome effectiveness and the reflection of community input in the outcome were low given it was promoted as a community-driven process.

ACKNOWLEDGEMENTS

I would like to thank Environment Canterbury for supporting my initial studies, and giving me the background in both planning and collaboration to spark my interest in this research subject.

Thanks to Dr Jeff McNeill for your guidance and assistance during the last two years – your words of encouragement have been essential to get through the difficult moments.

Thank you to my family who have always taken an interest in my work, without ever really understanding what I was doing. Finally, I am completely indebted to my amazing husband Jon for his unwavering support and patience, without which I would not have been able to complete this research. You are amazing. Thank you.

Julia Crossman

November 2014

TABLE OF CONTENTS

ABSTRACT	i
ACKNOWLEDGEMENTS	ii
TABLE OF CONTENTS	iii
FIGURES	vi
TABLES	vi
1. Introduction	1
1.1 Aim and Objectives	4
1.2 Limitations	4
1.3 Structure of thesis	5
2. Theory and Practice	6
2.1 Introduction.....	6
2.2 Collaborative planning and decision making.....	6
2.2.1 Conventional forms of governance.....	6
2.2.2 Collaboration as a new mode of governance.....	7
2.2.3 Foundations and rise of collaborative planning and decision making.....	8
2.2.4 Benefits of collaboration	10
2.2.5 Limitations of collaboration	11
2.3 Legitimacy	13
2.3.1 Defining legitimacy	13
2.3.2 Importance of legitimacy	14
2.3.3 Conceptualising legitimacy: input, output and throughput	14
2.4 Relationship between legitimacy principles.....	26
2.5 Summary	27
3. Research design	29
3.1 Introduction.....	29
3.2 Research Context.....	29
3.3 Research strategy	30
3.4 Research design considerations.....	31
3.5 Data Collection	32
3.5.1 Document Analysis	32

3.5.2	Survey.....	33
3.6	Ethical considerations	35
3.6.1	Potential conflict of interest	35
3.6.2	Freedom from harm and respect for participants.....	36
3.6.3	Informed and voluntary consent	36
3.6.4	Ethical approval.....	36
3.7	Summary.....	36
4.	New Zealand Freshwater Management and Planning.....	38
4.1	Introduction	38
4.2	New Zealand context.....	38
4.3	Freshwater resources – pressures and current state.....	39
4.4	Legislative and Planning Framework.....	40
4.4.1	Resource Management Act 1991	40
4.4.2	Regional council responsibilities under the RMA.....	42
4.4.3	Public input into policy development under the RMA.....	42
4.5	Freshwater planning under the RMA – challenge and response	43
4.5.3	National Policy Statement for Freshwater Management 2011	45
4.5.4	Further response to LAWF recommendations: 2013 reforms.....	45
4.6	Introduction to case studies - regional water management.....	46
4.7	Otago	46
4.7.1	The Otago Region: geographical context.....	46
4.7.2	Otago freshwater resources – state and pressures	47
4.7.3	Institutional and Planning Framework.....	48
4.7.4	Otago Limit Setting Approach.....	49
4.8	Canterbury	54
4.8.1	The Canterbury Region: geographical context.....	54
4.8.2	Canterbury freshwater resources: state and pressures.....	55
4.8.3	The Selwyn Te Waihora catchment overview, state and pressures	55
4.8.4	Institutional and Planning framework.....	57
4.8.5	Canterbury Limit setting approach	60
4.9	Summary	65
5.	Results	67
5.1	Introduction	67
5.2	Survey responses	67

5.3	Otago case study – Plan Change 6A	69
5.3.1	Input legitimacy.....	69
5.3.2	Throughput legitimacy	72
5.3.3	Output legitimacy.....	79
5.3.4	Maori participation.....	81
5.3.5	Barriers to achieving legitimacy	82
5.4	Selwyn Waihora case study – sub-regional section	84
5.4.1	Input legitimacy.....	84
5.4.2	Throughput legitimacy	88
5.4.3	Output legitimacy.....	98
5.4.4	Maori participation.....	101
5.4.5	Barriers to achieving legitimacy	101
5.5	Non-negotiable elements of a legitimate process	103
5.6	Summary	106
6.	Discussion.....	110
6.1	Introduction.....	110
6.2	Data collection	110
6.3	Legitimacy of the Otago limit setting process	110
6.4	Legitimacy of the Selwyn Waihora limit setting process	114
6.5	Comparison of approaches.....	120
6.6	Summary: overall legitimacy.....	128
7.	Conclusion	130
7.1	Introduction.....	130
7.2	The legitimacy of collaborative planning: general observations and recommendations.....	130
7.2	Further investigations	132
8.	References.....	134
	APPENDIX 1: Survey questions	148
	APPENDIX 2: Ethics Low Risk Notification Letter	152

FIGURES

Figure 4-1: New Zealand regional boundaries	38
Figure 4-2: RMA planning hierarchy	41
Figure 4-3: Otago region	47
Figure 4-4: Canterbury region	54
Figure 4-5: Selwyn Te Waihora catchment	56
Figure 5-1: Otago Plan Change 6A – Perceptions of Inclusiveness	70
Figure 5-2: Otago Plan Change 6A – Perceptions of Representativeness	71
Figure 5-3: Otago Plan Change 6A – Perceptions of Efficiency.....	73
Figure 5-4: Otago Plan Change 6A – Perceptions of Accountability.....	74
Figure 5-5: Otago Plan Change 6A – Perceptions of Transparency	75
Figure 5-6: Otago Plan Change 6A – Perceptions of Procedural Fairness and Inclusiveness	76
Figure 5-7: Otago Plan Change 6A – Perceptions of Information Sharing.....	78
Figure 5-8: Otago Plan Change 6A – Perceptions of Time	79
Figure 5-9: Otago Plan Change 6A – Perceptions of Outcome Effectiveness	80
Figure 5-10: Otago Plan Change 6A – Perceptions of the Reflection of Community Input	81
Figure 5-11: Selwyn Waihora Sub-Regional – Perceptions of Inclusiveness	86
Figure 5-12: Selwyn Waihora Sub-Regional – Perceptions of Representativeness	87
Figure 5-13: Selwyn Waihora Sub-Regional – Perceptions of Efficiency	89
Figure 5-14: Selwyn Waihora Sub-Regional – Perceptions of Accountability	91
Figure 5-15: Selwyn Waihora Sub-Regional – Perceptions of Transparency	93
Figure 5-16: Selwyn Waihora Sub-Regional – Perceptions of Procedural Fairness and Inclusiveness	95
Figure 5-17: Selwyn Waihora Sub-Regional – Perceptions of Information Sharing	97
Figure 5-18: Selwyn Waihora Sub-Regional – Perceptions of Time	98
Figure 5-19: Selwyn Waihora Sub-Regional – Perceptions of Outcome Effectiveness	99
Figure 5-20: Selwyn Waihora Sub-Regional – Perceptions of the Reflection of Community Input ..	100

TABLES

Table 2-1: Overview of legitimacy criteria	16
Table 2-2: Framework for assessing legitimacy	28
Table 3-1: Legitimacy principles, criteria and indicators	34
Table 4-1: Timeline of consultation and engagement for Otago Plan Change 6A.....	50
Table 4-2: Otago Plan Change 6A publically available information	51
Table 4-3: Selwyn Waihora sub-regional land use scenarios assessed	61
Table 4-4: Timeline of consultation and engagement for Selwyn Waihora Sub-Regional	62
Table 4-5: Selwyn Waihora Sub-Regional publically available information	65
Table 4-6: Limit-setting processes - regional comparison.....	66
Table 5-1: Role and level of involvement of survey respondents in the limit setting processes.....	68
Table 5-2: Non-negotiable elements of a legitimate process	105
Table 5-3: Comparative assessment - % favourable responses provided.....	108
Table 6-1: Key difference and similarities between Otago and Selwyn Waihora processes.....	121

ABBREVIATIONS

CWMS	Canterbury Water Management Strategy – Strategic Framework 2010
ECan	Environment Canterbury / Canterbury Regional Council
ECan Act	Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010
LAWF	Land and Water Forum
LWRP	Land and Water Regional Plan
MfE	Ministry for the Environment
MPI	Ministry for Primary Industries
NIWA	National Institute of Water and Atmospheric Research (Limited)
NPSFWM	National Policy Statement for Freshwater Management
ORC	Otago Regional Council
PC6A	Plan Change 6A
RMA	Resource Management Act 1991
RPS	Regional Policy Statement
s.	Section (of an Act).
ZIP	Zone Implementation Programme

All sections of legislation, unless otherwise stated, are to the RMA

1. Introduction

Water management and policy development in New Zealand is a contested issue, with a history characterised by polarised positions, fragmented communities and costly court battles. While New Zealand's freshwater is considered to be good overall, rating well globally, both its quality and the quantity available for use has declined (MfE, 2013a). Increasing demands for water, driven by land use intensification, threaten to exacerbate this deterioration, and as New Zealand tries to maximise the value gained from its water resource, conflicts between its users have been mounting over what sustainable water and land use means and how to achieve it. Agreement about how and where water should be used and the quality to be maintained has proven difficult to establish.

New Zealand's Resource Management Act (RMA) 1991 promotes sustainable, integrated environmental management and gives regional councils primary responsibility for water management. While water contamination from point source discharges has reduced significantly under the RMA, the water quality deterioration in lowland streams and iconic lakes, the over-allocated surface water and declining groundwater resource, and the increasing incidence of cumulative diffuse pollution, all indicate that councils have had difficulty fulfilling this responsibility effectively (Weber, Memon and Painter, 2011). In response to these challenges and deficiencies, various government-led initiatives over the last decade have sought to identify and progress policy options for dealing with freshwater management issues. The most recent initiative resulted in the Land and Water Forum (LAWF) - a diverse group comprising primary industry representatives, environmental and recreational non-governmental organisations, iwi and other organisations with an interest in freshwater and land management - being mandated by New Zealand's central government, to recommend potential reform to the country's freshwater management system.

LAWF accepted that a central reason for the declining trend in New Zealand's freshwater quality and availability is the failure to set or manage resource limits (Land and Water Forum, 2010, p. 13). This, in turn, has been attributed to the difficulty of involving stakeholders and iwi in a robust, meaningful way in policy development and decision making (Land and Water Forum, 2010) and as a result the conventional top-down water planning processes have become characterised by conflicting science and opposing viewpoints. Therefore, one of the fundamental principles of setting limits into the future, advocated by LAWF, is a move away from this top-down approach to one

where stakeholders and communities work collaboratively to resolve diverse perspectives and values and achieve community-accepted policy outcomes.

Collaborative approaches are defined by Lubell et al. (2010), as 'inclusive decision making processes that bring together multiple stakeholders, help build networks and trust, emphasise consensus decision procedures and voluntary compliance' (p. 288). Conley and Moote (2003) summarise the benefits of collaboration, suggesting that it reduces conflict among users, builds social capital, allows environmental, social and economic issues to be addressed in tandem, and produces better outcomes in complex, uncertain and contentious situations. Appelstrand (2002) also submits that collaborative approaches are economically efficient, promoting more rational and shorter processes that result in less obstruction and more robust decisions. This is echoed by LAWF, who advocate collaborative decision making to reduce the time taken to develop freshwater plans and policy, and produce 'effective, durable and practical solutions' that are 'more resilient and adaptive to change' (2012a, p. 4).

In New Zealand, collaborative initiatives are becoming common. In the Manawatu catchment, the Manawatu River Leaders Accord was signed by iwi, environmental interests, farming and industry representatives and local government, to take action to improve river health. In Bay of Plenty, the Lake Rotorua Primary Producers Collective, Federated Farmers and the regional council have signed a Memorandum of Understanding agreeing on a pathway to reduce nutrients entering the Lake. In Waikato, the Collaborative Stakeholder Group (CSG) was established as a means for the Waikato Regional Council and local iwi to engage stakeholders and the community in a plan change process through 'Healthy Rivers: Plan for Change/Wai Ora: He Rauaki Whakapaipai'. The CSG's role is to review and discuss the technical material and public feedback gathered through consultation, and ultimately makes recommendations to the decision makers. Similarly, in Canterbury, the Canterbury Water Management Strategy (CWMS) is being implemented by community-based Zone Committees who have been tasked with preparing Zone Implementation Programmes (ZIP) of actions to address freshwater issues in their zone, working in consultation with the local community. While these collaborative approaches have different origins, drivers, governance arrangements, formalisation processes and legal standing, all are centred on the notion that collaboration is 'a good thing' and will deliver better outcomes.

New Zealand's central government endorsed the concept of collaboration in the 2013 Freshwater Reforms, which propose an amendment to the RMA to provide for a

collaborative planning process that councils may choose when preparing, changing, and reviewing freshwater policy statements and plans. This alternative process emphasises a partnership between councils and the community early in the planning process to jointly explore options and solutions. It provides for the appointment of a collaborative stakeholder group to advise the council as the plan develops, and proposes limitations to the right of appeal. This proposed amendment is based on the assumption that getting early community buy-in in the planning process and changing the appeal rights to incentivise collaboration will result in less litigation, thereby increasing certainty and saving time and money.

Yet, while collaborative planning and decision making approaches have gained momentum and become more widespread in New Zealand and further afield, so too has the level of scrutiny and the call to evaluate their effectiveness (Conley and Mooto, 2003). Questions emerge relating to whether the collaborative process is truly inclusive and representative, whether the wider community supports and trusts the collaborative group, whether diverse perspectives can be resolved to produce enduring solutions and whether the outcome really reflects participant's views, delivers a high quality environmental policy and increases the likelihood of successful implementation and compliance. Each of these factors relates to and provides some insight into the overall legitimacy of the collaborative approach.

The notion of legitimacy relates to 'the belief that authorities, institutions and social arrangements are appropriate, proper and just' (Tyler, 2006, p. 376). It has importance for decision makers and regulators because it facilitates citizen cooperation and a willingness to accept decisions and rules, thereby making the implementation of decisions easier (Tyler, 2006). This legitimacy belief is particularly important in inherently controversial natural resource planning which involves allocating scarce public goods and resources (Bekkers and Edwards, 2007). Therefore, if central and local government wish to promote and pursue collaborative planning in New Zealand, being able to verify the legitimacy of the approach is essential.

It is suggested by Leach, Pelkey and Sabatier (2002), that given both the promises and pitfalls attached to the notion of collaboration, participants need to be fully aware of the risks and opportunities and know whether the time, money and effort they invest in collaboration is likely to produce the desired results. Given the growing application of collaborative approaches in New Zealand it is timely to consider their legitimacy. Weible and Sabatier (2009) note that literature related to the benefits of the collaborative over conventional top-down processes, is generally dominated by case

studies of either process, but rarely both. It is appropriate, therefore, to assess the legitimacy of collaborative approaches compared to the more conventional council-led top-down process, to provide insight into which arrangement is more likely to generate robust legitimacy beliefs.

1.1 Aim and Objectives

This research aims to assess the legitimacy of collaborative planning in the context of setting water resource limits. To achieve this aim, the research has the following objectives:

1. To review the theory of collaborative planning and decision making, and the concept of legitimacy.
2. To explore the relationship between the two theoretical concepts.
3. To develop a framework for assessing legitimacy.
4. To describe the environmental and institutional context in which water resource limits are being set in New Zealand.
5. To apply the legitimacy framework to two water resource limit setting case studies – a collaborative planning process and a conventional top-down planning process - to assess the legitimacy of each process and the elements that promote or challenge legitimacy claims.
6. To evaluate the legitimacy of collaborative planning, compared to conventional top-down processes, and provide insight into how local government can design and implement limit-setting processes to ensure legitimacy.

1.2 Limitations

Research limitations have been identified related to firstly, the measurement of participant perceptions and secondly, the timing of data collection.

Conley and Moote (2003) suggest the most common data-gathering method used to evaluate collaborative or participative processes is to ask participants about them. This research, therefore, focusses on measuring participant perceptions. However, this limits the results to the perspectives of those who have been identified to have participated in the study, and largely excludes those parties who did not directly participate in the process but may have been affected by it.

The timing of this research presents a limitation as at the time of data collection, the case studies were at different stages of the policy development cycle. In Selwyn Waihora, the ZIP Addendum had been presented to and accepted by the ECan Commissioners and the next step was to convert these recommendations into a sub-

regional section for notification. In Otago, the Council decisions had been released and the process was in Environment Court mediation. Each of these – the acceptance of the ZIP Addendum and the release of the Council decisions - mark significant milestones though neither represent the final ‘end point’. The timing difference is likely reflected in the responses. It is possible that, without knowing the final decision, some views of the participants may be influenced by what they anticipate the outcome may be, rather than the actual process they had been involved in; on the other hand, it may mean that the information garnered from participants is free of influence from the final decision.

1.3 Structure of thesis

Chapter two reviews the literature underpinning this research. It provides an overview of the theory of collaborative planning and decision making and details the benefits and limitations of collaboratively involving citizens in policy development. It explores the concept of legitimacy, its importance and how it has been defined and assessed within literature and concludes by developing a set of criteria and a framework for assessing the legitimacy.

Chapter three describes the research design and methods, and addresses ethical issues relating to the research.

Chapter four outlines the environmental, legislative and planning context within which freshwater limits are set in New Zealand. It summarises the current state and pressures on the water resource, and strategies initiated to respond to these challenges. This is followed by an overview of the state of the water resource in Canterbury and Otago as the two case study regions, and the limit setting approach adopted in each region.

Chapter five presents the results of the legitimacy assessment in each case study region.

In chapter six, the results are discussed and compared with literature reviewed in chapter two. The characteristics of each limit setting process, promoting or challenging legitimacy claims, will be identified and explored.

Finally, chapter seven evaluates the legitimacy of collaboratively made planning and decision making processes for managing water. In this concluding chapter, the main findings from the research as they relate to the research aims and objectives are presented.

2. Theory and Practice

2.1 Introduction

This chapter establishes a framework to assess the legitimacy of planning and decision making processes. Firstly, it overviews the theory of collaborative planning and decision making, its theoretical foundations and its rise as an alternative to conventional top-down governance arrangements. It details the benefits and limitations of collaboratively involving citizens in policy development. Secondly, it explores the concept of legitimacy, its importance and how it has been defined and assessed within literature. Building on these two concepts, this chapter concludes with the establishment of a framework and a set of criteria for assessing the legitimacy of both conventional and collaborative planning and decision making processes.

2.2 Collaborative planning and decision making

Collaborative planning and decision making has emerged in recent years as an alternative to conventional hierarchical arrangements. While adopting a collaborative approach has many benefits, there are also some significant limitations.

2.2.1 Conventional forms of governance

Until recently, conventional top-down forms of governance have been the norm, operating through command and control regulation (Gunningham, 2008; Kronsell and Bäckstrand, 2010) and comprising elected representatives who set policy and governmental agencies who implement and enforce it (Connick and Innes, 2003). Under this approach, elected representative are expected to 'resolve inevitable conflicts arising among the different interests in an equitable manner that satisfies the needs of society while still protecting the environment' (Randolf and Bauer, 1999, p. 171). This is based on the assumption that if the decision makers are provided with sufficient information and expertise, they will be able to develop socially acceptable policy outcomes. Decision making under such a system is, therefore, driven by rational scientific or economic analysis (Innes and Booher, 2010; Kronsell and Bäckstrand, 2010).

Gunningham (2008) notes that these conventional arrangements generally involve only two parties: the regulator (the government agency) and the regulated (people whose actions are directly controlled by policy). Beyond these two parties, broader public interest or involvement is commonly limited to voting for elected representatives (Parkins and Mitchell, 2005). Where government agencies do provide for public participation in decision making, this is often limited to the one-way information sharing

and commenting on already developed plans and initiatives (Benson, Jordan, Cook and Smith, 2013; Chakraborty, 2012). Fish, Ioris and Watson et al. (2010) suggest that in such cases of limited and short-term participation, there is little incentive to seek common ground and parties are more likely to promote and pursue individual goals.

In environmental policy, Gunningham (2008) acknowledges the achievements of command and control regulation in halting, or at least slowing some 'first-generation' environmental problems such as point source water and air pollution. However, contemporary 'second generation' problems present a different challenge, especially as they relate to public, common pool resources such as water (Bäckstrand, Khan, Kronsell, and Lövbrand, 2010; Gunningham, 2008). These problems are often trans-boundary and cross-sectoral, varying in their temporal and spatial effects (Bäckstrand et al., 2010) and are becoming increasingly common as resources become scarce (von Korff, Daniell, Moellenkamp, Bots and Bijlsma, 2012). They are epitomised by high levels of complexity, interconnectedness, scientific uncertainty and a multitude of competing interests and goals (Lachapelle, McCool and Patterson, 2003; Lejano and Ingram, 2009; Rodela, 2012; von Korff et al., 2012). Decision making is often contentious, with high stakes in terms of livelihoods, power, finances and cultural identity (Alexander, Moglia and Miller, 2010). As such, these second generation environmental problems have been referred to as 'turbulent' and 'wicked' (Lachapelle et al. 2003; Rittel and Webber, 1973; Trist, 1980) and incompatible with conventional decision making approaches which lack flexibility and responsiveness (Gunningham, 2008). Furthermore, because conventional approaches often place little importance on seeking effective local solutions, they are less likely to generate the wide knowledge base required to address the 'wickedness' of the problems. These limitations become increasingly apparent in circumstances where "scientific knowledge is limited, where the answers are unclear and gradually evolving, and where experimentation and adaptation are paramount" (Gunningham, 2008, p. 51). Against this background, alternative governance systems have been encouraged.

2.2.2 Collaboration as a new mode of governance

Over recent decades, a new form of governance has emerged to replace the conventional top-down and increasingly adversarial arrangements (Ansell and Gash, 2007). In environmental policy literature, these new modes have been given names such as collaborative (Ansell and Gash, 2007; Gray, 1985; Memon et al., 2012), deliberative (Bäckstrand et al., 2010) and network governance (Bekkers and Edwards, 2007; Fenger and Bekkers, 2007; Khan, 2010; Kronsell and Bäckstrand, 2010).

Ansell and Gash (2007), who reviewed 137 cases of collaborative governance across various policy sectors, define collaborative governance as

a governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programmes or assets (p. 544).

Gray (1985) further asserts that collaborative governance is not about one individual making a decision, but rather, a pooling of knowledge and resources so individuals or organisations can solve the problems neither can solve alone. Collaboration involves 'exchanging information, altering activities, sharing resources and a willingness to enhance the capacity of another for mutual benefit and a common purpose' (Himmelman, 2001, p. 278) and Salmon (2012) suggests such arrangements involve accountable stakeholders resolving a policy issue through informed consensus. Four fundamental elements of collaborative governance are therefore 1) participants engage directly in decision making; 2) power-sharing between public agencies and the community and stakeholders; 3) decision making by consensus; and 4) interdependence among parties in developing the most effective solution.

Collaborative governance, therefore, signals a change in the relationship between the regulator and the public that differs from conventional decision making arrangements. The public assume a greater role in planning, regulation, policy implementation, monitoring and evaluation – functions that have generally been the sole responsibility of governing bodies (Fish et al. 2010; Gunningham, 2008). While in its purest form, self-governing communities would be free from any government involvement (Arnstein, 1969; Gunningham, 2008; Ostrom, 1990) this is rarely the case. Rather the two parties share roles and the focus is on creating a 'common and trustworthy policy process through interaction, communication, negotiation and exchange' (Fenger and Bekkers, 2007, p. 24). It is assumed that resulting from this interaction, the quality and performance of environmental decision making will strengthen (Bäckstrand et al., 2010).

2.2.3 Foundations and rise of collaborative planning and decision making

Discussion and debate on the role citizens play in developing public policy is not new, being central to the social movements in the 1960s (Papadopoulos and Warin, 2007). Godschalk and Mills (1966, p. 88) advocated a collaborative approach to policy development and planning, asserting that 'meaningful and effective planning must be based on two-way communication flow between the public and the planning agency'.

Similarly, Arnstein's (1969) 'ladder of participation' presented a scale from manipulation to citizen control, signifying that greater government control means local communities have less opportunity to be involved in the critical stages of decision making. Through this ladder, Arnstein argues for a more meaningful role for the public in decision making and greater citizen involvement and control.

Building on Arnstein's typology, Jürgen Habermas' framework of communicative rationality provided the foundation for collaborative governance (Saravanan, McDonald and Mollinga, 2009). From the Frankfurt School of critical theorists, Habermas contends that if communicative practice meets conditions of 'ideal speech' what emerges can be considered rational. The ideal speech situation is one where participants engage in argumentation in an arena that is open to all affected parties and excludes all power or force, except the force of a better argument (Habermas, 1984). While Habermas acknowledges that such a situation is difficult to achieve, he argues that it provides a model which practitioners should strive to achieve.

Habermas' logic has resemblances in Elinor Ostrom's (1990) work on collective action in the commons and Innes and Booher's (2010) theory of collaborative rationality. Ostrom (1990) advanced the theory of collaborative resource management, investigating governance models for situations where there are multiple users of common pool resources which are subject to scarcity and where one user can affect the use by others. Ostrom advocates for developing a cooperative strategy with all users in which they agree on how the resource capacity will be shared. The model's effectiveness relies on transparent and joint monitoring of the resource and its use, institutional arrangements that reflect the collaborative strategy, a commitment to the rules and agreed approaches to enforcement and conflict resolution. To be considered rational, this requires communication, power sharing and trust between the collective users. Innes and Booher (2010) make the case for collaborative rationality in decision making which emphasises the need for face to face dialogue and multiparty negotiation. They state that for a collaborative process to be rational, three conditions are critical: participant diversity, participant interdependence and participant engagement in authentic face-to-face dialogue.

With the theoretical foundations of collaborative governance in place, over recent decades there has been an increasing emphasis on converting this theory into practice, particularly in the resource management field. The principle of participation in natural resource policy development was strongly enhanced at the 1992 UN Conference on Environment and Development (UNCED) where top-down decision making was

criticised. The Rio Declaration and Agenda 21 promoted citizen participation and put forward that local authorities should engage in bottom-up dialogue with citizens, local organisations and private enterprises before initiating and implementing projects (United Nations, 1992). Participatory governance has become increasingly institutionalised in the years since the Rio Declaration, further reinforced by the World Summit on Sustainable Development in Johannesburg in 2002 (Appelstrand 2012). Consequently, many countries have identified the need for, and right of the community to participate in natural resource decision making. These rights have been reinforced in national policy, such as the EU Commissions White Paper on Governance 2011 which called for participatory governance mechanisms, and the European Water Framework Directive (WFD) which supports involving diverse interest groups and the public in river basin management (European Commission, 2000). In New Zealand, this message has been enshrined in the Land and Water Forum's recommendations for water reform (Land and Water Forum, 2010).

2.2.4 Benefits of collaboration

The benefits of collaboration has been given extensive attention in literature (Ananda and Proctor, 2013; Conley and Moote, 2003; Irvin and Stansbury, 2004), and today there are high expectations attached to collaborative planning and decision making processes. Blackstock, Kelly and Horsey (2007) suggest that the assumption that collaboration is a 'good thing' is based on a combination of normative, substantive and instrumental reasoning.

Normatively, collaboration encourages and enriches social and individual learning (Blackstock et al., 2007). These social learning processes:

acknowledge that each interest group brings different information, values, capacities, perspectives, methods of learning, and stores of historical experience to any problem situation. In essence collaborative learning is integration of these diverse knowledge bases in ways that advance the collective decision making capability of all. (Landcare Research, in O'Connor, Small and Wedderburn, 2010).

There is a general acceptance in environmental policy literature that social learning increases public awareness of socio-environmental interactions, allows participants to search for and discover new common ground, enhances problem solving capacity and encourages collective action, all of which improve decision making (Cundill and Rodela, 2012; von Korff et al., 2012).

Substantively, multiple perspectives and diverse expert knowledge can improve understanding and assist in selecting appropriate alternatives (Blackstock et al., 2007). Participation is sought as a means of generating knowledge, recognising that even with the best technical information, the consequences of policy decisions can only be fully understood by involving the community. Blackstock et al. (2007) and Newig, Pahl-Wostl and Sigel (2005) recognise that where imperfect science, complexity and uncertainty exists, collaboration provides a means of embracing different perspectives and interests and incorporating diverse knowledge, information and experience into decision making. This is assumed to improve the quality of problem solving and yield outcomes that are more innovative and suited to local conditions than those developed at a broad scale (Bäckstrand et al., 2010; Carr and Halvorsen, 2001; Fenger and Bekkers, 2007).

Instrumentally, strong collaborative relationships can increase the acceptance of decisions and facilitate improved implementation, compliance and conflict resolution (Blackstock et al., 2007; Newig and Fritsch, 2009). Brody, Godschalk and Burby (2003) suggest that the up-front monetary and time investment required for collaboration can pay off when it comes to implementation. Furthermore, Lowery, Hoogland DeHogg and Lyons (1992) suggest that collaboration encourages empowered citizens to participate in other decision making processes, thereby having long-term benefits (Carr and Halvorsen, 2001). It is for these normative, substantive and instrumental reasons that Ansell and Gash (2007) suggest collaborative governance promises a 'sweet reward' (p. 561).

2.2.5 Limitations of collaboration

The growing body of literature asserting the advantages of collaboration reflects a rising confidence in the collaborative model. Yet, while the concept has gained momentum, it has also attracted criticism. As noted by Bäckstrand et al. (2010) its promise to deliver effective and legitimate policies is not 'embraced uncritically' (p. 16). Scepticism tends to focus on the issues or limitations relating to representation and inclusiveness, power dynamics, participant ability and rationality and the significant resources required.

Erling Klausen and Sweeting (2005) note the perception that collaborative governance arrangements are 'wanting' in terms of accountability and representativeness due to the selectiveness or randomness of the inclusion process. Additionally, because many citizens participate on a voluntary basis, collaborative groups may be strongly dominated by paid advocates, by those whose livelihoods or values are strongly

affected by the decision being made, or by those whose lifestyle allows them to participate regularly (Irvin and Stansbury, 2004). As a result, the general public interest is often not sufficiently incorporated into local decision making (Conley and Moote, 2003) and they may feel disenfranchised from the decisions being made (Tan, Bowmer and Mackenzie, 2012).

Ansell and Gash (2007) identify the potential for powerful stakeholders to manipulate a collaborative process and similarly, Salmon (2012) notes the perception that collaborative arrangements provide the powerful with the opportunity for private deals. Furthermore, Irvin and Stansbury (2004) warn that a collaborative group has the potential to endorse a decision put forward by, and favourable to, the powerful or vocal group members, rather than the wider public.

Scepticism also centres around the proposition that the public are limited in their capability to be effectively involved in complex decisions, due to deficiencies in their knowledge and reasoning abilities (Rowe and Frewer, 2000). In complex situations, personal beliefs and motivations take hold and important factual information can be ignored and participants default to 'judgemental instincts' (Gregory, McDaniels and Fields, 2001, p. 418). Under these circumstances, Slovic, Fischhoff and Lichtenstein (1976, p. 169) suggests that participants are likely to 'systematically violate the principles of rational decision making' (Gregory et al., 2001). Consequently, Gregory et al. (2001) strongly criticises consensus-based collaborative approaches, suggesting that processes based on the unanimous agreement is likely to be strongly influenced by individual personalities. They assert that,

it seems at best awkward and at worst illegitimate, for a resource management agency to delegate policy responsibilities to a group of concerned parties who have such direct (albeit often conflicting) interests in the outcomes (p. 418).

Likewise, Irvin and Stansbury (2004) warn that locally based decisions are an opportunity for 'persistent selfishness' to emerge and for participants to influence policy for their own personal gain.

Several authors warn that collaboration is resource hungry (Appelstrand, 2002; Brody et al., 2003; Conley and Moote, 2003; Gunningham, 2008; Irvin and Stansbury, 2004; Kallis, Kiparsky and Norgaard, 2009). Significant time, effort and funding can be required to implement successful collaborative processes, both for the facilitating agency and for the participants involved. A lack of commitment by the regulator or

process managers to provide these resources has the potential to create distrust in both the process and its outputs (Ansell and Gash, 2007).

In light of these limitations, Lubell et al. (2005, p. 293) who examined watershed in the United States conclude that 'like the salmon swimming upstream, collaborative approaches to watershed management expend huge resources, and they are time consuming, risky, and difficult'. Given this dilemma, Thomas (1993) suggests that the extent of public involvement required depends on the problem and its attributes - some complex issues demand more involvement, others less. Similarly, Gunningham (2008) asserts that collaborative arrangements have no attraction in addressing problems that hierarchies or markets can address at less cost and in a shorter time frame, and Huxham (2003) proclaims that collaboration is resourcing consuming and agonising and 'don't do it unless you have to' (p. 421).

2.3 Legitimacy

Given both the benefits and limitations attached to collaboration, it is appropriate that the effectiveness of collaborative processes is evaluated. The concept of legitimacy provides a valuable foundation from which to develop an evaluation framework.

2.3.1 Defining legitimacy

Tyler (2006) defines legitimacy as 'the belief that authorities, institutions and social arrangements are appropriate, proper and just' (p. 376). In conventional decision making systems, authorities gain legitimacy because the representatives are elected via majority vote (van Buuren, Klijn and Edelenbos, 2012). This account of legitimacy is, therefore, closely related to authority, where a legitimate authority is one that is 'recognised as valid or justified by those to whom it applies' (Bekkers and Edwards, 2007, p. 6).

A second thread of legitimacy has a procedural emphasises. Suchman (1995) define legitimacy as "the generalised perception or assumption that the actions of an entity are desirable, proper and appropriate within some socially constructed system of norms, values, beliefs and definitions" (p. 574). The decision making process is, therefore, fundamental to the perceived legitimacy of authorities and institutions(Tyler, 2006).

As legitimacy is often based on belief or perception, scholars have recognised its evolving and dynamic nature (Gearey and Jeffrey, 2006). Beetham suggested that legitimacy 'may be eroded, contested or incomplete; and judgements about it are usually judgements of degree, rather than an all-or-nothing' (1991, p. 20). Legitimacy

is, therefore, not fixed or universal but rather is influenced by the context in which it is being assessed (Moug, 2011). It is 'situated', given meaning by different people in different places (Connelly, Richardson and Miles, 2006) and is negotiated and interpreted through local practices and interactions (Häikiö, 2012). As a consequence, legitimacy is a 'potentially volatile attribute' (Gearey and Jeffrey 2006, p. 130), and the undertaking to secure legitimacy can be a difficult, on-going exercise.

2.3.2 Importance of legitimacy

Despite the challenges arising from its volatility, the importance of securing legitimacy for both a governing entity and any action or process undertaken is thoroughly documented. While such entities can use coercive power - through surveillance, penalties, sanctions or incentives - to exercise their influence, relying solely on this power to ensure compliance is costly and inefficient (Tyler, 2006). Alternatively, if those entities can demonstrate that their authority and decision making procedures are appropriate, proper and just, citizens are more likely to comply voluntarily to decisions and rules 'by virtue of who made the decision and how it was made' (Tyler, 2006, p. 377). This, in turn, facilitates public cooperation and a more efficient implementation process that is less reliant on costly monitoring or enforcement (Hechter 2009; Tyler, 2006; Valkeapää and Karppinen, 2013).

Hanberger (2003) explores the long-term implications of securing – or not securing – legitimacy, suggesting the choices made during policy development and decision making may have a significant influence into the future. If an entity is perceived to have a successful history of problem solving and addressing public needs, that entity is likely to retain a certain amount of 'legitimacy capital'. Without this capital, such entities can struggle to deal with urgent problems and in cases where legitimacy has been severely eroded there 'is no easy way back' (Hanberger, 2003, p. 271). It is, therefore, accepted that governing entities will benefit and find governing easier and more effective when legitimacy beliefs are held by the public (Tyler, 2006). Thus, legitimacy, as an indicator of the overall confidence in an entity and the processes they run, is an essential element of successful policy development and decision making.

2.3.3 Conceptualising legitimacy: input, output and throughput

The trend from conventional to more collaborative governance approaches has been outlined in the preceding discussion. While differences prevail in their structure and procedures, both arrangements must demonstrate legitimacy to be accepted (Erling Klausen and Sweeting, 2005).

The complexity of 'legitimacy', how it is derived, what influences it, and competing claims as to what counts as legitimate, can make it a difficult concept to understand. Bekkers and Edwards (2007) suggest that legitimacy might be regarded as the political scientists' equivalent of the economists' invisible hand:

we know it exists as a force that holds societies together, but we cannot give very satisfactory explanations of how to create it or why it is sometimes very strong and sometimes seems to disappear (p. 37).

Consequently, a closer look at the legitimacy concept reveals a 'Babel-like confusion of definitions, perspectives and interpretations' (Bekkers and Edwards, 2007, p. 36). However, despite these differences, there is a conceptualisation of legitimacy that has gained broad acceptance in literature, based on the principles of input, throughput, and output legitimacy.

Scharpf (1999) classified legitimacy in terms of input-oriented authenticity and output-oriented effectiveness. Input-oriented legitimacy is judged in terms of the responsiveness to citizens' concerns as a result of participation 'by the people', while output legitimacy is judged in terms of the decision making, the delivery of the decision, and the effectiveness of policy outcomes 'for the people' (p. 6). Building on this framework, a third legitimacy criterion, that of throughput legitimacy, has been more recently derived (Bekkers and Edwards, 2007; Haus and Heinelt, 2005; Schmidt, 2013). Throughput legitimacy focusses on the quality of the process 'with the people' and the interaction of the actors involved during the discussion and development of policy options.

An array of legitimacy criteria has been presented in literature related to participatory natural resource processes, collaborative planning and management and democratic theory. Table 2-1 summarises these criteria, revealing how different authors articulate their criteria based on input and output, and where acknowledged, throughput legitimacy. In some cases, the authors did not refer to this classification at all. The ensuing discussion reviews the literature, addressing each principle in turn.

Table 2-1: Overview of legitimacy criteria

Criteria	Input	Throughput	Output	Unspecified
Inclusiveness: openness and access	Bekkers and Edwards (2007); Haus and Heinelt (2005); Kronsell and Bäckstrand (2010); Schmidt (2013)	Appelstrand (2002); Bekkers and Edwards (2007); Schmidt (2013); Wallner (2008)		Leach (2006); Lockwood (2010); Pinkerton and John (2008); Salmon, 2012; Van Buuren et al. (2012); Webler et al. (2001)
Representativeness	Appelstrand (2002); Bekkers and Edwards (2007); Bernauer and Gampfer (2013); Schmidt (2013)			Leach (2006); Mascarenhas and Scarce (2004); Rauschmayer et al. (2009); Salmon (2012)
Efficiency		Schmidt (2013)		Mascarenhas and Scarce (2004); Webler et al. (2001)
Accountability	Kronsell and Bäckstrand (2010)	Haus and Heinelt (2005); Schmidt (2013)	Bekkers and Edwards (2007)	Leach (2006); Lockwood (2010); Mascarenhas and Scarce (2004); Rauschmayer et al. (2009); Salmon (2012); Van Buuren et al. (2012)
Transparency	Bernauer and Gampfer (2013)	Appelstrand (2002); Haus and Heinelt (2005); Schmidt (2013)		Leach (2006); Lockwood (2010); Rauschmayer et al. (2009); Salmon (2012); Webler et al. (2001)
Quality of the deliberation	Kronsell and Bäckstrand (2010)			Leach (2006); Salmon (2012);, Van Buuren et al. (2012);
Procedural inclusiveness				Lockwood (2010)
Ground rules		Appelstrand (2002); Bekkers and Edwards (2007)		Moug (2011); Hegtvedt and Johnson (2009)
Information provision and sharing	Appelstrand (2002)	Appelstrand (2002)		Pinkerton and John (2008)
Time		Wallner (2008)		Webler et al. (2001)
Policy related performance/ effectiveness			Bekkers and Edwards (2007); Haus and Heinelt (2005); Kronsell and Bäckstrand (2010); Schmidt (2013)	Moug (2011)
Reflection of participation in decision; empowerment; political commitment			Appelstrand (2002); Schmidt (2013); Wallner (2008)	Leach (2006); Pinkerton and John (2008); Salmon (2012)
Lawfulness; right to legal review or appeal				Leach (2006); Rauschmayer et al. (2009); Salmon (2012)
Communication	Schmidt (2013)		Schmidt (2013)	
Resource availability and adequacy	Appelstrand (2002)			
Independent facilitation; impartiality	Appelstrand (2002)			Leach (2006); Salmon (2012)
Monitoring and evaluation	Appelstrand (2002)		Appelstrand (2002)	
Public involved in implementation			Appelstrand (2002)	
Quality of decision making		Bekkers and Edwards (2007)		
Problem solving ability	Bernauer and Gampfer (2013)		Haus and Heinelt (2005)	
Consent/endorsement	Haus and Heinelt (2005)			Beetham, 1991; Hegtvedt and Johnson (2009); Moug (2011)
Evidence / science based				Pinkerton and John (2008); Webler et al. (2001)

Input legitimacy

The notion of 'authentic participation' was proposed by Haus and Heinelt (2005, p. 14) as referring to the opportunity provided to get 'ones voice heard and ones vote counted'. Consistent with this concept, input legitimacy is based on the openness and access of the process, the opportunity for citizens to influence the agenda-setting process, and the quality of representation across interests and preferences (Bekkers and Edwards, 2007; Schmidt, 2013)

Inclusiveness

Lockwood (2010) asserts that incorporating diverse perspectives and ideas into decision making is likely to yield more effective and innovative solutions to complex problems. It broadens the knowledge and expertise base, provides greater opportunities to build trust, and builds capacity to manage competing interests and mediate conflict. Broad public involvement in policy development and decision making has, therefore, been advocated and various authors have identified inclusiveness as a fundamental legitimacy criterion.

Under conventional hierarchical arrangements, the most basic opportunity that citizens have to participate in decision making is their right to vote (Bekkers and Edwards, 2007) and societal demands are generally expressed through political pressure groups, lobbying, demonstrations and letter writing in an effort to influence elected representatives. While such channels are open and accessible to all citizens, they generally represent detached or 'indirect' involvement (Erling Klausen and Sweeting, 2005; Schmidt, 2013). Beyond providing this voting right, a governing entity can either isolate itself when making decisions, or engage more meaningfully with constituents. It is asserted that an entity that chooses the latter approach will increase its legitimacy and the legitimacy of the policy decision in the eyes of stakeholders and wider public (Wallner, 2008). Legitimacy is, therefore, more likely to be achieved when elected members sufficiently represent their constituencies interests *and* relevant interests are given the opportunity to be involved.

From this emerges the question of whether inclusion means participation by all or participation by some. Consistent with Habermas' communicative rationality theory which emphasises the requirement for full inclusion, Benhabib (1996. p. 68) asserts that 'legitimacy in complex democratic societies must be thought to result from the free and unconstrained deliberation of *all* about matters of common concern' (emphasis added). Parkins and Mitchell (2005, p. 534) agree, suggesting that ideally '*all* concerned citizens would have opportunities to participate in setting environmental

policy by joining the efforts of scientists, technicians, and government officials within a democratic setting' (emphasis added). Hence theoretically, if participation is restricted to a smaller select stakeholder group, legitimacy may be questioned. However, it has also been recognised that in reality, time and financial constraints make 'collective decision making by anything more than a tiny majority inconceivable' (Dryzek, 2001, p. 652).

Brody et al. (2003) suggests that the stage at which citizens are first invited to participate is a key factor influencing perceived inclusiveness and, therefore, input legitimacy. To be meaningful, community and stakeholder involvement must occur when all options are open (Appelstrand, 2002) and be 'early, often and [be] ongoing' (Wondolleck and Yaffee 2000, p. 103). Similarly, Bartholomew (2007) warns against initiating a process with a pre-determined agenda in mind, suggesting that the public should be incorporated in the agenda-setting and exploration process before any words are written.

The notion of internal and external *exclusion* has been explained by Parkins and Mitchell (2005, p. 534-5). External exclusion refers to situations 'that keep some individuals or groups out of the forum of debate or processes of decision making, or which allow some individuals or groups dominative control over what happened in them' (Young, 2000, p. 52). Leach (2006) re-emphasised Ashford and Rest's (1999) warning that restricting such participation can encourage and intensify existing power inequities present in the community. Less noticeable internal exclusion may also arise when the community is included in the process, but when opportunities for input and discussion are limited to certain speakers or topics (Young, 2000).

Representativeness

Where inclusiveness relates to the opportunity provided to the community to enter the process, representativeness relates to the extent to which those entering represent broad values and interests. Leach (2006, p. 101), in analysing 76 watershed partnerships in California and Washington State, defines a representative process as one that 'ensures that the interests of all affected individuals are effectively advocated, either in person or through proxies'. Where Scharpf's (1999) notion of input legitimacy refers to obtaining representation of citizen demands through elections (Schmidt, 2013), collaborative representation is more complex with scholars identifying the need for balanced cross-sector participant involvement (Appelstrand, 2002; Biermann and Gupta, 2011). This latter concept of representation often refers to a reduced set of interests or stakeholders where stakeholders are 'all those who affect and/or are

affected by, the policies, decisions and actions of the system; they can be individuals, communities, social groups or institutions of any size, aggregation or level of society' (Grimble and Chan 1995, p. 114, In Parkins and Mitchell, 2005). The stakeholder-centred model of representation is founded on the rationale that those who have either a moral or economic stake in the decision are entitled to a 'seat at the table' (Leach, 2006, p. 101). Consequently, if any stakeholder questions the extent to which they are effectively represented in a process, the legitimacy of the deliberations and decisions may be doubted.

From their research in forest planning in British Columbia, Mascarenhas and Scarce (2004) propose two critical elements of collaborative representativeness. The first centres on the need to balance local and outside interests, reinforced by Newig and Fritsch (2009) who suggest that spatial scale can influence participants perceptions, interests and problem solving abilities. People both inside and outside the planning or project area will be affected by or have an interest in the decisions, and both may be able to influence the project interventions (Mirghani and Savenije, 1995), therefore, all should have the opportunity to be involved. The second focusses on achieving an appropriate mix of public and expert knowledge, though as already noted challenges can arise when the public are integrated into a technical process (Mascarenhas and Scarce, 2004). Further to these two representative elements, the need to secure and balance both urban and rural as well as environmental and economic interests and perspectives, are also identified in literature as a prerequisite of achieving legitimacy (Leach, 2006; Mascarenhas and Scarce, 2004; Overdeest, 2000;).

Achieving representation, however, is not easy and many factors can impede collaborative representation. Firstly, groups who may consider themselves interested or concerned may not have sufficient resources to be actively involved (Papabopoulos and Warin, 2007). Leach (2006) recognised that the most expensive resource in collaboration is time – while some participants may be fully compensated for their time, others partake voluntarily and representation will suffer if the personal costs of participating are prohibitive. Secondly, groups may lack the credibility required to have their interests acknowledged by other participants or the decision makers, and may need to validate their interests to be perceived as a legitimate contributor (Cliquet, Kervarec, Bogaert, Maes and Queffelec, 2010; Papabopoulos and Warin, 2007). Thirdly, not all actors are willing to participate, especially if they perceive there to be alternative means by which they can more effectively influence the decision makers (Papabopoulos and Warin, 2007). Finally, Prell, Reed, Racin and Hubacek (2010) found that, while engaging diverse stakeholders is important, identifying where the

diversity lies can be difficult as an individual's views and values can be more influenced by whom individuals associate and speak with, rather than their organisational affiliation. Consequently, bringing together stakeholders from a range of organisations does not guarantee true diversity or representation. Therefore, while various scholars have identified representativeness as a central criterion in achieving legitimacy, there are many factors that may prevent true representativeness being achieved.

Throughput legitimacy

Bekkers and Edwards (2007) and Schmidt (2013) argue the need to look beyond the participation of the community or the effectiveness of the outcomes and suggest that the procedural quality or 'throughput' is equally important. Being process-based, throughput legitimacy is founded on the interactions of participants, the appropriateness of the decision rules and the quality of procedures that lead to decision making. Schmidt (2013) judges throughput legitimacy against the efficiency, accountability, transparency and the quality of procedures 'with the people' (p. 2).

Efficiency

Throughput efficiency relates to the adequacy of the decision making rules that governing entities follow (Bekkers and Edwards, 2007; Schmidt, 2013). Bekkers and Edwards (2007) note the distinction between decision making based on aggregating individual preferences (majoritarian) or on integrating mechanisms such as deliberation and debate (consensus), and instruct that both aggregative and integrative mechanisms have their place in a decision making system. Some authors, however, favour consensus such as Biermann and Gupta (2011) who suggest that decision making based on consensus rules maximises procedural legitimacy by giving all participants a voice. Other authors recognise the challenges associated with implementing consensus because

consensus building is time consuming and requires skill and training and is only appropriate in situations of uncertainty and controversy where all stakeholders have incentive to come to the table and mutual reciprocity in their interests (Innes, 2004 p. 5).

Further scepticism surrounding consensus centres on the opportunity for small minorities to block valuable reform or, alternatively, the potential for minority groups to be suppressed, and the prospect that conflict is viewed as a problem to be overcome rather than a signal that further discussion is necessary (Gregory et al., 2001). Given these challenges, some authors have advocated for 'consensus-oriented' processes

recognising that collaborative forums may not succeed in reaching full consensus, but they will at least strive to discover areas of agreement (Ansell and Gash, 2007; Connick and Innes, 2003; Gregory et al., 2001).

Accountability

Accountability is considered a fundamental prerequisite for achieving legitimacy in any governing system (Häikiö, 2012). In representative systems, there is a clear 'principal-agent' relationship where elected members (agents) are answerable to their constituents (principals) and there are sanctions available when the agent's actions or decisions are incompatible with the principal's values and interests (Kronsell and Bäckstrand, 2010). Voting enables constituents to approve or disapprove of an individual or governing entity and the aspiration of elected representatives to get re-elected will moderate their actions (Aars and Fimreite, 2005; Lockwood, 2010).

These sanctions are, however, largely absent in collaborative systems (Lockwood, 2010) and the lines of accountability – who is accountable for what and to whom – are blurred. As such, Papabopoulos and Warin (2007) assert that a participatory process is not automatically an accountable process. While elected representatives may take part in a collaboration and, consequently, may be answerable for the policies derived from it, the extent of their participation can vary (Aars and Fimreite, 2005). Issues may also arise in a collaboration if responsibilities are ill-defined or are delegated without sufficient resources to fulfil these responsibilities (Lockwood, 2010).

Collaborative approaches, therefore, require different measures of accountability (Häikiö, 2012). Reputational accountability, credibility, the availability of information, public access, publicity of proceedings and decisions, and robust monitoring mechanisms are proxy accountability indicators identified in literature (Aars and Fimreite, 2005; Kronsell and Bäckstrand, 2010).

Transparency

Scholars have noted the link between accountability and transparency (Aars and Fimreite, 2005; Schmidt, 2013). Transparency is a commonly advocated legitimacy criterion founded on the notion that citizens have the right to know about matters that affect them (de Fine Licht, 2011; Lockwood, 2010). Demand for transparency is based on the rationale that if the decision process is clearly articulated, citizens will better understand why it is impossible to satisfy everyone all the time. They will understand the challenges and tensions inherent in allocating and managing resources and consequently, are likely to find the decisions more acceptable (de Fine Licht, 2011).

Lockwood (2010) suggests three conditions to achieving transparency. Firstly, all decisions should be accessible to citizens with information available on who made the decision, what decision making method they used, who informed the decision and what analysis was undertaken. Secondly, citizens should have access to information outlining the reasons or justification behind why a decision was made. Thirdly, performance reporting must be available in order to reveal the progress, or lack of progress being made as a consequence of decisions. A process, therefore, will gain legitimacy if it is totally open, without any sense of secrecy in its proceedings (Webler, Tuler and Krueger, 2001). Rauschmayer and Wittmer (2006) do, however, suggest that because complex decision making processes can be difficult to communicate, it is appropriate to distinguish between transparency requirements for those directly involved in the process, and those who are not. For 'insiders', transparency in all aspects is required, while for 'outsiders' communication should be based on general aspects such as the decision rules and who participate, rather than a detailed explanation of what was debated.

Procedural inclusiveness

Where inclusiveness through accessibility and openness is a critical aspect of input legitimacy, *procedural* inclusiveness relates to the quality of the deliberation and is, therefore, a criterion of throughput legitimacy. Lockwood (2010) suggests that procedural or process inclusiveness is about governing bodies 'having an awareness of and valuing diversity, and having policies and structures to foster stakeholder contributions and engagement' (p. 760) and therefore involves accommodating and respecting diversity and debate. This aligns with Innes and Booher's (2010) notion of 'authentic dialogue' which requires that participants engage with each other in a deliberation that aligns with Habermas' ideal speech conditions; that is, it must be face-to-face, include all major interests and knowledge, be free from coercion or domination, and ensure participants have equal information and equal ability to challenge assumptions, speak and be listened to. A quality deliberative process, therefore, enables participants to have a 'voice', clarify preferences, critically examine each other's arguments, explore conflicting values, identify common interests, build shared knowledge and social capital, and develop creative and innovative solutions (Leach, 2006; Mascarenhas and Scarce, 2004; Papabopoulos and Warin, 2007).

Procedural inclusiveness is also influenced by the behaviour of participants and the ground rules controlling this behaviour, with a system that guarantees fair, non-arbitrary and non-corrupt behaviour more likely to be considered legitimate (Bekkers and

Edwards, 2007). Integrity and honesty must be demonstrated by decision makers in performing their duties, declaring conflicts of interests and not seeking to manipulate outcomes for personal gain (Lockwood, 2010; McKay, Murray and Ping Hui, 2011). Ground rules should also set out who else is participating, their role and when they may act, as these rules assist in controlling power relationships and increase trust among individuals that the process is fair and safe (Appelstrand, 2002; Rauschmayer and Wittmer, 2006).

Information provision and sharing

Leach (2006) asserts that legitimacy is also influenced by the quality of information and analysis that is utilised in decision making. Literature identifies three key conditions of securing informational legitimacy 1) the accuracy of information; 2) the communication of this information; and 3) the co-production of information.

The requirement for accurate and reliable information is a widely endorsed legitimacy criteria and Chakraborty (2012) warns that processes can break down if there is distrust or disagreement from stakeholders on the validity of the science. The analysis undertaken and analytical tools employed, therefore, must be transparent, trustworthy and from credible sources.

For people to competently understand, influence or make decisions, they must have access to and understand the relevant information. The way information is disseminated, therefore, plays an important role in securing legitimacy, and experts and facilitators need to be able to communicate complex ideas and provide knowledge in a usable form (Chakraborty, 2012; Rowe and Frewer, 2000). In their work in fishery management, Pinkerton and John (2008) conclude that knowledge sharing by scientific experts during the process played a key role in legitimising the subsequent policies; it is crucial that the science is communicated effectively and that time is taken to educate and discuss the information respectfully with the community. A significant barrier to securing throughput legitimacy is, therefore, the inability or unwillingness of experts to effectively share knowledge and build awareness in the local community (Boreux, Born and Lawes, 2009).

Appelstrand (2002) looks beyond the one-way flow of information from expert to participants, and instead encourages mutual two-way information sharing. Leach (2006) advocates 'joint fact finding' where participants work together to determine the scope or source of the issues, and both Weber et al. (2011) and Callon (1999) provide useful insights into 'civic science' and the 'co-production of knowledge' which involve

lay people in the production of knowledge. Such processes are characterised by the flow of information among scientists, policy and decision makers and society, for the purpose of integrating and managing data collection and analysis in decision making processes (Weber et al., 2011)

Time

The fundamental importance of having adequate time for robust policy development and decision making has almost universal agreement (Wallner, 2008). In a conventional top-down systems, Polsby (1984) argues that time facilitates 'policy incubation' where political actors 'take the idea up, reshape it, adapt it to their political needs, publicize it, and put it into the on-going culture of decision makers' (p. 153). This incubation serves to ensure that the proposals are secure in the minds of the decision makers and allows time to educate the community of the value of the proposal and rally support (Hacker, 1997, *In* Wallner, 2008)

In collaborative situations, Legacy (2012) asserts the need for sufficient time to enable participants to consider the issues and challenges together. It is noted that any attempt to reduce the time available to present or discuss information, or to cut the process short with a premature 'sunset date' may compromise legitimacy (Cliquet et al., 2010; Webler et al., 2001).

Output legitimacy

Further to the principles of input and throughput legitimacy, both the delivery of the decision and its effectiveness are fundamental in achieving legitimacy. Scharpfs (1998) notion of output legitimacy focusses on the ability of entities to govern effectively 'for the people' (Schmidt, 2013) and refers to 'the results of the process, to their quality and consequences' (Hurrelmann et al. 2005).

Two key criteria of output legitimacy identified in literature relate to the effectiveness of the policy decision to address an identified problem and the extent to which the policy outcomes resonate with the public. The lawfulness of the process is a further output legitimacy criterion, though its coverage in literature is minimal.

Outcome effectiveness

Output legitimacy relates to the performance of the policy decision and is based on the assertion that policies must be effective and community enhancing (Schmidt, 2013). As noted by Beierle (2002) advocates of rational technocratic decision making approach believe that the public interest is best served through the use of scientific or

economic analysis to identify the most socially optimal outcome; in contrast advocates of processes based on collaborative rationality argue for a more participatory and deliberative approach to identifying the public interest and values. They assert that that in uncertain and complex situations, local knowledge and community involvement can help prevent poor policy choices and improve output quality and effectiveness (Papabopoulos and Warin, 2007; Parkins and Mitchell, 2005).

Haus and Heinelt (2005) suggest that good policies are measured or judged according to their efficiency and effectiveness, that is:

- Whether decisions and their implementation achieve the intended objectives;
- Whether they are accepted and supported by society;
- Whether the decisions make the best use of given resources or are able to mobilise others.

Reflection of participation outcomes in the decisions

Literature suggests that it is not enough that policy outcomes are effective and efficient – to be considered legitimate they must also resonate and align with societal values and attitudes (Bekkers and Edwards, 2007; Schmidt, 2013; Wallner 2008). This supports Dryzek's (2001) notion of discursive legitimacy, which states that a decision should be consistent and reflect the discourses present in society.

A fundamental element in securing output legitimacy is, therefore, the sincerity displayed by decision makers to 'pay attention to the beliefs and opinions of all stakeholders' (Appelstrand, 2002, p. 288). This is particularly important where collaborative arrangements are not legislated to make binding decisions but rather have the brief to make recommendations to elected or appointed officials (Page, 2010). These officials must be a credible commitment to implement the recommendations, as any disinterest or inaction displayed has the potential to undermine legitimacy (Lockwood, 2010).

The notion of empowerment was put forward by Leach (2006, p. 105) suggesting that an empowered process 'enables participants to influence policy outcomes', and oversee its implementation. Leach asserts that conventional top-down arrangements tend to involve the public after the governing body has invested significant resources drafting a proposal, therefore, this involvement is likely to focus on rallying support rather than discussing options and revising proposals, with lead agencies taking a 'decide, announce, and defend' stance (Innes and Booher, 2005; Leach, 2006).

Collaborative processes, by contrast, are promoted as facilitating early involvement, allowing communities to articulate their aspirations prior to proposal being drafted.

Lawfulness

While not explored in great detail in literature, lawfulness is also suggested as a criterion for output legitimacy. Bekkers and Edwards (2007) refer to lawfulness as ensuring the decision is in accordance with the law, established norms, rules and procedures. A lawful process 'upholds all existing statutes and regulations (Leach, 2006, p. 104).

Leach (2006) notes that concerns regarding the lawfulness of collaborative processes, relate to the redistribution of power from elected representatives to communities. This is a particular concern when the collaboration is focussed on the management of publicly-owned or common pool resources.

2.4 Relationship between legitimacy principles

The interactions, associations and tensions between the three legitimacy principles - input, throughput and output - has been explored by several scholars, many with different viewpoints.

Schmidt (2013) suggests that output policy and input participation can involve complementariness where good policies make up for deficient participation or where citizen input makes up for mediocre policies, or trade-offs where increasing one necessarily leads to a decrease in the other. Mantysalo, Saglie and Cars (2011) also note these trade-offs recognising that the call for broad participation can conflict with the desire for quick decisions, outcome predictability, lower costs and speedy implementation.

Biermann and Gupta (2011) refer to the work of Schouten and Glasbergen (2011), who found that perceptions of output legitimacy are often driven by input legitimacy and whether participants are included in the initiative. They suggest that those actively involved tend to view the process as legitimate not only due to their own participation but because of its perceived achievements, while those in society who remain outside the process tend to have a more negative view towards the output.

Rauschmayer, Berghöfer, Omann and Zikos (2009) suggest that good procedures improve output quality by facilitating better information management and mutual learning within the process. Adding to this argument, Tyler (2006) suggests that throughput legitimacy acts as a cushion for output legitimacy whereby if the decision

maker uses fair procedures, people are more likely to attribute unfair outcomes to external rather than internal factors. On the other hand, however, Biermann and Gupta (2011) suggest that focussing too much on throughput legitimacy has the potential to reduce the overall performance and output legitimacy of the decision making system. Similarly, Schmidt (2013) asserts that in contrast to input and output legitimacy where 'more' is normally expected to enhance perceptions of legitimacy, more 'throughput' does not necessarily have the same positive impact. Violating throughput criteria, on the other hand, can have a major negative impact on public perceptions of legitimacy, regardless of how extensive the input or effective the output.

Putting these three legitimacy principles together, Erling Klausen and Sweeting (2005) propose that

Input legitimacy will ultimately be inadequate in the face of poor accountability and inefficient policies; throughout legitimacy would be inefficient without public consent or effective policies; and the legitimacy bestowed by instrumental goal attainment cannot be sought completely in isolation from procedurally legitimated institutions and decisions (p. 215).

It is evident from these varying accounts that the interactions and associations between legitimacy principles are complex and the relative importance of each principle – input, throughput, and output - is likely to be context dependent. The relationship between these legitimacy principles is an important consideration for any governing body and one principle cannot be considered in isolation from the others.

2.5 Summary

This chapter has demonstrated that securing legitimacy in any planning or decision making process rests on firstly, achieving the balanced participation of affected and interested participants; secondly, providing fair, accountable, transparent procedures and quality deliberation; and thirdly, producing effective and efficient policy that adequately reflects the values and objectives of the wider community. These criteria provide a useful basis from which to develop an assessment framework, as presented in Table 2-2.

New collaborative modes of governing, policy development and decision making have been held up in literature as a means to address the 'legitimacy deficit' that has increasingly become associated with more conventional, hierarchical arrangements. This promise, however, is not without scepticism and a look at this new approach

prompts the fundamental question of whether it is more likely to achieve legitimacy than the top-down alternative.

Chapter three outlines the research strategy adopted in the attempt to answer this question in the context of setting water resource limits in New Zealand.

Table 2-2: Framework for assessing legitimacy

Legitimacy Principles	Legitimacy Criteria
Input	Inclusiveness Representativeness
Throughput	Efficiency Accountability Transparency Quality of deliberation Procedural inclusiveness Information sharing Time
Output	Outcome effectiveness Reflection of participation in decisions Lawfulness

3. Research design

3.1 Introduction

The previous chapter defined and explored the concept of legitimacy through a comprehensive literature review. It identified input, throughput and output legitimacy as key factors contributing to the acceptance and durability of decisions made, and it established a framework for assessing the legitimacy of planning and decision making processes.

The following discussion outlines the research design and methods employed to assess the legitimacy of regional water planning processes under different limit-setting approaches in New Zealand. This research adopts a comparative case study approach to operationalise the notion of legitimacy, drawing on the framework developed in chapter two and further refined to an indicator level. The data collection strategy, drawing on a survey of participants from the limit-setting processes and supplemented by publicly available data, is outlined, followed by an overview of the research design and ethical issues considered.

3.2 Research Context

Regional councils undertake a variety of statutory and non-statutory activities and functions. Under s.30 of the RMA these functions include soil conservation, the management of water quality and quantity, biodiversity conservation, hazardous substances, natural hazards and the strategic integration of infrastructure with land use. The priority and resources allocated to these functions varies between councils depending on population, physical characteristics, pressures, and central government requirements.

Under the National Policy Statement for Freshwater Management (NPSFWM), all regional councils must set freshwater resource limits, irrespective of their environs. Water resource limit-setting, therefore, provides a useful base from which to assess different approaches to planning and decision making. It is likely, however, that the framework developed in this research can be applied to assess the legitimacy of other natural resource management processes. It is also anticipated that the research findings may have wider relevance and applicability beyond setting water quality and quantity limits, to a wider range of regional council activities and functions.

3.3 Research strategy

A combination of quantitative and qualitative methods have been utilised in this research. Quantitative methods have value in enabling direct comparisons and the generation of standardised, quantifiable data. Quantitative methods can also generate qualitative data through the use of open-ended questions. Carr (1994) asserts that qualitative research allows for greater flexibility in the search for a deeper understanding of an issue or subject. Brewer, Vose, Van Raalte and Petitpas (2011) suggest that this flexibility can 'allow researchers to enquire about idiosyncratic matters that might otherwise go unexplored and ultimately lead the research in unanticipated, fruitful directions' (p. 330).

This research aims to examine the input, throughput and output legitimacy of regional council water resource planning. As previously noted, the NPSFWM requires all regional councils to set water resource limits. To be entirely comprehensive, this research would have examined all current limit-setting processes being undertaken by regional councils throughout New Zealand. Time and resource constraints, however, constrained the scope of this work and, instead, this research was undertaken within a case study framework, examining a sub-section of the regional councils in detail. This case study approach enables the research to 'delve into detail' and go beyond what is generally possible in a large scale survey (O'Leary, 2010 p. 173) while keeping the research manageable. The assessment and comparative analysis of two case studies was considered appropriate.

O'Leary (2010) suggests that the selection of a study case(s) should be guided by a set of clear and distinctive characteristics or criteria. The case study selection in this research was guided by the following criteria:

- 1) The regions were neighbouring and/or had similar types of environmental conditions;
- 2) The cases utilised different planning and decision making – i.e. collaborative and council-led;
- 3) Each process was making decisions regarding the same resource – i.e. water.

The Otago and Canterbury regions were selected as the two case studies for investigation. These neighbouring regions lie east of the Southern Alps in the South Island of New Zealand; Canterbury to the north and Otago to the south, separated largely by the Waitaki River Catchment. The two regions sit in the rain shadow of the Southern Alps, and both feature large intermontane basins - Mackenzie in Canterbury

and Maniatoto in Central Otago – which are some of the driest places in New Zealand and are subject to severe frosts and harsh winters (Molloy, 1988; WWF, 2013). Canterbury and Otago exhibit a cool-dry climate and both have lowland and hill-fed river types based on River Environment Classification (McNeill, Cheyne and Summers, 2013).

Both regions have had recent experience in the process of setting water resource limits; the regional council in Otago set limits through a conventional council-led process, while Canterbury implemented a collaborative approach. The Otago case study encompasses the entire region, while the Canterbury case-study has a particular focus in the Selwyn Waihora Catchment. This comparative case study provides insight into which planning and decision making arrangement generates more robust legitimacy beliefs. Conley and Moote (2003) suggest that comparisons can be particularly useful to policy makers in deciding which approach is most appropriate for a given situation. A comparative case study also provides the opportunity for theories to be tested, investigating the strength of association between a theory's predictions and actual outcomes.

3.4 Research design considerations

Referring largely to the work of Gibbs (2007), Creswell (2009) outlines research design considerations that should be addressed in order to ensure the quality and robustness of research designs: reliability, validity and generalizability.

Reliability indicates that the researchers approach is consistent across different researchers and different projects (Gibbs, 2007). It relates to the need to ensure that if the same investigation was to be undertaken at a later date, the same conclusions would be arrived at. The goal is to minimise the errors and biases in the research (Yin, 2009). Strategies to ensure reliability, suggested by Gibbs (2007) and Yin (2009) and adopted in this research, include the documentation of case study procedures or steps and double-checking survey results for any obvious errors.

Validity means the researcher checks for accuracy of the findings by employing certain procedures (Gibbs 2007). Creswell (2009) suggests various strategies which have been utilised in this research:

- Data triangulation, from different sources or participant perspectives;
- Clarifying any bias that the researcher brings to the study;
- Presenting the negative or discrepant information that may run counter to the theory or emergent themes; and

- Using peer briefing through supervisor sessions, to review and ask questions about the study.

Generalisability is concerned with whether the study's findings can be generalised to individuals, sites or places outside those under immediate study (Creswell, 2009). While critics assert that case studies offer a poor basis for generalising, Yin (2009) suggests that because the method relies on analytical generalisation, rather than quantitative statistical generalisation, the researcher can generalise the case study results to some broader theory - in this case, both collaborative and legitimacy theory.

3.5 Data Collection

Blackstock et al. (2007, p. 732) propose that the selection of data collection method(s) should be guided not only on what is to be measured, but also on the 'focus, purpose and timing' of data collection and assessment. O'Meara, Chesters and Han (2004) suggest that often relying on one variable, measure or method is inadequate when assessing complex subjects. A strength of case study data is the opportunity it provides to use multiple sources of evidence and developing 'converging lines of inquiry' (Yin 2009, p. 115), allowing for data triangulation which increases research validity. This research utilised two lines of inquiry or data collection; firstly, a document analysis and review of information relating to each case study and secondly, a survey of participants involved in each of the limit-setting processes. These data collection methodologies are further discussed below.

3.5.1 Document Analysis

Information was obtained from an analysis of publicly available documents found on the relevant council's websites including:

- Council meeting and workshop agendas and minutes;
- Community meeting and workshop agendas, minutes and summaries;
- Reports and proceedings from each process;
- Newsletters;
- Submissions;
- Notified Plans and Zone Implementation Programme Addendum documents.

O'Leary (2010) and Yin (2009) both caution that when utilising such information, it is important to question their source and appreciate their purpose and context in which the documents were prepared. It cannot be assumed that the documents contain 'the unmitigated truth' (Yin, 2009 p. 105). This warning was observed in interpreting the

usefulness and accuracy of the records, and data triangulation was also used to highlight inconsistencies. Key excerpts from these documents, relevant to the legitimacy criteria assessed, are presented in chapter four.

3.5.2 Survey

For the purpose of this research, a survey of participants involved in the limit-setting processes was considered the principal and most appropriate means of assessing the legitimacy of the two case study approaches. The survey (Appendix 1) was structured according to the principles of input, throughout and output legitimacy, with questions based on the criteria underpinning each principle, further developed to an indicator level (Table 3-1). Most survey questions used a five point Likert scale (Likert, 1932) with respondents asked to indicate their level of agreement or disagreement for a range of statements. Respondents were also able to indicate that they were unable to respond through the 'don't know' option:

1	2	3	4	5	6
Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree	Don't know

Open-ended questions were also used to allow for flexibility in responses, while enabling comparisons to be made between the participant responses. These question types deliver rich information and provide a greater opportunity for participants to articulate their views.

Conley and Moote (2003) reported the findings of Leach (2000) who suggested that different stakeholder groups could differ significantly in their perceptions and assessments of the same process or efforts, therefore, researchers should strive to include a wide cross-section of participants. However, because this research aimed to assess the legitimacy of two specific processes, some knowledge of or involvement in either process was required. While many citizens, both within and beyond the Otago region and Selwyn Waihora district boundaries, are interested in water management and setting environmental limits, fewer were specifically involved in or understood the limit setting processes. As such, a stratified sample was used, targeting the groups most actively involved. This stratified sampling approach means that the wider public opinion cannot be deduced from the responses; rather, any results can only be couched within the constraints of the sample population characteristics. Any aggregation of responses is made with care given the difference in composition of the participant groups, defined by their affiliation.

Table 3-1: Legitimacy principles, criteria and indicators

Legitimacy Principles	Legitimacy Criteria	Indicators
Input	Inclusiveness: Openness and access	<ul style="list-style-type: none"> • Equal opportunity to be involved • Commitment by decision makers to take on board community views • Access to decision makers • Direct involvement opportunities • Early engagement • Flexibility of agenda setting • Sufficient resources / capacity
	Representativeness	<ul style="list-style-type: none"> • Cross-section of community stakeholders • Relevant parties represented • Equal power in proceedings among parties • Appropriate Community / expert mix
Throughput	Efficiency	<ul style="list-style-type: none"> • Appropriateness of decision making style • New common ground found
	Accountability	<ul style="list-style-type: none"> • Sufficient decision making authority • Connection with societal interests and groups • Availability of sanctions • Appropriate consultation with the community • Status and credibility • Appropriate resources and information
	Transparency	<ul style="list-style-type: none"> • Clarity of process, roles, decision making style • Clear expectations of influence • Openness of procedures / information • Clearly explained decisions and rationale
	Procedural inclusiveness	<ul style="list-style-type: none"> • Civil, safe and respectful environment • Fair / impartial proceedings • Face to face dialogue between parties • Management of domination / coercion. • Management of conflict and debate • Ability to voice ideas/concerns • Integrity of proceedings
	Information sharing	<ul style="list-style-type: none"> • Accuracy and robustness of information • Accessibility of understandable information • Acceptance of information and sources • Enhanced understanding • Multi-directional information flow • Completeness of information
	Time	<ul style="list-style-type: none"> • Sufficient time for robust discussion and decision making
	Output	Outcome effectiveness
	Reflection of participation outcomes in decisions	<ul style="list-style-type: none"> • Support and acceptance of outcome • Satisfaction with response to community input • Public trust • Reflection of community values in outcome • Community ownership of the outcome • Appropriate balance of science and community input
	Lawfulness	<ul style="list-style-type: none"> • Laws, statutes and regulations upheld

In the Canterbury (Selwyn) limit-setting process these participant groups were:

- Zone Committee members, as the group making the recommendation;
- Community and focus members, as the participants informing the zone committee;
- Process managers, including Environment Canterbury staff and expert support, facilitating the development of the sub-regional section or informing the process in a technical capacity.

In the Otago limit-setting process these participant groups were:

- Industry, stakeholder and community members who had participated in the consultation process or who had submitted on the notified plan.
- Process managers, including Otago Regional Council (ORC) staff, facilitating the development of the plan change or informing the process in a technical capacity.

The ORC councillors and the ECan commissioners were not surveyed in this research, however, the perceived legitimacy of these decision makers was explored in the survey questions posed.

The survey was conducted on-line, via the Survey Monkey tool. The survey link was sent to all participants within the stratified sample, where email addresses were available. The initial email, with an information sheet attached, was sent on 30 November 2013 inviting participants to complete the online survey questionnaire. A follow up reminder was sent prior to the survey closing on 13 December 2013.

3.6 Ethical considerations

The Massey University Human Ethics Committee Code of Ethical Conduct for Research, Teaching and Evaluations Involving Human Participants (2006) sets out certain requirements for Massey University researchers undertaking research involving humans. Key ethical considerations in this research included conflict of interest, freedom from harm, respect for participants and informed consent.

3.6.1 Potential conflict of interest

As an Environment Canterbury employee at the time of data collection, there was the potential for research participants to question my ability to present the information in an unbiased manner or perceive that I may act in my employer's interests above the overall aim of the research. In order to minimise these potential issues, in any written

information provided to participants I made it clear that my role while undertaking research is that of a Massey University student, under my supervisors guidance and with the approval of the Massey University Human Ethics Committee, rather than an a regional council employee.

It is notable that from the point of data analysis through the remainder of this research, I was no longer a regional council staff member.

3.6.2 Freedom from harm and respect for participants

It is not acceptable to expose participants to unnecessary harm, therefore, minimising this risk and respecting participant privacy and confidentiality was a high priority. Participants were able to provide information in confidence, and they had the right to decline to answer any particular question or to withdraw from the survey at any time. Participants provided information on the understanding that their name would not be used unless they gave their permission, and confidentiality was exercised in collecting and reporting survey information by using general references (e.g. process manager, submitter, zone committee member).

3.6.3 Informed and voluntary consent

In line with the Massey University Human Ethics Committee requirements, participants were provided with an information sheet which outlined the research objectives, my employment details at the time of data collection (with respect to the issues identified in 3.6.1 above) and the general research approach. It was made clear in both the information sheet and survey that completing and returning the survey questionnaire implied consent, but that respondents had the right to decline to answer any particular question. All documentation followed the standard Massey University template.

3.6.4 Ethical approval

Ethical approval was sought and gained from the Massey University Human Ethics Committee before research commenced. After following the Low Risk Guidelines in consultation with my supervisor, a peer review by a senior member of the Planning Programme and feedback from the Human Ethics Committee, all parties agreed that the strategies adopted minimised potential ethical issues. The research met the criteria for low risk notification, and was recorded on the Low Risk Database. The approval letter is included in Appendix 2.

3.7 Summary

This chapter has outlined the research design for assessing the legitimacy of water resource limit setting approaches. This research adopts a mix of quantitative and

qualitative research methods, using a comparative case study of two processes in Canterbury and Otago. The assessment framework, developed in the preceding chapter, is applied to these case studies through a survey, complemented where possible with document analysis. This chapter has also outlined the potential ethical issues considered in this research and the strategies put in place to minimise these issues.

The next chapter outlines the environmental, legislative and planning context within which freshwater limits are being set in New Zealand and in the two case study regions. Chapter five will then detail the results of the legitimacy assessment in each region and chapter six will discuss and compare the results with the literature reviewed in chapter two. The characteristics that promoted or challenged legitimacy claims in each case study region will be identified and explored.

4. New Zealand Freshwater Management and Planning

4.1 Introduction

This chapter outlines the environmental, legislative and planning context within which freshwater limits are being set in New Zealand. It summarises the current state and pressures on the freshwater resource nationwide, then outlines the current legal and planning framework for setting water quality and quantity limits at a national level. It details the evolving nature of water planning in New Zealand, and discusses recent response strategies to contemporary water management challenges. This chapter then reviews the state of water resources in the two case study regions - Canterbury and Otago - and the limit setting approach adopted in each region.

4.2 New Zealand context

Situated in the south-western Pacific Ocean, New Zealand encompasses two main islands – the North and South Island’s - and some smaller surrounding islands. The North Island features mountain ranges running through the centre, with gentle rolling farmland on both sides. The South Island’s mountainous Southern Alps traverse much of its length and rise to over 3,000m. The extensive indigenous forest west of the Alps, contrasts with the vast farmland eastward. In the south, a series of large lakes have formed in depressions scoured out by pre-historic glaciers.

New Zealand’s climate is cool to temperate, but can vary daily. Located between 34° and 47° latitude south, it spans the ‘roaring forties’ which can bring high winds to much of the country such as the nor’wester, a hot dry wind that is a particular feature of the South Islands east coast in spring and summer. The mountainous terrain influences rainfall distribution with the most rain falling on the South Islands west coast and the least on the Canterbury Plains and Central Otago inland basin. The mean annual rainfall varies from over 8000mm in the Alps to 300mm in Central Otago (Metservice, 2014).



Figure 4-1: New Zealand regional boundaries

New Zealand's economy is agriculture-dependent with 70% of the country's merchandise export earnings and approximately 12% of the Gross Domestic Product (GDP) generated from farming, food and forestry (MPI, 2013a). In recent years, market globalisation and growing international demand for milk and protein-based products has driven significant intensification in New Zealand's primary sector. Agricultural productivity has increased substantially in recent years and irrigation has played an important role in these productivity gains (MPI, 2013b). Irrigated land area increased 82% between 1999 and 2010 (MfE, 2013b), and irrigation accounts for approximately 80% of all water allocated in New Zealand (excluding hydro) (MfE, 2007a). Irrigation has facilitated and fuelled dairy growth and dairy cow numbers have risen in line with increased irrigation, with the national herd increasing by nearly 20% between 2007 and 2012, to 6.4 million cows (INZ, 2013a p. 4). There is still the potential for another 420,000ha to be irrigated nationwide (INZ, 2013b p. 4).

4.3 Freshwater resources – pressures and current state

New Zealand's abundant freshwater resource is the country's greatest natural asset and is a source of competitive advantage globally. These freshwater resources are relatively clean and abundant and overall rate well internationally, but recent trends showing deterioration in some catchments, particularly those dominated by intensive pastoral land use (LAWF, 2010; MfE, 2013a).

In terms of water quality, the historic contamination associated with the point source discharge of factory waste and treated sewage directly into waterways has largely been resolved through regulation, discharge quality controls and compliance monitoring (OAG, 2011). More recent surface and groundwater quality degradation is now largely attributed to pastoral land use change and intensification and associated diffuse contamination (NIWA, 2010; OAG, 2011). These diffuse discharges are challenging to manage due to the difficulties in identifying the contaminant source, establishing a link between a particular land use and observed changes in water quality, and controlling the cumulative contribution from individual properties. As a result, nutrient (nitrogen and phosphorus) levels have generally increased over recent decades, signalling a trend towards nutrient enrichment (MfE, 2007b).

With regard to water quantity, many catchments around the country are either over-allocated or approaching full allocation (LAWF, 2010) with associated low flows, habitat loss or degradation, and a reduction in recreational, tourism and cultural opportunities. In some regions, particularly on the east coast, the demand for water and consequential pressure on the freshwater resource is predicted to exacerbate into the

future with more frequent droughts and water shortages expected (LAWF, 2010; MfE, undated). While irrigation dominates water use in New Zealand, there are a multitude of other uses for water such as supporting New Zealand's tourism sector and renewable energy production (INZ, 2013b, p. 16). It also supports wide-ranging recreational, social, aesthetic, ecological, and spiritual activities and interests.

These pressures and deteriorating trends are increasing the demand and competition for water between in-stream and out-of-stream users. As a result, anxiety and dispute among water users has escalated and resulted in significant time and money spent in divisive planning processes and litigious court hearings (LAWF, 2010). It is within this dynamic and contentious environment that both central and local government have identified the need to set freshwater resource limits.

4.4 Legislative and Planning Framework

Freshwater management and limit-setting in New Zealand occurs within, and is constrained by, a national legislative and planning framework. Freshwater planning has evolved since European settlement, when riparian law enabled those with riparian rights to access and use freshwater as long as the water quality and quantity available for downstream users was not interfered with (Harris Consulting, 2004). This regime was replaced by the Water and Soil Conservation Act in 1967, which introduced a consenting regime for allocating water use rights. In 1991, this was further superseded by the Resource Management Act 1991 (RMA), which combined around 70 pieces of legislation into one central environmental planning statute.

4.4.1 Resource Management Act 1991

The Resource Management Act 1991 (RMA) is the key piece of legislation governing freshwater resource management. The RMA incorporates the principle of sustainability into environmental management in New Zealand through its purpose in Part II, s.5:

To promote the sustainable management of natural and physical resources

where sustainable management means:

Managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural well-being and for their health and safety while –

- (a) *Sustaining the potential of natural and physical resources excluding minerals to meet the reasonably foreseeable needs of future generations; and*
- (b) *Safeguarding the life-supporting capacity of air, water, soil and ecosystems; and*
- (c) *Avoiding, remedying, or mitigating any adverse effects of activities on the environment.*

Also in Part II, s.6-s.8 of the RMA place certain obligations on persons exercising functions and powers relating to the management of natural and physical resources, which must be considered in the planning process. This includes a requirement to recognise and provide for ‘matters of national importance’ (RMA s.6) such as ‘the preservation of the natural character of the coastal environment..., wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development’. There is also an obligation to have ‘particular regard’ to certain other matters (RMA s.7) and to ‘take into account’ the principles of the Treaty of Waitangi (RMA s.8) in achieving the purpose of sustainable management.

The RMA provides for a hierarchy of policy statements and plans (Figure 4-2). At a national level, national environmental standards and national policy statements may be prepared. At a local government level, regional councils must prepare a regional policy statement and may prepare a regional plan, though a regional coastal plan is compulsory; and territorial authorities must prepare district plans. To ensure integration, district plans must not be inconsistent with regional plans, district and regional plans must give effect to regional policy statements, and each document must give effect to national policy statements (RMA s.67(3)).

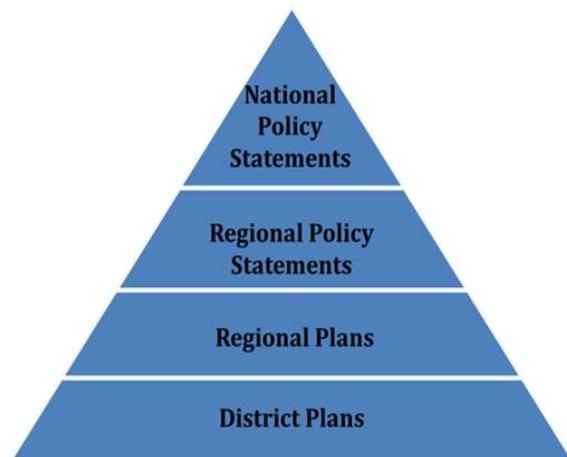


Figure 4-2: RMA planning hierarchy

Part III of the RMA places varying levels of restrictions on the use of natural resources. In general, land uses are allowed unless they contravene a national environment standard or regional or district rule (RMA s.9). By contrast, most activities related to fresh water are not allowed unless they are expressly authorised by a rule in a regional

plan or by resource consent, with the exception of taking or using water for reasonable domestic, stock water and fire-fighting needs (RMA s.14). The RMA also regulates freshwater quality, and no person can discharge any contaminant or water to water, or discharge a contaminant onto or into land where it may enter water, unless they have been expressly authorised either by a resource consent or regional plan rule (RMA s.15).

4.4.2 Regional council responsibilities under the RMA

The RMA has largely decentralised resource management decision making to local government at a regional and district level, founded on the assumption that such decisions should be made as close as possible to the resources and community where costs, interest and benefits arise (Kerr, Claridge and Milicich, 1998; Memon, Kirk and Selsky, 2011;). New Zealand comprises sixteen regions, with seven in the South Island and nine in the North Island. These regions are governed by local government authorities under the Local Government Act (2002). Regional councils administer most of these regions, though there are five administered by unitary authorities which have both regional and district council functions.

Regional councils have primary responsibility for managing freshwater resources under s.30 of the RMA. Their functions include regulating water quantity by setting flow and water allocation regimes, and regulating water quality by controlling the use of land and the discharge of contaminants and water. The RMA provides for regional councils to develop policy statements and plans to implement their water allocation functions (RMA s.60 and s.65). The purpose of a regional policy statement is to provide a broad overview of the significant resource management issues in the region, the objectives the council is seeking to achieve with respect to the regions resources, and the policies and methods for managing these resources (RMA s.59). A regional plan is the principal natural resource management document in a region, containing specific objectives, policies, methods and enforceable rules (RMA s.67). Plans also set parameters on resource use and guide consenting decisions and so are an important means of influencing water resource management.

4.4.3 Public input into policy development under the RMA

The RMA provides the opportunity for public input into natural resource policy and plan development. While it is considered good practice for a council to consult with the community in the early stages of developing a policy or plan, there is no explicit requirement to do so. Formal RMA consultation begins with First Schedule consultation with specified parties, prior to the notification of a policy statement or plan.

Under Schedule 1, once publicly notified, members of the public may make a submission and present this submission in person at a council hearing. Once a Hearing Committee has considered and deliberated on all submissions, it releases its decision, and dissatisfied submitters may appeal to the Environment Court on points of merit. The High Court provides the last avenue for appeal on points of law only.

4.5 Freshwater planning under the RMA – challenge and response

The RMA focuses on managing the effects of activities rather than regulating the activities themselves and seeks to intervene only where activities are likely to result in unacceptable environmental impacts. While described as world leading, this enabling legislation is not without criticism. In particular, a lack of resources, capacity and political capability has meant that regional councils have struggled to undertake its functions, particularly those relating to water (Memon 1997b; McNeill, 2008; Memon and Kirk, 2012). Consequently, freshwater planning under the RMA has largely been undertaken through ad hoc consenting rather than through developing strategic regional policy and plans to set resource use limits and guide consenting decisions. The first-in-first-served consenting approach has provided no incentive for water users to be efficient and has compromised the regional council's ability to free up water for new or alternative uses (Peart, 2011). Criticism has also focussed on the lack of freshwater quality limits in the regional plans that have been developed, which has led to water quality degradation that has been difficult to halt. The few freshwater plans drafted have largely been developed through a conventional top-down process where the regional council has produced the plan in-house and then notified it for public comment, rather than producing documents that reflect active community and stakeholder engagement in the drafting stage.

In response to these challenges and deficiencies, various government-led initiatives over the last decade have sought to identify and progress policy options for dealing with freshwater management issues. The most recent initiative began in 2009 with the 'New Start for Fresh Water' Strategy. This programme resulted in the evolution of the Land and Water Forum (LAWF) which sought to reach a national consensus on the goals or outcomes for freshwater management in New Zealand. The LAWF has its origins in the Sustainable Land Use Forum established at the Environmental Defence Society's (EDS) 2008 annual conference *'Conflict in paradise: the Transformation of Rural New Zealand'* with the aim of finding common ground on which new water policies could be built, and to 'find ways of making New Zealand agriculture more sustainable' (EDS, 2008). The Forum was subscribed to by various primary industry

groups, environmental and recreational non-governmental organisations, iwi groups and others with an interest in water and land management (Smith, 2009). The Forum's establishment drew on lessons from the Nordic environmental management institutions characterised by collaborative governance arrangements, detailed in Salmon, Sundström and Zilliacus (2005) and Salmon, Zilliacus, Scherzer and Bärlund (2008).

In 2009 this Forum, now renamed as LAWF, was asked by the Minister for the Environment and the Minister of Agriculture and Forestry, as part of the 'Bluegreen Vision for New Zealand' to undertake a collaborative and consensus-based process to provide solutions for freshwater management issues in New Zealand. Between 2010 and 2012, the LAWF delivered three reports recommending potential reform to New Zealand's freshwater management system: the first (Land and Water Forum, 2010) provided a blueprint for land and water management reform, the second (Land and Water Forum, 2012a) focussed on developing a framework for setting objectives and limits, and the third (Land and Water Forum, 2012b) addressed how to manage within these limits. A suite of recommendations were made to government through these reports, including the need for:

- Local decisions within national frameworks, including support for a national policy statement for freshwater.
- Clear objectives for the state of water bodies, and limits on takes and discharges.
- All relevant tools - from riparian planting to infrastructure - to manage within limits are used efficiently and in an integrated way, with accountability for results.
- Greater clarity and certainty about rights and obligations.
- A dynamic system, not a static one, so that resources flow to their highest valued-use over time.
- A system that applies to all catchments, urban and rural.
- Collaboration at the catchment level.

In May 2011, in partial response to the first LAWF report, central government announced the 'Fresh Start for Freshwater' reforms, a package of freshwater initiatives including a 'Fresh Water Clean-up Fund' providing \$15M for major restoration projects; the 'Irrigation Acceleration Fund' of over \$35M to assist the development of regional water infrastructure proposals; and the gazetting of the National Policy Statement for Freshwater Management, 2011.

4.5.3 National Policy Statement for Freshwater Management 2011

In their 2010 report, the LAWF suggested that a central reason for freshwater degradation in New Zealand is the failure, as a country, to set or manage limits, largely because 'it has been difficult to get agreement on what the limits should be, over what time period they should be achieved, and who should meet the cost' (Land and Water Forum, 2010, p. 13). Recognising the need for limits, an important component of the government's water reform package was the National Policy Statement for Freshwater Management 2011 (NPSFWM), which had been previously drafted and put on hold awaiting the first LAWF report. Incorporating LAWF's recommendations, the NPSFWM set in place a national directive for setting freshwater limits throughout New Zealand.

The purpose of a National Policy Statement under the RMA, is to state objectives and policies for matters of national significance. The NPSFWM requires all regional councils to set freshwater objectives and limits and stipulates that councils establish methods to avoid over-allocation of water resources. It states that where over-allocation has occurred, councils must set defined timeframes and methods by which this is phased out (MfE, 2011).

The NPSFWM, therefore, reflects the changing nature of water management in New Zealand, with a clear direction being given by central government and a set timeframe within which local government agencies must set limits. It also requires that the water quality and quantity limits reflect national and local values, thereby endorsing community involvement in water management decisions.

4.5.4 Further response to LAWF recommendations: 2013 reforms

In March 2013, New Zealand's central government released further proposals for reform to the freshwater management system in the document "Freshwater reform 2013 and beyond", again based on the LAWF's recommendations. It included the creation of a National Objectives framework (NOF) and proposals for better water accounting (MfE, 2013a). Of particular relevance to this research, the reforms also propose to amend the RMA to include an optional collaborative planning process, as an alternative to the current (RMA Schedule 1) process, which councils may choose when preparing, changing and reviewing freshwater policy statements and plans. This is based on the premise that this new planning option will give communities and iwi a greater say in planning what they want for their local waterways and how they should be managed.

4.6 Introduction to case studies - regional water management

As outlined, the RMA is enabling legislation, allowing regional councils to set and implement policy to address local issues. While the RMA framework is applied nationwide, region-specific legislation and planning documents play an important role in defining the context under which limits are set locally.

While the notion of collaborative planning has been endorsed by central government as a means of establishing and managing water limits in New Zealand, there is currently no formal requirement to implement this approach. Both central government and LAWF acknowledge that collaborative approaches are not easy and may not suit every situation - 'they can be resource intensive, need to operate on a high level of goodwill, and need to be managed carefully' (Land and Water Forum, 2010 p. 48). As a result, the extent to which regional councils around New Zealand have adopted this collaborative approach under the RMA framework is variable.

This research examines two regional council limit-setting processes – the first (Plan Change 6A, Otago) chose not to adopt the collaborative approach and instead opted for a conventional council-led approach; the second (Selwyn Waihora Sub-Regional Section, Canterbury) took the new approach on-board and set water resource limits through a collaborative community-driven process. The purpose of this research is to assess the legitimacy of each approach, and the elements that promote or challenge legitimacy claims.

4.7 Otago

4.7.1 The Otago Region: geographical context

The Otago Region (Figure 4-3), situated in the lower South Island, is New Zealand's third largest region by area, extending from the main divide to the west, to the coast on the east. It borders with the Canterbury Region along the Waitaki River catchment to the north, and extends to the Catlins area to the South. The region has significant freshwater resources, with rivers sourced from the alpine mountains discharging into large glacial lakes. Lakes Wakatipu, Wanaka and Hawea source the Clutha River, the largest river by discharge in New Zealand, which flows across Otago and discharges at the coast near Balclutha. In total, Otago contains approximately 23% of New Zealand's lake surface area (ORC 2012a), and produces a notable proportion of New Zealand's hydro-electricity generation.

Weather conditions vary enormously across Otago. Coastal climates are moderated by the stable ocean temperatures, but further inland the climate is more continental and variable. Consequently, Central Otago features some of New Zealand's highest and lowest temperatures, low mean annual rainfalls and high seasonal evaporation rates.



Figure 4-3: Otago region (source: localcouncils.govt.nz)

The last 20 years has seen a significant change in agricultural land use in Otago. Dairy conversions have been a notable feature since the early 1990s, with the number of dairy cows in milk increasing from 62,000 in 1994 to 214,000 in 2010 (Copland and Stevens, 2012). These changes have facilitated significant dairy development in both milking platforms as well as support land for sourcing winter feed and raising young stock, and this development and intensification has put pressure on the freshwater resource in some areas.

4.7.2 Otago freshwater resources – state and pressures

The geography of Otago means it is both water rich and water short. Despite large water volumes being present in the region's lakes and rivers, it also has the most arid areas in New Zealand. Many catchments have no guaranteed reliable irrigation water and the deficit of water is evident in many small streams that dry up each summer (ORC, 2012a).

State of environment monitoring indicates the surface water quality is generally good or very good, particularly in the high country and large lakes (ORC, 2012b). However, some lowland pastoral sites, especially in areas with heavy soils and tile-and-mole drainage, have fair or poor water quality. This is particularly evident in south and west Otago, where intensive dairy farming is common and a combination of leaching, drainage and runoff has resulted in elevated nutrients, faecal bacteria and sediment in an increasing number of streams and tributaries in these lowland areas (ORC, 2007a). In response to these water quality issues, the ORC implemented a series of initiatives aimed at changing farming practices to improve water quality and entered into agreements with primary industry bodies such as the Dairying and Clean Streams Accord 2003, the Regional Action Plan for the Otago Region 2005 and the Memorandum of Understanding for dairy farming on tile and mole drained land

(2007b). These initiatives and agreements provided the basis for the development of a policy framework to address rural water quality in 2011.

4.7.3 Institutional and Planning Framework

Otago Regional Council

The Otago Regional Council (ORC) is governed by a council of twelve representatives from four constituencies, elected by Otago citizens every three years. The mission statement of Council is 'To promote the sustainable development and enhancement of Otago's resources'. The regional councillors have broad powers under the Local Government Act 2002 (LGA) to act on behalf of their communities to achieve this mission statement. These general powers are balanced by requirements to take account of the principles set out in the LGA, and to report back to their communities. As representatives of their communities, their role involves setting policies, making regulatory decisions and reviewing council performance (localcouncil.govt.nz).

Otago Regional Policy Statement (RPS)

The Otago Regional Policy Statement (RPS) was made operative in 1998 and sets the direction for the management of Otago's natural and physical resources. The RPS recognises the inter-relationship between land-use activities and discharges and looks at land management activities and contaminant movements that can have an effect on water and habitat health. The RPS promotes a reduction in the adverse effects of contaminant discharges into the regions water bodies and states that existing water quality is to be maintained and, where appropriate, enhanced to support aquatic life and contact recreation.

Otago Regional Plan: Water for Otago

The Regional Plan: Water for Otago (the Water Plan) is the ORC's primary water planning document. Consistent with the RPS, the purpose of the plan is to 'promote the sustainable management of Otago's water resources'. The Council publicly notified the Water Plan in February 1998, and it was made operative on 1 January 2004. Various plan changes under the RMA have occurred since 2004, the most recent being Plan Change 6A which sought to establish water quality limits across the region and address deficiencies and ambiguity in the regional plan regarding water quality and the control over non-point source contaminants.

4.7.4 Otago Limit Setting Approach

The Water Plan 2004 established the overall framework for managing water quality, including the use of permitted activities with conditions for many rural discharge activities and the requirement for consents for many point source discharges. For non-point source discharges, the approach adopted was to promote best practice, by making information available and undertaking catchment education programmes. As a consequence of water quality issues identified in the 2007 State of Environment report (2007a) and in response to ongoing work in central government relating to water quality, ORC determined that the promotion of good practice alone was not enough to improve the degraded water quality (2007b). A strategic approach was developed for both rural and urban communities which identified the need for specific plan changes to the Regional Water Plan to address non-point source contamination. This approach was first reported in 2009 (ORC, 2009). In 2011, the ORC drafted a Rural Water Quality Strategy (ORC 2011) and an Urban Water Quality Strategy (ORC, 2010b) to set in place a programme to address the water quality issues emerging in the region. While the strategies had no legal weighting, they were developed with the intention of implementing them via the drafting of rules and limits through a Plan Change process. The Strategy set out the following steps as to how the water quality limits were to be set:

1. Community consultation defines water quality values;
2. Contaminant limits relating to water quality will be set for discharges from land based on the identified values;
3. Farmers will choose for themselves which land actions are necessary to meet the required limits;
4. External advice and guidance will be available for those who have difficulty achieving the limits;
5. A transition period and easy methods of measuring the quality of discharges from land will be crucial to achieve the limits;
6. Measure water discharge quality from land so that farmers find out when, where and how non-point source discharges from their land may exceed the limits so that they can adjust their farming methods (ORC, 2011).

The Proposed Plan Change 6A (Water Quality) to the Water Plan sought to implement the regulatory framework described in the Rural Water Quality Strategy, including rules which set limits for the amount of contaminant that could be discharged from farm drains and through runoff and leaching (ORC, 2012c). With four of the six steps above

focused on implementing rather than drafting and setting the limits, it is evident that significant importance was placed on implementation by the ORC.

As outlined, prior to the Rural Water Quality Strategy and Plan Change 6A, the Council had been working on water quality issues with the rural community for some time through extension initiatives. Consultation on the strategy began in 2010 with meetings with Iwi representatives and the community. During May-July 2010, the ORC held a series of Water Quality Forum in three localities across Otago, which centred on the Rural Water Quality Strategy and were attended by around 130 people. A further three Forums were held in September and October 2011 at the same venues attended by around 200 people. In November and December that year, a further 15 public meetings were held around the region to discuss the proposed plan change, attended by about 300 people (ORC, 2012e) (Table 4-1).

Table 4-1: Timeline of consultation and engagement for Otago Plan Change 6A (source: ORC, 2012e; ORC, 2014).

Topic	Date	Venue
Pre-Schedule 1		
Rural Water Quality Strategy Launch	May 2010	Cromwell
	June 2010	Oamaru
	July 2010	Balclutha
Plan Change 6A – public forums	Sept/Oct 2011	Cromwell
	Sept/Oct 2011	Oamaru
	Sept/Oct 2011	Balclutha
Plan Change 6A – catchment meetings	3 November 2011	Roxburgh and Wanaka
	4 November 2011	Tarras and Manuherikia
	8 November 2011	Ranfurly and Middlemarch
	10 November 2011	Outram
	17 November 2011	Owaka and Balclutha
	22 November 2011	Papakaio, Maheno and Waikouaiti
	28 November 2011	Milton
	30 November 2011	Frankton
	1 December 2011	Tapanui and Clydevale
6 December 2011	Dunedin	
Schedule 1 process		
Notification of Plan Change 6A	31 March – 2 May 2012	
Call for further submissions	2 - 18 June 2012	
Council hearing	10 – 22 October 2012	Dunedin, Balclutha, Wanaka, Alexandra and Oamaru
Decisions notified, Environment Court Appeal period	20 April - 4 June 2013	

The Proposed Plan Change 6A was notified on 31 March 2012 and 334 submissions were received. This was followed by a call for further submissions, of which 77 were received. The officers report evaluating the decisions requested by submitters and

further submitters and making recommendations to the Hearing Committee was released in late August 2012, and submissions were heard at the Council Hearing for around 6 weeks during September and October 2012 at various locations around the region. When decisions were publically notified in April 2013, 21 parties appealed the Council decisions (ORC, 2014).

Analysis of publically available information- Otago

Publically available reports and documents (Table 4-2) provide insights into the nature of the Plan Change 6A process. Key excerpts from these documents, relevant to the legitimacy criteria assessed, are presented below.

Table 4-2: Otago Plan Change 6A publically available information

Type	Date	Content
ORC website	Various	The ORC web-pages provided information on the Rural Water Strategy, presentations given at the water quality forums and catchment meetings and some technical material.
Technical information	Various	Surface water quality studies and State of the Environment Reporting, effects of land use on water quality
Forums and presentations	2011	ORC Water Quality Forum 2010 Proceedings (ORC, 2010a); 'Good Water, Good Farming' catchment presentations and pamphlets, 2011;
ORC Reports to Committee or Council	Ongoing	Various reports to ORC Committee or Council for information and decision making
Strategies	2011	Rural Water Quality Strategy (ORC, 2011)
Interviews / articles in local media	Various	Various media releases and articles in local newspapers
Planning documents	PC6A	Proposed PC6A (ORC 2012c); PC6A section 32 report (ORC 2012d) PC6A officers report on decisions requested (ORC 2012e)
Submissions	Various	Submissions made by the public on PC 6A

Many of these documents indicate a commitment by ORC to community consultation and community involvement. It is evident, however, that a fully collaborative approach to setting limits was not endorsed by the ORC:

Community consultation defines water quality values (ORC Rural Water Quality Strategy, 2011).

...changes are needed to better address non-point source pollution. Making this improvement will involve a range of interested parties (ORC Rural Water Quality Strategy, 2011).

ORC will work with key parties (such as farmers, industry and iwi) to ensure the approach is practical and fits comfortably with their expectations. This will include a series of forums for key parties...Public feedback will help further develop the necessary tools and refine the overall concept (ORC Rural Water Quality Strategy, 2011).

The first and most important part of any proposed plan change is the preparation stage. In this we go through a consultation process, which today's forum is part of. There will be many more similar meetings involving a range of groups, as we work with communities to: define what the water quality issues are; identify community values for separate rivers; set local discharge standards (F. McRae, Rural Water Quality Forum, ORC 2010a).

Extensive consultation has been undertaken with the regional community, including meetings with iwi, two series of water fora in 2012 and 2011 and public meetings across the region in 2011. ORC has been active in education for more than 10 years and there have been further meetings to discuss recent catchment water quality studies over the past 3 years. ORC have met regularly with rural sector leaders and agri scientists to test and refine the proposed approach (ORC s42A report, 2012e).

I am supportive of the ORC on this Rural Water Strategy and other water management initiatives they have taken in recent times. I'm impressed by the lengths that they have gone to in consulting with communities (G Crutchley, Rural Water Quality Forum, ORC 2010a).

As part of this partnership, Kai Tahu encourages a shift from being 'consulted', to having a meaningful role in governance and the decision-making required for water quantity and quality (E. Ellison, Rural Water Quality Forum, ORC 2010a).

The plan change has been prepared lawfully, using the process specified in RMA Schedule 1. There is no basis in law to undertake a collaborative process as requested and being promoted by the non-statutory Land and Water Forum (ORC s42A report, 2012e).

Various submissions, however, drew attention to and indicated a desire for, a collaborative approach to be taken:

ORC should initiate a collaborative process with a broad range of stakeholders to develop a rule that is more technically robust and has broad community support...Support ORC leading a review of the proposed plan, incorporating appropriate community consultation, collaborative stakeholder involvement, resulting in a practical plan that will deliver on all community objectives related to water values....Benefit to collaboratively developing codes of practice and standards (Fonterra Cooperative Group Ltd, 2012) .

If there is valid need to restrict N usage in specific areas this should be developed in consultation with land users and sectors, not by imposition (Ettrick Fruitgrowers Assoc, 2012).

Supports collaborative approach and consideration of all values. Support the need for greater collaboration with stakeholders (Horticulture NZ, 2012).

More thorough collaboration with the community should be undertaken than occurred in the development of the proposed Plan Change. Objectives and values should be set at sub-regional level and supported by technical and scientific analysis (Waitaki Irrigators Collective, 2012).

...need be rewritten so as it clearly separates the narrative and numerical objectives. This should be done in collaboration with stakeholders throughout Otago and also with better understanding of the benefits to and consequences upon individual communities for each (Irrigation NZ, 2012).

Need greater collaboration, technical robustness and clarity...No scientific justification for limit, lack of link between limit and environmental benefit (Federated Farmers, 2012).

The documentation available, however, suggests that the ORC placed greater importance, focus and attention on collaboration at the implementation stage:

The panel had worked diligently to assess the public submissions and thoroughly review the proposed policy...their report highlights the recognition by many submitters that collaboration between ORC and the community is essential if water quality objectives are to be successfully met (media release).

The council seemed to be saying 'we trust you; we just want to help you get there' – that is so different from many other regions (media article).

The information also promoted the innovative nature of the approach and outcomes:

ORC proposes innovative responses focused on effects-based management. In partnership with land users, ORC will focus on managing diffuse contaminants through conditioned permitted activities (ORC Rural Water Quality Strategy, 2011).

The council's goal is to control the level of contaminants in discharges from rural land, while at the same time providing for agricultural uses, and flexibility in achieving those limits. The proposed new direction for water quality is based upon a system of self-management by farmers, allowing them flexibility, and encouraging them to manage their discharges in innovative ways (ORC Rural Water Quality Strategy, 2011).

4.8 Canterbury

4.8.1 The Canterbury Region: geographical context

The Canterbury Region (Figure 4.4) has the largest land area of all regions in New Zealand, extending from the Conway River near Kaikoura to the north to the Waitaki River in the south, from the Main Divide to the coast. The Canterbury Plains slope from the foothills to the sea, and are crossed by alpine rivers, foothill rivers and lowland streams closer to the coast. Both this surface water and an extensive groundwater resource underlying the plains are abstracted for irrigation, domestic and industrial supplies.

Land use on the Canterbury Plains is dominated by pastoral mixed livestock, dairy, and cropping (Hill, 2013), all challenged by the nor-west winds and droughts the plains are susceptible to. Immediately west of the plains lies rolling to steep hill country, dominated by pastoral farming, where rainfall is generally higher, but drought is still common. The high country, further west and at a greater altitude, is characterised by weather extremes, particularly heavy snow, severe frosts and strong winds. Extensive pastoral farming has been the predominant land use



Figure 4-4: Canterbury region (source: localcouncils.govt.nz)

in this high country for many years, though there are some large intermontane basins which are valued for their recreational, amenity and landscape values (ECan, 2013a).

4.8.2 Canterbury freshwater resources: state and pressures

Land and water management in Canterbury is historically complex and contentious. The Canterbury region allocates 58% of all water allocated in New Zealand, and has 70% of the country's irrigated land (ECan, 2011a). The region also provides approximately 65% of the nation's capacity for hydro-electricity generation (Canterbury Mayoral Forum, 2009).

Both urban and rural development over the last two decades has led to substantial land-use change and a growing demand for water, which has impacted both water quantity and quality (ECan, 2011b). The Canterbury Mayoral Forum (2009) report that surface water abstraction is nearing the limit of what can be sustainably taken while maintaining environmental flows, with restrictions on takes already widely imposed. Increased groundwater abstraction over the past 20 years has also contributed to a decline in groundwater levels and reduced flows in spring-fed streams. There are now ten 'red zones', where groundwater has been fully allocated, and four 'yellow zones', where allocation exceeds 80% of the allocation limit (Canterbury Mayoral Forum, 2009). In terms of water quality, with the exception of most high country rivers and streams, many waterways in Canterbury face issues of nutrient enrichment, faecal contamination, sedimentation and siltation. Spring-fed plains streams in both rural and urban catchments are the most degraded, followed by spring-fed lower basin streams (Stevenson, Wilks and Hayward, 2010). Aquatic ecosystem health monitoring is also showing declining health in lowland and coastal areas, wetlands and freshwater biodiversity (Canterbury Mayoral Forum, 2009).

4.8.3 The Selwyn Te Waihora catchment overview, state and pressures

The Selwyn Te Waihora catchment covers the area bound by the Waimakariri River in the north, the Rakaia River in the south, the Big Ben Range in the West and Te Waihora/Lake Ellesmere in the east. The catchment is hydrologically diverse characterised by the central plains, hill fed rivers, two groundwater zones, spring-fed streams, a complex drainage system and Te Waihora / Lake Ellesmere as the fifth largest lake in New Zealand (ECan, 2011c) (Figure 4-5).

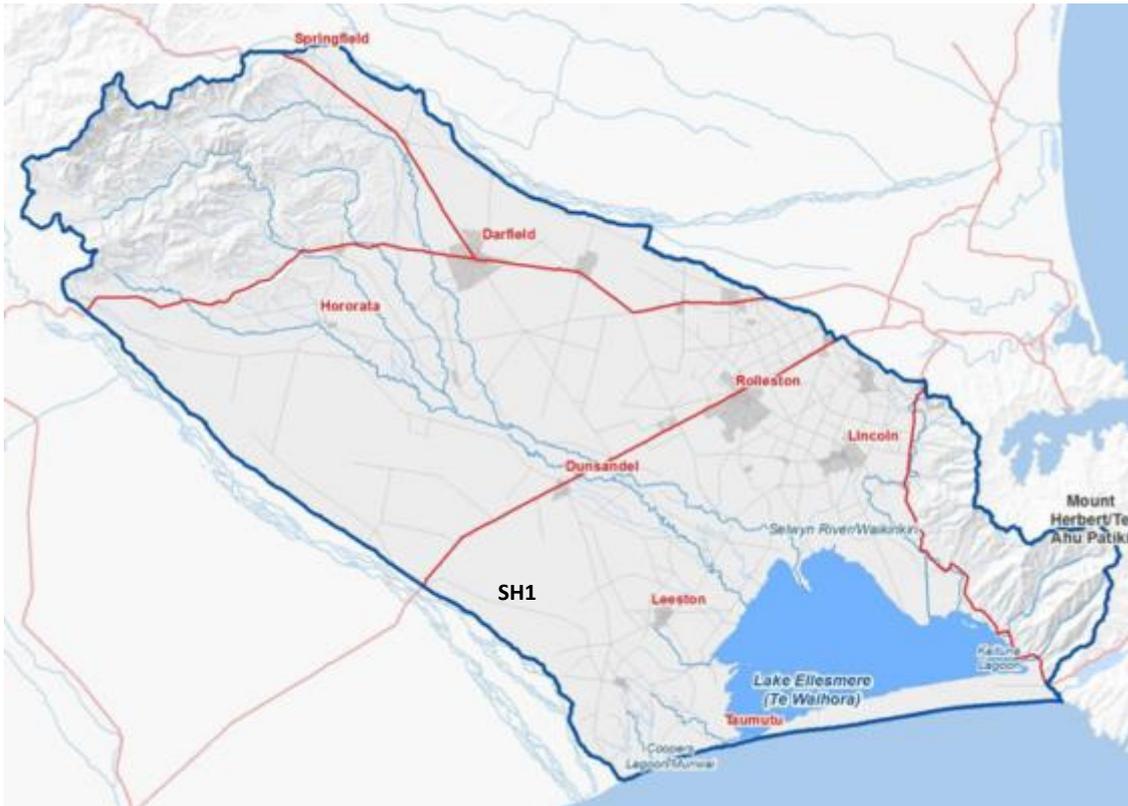


Figure 4-5: Selwyn Te Waihora catchment showing sub regional section boundary (blue outline) (source: ECan, 2014a)

The Selwyn River/Waikirikiri travels mid-catchment across the plains before discharging into Te Waihora. Fed from rain in the foothills and small springs in the lower plains, it is seasonal, prone to floods in winter and early spring, but low during summer. The lower plains are characterised by spring-fed streams, many flowing directly into the Lake. Te Waihora/Lake Ellesmere is a brackish, shallow lagoon, around 20,000ha in size, which is considered internationally significant for the abundance and diversity of wildlife, and supports a customary and commercial eel, flounder and mullet fishery. The lake also has high cultural significance with seven Ngāi Tahu Papatipu Rūnanga having Tangata Whenua interests in the catchment (ECan, 2011c).

The Selwyn District is the fastest growing district in New Zealand (ECan, 2013b). The plains are a highly modified environment, with land use by area dominated by sheep and beef farming followed by dairy and dairy support (ECan, 2011c; ECan, 2013b). Approximately 60,000ha of land in the catchment is irrigated, largely sourced from groundwater, shallow in the lower catchment and pumped from increasing depths west of State Highway 1 (SH1), refer Figure 4-5.

Over the last two decades, water demand, irrigation and land use intensification has increased substantially in the Selwyn Waihora catchment, impacting on the health of lowland streams, hill-fed rivers, groundwater and Te Waihora. Flows in many lowland streams have declined as a consequence of abstraction and long term climate variability and most of these lowland streams have elevated nutrient levels. The two groundwater zones in the catchment are considered to be over-allocated in terms of the volumes abstracted, and average groundwater nitrate concentrations are just over half the drinking water standard with increasing nitrate trends detected in around a third of monitored wells (ECan, 2011c). The health of Te Waihora has also declined and is now high in nutrients and highly turbid, giving rise to algae growth (ECan, 2013b).

The future state of the environment in the Selwyn Waihora catchment is uncertain due to two main factors. Firstly, there is a 10-30 year lag effect in the groundwater system, suggesting that some environmental outcomes will continue to decline even with immediate action. Secondly, in 2012 Central Plains Water, a large scale irrigation scheme, was granted consents to irrigate 60,000ha, based on a replacement of 30,000ha of currently groundwater-irrigated land with scheme water and a net gain of 30,000ha new irrigated land (ECan, 2011c).

4.8.4 Institutional and Planning framework

Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010 (the ECan Act)

Canterbury's freshwater management challenges and deficiencies culminated in 2010 with central government replacing the democratically elected ECan councillors with government-appointed Commissioners through the Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010 (ECan Act). This intervention was reportedly in response to a failure by Council to effectively manage the region's fresh water, an absence of any operative regional plan and policy framework, and a 'gap' between 'what needs to be done' to appropriately manage water and 'ECan's capability to do so' (Creech, Jenkins, Hill and Low, 2010, p.ii).

Under the ECan Act, the Commissioners were appointed to act as the Council's governing body and were provided with new powers under the RMA for water management. Importantly for this research, the ECan Act removed the right for communities and stakeholders to appeal decisions on water conservation orders, regional policy statements and regional plans to the Environment Court, instead limiting appeals to the High Court on points of law only (EDS, 2014). The ECan Act also

acknowledged and awarded statutory weight to the Canterbury Water Management Strategy – Strategic Framework 2009.

Canterbury Water Management Strategy (CWMS)

The Canterbury Water Management Strategy – Strategic Framework 2009 (CWMS) is a non-statutory strategic document setting out a policy and governance framework for resolving issues surrounding water quality, water allocation and water storage in Canterbury. The CWMS was developed through a public and stakeholder engagement process overseen by a multi-stakeholder Steering Group of water interests, reporting to a forum of all mayors in Canterbury. The legitimacy of this process was researched and documented by Salmon (2012).

Responding to the contentious and adversarial nature of water management in Canterbury, a fundamental goal of the strategy was “to improve the collaborative input of stakeholders to the integrated management of Canterbury’s water resources” (Canterbury Mayoral Forum, 2009, p. 31). Collaboration in decision making is, therefore, a central tenet of the CWMS and reflects an expectation that informed discussion involving all relevant parties improves the quality of decisions and reduces the likelihood of conflict.

The Vision of the CWMS is

To enable present and future generations to gain the greatest social, economic, recreational and cultural benefits from our water resources within an environmentally sustainable framework (Canterbury Mayoral forum, 2009, p. 6).

The strategy sets out first and second order priorities, and has a set of water management targets to be achieved by 2015, 2020 and 2040. The strategy’s implementation is driven by ten Zone Committees across Canterbury, appointed by Environment Canterbury and the relevant Territorial Authority, both of which also have a representative on the Committee. Zone Committee membership also includes four to seven community representatives who live in or have a close association with the zone, and have applied for and been selected onto the committee. One member from each Rūnanga that falls within the zone is also appointed (ECan, 2014c).

The Zone Committees are joint committees of the councils and have facilitator support from the regional council. They are charged with preparing a Zone Implementation Programme (ZIP) that sets out a pathway to implement the targets in the zone, with one of these targets being the setting of environmental limits (Canterbury Mayoral

Forum, 2009). Zone Committees subsequently lead the limit-setting in their zone, recording their recommendations in a ZIP Addendum which becomes the 'writing instructions' for regional council staff to convert into statutory policies and rules.

The CWMS was prepared under the Local Government Act 2002 (LGA) and cannot override the RMA or the statutory policy statements and plans prepared under the RMA. However, under the ECan Act (s.63) the vision and principles of the CWMS are a matter which the Council must have particular regard to in considering any proposed regional policy statement or plan. Consequently, the intent of the CWMS has been incorporated into the objectives and policies of the Canterbury Regional Policy Statement and Canterbury Land and Water Regional Plan.

Canterbury Regional Policy Statement (RPS) 2013

The Canterbury Regional Policy Statement (RPS) was reviewed and adopted in 2013 to incorporate the CWMS vision and principles. The Canterbury RPS seeks the sustainable and integrated management of freshwater resources and it requires that any further development or abstraction of water can only occur at the same time as water quality is maintained where it is of a high standard or improved in catchments where it is degraded. It also requires improvements in water use efficiency, and the restoration or enhancement of degraded fresh water bodies and their surroundings (ECan, 2013a).

Co-governance Te Rūnanga o Ngāi Tahu and Environment Canterbury

In 2012, ECan Commissioners and the Te Waihora Management Board - an advisory body for Te Rūnanga o Ngāi Tahu comprising representatives of the six Papatipu Rūnanga who have interests in Te Waihora - signed a joint management co-governance agreement with the purpose of restoring and rejuvenating the lake. The agreement identifies the functions, powers and duties of the parties, including the development of a vision for Te Waihora as an overarching framework for RMA policies/plans, the opportunity for Ngāi Tahu staff co-draft the plan with ECan staff, the opportunity for the co-governors to seek advice before plan notification and a shared policy on the appointment of Hearing Commissioners (2014b).

Canterbury Natural Resources Regional Plan (NRRP)

The Natural Resources Regional Plan (NRRP) is the operative plan for Canterbury that regulates the management of natural resources in the region. The NRRP was notified in 2002, and focussed on management of air quality. Variation 1 to the NRRP was

notified in 2004 and introduced five chapters dealing with land and water issues. Further variations were notified introducing catchment specific environmental flow and allocation regimes.

As already discussed, the prolonged passage of time it took ECan, from the enactment of the RMA to having the NRRP operative, meant that there was an absence of an overarching planning and policy framework which resulted in a piecemeal, ad hoc and inefficient consents-based approach to freshwater management (Creech et al., 2010).

Canterbury Land and Water Regional Plan

In order to give effect to both the NPSFWM and the CWMS, both of which were introduced post-NRRP, Environment Canterbury drafted the Land and Water Regional Plan (LWRP), to replace the NRRP. The LWRP operates at two levels. There is a region-wide section, which contains objectives, policies and rules that apply across the region; then there are ten sub-regional sections which are to be developed over time and contain policies, rules and limits which are specific to the catchments covered by that section and apply instead of, or in addition to, the region-wide provisions. The sub-regional sections are developed through a collaborative process based on the 'Preferred Approach for managing the cumulative effects of land use on water quality in Canterbury' (the 'Preferred Approach').

4.8.5 Canterbury Limit setting approach

The Preferred Approach

The 'Preferred Approach' methodology was adopted by ECan following a pilot study carried out in the Hurunui catchment which trialled a process of data collection, analysis and stakeholder deliberation (ECan, 2012a). The approach is based on the development of community agreed outcomes, exploring a range of water management and land use scenarios through both scientific analysis and community deliberation, and developing and evaluating a water management solution package (ECan, 2012a; ECan, 2014b). ECan facilitate and support the limit-setting process, however, the Zone Committees are considered the principal collaborative group, taking the lead role and making the final recommendations to Council – through the ZIP Addendum - on the outcomes sought for the catchment and the limits to achieve these outcomes. These are then translated, by ECan planning staff, into the sub-regional section and incorporated in the Land and Water Regional Plan by way of a variation or plan change, following a RMA Schedule 1 process.

Selwyn Waihora Sub-Regional Section Development

Established in 2010, the Selwyn Waihora Zone Committee's initial task was to develop their Zone Implementation Programme (ZIP). This was completed in December 2011 and accepted by ECan Commissioners as the basis for a future work programme in the zone. For the following two years, the Committees' primary focus was the limit setting process, with the purpose of developing consensus agreement on water quality and quantity limits for inclusion as a sub-regional section into the LWRP. Over 50 zone committee meetings and workshops were held on issues relating to the sub-regional section, establishing priority outcomes, selecting scenarios to be assessed (refer Table 4-3) and developing a water management solution package for the catchment (ECan, 2014b). There were also over 20 meetings held with the Co-Governance partners to fulfil the obligations of that arrangement.

Table 4-3: Selwyn Waihora sub-regional land use scenarios assessed (adapted from ECan, 2012b)

Scenario	Description
Current state	The current scenario describes what people see and experience now across social, economic, environmental and cultural areas.
Scenario 1: baseline	The baseline accounts for the time lags in the environment, from when nutrients are lost from the land to when they are seen again, and models the impacts of 2011 land use on water quality and quantity.
Scenario 2	This scenario is based on a surface water supply providing for 60,000ha of irrigation. This comprises approximately 30,000ha of new irrigation on the plains and replacement of some groundwater takes with surface water. Other enterprises and land uses in the catchment will also intensify.
Scenario 3	This scenario is based on achieving a Trophic Level Index* (TLI) of 6 in the Lake.
Scenario 2 + 'bolt-ons'	This scenario is based on 30,000ha of new irrigation plus advanced on-farm mitigation and lake interventions.
Solutions package #1	This first solutions package is based on 30,000ha new irrigation with a package of catchment, lake, stream and on-farm mitigations, economic/social mechanisms, non-diffuse source control, and planning policies.

Beyond the Selwyn Waihora Zone Committee meetings, consultation and engagement with the wider community was initiated in December 2011. Throughout 2012 and 2013, fifteen community focus group workshops were held (refer Table 4-4). Focus groups represented at these workshops included Rūnanga, Irrigation, Dairy, Arable/Horticulture/Viticulture, Sheep/Beef/Pork, Rural Professionals, Rural Women, Environment, Recreation, Commercial/Tourism/Energy, Education, Health/Local Authorities and Community Boards/Committees.

The focus group workshops aimed to provide an opportunity for community members to discuss and assess the land use scenarios. Unlike the Zone Committee discussions, the intent of these deliberations was not to seek consensus, but to provide

a forum for the Zone Committee to hear from various stakeholders and interests. Additional to these focus group workshops, more targeted consultation and engagement activities occurred with interested parties and around specific issues (Table 4-4).

Table 4-4: Timeline of consultation and engagement for Selwyn Waihora sub-regional (adapted from ECan, 2014b).

FOCUS GROUPS		
Sector / Group	Date	Activity
Focus Groups	15 Dec 2011	Workshop to introduce planning process and get feedback on scenarios and on-farm modelling / assessment
	21 Feb 2012	Workshop to recap planning process; focus group purpose and role; wider community engagement
	24 March 2012	Field trip around Selwyn Te Waihora catchment
	29 March 2012	Workshop to deliberate Current State
	26 April 2012	Technical workshop for those who wanted to better understand the modelling/science informing the planning process.
	31 May 2012	Workshop to present Scenario 1 (baseline) and deliberate Scenario 2'
	21 June 2012	Workshop to deliberate Scenario 3
	12 July 2012	Workshop to deliberate Scenario 2+ bolt-ons
	16 Aug 2012	Workshop to present Solutions package #1
	28 Aug 2012	Workshop to deliberate Solutions package #1
	18 Sept 2012	Workshop to provide all focus groups to present feedback on Solutions package #1
	13 Dec 2012	Workshop for Zone Committee to report back on progress, and get feedback on key topic areas
	25 Jan 2013	Workshop to provide further information around on-farm assessment and N allocation workstream
	15 Oct 2013	Workshop for ZC to present back on finalised ZIP Addendum
FARMING INDUSTRY AND OTHER GROUPS		
Sector / Group	Date	Activity
Ellesmere Irrigation Society	23 July 2012	Introduction to planning process (AGM, Southbridge)
	5 Aug 2013	Update on planning process (at AGM, Southbridge)
Dunsandel Groundwater Users Group	25 Sept 2012	Introduction to planning process (AGM, Dunsandel)
	8 May 2013	Update on planning process / ZIP Addendum (Dunsandel)
Central Plains Water	6 March 2013	Discussions of water storage provisions
Land and Water Policy Advisory Group	6 Sept 2012	Update on limit setting process and timetable
	19 Oct 2012	Workshop on provisions
Farming industry reps	25 January	Discussions of nitrogen allocation options
DairyNZ	17 July 2012	Introduction to planning process (Dairy Farm Systems Group, Irwell)
	1 Oct 2012	Introduction and update on planning process (Dunsandel)
	4 Oct 2012	Introduction and update on planning process (Darfield)
Federated Farmers	3 Oct 2012	Introduction and update on planning process (Dunsandel)
	12 March 2013	Update on ZIP Addendum / planning process (Coalgate)
	26 Nov 2013	Presentation on final recommendations (Coalgate)
Field days / shows	24 Nov 2012	Courteney / Kirwee A and P Show (Kirwee)

	20-22 March 2013	South Island Field Days (Lincoln)
CONSENT HOLDER MEETINGS		
Sector / Group	Date	Activity
Consent holders	5 June 2013	Present and get feedback on minimum flow recommendations (Darfield)
	5 June 2013	Present and get feedback on minimum flow recommendations (Lincoln)
	6 June 2013	Present and get feedback on minimum flow recommendations (Irwell)
	11 June 2013	Meeting with Selwyn District Council to discuss minimum flows for stock water takes
	10 July 2013	Presentation of adopted minimum flow recommendations (Southbridge)
	10 July 2013	Presentation of adopted minimum flow recommendations (Lincoln)
Waikewai consent holders	1 July 2013	Meeting of Waikewai landowners and Taumutu Runanga to discuss options for giving effect to Iwi Management Plan (Sedgemere)

A water management solutions package, which included both statutory and non-statutory actions was developed by the Zone Committee, with the assistance of Council staff, technical experts and other stakeholder groups. This was documented as a ZIP Addendum, signed off by ECan Commissioners in June 2013. The statutory elements were then translated into the sub-regional section as a variation to the LWRP, released for first schedule consultation in October 2013 and publically notified in February 2014.

Analysis of publically available information- Selwyn Waihora

The information sources presented in Table 4-5 were publically available and provide insights into the nature of the process.

The strong theme running through these information sources is that the process was collaborative and community driven:

An integrated approach is proposed which will determine the outcomes sought by the community then collaboratively determine the appropriate limits for the water resources in the catchment (ECan, 2014d).

The [focus groups] process is designed to give stakeholders a say in how limits are set taking into account the differing values people place in water (ECan, 2012b)

The wide range of stakeholders should provide diverse opinions on the scenarios (ECan, 2012c)

At the heart of this work... is the local Selwyn-Waihora Zone committee which is working collaboratively with the community (ECan, 2012d).

We are looking for consensus which is a lot harder than it sounds the zone committee working collaboratively with the community (ECan, 2012d)

Our job on the Selwyn Waihora Zone Committee is now to review what [focus groups] are saying and then make recommendations on limits and how to manage them to ECan. ECans job is then to take these recommendations and make them into objectives and rules within the sub-regional plan (ECan, 2012d)

This addendum reflects the community engagement and committee discussion as part of developing the Selwyn Waihora sub-regional (ECan, 2013c)

The ZIP and ZIP addendum...carry the weight of the wide commitment to the CWMS of Councils, Rūnanga and the community and a wide range of agencies and industry and interest groups (ECan, 2013c)

The Zone Committee will listen to and explore the thoughts and values of participants in the focus groups as they deliberate the various scenarios (ECan, 2014d).

There information also promoted the process as one searching for practical outcomes based on robust information:

A key part of the limit setting process is the technical analysis around the environmental, economic, social and cultural consequences of differing land use scenarios (ECan, 2012c).

Scenarios and modelling assumptions must be credible and resonate with the Zone Committee and community to avoid modelling the wrong things (ECan, 2014d).

The aim of this work is not only to set limits but to find realistic ways to manage to limits (ECan, 2012d).

Reference was also made to improving the process from previous experiences:

Everyone involved hopes this will be more straightforward and without the adversarial nature of previous plans (ECan, 2012d).

Table 4-5: Selwyn Waihora sub-regional publically available information

Type	Date	Content
ECan website	Ongoing	The ECan website provided information on the history of planning processes in the zone, links to research previously undertaken, maps of the project area and detail of all focus group workshops including agendas, presentations and technical material, and Q&A.
Technical information	Ongoing	Technical documents were provided on the Selwyn Waihora web page, including past research and the technical reports informing the zone committee and focus group workshops.
Publicity material	March 2012	Newsletter 1: Limit setting – an introduction (ECan, 2012c)
	August 2012	Newsletter 2: Newsletter on setting limits (ECan, 2012b)
	Feb/March 2013	'Setting Limits in the Selwyn Waihora Zone'
Interviews / articles in local media	Sept 2012	Opinion Piece by Zone Committee Chair – September 2012 (ECan, 2012d)
	Sept 2012	'Living Here' newsletter distributed to every household in Canterbury. Feature article on the Selwyn Waihora Zone Committee and the package of solutions
ZIP Addendum	October 2013	ZIP addendum as 'writing instructions' for Council staff (ECan, 2013c)

4.9 Summary

This chapter has provided the environmental, legislative and planning context within which water resource limits are being enacted in New Zealand and the Canterbury and Otago regions. New Zealand's freshwater resources are under increasing pressure, resulting in angst and conflict among water users. Canterbury's water resources are close to reaching sustainable limits of water use and Otago, while not exhibiting the same issues as Canterbury, is showing deteriorating trends in freshwater in some areas. The national directive from central government to all regional councils in New Zealand is to set water resource limits and give effect to the NSPFWM.

This chapter has outlined the two different approaches the regional councils in Otago and Canterbury have chosen in responding to this national directive to set limits, which is summarised in Table 4-6. With the diversity of community and stakeholder interests involved and its reliance on consensus decision making, the Selwyn Waihora limit setting can be assessed as an exercise in collaborative planning and decision making, and can provide some insights around the legitimacy of such collaborative processes. Conversely, as a largely council-led planning process, the ORC limit setting approach can be assessed to provide insights regarding the legitimacy of the more conventional, top-down models. The limit setting processes undertaken in these regions, therefore, provides a useful case study to explore the elements that either help or hinder legitimacy claims.

Table 4-6: Limit-setting processes - regional comparison

	Otago	Selwyn Waihora
State and pressures	<ul style="list-style-type: none"> • Water quality relatively good in most areas. Significant shortages of water in some areas. 	<ul style="list-style-type: none"> • Water resources under significant pressure in terms of both quality and quantity, throughout much of the region.
Institutional framework	<ul style="list-style-type: none"> • Democratically elected regional councillors • Powers conferred to regional council under the RMA (consistent with all other NZ regions) • Rural and Urban Water Strategies guide water management 	<ul style="list-style-type: none"> • Government appointed Commissioners • Additional powers conferred to Commissioners (different to all other regions NZ) • No Environment Court • CWMS guides water management
Limit setting approach	<ul style="list-style-type: none"> • Recommendations made by Council staff; decisions made by regional councillors • One region wide process • Consultation focussed on implementation 	<ul style="list-style-type: none"> • Recommendations made by Zone Committees; decisions made by Commissioners • Consensus based Largely sub-regional approach taken (with regional 'placeholder') over several years. • Consultation focussed on plan development stage

5. Results

5.1 Introduction

The case study research sought perceptions of the legitimacy of the limit setting processes in Otago and Selwyn Waihora, Canterbury using a structured survey. Case study participants included regional council staff, technical experts, zone committee and focus group members, community members, industry and stakeholder representatives and submitters. Participants were asked to assess and respond to between 88 and 95 statements and questions. While questions were generally the same across both case studies, there were some small variations to reflect the different councils and processes and to enable specific elements to be explored more fully. Drawing on the evaluation framework developed in chapter two, the survey questions explored input, throughput and output legitimacy criteria. This chapter reports the results of this survey.

5.2 Survey responses

The survey was conducted on-line, via the Survey Monkey tool. The survey link was sent to all participants within the stratified sample, where email addresses were available. A total of 263 on-line surveys were sent to Otago Plan Change 6A (PC6A) participants, comprising submitters, ORC staff and technical experts. Twenty-six emails were returned with delivery failure, leaving 237 potential respondents, of which 62 participants responded. Seven participants started the survey but did not progress further than the first introduction page and so were deemed incomplete and excluded from the analysis. In total, 55 (23%) responses were analysed.

Online surveys were also sent to 142 Selwyn Waihora participants, including ECan staff and technical experts, Selwyn Waihora Zone Committee members, focus group members and other community, industry or stakeholder representatives. Six emails were returned with delivery failure, leaving 136 potential respondents. Of these, 56 participants responded to the Selwyn Waihora survey, however 2 were started but did not progress any further than the first page, so again these were excluded from the analysis. In total, 54 responses (40%) were analysed.

Table 5-1 summarises the role or affiliation of survey respondents in the limit setting process and their level of involvement (as indicated through questions 1a and 1b of the survey).

Table 5-1: Role and level of involvement of survey respondents in the limit setting process

OTAGO PC6A survey respondents					
Participants	Respondents	Involvement			
		A	S	D	n/a
Process managers (ORC staff)	2	2			
Submitters (technical experts, community members, industry/stakeholder reps, lawyers on behalf)	38	10	17	11	
Non-submitting participants (technical experts, community members, industry/stakeholder reps)	15	6	4	4	1
TOTAL	55	18	21	15	1
Selwyn Waihora sub-regional survey respondents					
Participants	Respondents	Involvement			
		A	S	D	n/a
Process managers (ECan staff, Technical experts)	21	14	7		
Zone Committee members	4	4			
Focus group participants	19	11	6	2	
Other participants (community, industry/stakeholder, government observer)	10	8	1	1	
TOTAL	54	37	14	3	0

A = actively involved
S = some involvement

D = viewed process from a distance
n/a = no answer provided

Most (69%) Otago survey respondents had submitted or assisted with submissions on PC6A. Another 27% were not submitters but participated as technical experts, community or industry/stakeholder representatives. The remaining 4% were from ORC staff members as process managers. Thirty-three percent had been actively involved in the process, 38% had some involvement, and 27% had only viewed the process from a distance. In the Selwyn Waihora survey, most responses came from the process managers including ECan staff and technical experts (39%), followed by focus group participants (35%). Only 7% of respondents were zone committee members, and the remainder were community, industry and stakeholder representatives or government advisors not directly involved in the structured groups. Sixty-nine percent of Selwyn Waihora respondents considered themselves actively involved in the process, 25% had some involvement, and 5% viewed it from a distance. Overall, despite the relatively low response rate from both the ORC process managers and the Selwyn Waihora Zone Committee, an adequate return rate and range of participants was achieved. The level of involvement indicated by respondents also suggests that they should be able to comment on the input, throughput and output legitimacy of the respective limit setting processes. Recognising that there were significantly more process managers who responded to the Selwyn Waihora survey compared with the Otago survey, where appropriate, statements and answers are assessed and reported according to this affiliation rather than in aggregate form.

Most survey questions used a Likert scale (Likert, 1932) with respondents asked to indicate their level of agreement or disagreement on a range of statements. While a five point scale was utilised to collect the data, where appropriate it has been ‘collapsed’ and treated more simply as a two point (agree-disagree) scale.

5.3 Otago case study – Plan Change 6A

Plan Change 6A to the Otago Regional Water Plan sought to implement a regulatory framework to manage rural water quality. The ORC chose to develop this plan change through a conventional council-led process under the RMA.

5.3.1 Input legitimacy

Input legitimacy is based on process openness and accessibility, the opportunity for citizens to influence the agenda setting process and the quality of representation of interests and preferences.

Inclusiveness

Otago survey respondents’ perceptions of the inclusiveness of the limit setting processes, as a key criterion of input legitimacy, were explored through Q.2a-Q.2r (Figure 5-1).

2a	Everyone interested in or affected by the limit setting process had an opportunity to be involved
2b	The ORC expressed a commitment at the start of the process to listen to, and incorporate the views of the community in the recommendation / decision
2c	The decision makers (ORC Councillors) were actively involved in the process and discussions with the community
2d	The decision makers (ORC Councillors) were accessible to the community
2e	The ORC staff were accessible to the community
2f	The process had a stronger focus on direct involvement (community deliberation and debate) than indirect involvement (letter writing, lobbying, letters to editor)
2g	The community were engaged early in the process, before any key decisions were made
2h	Community involvement occurred too late in the limit setting process to be influential i.e. it was a ‘rubberstamping’ exercise
2i	ORC staff were open to modifying the process to meet the demands and concerns of the community
2j	Everyone involved in the process had a valid right to participate
2k	Everyone involved in the process had an incentive to participate
2l	Knowledge, skill, or resource constraints influenced some people’s ability to participate effectively
2m	The limit setting process should have been based on science alone and ‘left to the experts’
2n	Were any sectors of the community excluded - intentionally or unintentionally – from the process? If so, who?
2o	Everyone/I had sufficient opportunity to question and express approval or opposition to the options and proposals discussed
2p	Opportunities to contribute to the discussion were limited to certain speakers or topics
2q	Adequate opportunities were provided for Maori to participate in the process
2r	Were there any barriers to participation in the limit setting process? If so, how could these barriers be overcome?

The majority agreed (56%) or strongly agreed (18%) that all those interested or affected had the opportunity to be involved. One respondent did observe, however,

that while everyone *could* participate in consultation groups and submit on the plan change, it was usually the ‘loud and ill-informed’ that were most active. Most (80%) agreed and no-one disagreed, that those involved in the process had a valid right to participate, though just under half (49%) felt that there was an incentive to participate. Most (67%) felt that they could sufficiently question and endorse or oppose the proposals, and only 20% felt that opportunities to contribute were limited to certain speakers or topics.

Just over half (53%) felt that the ORC expressed an early commitment to listen to and incorporate community perspectives in the plan change, and the same number agreed that ORC councillors, as the decision makers, were actively involved in the process and community discussions. The two ORC process managers strongly agreed with these statements, while most disagreement came from the submitters. Fewer (45%) felt that the councillors were accessible to the community, though this increased to 71% when the same question was asked about ORC staff. One respondent specifically commented on the positive interactions with staff stating the process built ‘on strong existing relationships with staff members’.

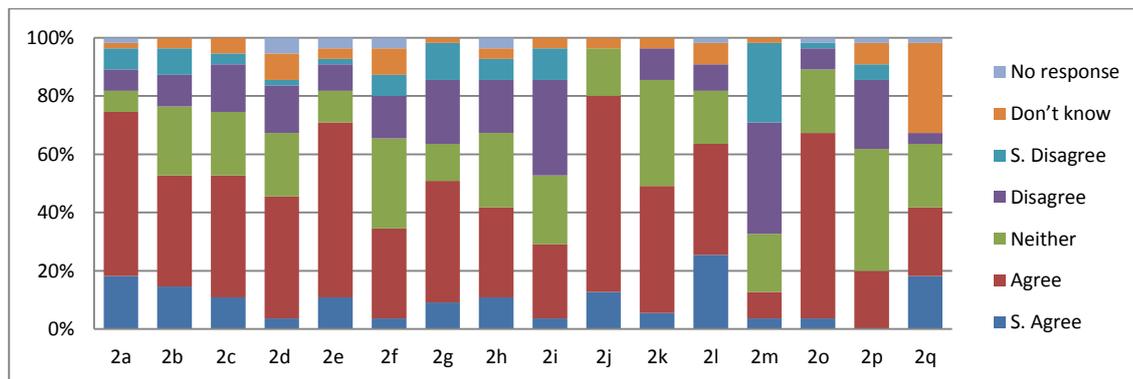


Figure 5-1: Otago Plan Change 6A – Perceptions of Inclusiveness

Around half (51%) believed the community were engaged before any key decisions were made, while 42% felt that community involvement was a ‘rubber-stamping exercise, occurring too late in the limit setting process to be influential. While ORC process managers were confident that early engagement had occurred, criticism regarding this came from both the submitters and non-submitters. Inflexibility was noted by 43% of respondents, who disagreed that ORC staff were open to modifying the process to meet the communities demands and concerns. In line with these sentiments, only 35% considered the process more focussed on direct rather than indirect involvement.

Respondents suggested various means of improving inclusiveness. Rather than taking an all-encompassing regional approach, some advocated a catchment approach to allow communities to get involved early in a localised process to determine the catchment-specific values they want to protect. Also suggested was the need to develop closer relationships with industry, agricultural interests and environmental groups, in order to get more targeted catchment or discharge-specific rules, as opposed to taking the 'blanket approach'.

Representativeness

Survey participants were then asked a series of questions (Q.3a-Q.3k) related to the input criterion of representativeness (Figure 5-2).

3a	The limit setting process involved a good cross-section of the community and affected or interested parties
3b-3g	The process was dominated by the following interests 3b) rural interests 3c) urban interests 3d) environmental interests 3e) economic interests 3f) local interests 3g) national/outside interests
3h	Minority groups were encouraged to be involved
3i	Minority groups had too much say in the process
3j	The decision makers (Otago regional councillors) adequately represent community demands, interests and preferences
3k	Were there any major organisations, stakeholder groups, communities of interest or demographic or social-economic category, not represented or under-represented in the limit setting process? If so, who and why?

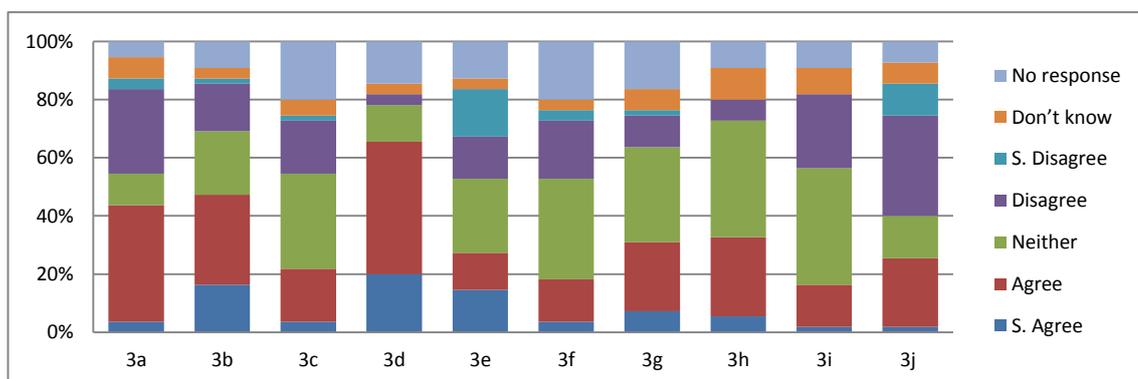


Figure 5-2: Otago Plan Change 6A – Perceptions of Representativeness

Less than half (43%) the Otago respondents felt that the PC6A process involved a good cross-section of participants, with one-third (33%) disagreeing to some extent with this statement. When asked if any parties or sectors dominated the proceedings, 47% felt rural interests dominated; 22% felt urban interests dominated; 65%, environmental interests; 27%, economic interests; 31% national/outside interests; and 18% believed local interests dominated. This line of questioning was not designed to give an absolute weighting by adding up to 100% but to highlight any domination. One respondent suggested that the local 'voice' could have been stronger if the community had rallied together to present and submit as a collective society rather than as individuals, as 'no matter how sound your case you have more capacity to influence as

a group'. Only 33% felt involvement by minority groups was encouraged, while 16% suggested they had too much say in the process. Despite being elected members, only one-quarter of respondents felt the ORC councillors adequately represented citizen demands, interests and preferences, with 34% disagreeing and 11% strongly disagreeing with this statement.

5.3.2 Throughput legitimacy

Throughput legitimacy is process-oriented and largely based on the interactions of actors, the quality and fairness of the discussion and deliberation and the procedures by which decisions are being made. The next set of questions queried throughput legitimacy, starting with the efficiency criterion.

Efficiency

The efficiency of the Otago process, relating to the decision making procedures, was investigated through Q.4a-Q.4d (Figure 5-3).

4a	Some groups did not participate in the discussions because they saw alternative means of influencing the decision to achieve their goals and objectives
4b	New 'common ground' between parties has been found through the process
4c	The top-down council led approach appropriate for this process, i.e. it suited the complexity of the situation and issues
4d	A collaborative, consensus seeking approach would have been more appropriate for this limit setting process

Only 7% agreed with the statement that some groups did not participate because they saw alternative means of influencing the decision, while most (69%) respondents did not know or were indecisive. One respondent proposed that major stakeholders did not interact with or address the community as they knew they had the option of mediation or the Environment Court to push their case. Smaller organisations, however, only had community meetings as an opportunity to address their concerns, and the 'policy speak' often overshadowed their efforts.

When asked if new common ground had been found in the process, 44% answered favourably. Overall, approximately one-third (31%) including the two process managers, opposed the notion of collaboration and consensus and instead felt that the council-led approach was appropriate for this process. Proponents of the council-led approach suggested that the vested interests and entrenched views within the key parties meant that a collaborative, consensus approach would not work. It was suggested that 'greed and financial interests will always stifle a collaborative consensus-seeking approach'. One respondent suggested that minority groups fail to gain sufficient respect and understanding when large industries are in a position to

dominate and control the consensus discussion, while others felt that the collaborative approach would be open to abuse by single interest or lobby/radical groups. Others stated that reaching a consensus under a collaborative approach - if reached at all - is too time consuming and difficult, and it could be used as a tactic to delay or avoid change.

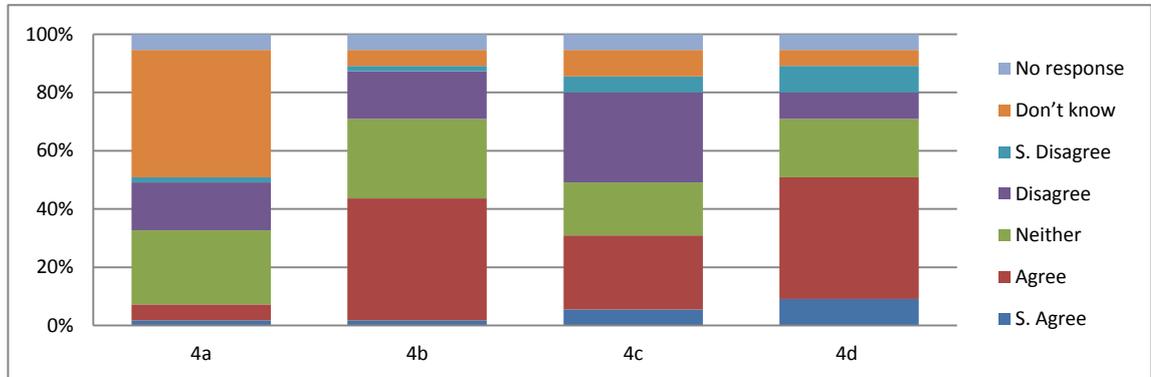


Figure 5-3: Otago Plan Change 6A – Perceptions of Efficiency

Some respondents suggested that water issues are too important to the rate-paying community for a limit setting to be done through collaborative means and, rather, the ultimate responsibility must rest with elected representatives. It was proposed that the solution far exceeds anything possible using collaboration and consensus, and that only the council can protect the public interest and provide a ‘counterbalance’ to the commercial sectors who ‘have the resources, self-interest, and time to participate in the often protracted collaborative consensus-seeking approach’.

Over half the respondents (51%), however, suggested that a collaborative, consensus seeking approach would have been more suitable than the council-led approach. Their confidence in the alternative approach centred on views that it enabled local input, more buy-in, a better understanding of other views, needs and potential implications, a greater sense among the community that their concerns had been heard and taken seriously, reduced likelihood of mediation and/or Environment Court and increased likelihood of better outcomes in the long term.

Accountability

Accountability was the next throughput criterion explored through Q.5a-Q5h (Figure 5-4). Respondents were first asked to indicate who they considered to be accountable and answerable in this limit setting process. Despite having elected decision makers, 67% of Otago respondents felt that the ORC staff were the ‘accountable actors’, with one survey participant specifically stating it was the ORC Chief Executive. Only one-quarter (25%) felt the ORC councillors were accountable, with most of these responses coming from submitters who may have a better understanding of the decision making

process. One respondent commented that while the councillors *should* have been responsible, it was the staff who had to ‘face the people and take it on the chin’, suggesting an association between perceived accountability and visibility in the community.

- 5a** Who do you feel was the main accountable and answerable body in this limit setting process? 1) Otago regional councillors 2) Otago Regional Council staff 3) other
- 5b** The accountable actors had authority to make the recommendations/decisions
- 5c** The accountable actors were sufficiently connected to the diverse societal interests affected by the recommendations/decisions
- 5d** There were measures available to deter inappropriate actions by the accountable actors
- 5e** The accountable actors consulted with the community in an appropriate manner, i.e. frequency and content
- 5f** The accountable actors achieved and maintained status and credibility throughout the process
- 5g** The accountable actors had sufficient resources and information to enable them to fulfil their responsibilities
- 5h** The accountable actors demonstrated fairness, consistency and integrity (e.g. declared conflicts of interest; were unbiased; did not seek to manipulate outcomes; behaved honestly)

Of those who held ORC staff accountable, 62% felt that they had the authority to make the recommendations/decisions, though only 19% felt sanctions existed to deter inappropriate behaviour. Similar numbers agreed (38%) as disagreed (41%) that staff consulted appropriately with the community, and only 30% felt that staff were sufficiently connected to the community, with more respondents (46%) disagreeing with this statement. Under half (49%) felt that staff had sufficient access to resources and information to fulfil their responsibilities. According to 47% of respondents, staff demonstrated fairness, consistency and integrity, and 42% felt they achieved and maintained status and credibility.

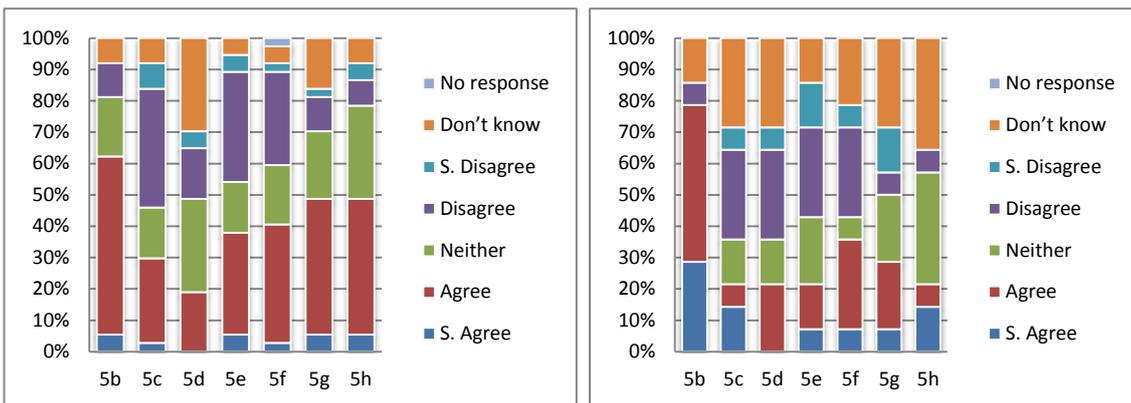


Figure 5-4: Otago Plan Change 6A – Perceptions of Accountability of ORC staff (left) and Councillors (right)

Of the one-quarter of respondents who consider ORC councillors accountable, 79% agreed they had the authority to make the recommendations/decisions, with only 1 person (7%) disagreeing. However, far less (36%) had confidence that measures were available to prevent inappropriate behaviour by the councillors. Just over one-third felt

the councillors achieved and maintained status and credibility and fewer still (21%) believed they had demonstrated fairness, consistency and integrity. Only 21% felt that the councillors were connected to the community affected and likewise, half as many agreed/strongly agreed (21%) than disagreed/strongly disagreed (42%) that the councillors consulted appropriately with the community. Less than one-third (29%) felt that the councillors were provided with the resources and information required to fulfil their responsibilities.

Transparency

Survey participants were then asked to assess the transparency of the limit setting process through a set of questions (Q.6a-Q.6j) designed to ascertain whether critical aspects of the process had been explained (Figure 5-5).

6a-6f	It was clearly explained at the start of the limit setting process: 6a) who could participate and how, 6b) what form the discussions would take, 6c) what analysis would inform the discussions 6d) who would make the recommendations and decisions, 6e) how the decisions would be made, 6f) how community input (feedback/comments) would be used
6g	Sufficient information, including agendas, minutes and record of agreements, was made available to anyone wishing to follow the process
6h	The process had no sense of secrecy or 'hidden agenda'
6i	The decisions, and the rationale for these, have been clearly explained
6j	The process has enabled the community to understand more fully and better accept the recommendations, even if they don't necessarily agree with it

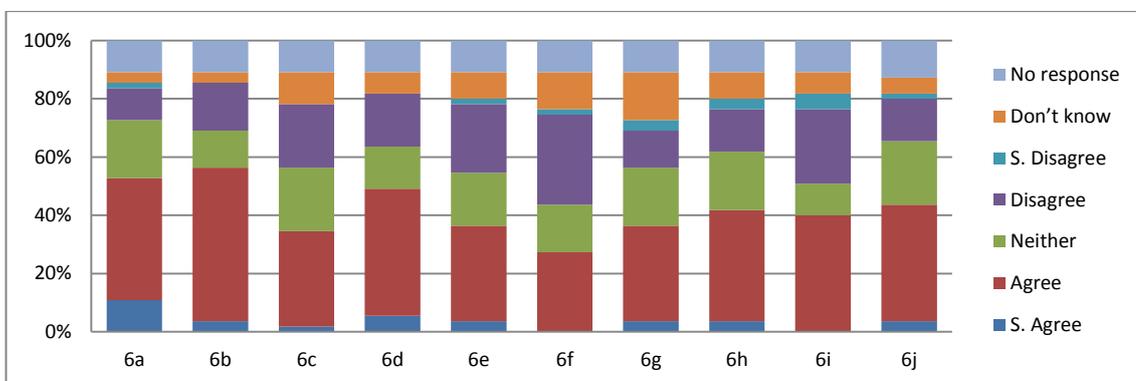


Figure 5-5: Otago Plan Change 6A – Perceptions of Transparency

When asked whether respondents were informed as to who and how people could participate, what form the discussions would take and who would make the recommendations, 49-56% of Otago respondents responded favourably. A comment was made that 'ORC staff took the time to signal change well in advance, explain the role of community and encourage dialogue and explain and talk through areas of concern'. Despite this affirmation, however, only 35% felt they were told what analysis would inform discussions and how the decisions were to be made. Just over one-third (36%) of respondents felt that sufficient information was made available to those wishing to follow the process and fewer (27%) felt informed about how the community

feedback was to be used. The process managers were more positive about this series of questions compared with the submitters and other community representatives.

Around 40% felt that the council decisions and their rationale had been clearly explained and slightly more (44%) felt the process enabled the community to better understand and accept the decisions. While 42% felt no sense of secrecy in the process, 18% did indicate some hint of a ‘hidden agenda’.

Procedural Inclusiveness

Procedural inclusiveness is also an important component of throughout legitimacy, and was the focus of Q.7a-Q.7h (Figure 5-6).

7a	Civility and respect was maintained during the limit setting process
7b	The process was conducted in a fair, impartial manner
7c	Face to face dialogue was enabled as part of this process
7d	The process was managed to prevent coercion or domination by certain organisations, groups or individuals
7e	The process was too controlled / structured
7f	The process accommodated and respected debate and conflict, rather than closing it down
7g	The community were able to articulate their views clearly, in a safe, non-threatening environment
7h	Community interest and involvement was maintained throughout the process

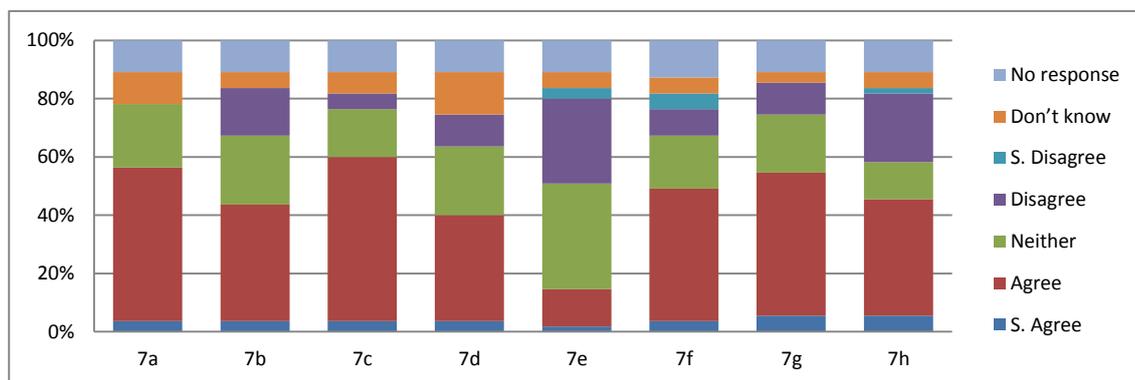


Figure 5-6: Otago Plan Change 6A – Perceptions of Procedural Fairness and Inclusiveness

When Otago respondents were queried about the PC6A process, no-one disagreed and most (56%) agreed that it was civil and respectful and 44% felt that it was fair and impartial. Around 40% felt that it controlled coercion and domination, though few (15%) felt it was too controlled. Nearly half (49%) agreed the process accommodated debate and conflict, however, still 55% felt it provided a safe, non-threatening environment for the community to articulate their views. One respondent observed that it was a ‘good process for fostering communication between interested parties and it improved understanding of diverse issues and perspectives’. Face to face dialogue was enabled according to 60%, and 45% felt that the process maintained community interest and involvement throughout. The comment was made by one respondent that it was

'satisfying to see and hear other people who had similar ideas to you - it was good to hear how they presented their ideas'.

Information sharing

Respondents were next asked, through Q.8a-Q.8o, to provide their assessment regarding the provision and sharing of information in the limit setting process (Figure 5-7).

8a-8g	The information provided/presented to the community was: 8a) accurate and up-to-date, 8b) accepted and robust, 8c) understandable and usable 8d) reliable 8e) provided in a timely manner 8f) driven by what the community requested], 8g) spanned the 4 well-beings (social, soc, env, cultural)
8h	Members of the community / I felt overwhelmed at the amount of information that was provided and found it difficult to digest it all
8i	The process enabled the community to increase their understanding of the relevant issues
8j	The process enabled the community to increase their understanding of other peoples perspective
8k	It was evident that some community members changed their views as the process developed and their understanding and learning increased
8l	The limit setting process was a one-way flow of information from the Council to the community
8m	The community was provided the opportunity to contribute their own knowledge / information
8n	Local 'layman' knowledge was considered just as important as technical scientific information.
8o	There are some significant information gaps remaining at the end of the limit setting process that still need to be filled

The information was accurate, up to date and provided in a timely manner, according to 42% of respondents. One-third felt that the information was understandable and usable, though only one-quarter felt it was accepted and robust. In response to a question exploring 'information overload', 38% felt participants were overwhelmed at the volume of information provided, while 22% disagreed and one process manager strongly disagreed. The process enabled the community to better understand the relevant issues and other's perspectives, according to 64% and 55% respectively, with some respondents 'applauding the work of the ORC staff' and indicating that they felt more informed after the process. However, only 20% considered that participants in the process actually changed their views as their understanding and learning increased. Again, the process managers felt generally more positive about this line of questioning than other participants.

Just over one-third (36%) felt the information flowed one-way only from the Council to the community. While 55% felt the opportunity was provided to the community to contribute their own knowledge and information only 18%, including the process managers, actually felt this local knowledge was considered as important as the technical scientific information. Respondents suggested that information sharing was important during both the consultation/pre-RMA phase and the RMA Schedule 1

phase, with recommendations of pre-notification meetings and having council staff attend the hearing so they can better understand submitters' issues and viewpoints.

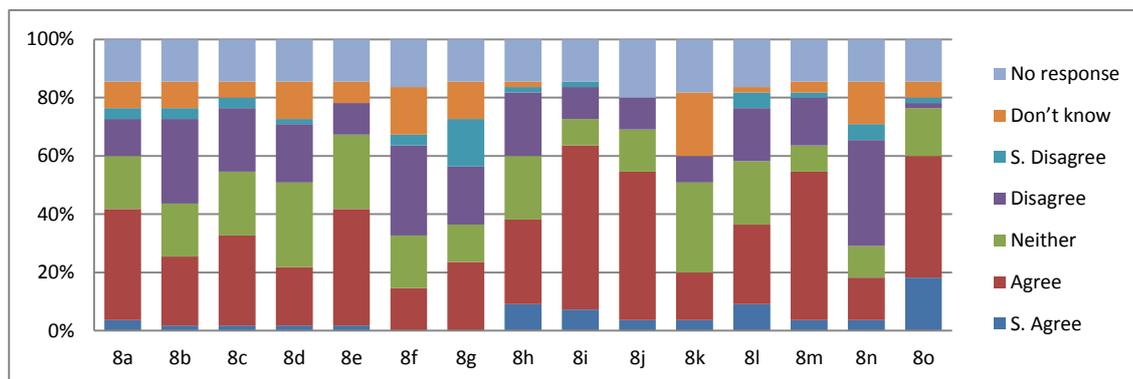


Figure 5-7: Otago Plan Change 6A – Perceptions of Information Sharing

Ensuring robust science was a key theme emerging from Otago respondents, including the need for ‘hard factual data regarding the effects’, and a ‘full balance between environmental, social, economic, and cultural, where the latter three are not just “lip-service”’. However, only 15% of respondents felt the information provided was driven by what the community requested, and 24% felt it sufficiently spanned the four well-beings. When asked if there were any significant information gaps remaining to be filled, 42% agreed and 18% strongly agreed. These responses have likely resulted from a perceived lack of social and economic analysis, evident in responses.

Time

The final criterion of throughput legitimacy - that of time - was explored through Q.9a-Q.9e (Figure 6-8).

9a	Some members of the community / I did not have the time to participate effectively in the process
9b	Sufficient time was provided to digest the information, consider the issues and challenges, and provide feedback where requested
9c	The limit setting process should have moved faster
9d	People were / I was tired of attending meetings by the end of the process
9e	The overall timescale was appropriate to ensure a robust process

Only 25% of Otago participants felt they had sufficient time to participate effectively. For those who could engage in the process, 42% felt that adequate time was provided to digest the information, consider the issues and challenges, and provide feedback. Over half (53%), including the process managers, disagreed that the process should have moved faster and only 7% expressed weariness in terms of attending meetings. When asked whether the overall timescale was appropriate to ensure a robust process, far more felt it was (42%) than was not (15%).

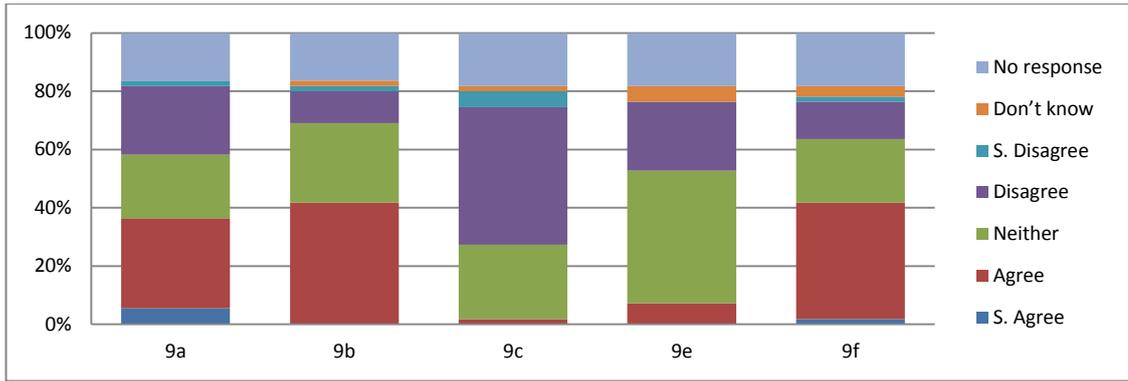


Figure 5-8: Otago Plan Change 6A – Perceptions of Time

5.3.3 Output legitimacy

Output legitimacy is focused on the quality, effectiveness, and consequences of the process results or outcomes.

Outcome effectiveness

Output legitimacy was first assessed against the criterion of outcome effectiveness explored through Q.10a-Q10f (Figure 5-9). The ‘outcome’ was specified as the council decision, as the Environment Court decision had not been released when the survey was conducted.

10a	The limit setting process fostered creativity and innovative solutions, not obvious at the outset
10b	The outcomes of the process are effective
10c	The outcomes of the process are community enhancing
10d	The outcome is practical and implementable
10e	Everyone gains, to some degree, from the outcome
10f	Relationships or partnerships between the community and Otago Regional Council have improved as a result of this process

When queried about the council decision, 22% felt it was effective and 18% community enhancing, though a greater number (31% and 33% respectively) disagreed to some extent with these statements and 31% either did not know or were ambivalent. Process managers answered favourably to these questions, while criticism was spread evenly between submitters and non-submitters. Despite the comment that ‘new thinking created an innovative approach and gained community acceptance’, only 18% felt that creativity and innovation, and 18-19% considered the council decision to be practical and implementable and one which everyone gains from. While one respondent commented that the opportunity to interact with other interests had been ‘very interesting’, fewer respondents agreed (24%) than disagreed (36%) that relationships or partnerships between the community and the Council improved due to this process, with the two who strongly agreed being the process managers.

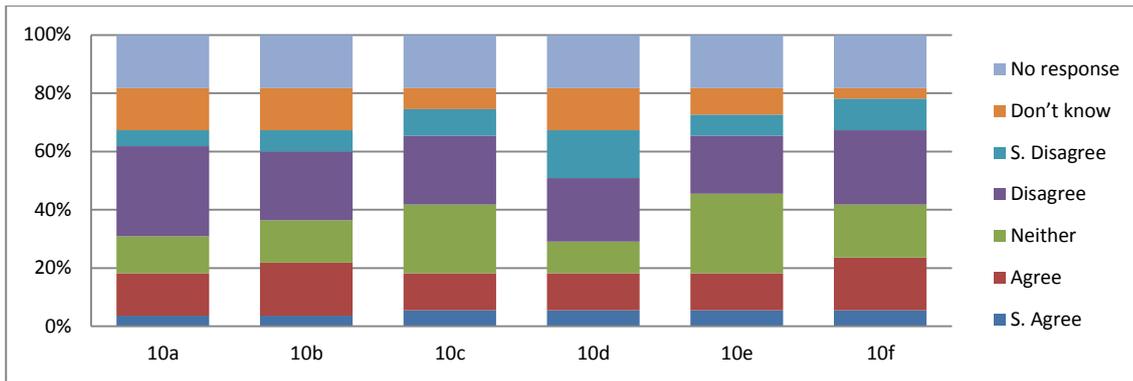


Figure 5-9: Otago Plan Change 6A – Perceptions of Outcome Effectiveness

Reflection of community input

Survey respondents were next asked questions (Q.11a-Q.11j) to assess the extent to which participants can see their input reflected in the outcome (Figure 5-10). Again, the ‘outcome’ specified was the council decision.

11a	The outcomes of the limit setting process are accepted by the community
11b	The outcomes of the limit setting process are supported by the community
11c	Because of the limit setting process, public trust in Otago Regional Council has increased
11d	The outcome resonates with and reflects community values and is consistent with general sentiments in the wider community
11e	The community's ideas, analysis and information were taken on board and reflected in the outcome
11f	Maori values and perspectives are adequately reflected in the outcome
11g	The outcome is more reflective of the interests of the people involved in the process rather than the whole community
11h	The aim of the public consultation was to gain support for an already decided policy
11i	The community feel ownership of the process outcomes and are likely to want to be involved in the implementation
11j	The outcome reflects an appropriate balance of science and community input?

Only 24% felt that the outcome resonates with and is consistent with community beliefs, and though one respondent stated ‘I believe our voice was heard and our ideas supported’, overall only 20% of respondents were confident that the community's ideas and knowledge were taken on board and reflected in the outcome.

Many more respondents agreed (45%) than disagreed (15%) that the process was pre-ordained and that the public consultation was, as described, the ‘same old going through the motions of an already decided policy’. When asked if the outcome is more reflective of the interests of those involved in the process rather than the whole community, 38% felt it was. It is, therefore, not unexpected that only few felt the Otago limit-setting outcomes are accepted (16%) and supported (11%) by the community, respectively. The process managers answered favourably to these statements along with a few submitters. Only 20% believed the community feel ownership of the outcomes and are likely to want to be involved in the implementation, while more

respondent (27%) disagreed or strongly disagreed. Additionally, when asked whether the outcome reflects an appropriate balance between science and community input, only one-quarter agreed, with another 52% answering unfavourably - 27% stating it lacks science input and 25% stating it lacks community input.

Consistent with this feedback, and contrary to the comment made by one participant that 'I trusted the council to make decisions after the consultation and I had confidence in their environmental science and brave ways of thinking for future water quality', only 18% agreed with the statement that public trust in the ORC has increased due to the process, with 29% disagreeing to some extent.

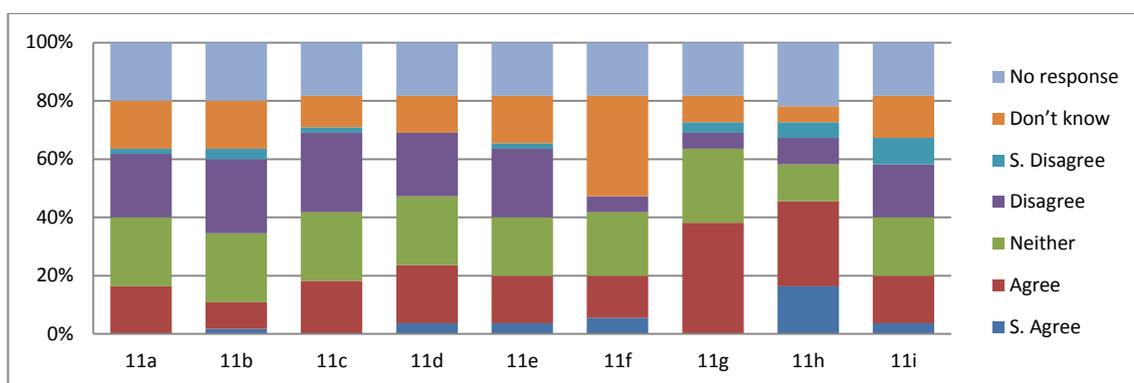


Figure 5-10: Otago Plan Change 6A – Perceptions of the Reflection of Community Input

Lawfulness

The final question related to output legitimacy (Q.12a) focussed on the lawfulness of the process.

12a The process and outcomes uphold all existing laws and regulations

When asked whether the process and outcomes upheld all existing laws and regulations, 31% agreed or strongly agreed, only 7% disagreed, and equal numbers (22%) either did not know or neither agreed nor disagreed.

5.3.4 Maori participation

Maori participation and the suitability of the outcome for Maori were explored through various survey questions. Answers indicate a lack of awareness or understanding regarding the involvement of Maori in the PC6A process. Over half (53%) the respondents did not know or were ambivalent as to whether there were adequate opportunities for Maori to participate in the process, though 42% felt the opportunity was there. Only 20% agreed that Maori values and perspectives are adequately reflected in the outcome; though only 5% disagreed and most (56%) did not know or were indecisive. A technical expert respondent that Iwi were inactive at a community

level - possibly due to capability constraints – however, they became more actively engaged in the Environment Court mediation process.

5.3.5 Barriers to achieving legitimacy

The survey explored, using open-ended questions across all criteria, what barriers to achieving input, throughput, or output legitimacy existed. Some key themes emerged from the Otago respondents.

Many respondents noted resource constraints, centred on finances, time and access to technical experts and legal advice. For some the process was too time-consuming, involved too much travel, and was dealing with issues ‘too complex for the time I had’. Participants suggested that many people didn’t know how to participate or how important their participation was. Others pointed out that key stakeholders were not involved until the submission process as they were unprepared for how quickly the process moved and had insufficient resources to participate in multiple regions in parallel. Some felt the process was driven too fast to allow for sufficient science or community discussion and, therefore, resulted in a council-driven framework that ‘did not work for the community’.

The second theme centred on technical knowledge barriers, with many respondents reporting a ‘somewhat daunting’ process which required participants to have a high level of technical knowledge and expertise in order to actively participate and understand the proposals. One respondent was so overwhelmed at the volume of information being distributed that it became ‘mindboggling’ and resulted in them withdrawing from the hearing. It was commented that it is difficult for community members to translate their values into policy, that is, ‘people know what they want (e.g. safe swimming) but they don’t know what the limit needs to be to achieve that or the consequences of that limit’. Correspondingly, when queried through question Q.2l, nearly two-thirds (64%) suggested that knowledge, skill, or resource constraints influenced some people’s ability to participate effectively. It is noteworthy that despite this obvious limitation, 65% disagreed or strongly disagreed with the notion that the limit setting process should have been based on science alone and ‘left to the experts’ (Q.2m), including the two process managers.

The third cluster of responses focussed on the lack of understanding or realisation in the community about the implications of the process and limits. Respondents stated that many in the farming community were not aware of, or engaged in, the process. It was suggested that the community discussions were too high level to be either informative or insightful and as a result, it was not until the detailed PC6A was released

that on-farm ramifications became evident. Even then, many farmers were too late to appreciate the potential impacts and costs and the need to be involved, and so missed the opportunity to submit. A suggestion was made by one respondent that future processes would benefit from an external (not Council-employed) support person to help landowners understand the implications.

Many respondents also highlighted a lack of economic and social analysis of the implications of the limits, so that 'even those who did attend meetings did not have balanced information'. Some respondents expressed frustration with the wider technical analysis, suggesting that some of the technical details appeared negotiable and that 'decisions were rushed on poor or limited science' and it 'lacked the scientific robustness expected from a process such as this'. Respondents also observed conflicting and incomplete information being disseminated,

Even after the limits were set, the Council were providing information to stakeholders that was, at best, confusing, and, at worst, misleading.....so, farmers were disadvantaged in the submission and hearing process as they could not even assess whether their farms complied with the limits, or what mitigation options they might have to undertake in order to comply (Industry/stakeholder representative).

Also highlighted as barriers to legitimacy, was the perceived lack of community engagement and the notion that the outcome was preordained. Some respondents alleged that during the consultation phase they were not listened to and the decision had already been made before community discussions. Some respondents commented that the proposed limits 'did not appear to be open to change during the process' and '[ORC] didn't want to know what the community really wanted'. As such, the 'focus became one of defence from the Council - as if to say "this is our position, we're correct, and we are not going to accept any further input"'. Consequently, it was observed by a respondent that the practical application and implication of the rules and limits was not well understood by the ORC. While others acknowledged the council had done some consultation through community meetings, some felt there was 'always an element of bashing ones head against a brick wall' and,

...although there were opportunities to "participate" in the limit-setting process, this was more about the ORC providing information on the limits, rather than seeking genuine involvement from those affected by it (Industry/stakeholder representative).

This was echoed in comments made regarding the RMA Schedule 1 submission and council hearing stages. Respondents suggested the ORC appeared closed to community input, with frustration expressed by one respondent that while 'clear and logical' submissions were presented, the 'notified version of the plan - with tweaks - was rubber-stamped'. One respondent felt that PC6A was a 'very poor example of Schedule 1 process' and stated 'they are happy to have only 35 mediation disputes - I don't see that as positive'. One respondent summed up many of these concerns and barriers, saying:

A large amount of time, energy and financial resources have been expended by a large number of people and organisations throughout the process. If there had been more attention paid to the community's concerns (and these concerns had been taken seriously) at the outset, this would have reduced the need for such complex and lengthy environment court appeal processes. It has been exhausting and frustrating. There has been a real sense that people weren't being listened to, and that our concerns weren't being taken seriously (Industry/stakeholder representative).

Various respondents noted, however, that the subsequent Environment Court mediation process had been a lot more satisfying, with the parties working towards more practical and implementable limits. Many felt that it was at the appeal stage that the Council were more open to discussion and reaching 'common sense decisions and compromises' that people would want to work together to achieve.

5.4 Selwyn Waihora case study – sub-regional section

The Selwyn Waihora sub-regional process sought to set water quality and quantity limits for the catchment. Environment Canterbury chose to set these limits using a community-driven approach, led by the zone committee and supported by a community focus group process.

5.4.1 Input legitimacy

Inclusiveness

Selwyn Waihora survey participants were first asked a series of questions (Q.2a-Q2u) related to the input criterion of inclusiveness (Figure 5-11). While reflecting the Selwyn Waihora process and the groups involved, these questions were consistent with those asked of the Otago survey participants with the addition of question (2h) regarding the transparency of the zone committee selection process.

2a	Everyone interested in or affected by the limit setting process had an opportunity to be involved
2b	Environment Canterbury expressed a commitment at the start of the process to listen to, and incorporate the views of the community in the recommendation / decision
2c	The Selwyn Waihora Zone Committee expressed a commitment at the start of the process to listen to, and incorporate the views of the community in the recommendation / decision
2d	The decision makers (Environment Canterbury Commissioners) were actively involved in the process and discussions with the Zone Committee and wider community
2e	The Decision makers (Environment Canterbury Commissioners) were accessible to the community
2f	Environment Canterbury staff were accessible to the community
2g	The Selwyn Waihora Zone Committee were accessible to the community
2h	The criteria used to select the Zone Committee was transparent
2i	The process had a stronger focus on direct involvement (community deliberation and debate) than indirect involvement (letter writing, lobbying, letters to editor)
2j	The community were engaged early in the process, before any key decisions were made
2k	Community involvement occurred too late in the limit setting process to be influential i.e. it was a 'rubberstamping' exercise
2l	Environment Canterbury staff were open to modifying the process to meet the demands and concerns of the community
2m	Everyone involved in the process had a valid right to participate
2n	Everyone involved in the process had an incentive to participate
2o	Knowledge, skill, or resource constraints influenced some people's ability to participate effectively
2p	The limit setting process should have been based on science alone and 'left to the experts'
2q	Were any sectors of the community excluded - intentionally or unintentionally – from the process? If so, who?
2r	Everyone / I had sufficient opportunity to question and express approval or opposition to the options and proposals discussed
2s	Opportunities to contribute to the discussion were limited to certain speakers or topics
2t	Adequate opportunities were provided for Maori to participate in the process
2u	Were there any barriers to participation in the limit setting process? If so, how could these barriers be overcome?

Most (70%) Selwyn Waihora respondents felt that those interested or affected had the opportunity to be involved, with most favourable comments coming from the zone committee and focus group participants. Nearly all (98%) believed those involved had a valid right to participate and 70% felt there was an incentive to participate. When asked whether ECan expressed a commitment to listen to and incorporate the views of the community, 63% agreed and 24% strongly agreed. Likewise, 46% agreed and 30% strongly agreed that the Selwyn Waihora Zone Committee made the same commitment. Fewer (52%) felt the ECan commissioners had been actively involved in the process and discussions, with the lowest ratings for this statement coming from process managers. Significantly, 91% and 81% felt that ECan staff and the Selwyn Waihora Zone Committee, respectively, were accessible to the community; however only 41% of respondents indicated that the commissioners were.

Despite the important role of the Selwyn Waihora Zone Committee, only 37% of respondents believed the criteria used to select the committee was transparent, with 33% disagreeing and 30% not knowing or ambivalent. It was suggested that the zone committee should have fewer members and be more balanced, and one respondent questioned whether having 6 Papatipu Rūnanga representatives was the best way to

ensure Ngai Tahu values and interests were reflected, proposing instead that two representatives may be better able to coordinate and facilitate Ngai Tahu contributions. Respondents also highlighted the need for a highly skilled zone committee with enough ‘intellectual grunt’ to lead and make decisions, and proposed the committee should be representative *of* the community, not composed of representatives *from* the community. There was a comment that the zone committee formation may have differed if the work programme and commitment required was specified prior to the call for applications. A respondent highlighted the need for the zone committee to take the lead in the process ‘from day one’, and ensure they are involved in all community discussions.

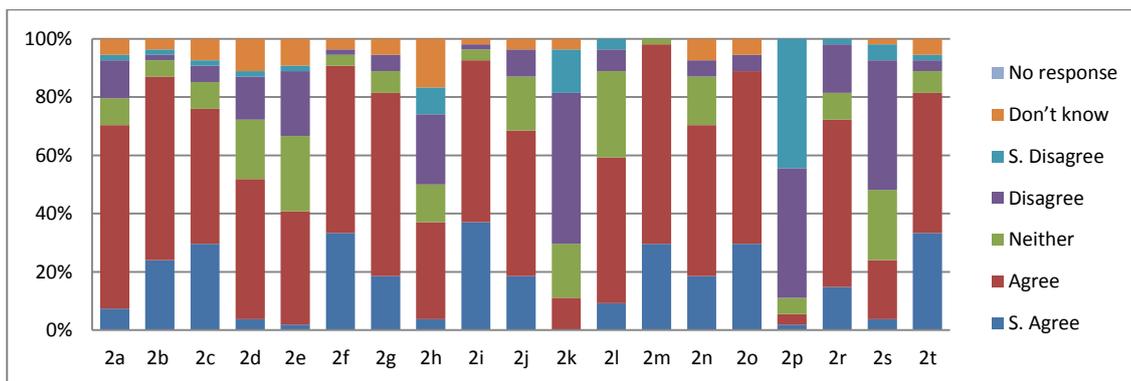


Figure 5-11: Selwyn Waihora Sub-Regional – Perceptions of Inclusiveness

Most respondents (93%) agreed that the Selwyn Waihora process had more focus on direct rather than indirect involvement, and 59% felt that ECan staff were open to adapting the process to address community concerns with a feeling of ‘responsiveness to the people involved’. It is notable, however, that the process managers rated this statement more positively (86%) than other respondent groupings. Most (69%) believed community engagement occurred before any major decisions were made, similar in number to those who disagreed that the process was a ‘rubber-stamping’ exercise (67%). The zone committee respondents answered most favourably (100%) to these questions, followed by the process managers. There were, however, around 10% who felt that community engagement occurred too late to be influential, with one respondent suggesting that ‘it was very much a rubber stamping exercise [where] Council staff set the limits’. Despite this sentiment, 72% felt participants had sufficient opportunity to question and show support or dissent of the options, and over half (54%) disagreed with the comment that discussion was limited to certain speakers or topics. Again, the positive responses came largely from the zone committee and process managers.

Representativeness

Perceptions of the representativeness of the Selwyn Waihora limit setting process were explored through Q.3a-Q.3l (Figure 5-12).

3a	The limit setting process involved a good cross-section of the community and affected or interested parties
3b-3g	The process was dominated by the following interests 3b) rural interests 3c) urban interests 3d) environmental interests 3e) economic interests 3f) local interests 3g) national/outside interest
3h	Minority groups were encouraged to be involved
3i	Minority groups had too much say in the process
3j	Environment Canterbury Commissioners adequately represent community demands, interests and preferences
3k	The Selwyn Waihora Zone Committee adequately represent community demands, interests and preferences
3l	Were there any major organisations, stakeholder groups, communities of interest or demographic or social-economic category, not represented or under-represented in the limit setting process? If so, who and why?

The majority (78%) of respondents agreed that the limit setting process involved a good cross-section of the community, with most favourable responses coming from the zone committee and focus group members. When asked whether specific parties or sectors dominated the process, 57% agreed the rural sector dominated, whereas 6% felt that urban sectors dominated; 44% felt that environmental interests dominated and 54% believed that economic interests dominated. The catchment or zonal nature of the process was reflected in the 57% who suggested it was dominated by local interests, with only 15% saying outside/national interests dominated. Half (50%) agreed that minority group involvement was encouraged, and it is notable that the process managers viewed this statement less positively than both the zone committee and focus group respondents. Few (9%) felt that these minority groups had too much say.

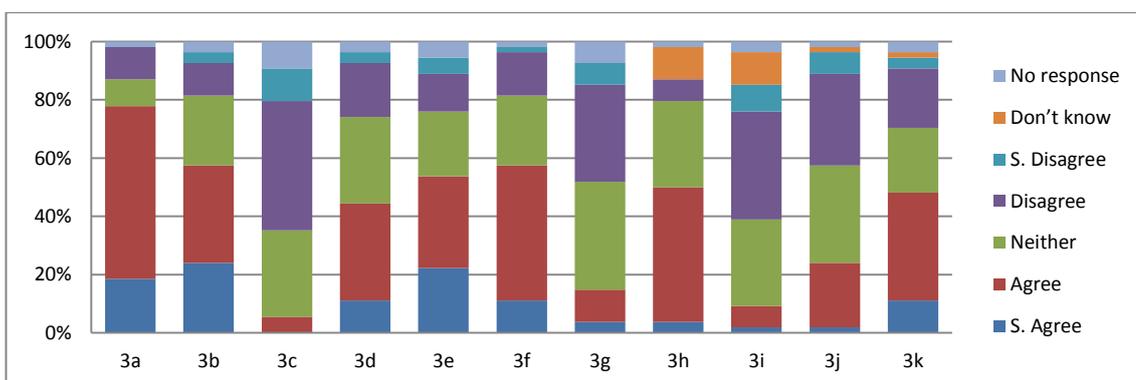


Figure 5-12: Selwyn Waihora Sub-Regional – Perceptions of Representativeness

Only 24% felt that the ECan commissioners adequately represent community interests. While the zone committee was viewed more favourably in this regard, still less than half (48%) agreed or strongly agreed that the committee represented the broad community.

The process managers and 'other participant' group were the least positive regarding this statement. One respondent suggested,

I believe that the local community was under-represented on the zone committee in the way that the representatives were selected. In the end we ended up with community representatives with strong green and environmental agendas from outside the zone sitting at the table with no empathy for the local community.

5.4.2 Throughput legitimacy

Efficiency

Survey participants were then asked to assess the efficiency of the Selwyn Waihora limit setting process through Q.4a-Q.4g (Figure 5-13).

4a	Some groups did not participate in the discussions because they saw alternative means of influencing the decision to achieve their goals and objectives
4b	New 'common ground' between parties has been found through the process
4c	The collaborative, consensus approach adopted by the Zone Committee was appropriate for this process i.e. it suited the complexity of the situation and issues
4d	The consensus approach meant that some valuable ideas were obstructed by minority viewpoints
4e	Do you believe it took longer to deliver the recommendations because a consensus approach was taken? If yes, was the additional time spent on it worth it?
4f	The consensus approach reduced conflict between parties
4g	A top-down, council led approach would have been more appropriate for this limit setting process

Over two-thirds (69%) felt that the collaborative, consensus approach adopted by the zone committee was appropriate and 61% felt that new 'common ground' between parties was found as a result; the process managers and zone committee respondents viewed these statements most favourably. However, 46% of respondents still believed that some groups chose not to participate in discussions because they had alternative ways of influencing the decision. It is notable that the process managers were the group to agree with this statement the most. One respondent suggested that,

Where folk had bottom-lines incompatible with a collaborative, they walked or created further demands in attempt to achieve their desired outcomes (zone committee member)

While another commented,

Powerful interests do not need to go elsewhere because they had already been elsewhere and achieved a process that would deliver their desired goal i.e. no environment court process. Basically, when operating under a dictatorship as

we are in Canterbury, everything is more efficient because the results are pre-ordained - we were tinkering with the trivial (focus group member).

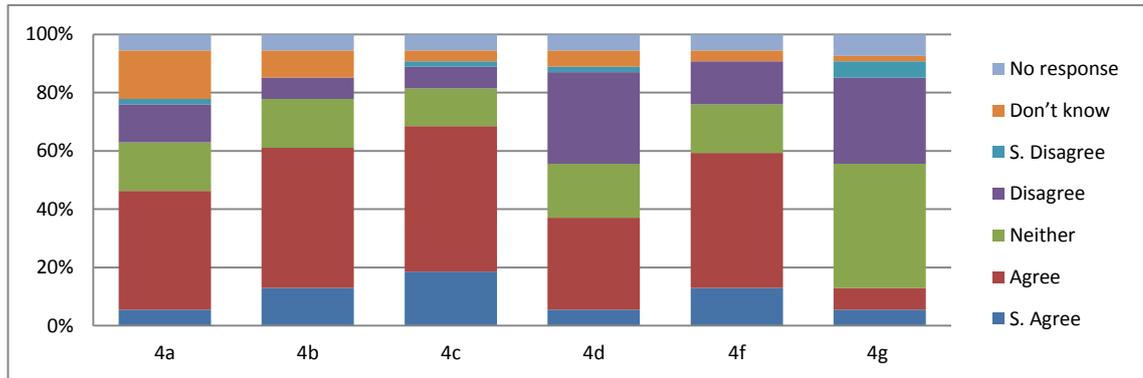


Figure 5-13: Selwyn Waihora Sub-Regional – Perceptions of Efficiency

Survey participants were asked additional questions to explore the consensus approach. When queried whether the process had reduced conflict between parties, 59% agreed or strongly agreed, with the zone committee most positive about this statement, followed by the 'other participants' group. However, 37% felt that some valuable ideas were obstructed by minority viewpoints, and it is notable that all zone committee respondents agreed with this, while the process managers largely disagreed. When asked whether the process took longer to deliver the recommendations because a consensus approach was taken, 59% of respondents felt it did, though of these 78% indicated that the additional time was worth it.

Overall, 72% disagreed that a top-down, council led approach would have been more appropriate for this process. This confidence toward the collaborative approach centred on some key areas. Respondents referred to the long-term, enduring benefits of collaboration. One respondent suggested that while collaboration may not be perfect or easy, there will be more willingness to work with the community and environmental interests to deliver 'on the ground action', than a council-led approach could ever achieve. Respondents also wrote about the ownership that is derived from collaboration, stating that to implement change the people most affected must be part of the initial process; any top-down policy would be seen as imposed and, therefore, take longer to implement and be less enduring. Respondents also talked about the importance of key stakeholders taking ownership, stating that 'primary industries will need to take the lead [in implementation], therefore, involving them in designing the solution has been very important'.

Other respondents were outcome-focussed, suggesting that top-down processes fail to produce a solution that best meets community needs. Survey participants suggested

that where top-down processes tend to 'put a stake in the ground and defend it', a bottom-up and community-driven process can produce more sustainable and acceptable outcomes. One respondent summed up:

The process of community discussion and debate must occur. If a notified plan was developed quickly the debate would occur through the statutory process, slowing this stage of the process, through a process where all ideas cannot be taken on board, due to the submissions, hearing and decision making process set out in the RMA (process manager).

Respondents also referred to the learning differences between top-down and collaborative processes, suggesting that the latter can inform and educate many in the community about science and management issues. Through the limit-setting process, respondents also learned about collaboration and what is involved in making collaborative decisions, 'where difficult value judgments and uncertainties are shared with all, leading to an overall less adversarial process'. It was observed that the collaborative process made it harder for stakeholders to influence it in an unfair way. Respondents also suggested that collaboration enabled people to feel heard and respected and helped build trust and an understanding of others views; all of which will have benefits into the future. The term 'acceptability' was used by several respondents who asserted that the same outcome would have been rejected by the community if the council had proposed it without collaboration – 'it is a social process that is informed by science, not a science process alone'.

There were, however, 13% of respondents who felt a top-down approach was preferable, noting the benefits of potentially faster outcomes, greater opportunity to provide written responses and articulate viewpoints, and greater accountability. Some comments regarding the governance arrangements were also made, with two respondents stating that a top-down approach would have been more favourable if the ECan was democratically elected, rather than led by commissioners, and accountable to the normal RMA processes and Environment Court. Another suggested that a top-down approach may have suited the very complex issues in the Selwyn Waihora zone, however, this respondent also stated that this 'presumes competence to represent all interests - and I don't think ECan could have done that'.

Some respondents suggested that the Selwyn Waihora process felt top-down as most information was provided by process managers 'unwilling to change their views', the science was a 'black box' and the discussions were driven by a combination of ECan staff, a 'hand-picked' zone committee, and government-appointed commissioners.

There was a suggestion, therefore, that the final decisions were made ‘by those associated with Council through mechanisms that were far from democratic’. One respondent commented ‘I was not aware a consensus approach was taken - it was the will of the majority and those who disagreed gave up fighting in order to at least make some improvements or to try to prevent worse damage’, and another remarked ‘saying this is not a top-down approach when the key decisions were already made is disingenuous’.

Accountability

The next set of questions looked at the accountability criterion, through Q.5a-Q.5h (Figure 5-14)

5a	Who do you feel was the main accountable and answerable body in this limit setting process? 1) Selwyn Waihora Zone Committee 2) Environment Canterbury Commissioners 3) Environment Canterbury staff 4) other?
5b	The accountable actors had authority to make the recommendations/decisions
5c	The accountable actors were sufficiently connected to the diverse societal interests affected by the recommendations/decisions
5d	There were measures available to deter inappropriate actions by the accountable actors
5e	The accountable actors consulted with the community in an appropriate manner, i.e. frequency and content
5f	The accountable actors achieved and maintained status and credibility throughout the process
5g	The accountable actors had sufficient resources and information to enable them to fulfil their responsibilities
5h	The accountable actors demonstrated fairness, consistency and integrity (e.g. declared conflicts of interest; were unbiased; did not seek to manipulate outcomes; behaved honestly)

When asked who the main accountable and answerable body was in the limit setting process, 52% of survey respondents indicated the Selwyn Waihora Zone Committee, 19% identified ECan staff, and 22% the ECan commissioners.

Of those (28) who specified the zone committee as the accountable actors, 79% felt they had the authority to make the recommendations, though only 39% believed there were measures available to deter inappropriate behaviour. Half felt that the zone committee were connected to their community, and slightly less (46%) felt the committee consulted appropriately with their community. Similarly, 46% agreed the zone committee had sufficient resources and information to carry out their functions. When asked whether the

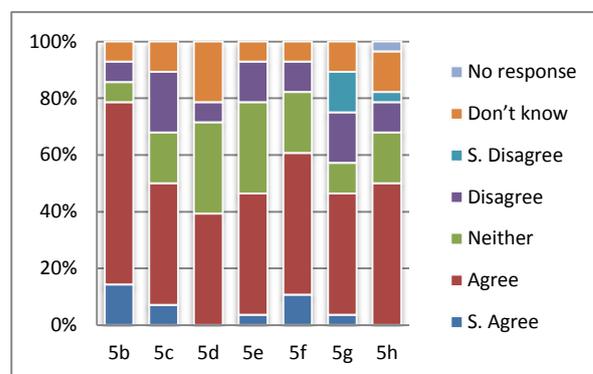


Figure 5-14a: Selwyn Waihora Sub-Regional – Perceptions of Accountability of Zone Committee

zone committee had status and credibility, 61% of relevant respondents agreed, and 50% felt they demonstrated fairness, consistency and integrity.

Of those (10) who viewed ECan staff as accountable, 30% felt they had the authority and 30% felt there were measures in place to prevent inappropriate behaviour. Half (5/10) felt staff were adequately connected to their community, and 60% felt they consulted appropriately and maintained their status and credibility. Over two-thirds (70%) felt that the staff had sufficient resources and information to fulfil their responsibilities; and half (50%) felt they demonstrated fairness, consistency and integrity. One respondent commented on the complexities associated with accountability at a staff level:

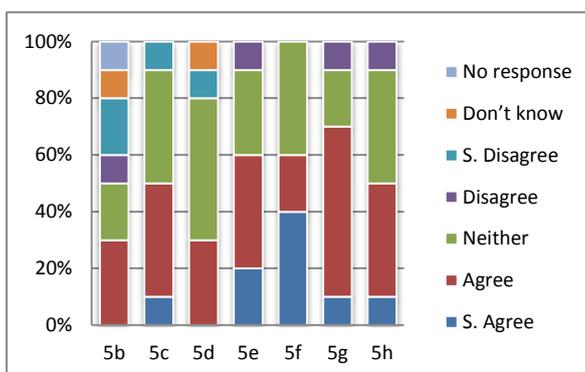


Figure 5-14b: Selwyn Waihora Sub-Regional – Perceptions of Accountability of ECan staff

ECan staff were probably the most directly accountable because they have to deal with many of [the community] on a day to day basis and know that several players have political power and so can influence things up the line - so they end up accountable to their political masters and also to the people they interact with on a daily or weekly basis who they must have good relations with if they wish to achieve other things they do (focus group member)

All those who believed ECan commissioners (12) were accountable felt they had the authority to make the decisions and three-quarters felt they had sufficient resources to fulfil their responsibilities. However, only 17% felt that there were measures available to deter inappropriate action. While 42% suggested the commissioners demonstrated fairness, consistency and integrity and consulted appropriately with their communities, only one-quarter felt they were actually connected to their society. Approximately one-third believed the commissioners maintained status and credibility. The desire for an elected council with local accountability was advocated by some respondents

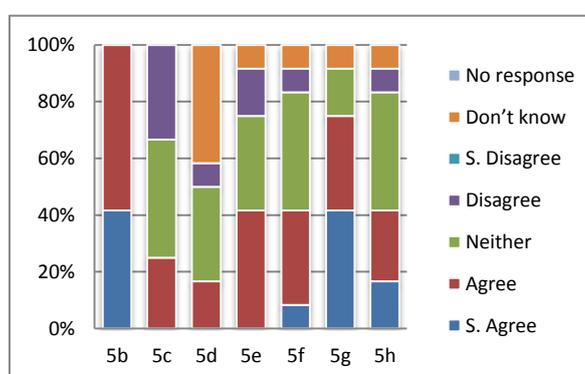


Figure 5-14c: Selwyn Waihora Sub-Regional – Perceptions of Accountability of ECan commissioners

who noting that the commissioners were ‘hand-picked by government.’

It is notable that while most of the process managers identified the zone committee as accountable, only one of the four zone committee members considered this to be the case. The ambiguity surrounding the notion of accountability aligns with responses from two survey participants who stated that no-one was accountable; one suggested that ultimately it will be the wider Selwyn Waihora community that will be accountable, while the other was more critical, stating that the process ‘was designed so that there is no accountability - that is the cleverness of it - when it all comes to custard there is less chance of holding anyone accountable than there was in the Pike River disaster’.

Transparency

Survey participants were next asked questions to assess transparency in Q.6a-6j (Figure 5-15).

6a-6f	It was clearly explained at the start of the limit setting process: 6a) who could participate and how, 6b) what form the discussions would take, 6c) what analysis would inform the discussions 6d) who would make the recommendations and decisions, 6e) how the decisions would be made, 6f) how community input (feedback/comments) would be used
6g	Sufficient information, including agendas, minutes and record of agreements, was made available to anyone wishing to follow the process
6h	The process had no sense of secrecy or ‘hidden agenda’
6i	The decisions, and the rationale for these, have been clearly explained
6j	The process has enabled the community to understand more fully and better accept the recommendations, even if they don't necessarily agree with it

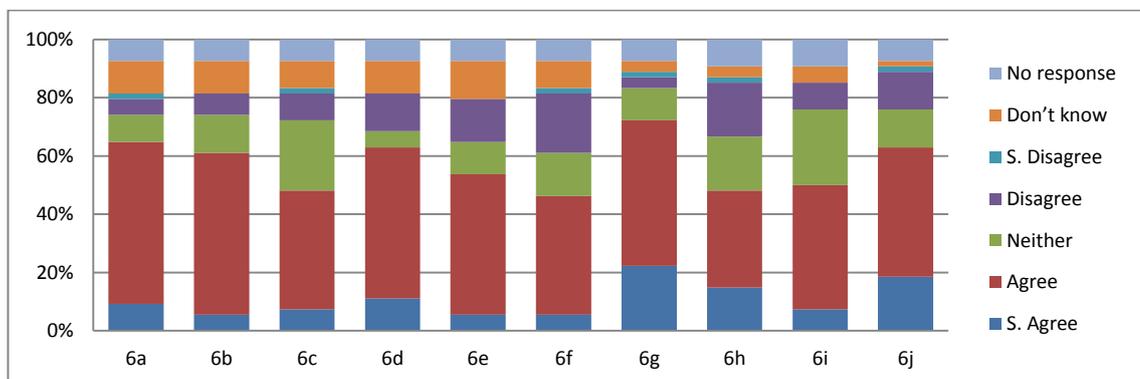


Figure 5-15: Selwyn Waihora Sub-Regional – Perceptions of Transparency

Half the respondents agreed and 22% strongly agreed that sufficient information was made available to anyone wishing to follow the process. Nearly two-thirds (65%) believed it was understood who could participate and how, 61%-63% felt participants were told what discussions would take place and who would make the recommendations and decisions, and 54% agreed that it was explained how the decisions would be made. However, less than half (48%) believed that there was adequate information about the analysis that would inform the discussions. Even fewer

(46%) felt it was clearly explained how the community input would be used, and this was inflated by positive responses from the process managers compared to the other groupings.

Despite agreement from all zone committee members that the decisions and rationale had been clearly explained, overall only half (50%) of the respondents concurred. Nearly two-thirds (63%) felt that the process enabled the community to understand and better accept the recommendations, with both the process managers and zone committee members answering most favourably. Less than half (48%), however, felt there was no hidden agenda, with 20% indicating some sense of secrecy in the process. One respondent noted

I felt we were led in a direction that did not appear totally open given my own research and understanding of the science. I believe towards the end of the process there was more trust from staff and experts to have a fuller debate and widen the thinking away from what I suspect was a managed process.

Procedural Inclusiveness

Respondents were next asked, through Q.7a-Q.7i, to provide their assessment regarding the procedural inclusiveness of the limit setting process (Figure 5-16).

7a	The Zone Committee had clear ground rules / terms of reference to guide their work
7b	Civility and respect was maintained during the limit setting process
7c	The process was conducted in a fair, impartial manner
7d	Face to face dialogue was enabled as part of this process
7e	The process was managed to prevent coercion or domination by certain organisations, groups or individuals
7f	The process was too controlled / structured
7g	The process accommodated and respected debate and conflict, rather than closing it down
7h	The community were able to articulate their views clearly, in a safe, non-threatening environment
7i	Community interest and involvement was maintained throughout the process

Over three-quarters (76%) of Selwyn Waihora respondents felt that civility and respect was maintained, though fewer (57%) believed the process was fair and impartial. Half agreed it was managed to prevent situations of coercion and domination and despite the structured design of the process and discussions only 17% believed it was too structured.

Most (80%) agreed that face to face dialogue was facilitated, and the responses suggest a balance was struck between accommodating and respecting debate and conflict (63% agreed) while enabling participants to safely present their views (61% agreed). Despite the significant commitment asked of participants, 63% felt that

community interest had been maintained throughout the process. It was commented that 'the door was always open for dialogue' and participants were only excluded from discussion 'if they decided to exclude themselves'. Process managers expressed admiration at the commitment shown by community members and their willingness to debate and discuss the tricky issues. Respondents favourably stated that the process enabled more community-focussed discussion, effective and non-combative consultation and less adversarial proceedings:

Zone committee members, ECan staff and community participants all put in a huge and credible effort to make this work and are to be applauded;

Much of the success of this is owed to the quality of facilitator and Zone Committee chair. They worked really hard to be inclusive, respond to peoples' needs, and kept the process moving;

I have enjoyed being part of this process and coming to grips with a whole new mountain of knowledge with skilled people.

Other respondents, however, felt there should be less emphasis on the scenario assessment and the continual feed of science, graphs, tables and numbers and more emphasis and in-depth discussion on 'what it means for me/my sector' and the possible policy and non-regulatory solutions available. Respondents observed the need for more cross-sector, rather than sector-based discussions to facilitate greater understanding of differing realities and viewpoints.

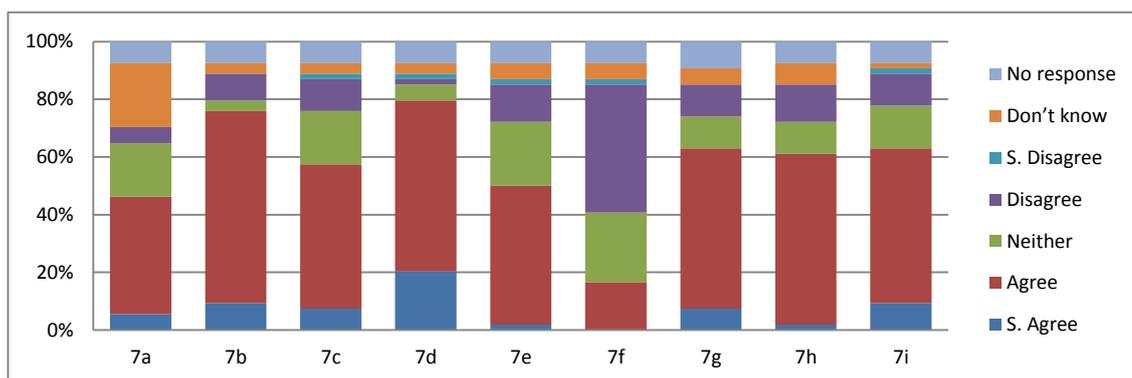


Figure 5-16: Selwyn Waihora Sub-Regional – Perceptions of Procedural Fairness and Inclusiveness

An additional question was asked to explore how participants perceived the functioning of the zone committee. When queried whether they felt the zone committee had clear ground rules or terms of reference to guide their work, less than half (46%) believed they did, and many (41%) either did not know or were indecisive, again highlighting a

lack of understanding and transparency in the selection and operation of the zone committee.

Information sharing

Survey participants were then asked a series of questions (Q.8a-Q.8o) related to the throughput legitimacy criterion of information sharing (Figure 5-17).

8a-8g	The information provided/presented to the community was: 8a) accurate and up-to-date, 8b) accepted and robust, 8c) understandable and usable 8d) reliable 8e) provided in a timely manner 8f) driven by what the community requested], 8g) spanned the 4 well-beings (social, soc, env, cultural)
8h	Members of the community / I felt overwhelmed at the amount of information that was provided and found it difficult to digest it all
8i	The process enabled the community to increase their understanding of the relevant issues
8j	The process enabled the community to increase their understanding of other peoples perspective
8k	It was evident that some community members changed their views as the process developed and their understanding and learning increased
8l	The limit setting process was a one-way flow of information from the Council to the community
8m	The community was provided the opportunity to contribute their own knowledge / information
8n	Local 'layman' knowledge was considered just as important as technical scientific information.
8o	There are some significant information gaps remaining at the end of the limit setting process that still need to be filled

When asked for their perceptions regarding the information provided to the zone committee and community, 56% considered it to be accurate and up to date and 57% felt it was provided in a timely manner. Half considered the information understandable and usable, though less than half felt it was accepted and robust (35%), reliable (44%) or driven by what the community wanted (46%). Encouragingly, 69% agreed or strongly agreed that the information provided sufficiently spanned the four well-beings, though this is inflated by the agreement from the zone committee (100%) and process managers (90%).

Around half the respondents agreed (31%) or strongly agreed (20%) that people felt overwhelmed by the information. The process managers largely agreed with this statement, while the zone committee and focus group respondents generally disagreed. This suggests that the community participants may have been able to 'take on board' and understand more information than the process managers anticipated. As with the Otago process many respondents, including the process managers, felt that there were outstanding information gaps to be filled.

Most respondents agreed that the process enabled the community to increase their understanding of the relevant issues (89%) and others perspectives (87%) and 59% felt that they saw other community members changing their views as their learning and understanding developed. Respondents commented that the process had been a learning experience which enabled them to better understand the issues and hear from

other communities and groups about their concerns. Only 11% felt there was a one-way flow of information from council to community and consistently, 72% agreed that the community were able to contribute their own knowledge. However, only 22% felt that this 'layman' knowledge was considered as important as the technical information.

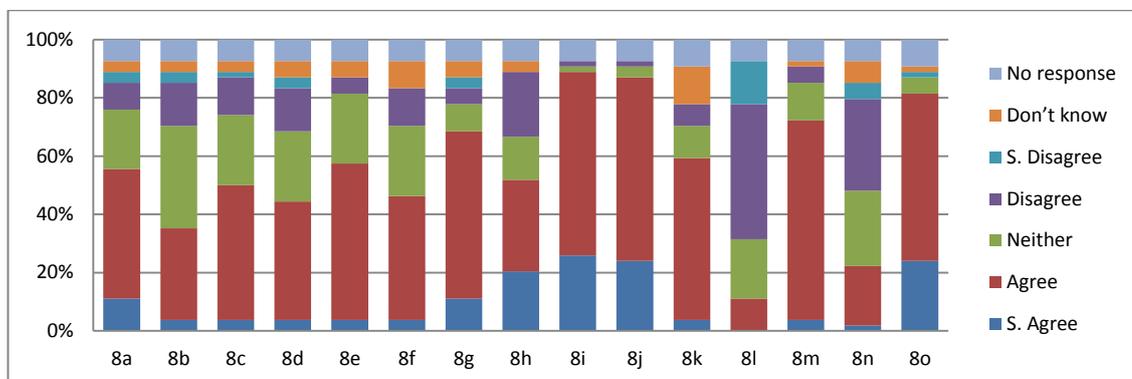


Figure 5-17: Selwyn Waihora Sub-Regional – Perceptions of Information Sharing

Time

Time, as the final measure of throughput legitimacy was explored through Q.9a-Q.9f (Figure 5-18). While 57% of respondents indicated that the community did not have the time to participate effectively, it was again the process managers that agreed with this statement, whereas zone committee and focus group members tended to disagree. However, well under half (37%) believed adequate time was provided to digest and consider the information and provide feedback and 43% felt that there was insufficient time provided to fully discuss all relevant issues.

9a	Some members of the community / I did not have the time to participate effectively in the process
9b	Sufficient time was provided to digest the information, consider the issues and challenges, and provide feedback where requested
9c	The limit setting process should have moved faster
9d	Sufficient time was provided for a full discussion on all the relevant issues
9e	People were / I was tired of attending meetings by the end of the process
9f	The overall timescale was appropriate to ensure a robust process

As with the Otago process, very few (6%) felt that the process should have moved faster, with 63% disagreeing or strongly disagreeing with this statement. Fatigue was expressed by 37% of respondents who were tired or felt others in the community were tired of attending meetings, though it is interesting that most of these responses came from process managers. Overall, only one-third of participants felt that the overall timescale was appropriate to enable a robust process.

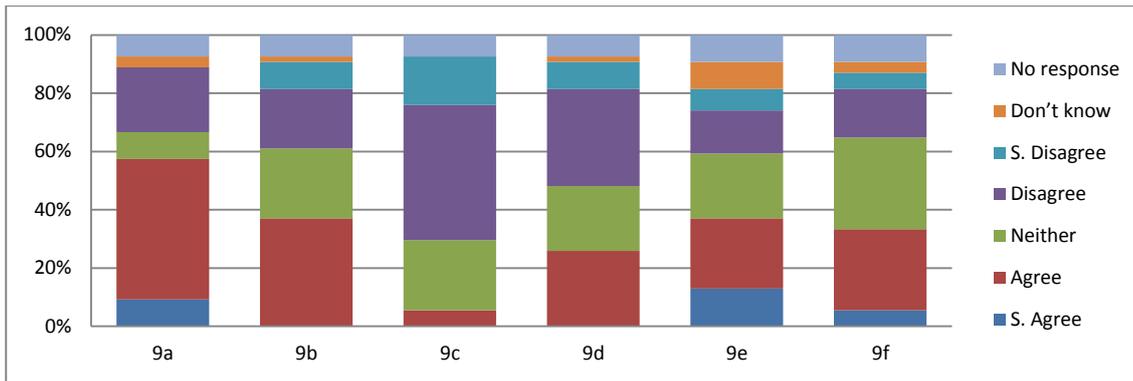


Figure 5-18: Selwyn Waihora Sub-Regional – Perceptions of Time

5.4.3 Output legitimacy

Output legitimacy was then examined, starting with the outcome effectiveness criterion through Q.10a-Q10g (Figure 5-19). The ‘outcome’ referred to the ZIP Addendum developed by the zone committee as the writing instructions for the Statutory Plan.

Outcome effectiveness

10a	The consensus approach meant that emphasis was put on achieving an agreeable outcome, rather than a quality one
10b	The limit setting process fostered creativity and innovative solutions, not obvious at the outset
10c	The outcomes of the process are effective
10d	The outcomes of the process are community enhancing
10e	The outcome is practical and implementable
10f	Everyone gains, to some degree, from the outcome
10g	Relationships or partnerships between the community and Environment Canterbury have improved as a result of this process

Over half the Selwyn Waihora respondents (57%) agreed the process had resulted in improved relationships or partnerships between the community and ECan, however, it is notable that the process managers were more confident about this than the other group. Despite more than half (52%) the respondents indicating that the process had fostered creativity and innovation, only 35% felt the ZIP Addendum was practical and implementable and 37% considered it effective. Under half (48%) were confident that the Addendum was community enhancing and slightly less (46%) believed that everyone gained, to some extent, from the outcome. One respondent observed that the Addendum is a compromise, and all parties ‘should be at least partially unhappy with the outcome - in this way it is balanced with each party having some wins but also some losses’.

Several disillusioned comments were made regarding the environmental effectiveness of the outcome, and the likelihood of it improving the environment

I am focussed on what is actually happening to the environment. That is not improving, and I have zero confidence that it will improve as an outcome of this process.

I'm very worried about the future of Lake Ellesmere as an important habitat.

Good luck New Zealand. Bottled water is expensive and it's your future.

There has not been enough consideration given to alternative land use than irrigated dairy farming.

It is incredibly insulting and frustrating to take part in a process where actually achieving ecologically sustainable water quality in our lifetimes is never going to be an acceptable outcome to the decision-makers.

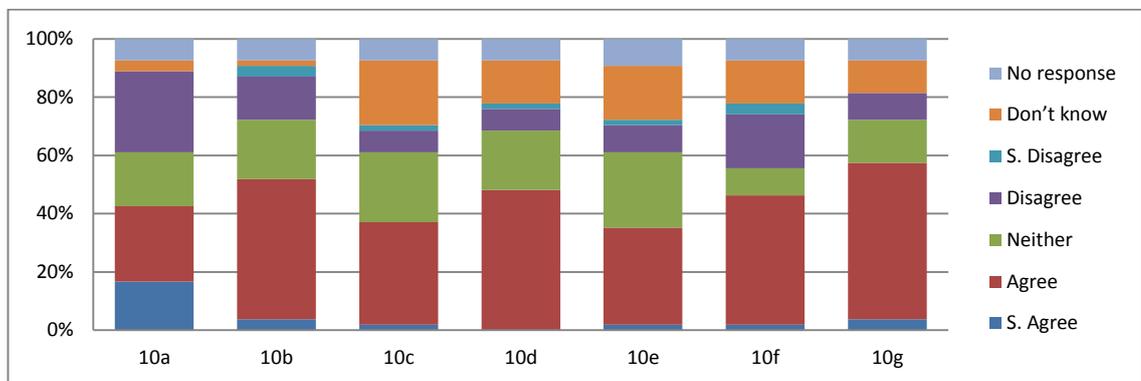


Figure 5-19: Selwyn Waihora Sub-Regional – Perceptions of Outcome Effectiveness

An additional question was asked to explore the consensus approach, inquiring into whether the focus on consensus meant that emphasis was put on achieving an agreeable outcome, rather than a quality one. While no zone committee members agreed with this statement, overall many more (43%) agreed that this was the case, compared to those (28%) that disagreed.

Reflection of community input

The next series of questions (Q.11a-Q.11j) examined the extent to which Selwyn Waihora participants could see their input reflected in the ZIP Addendum, as the ‘outcome’ specified for the process (Figure 5-20)

11a	The outcomes of the limit setting process are accepted by the community
11b	The outcomes of the limit setting process are supported by the community
11c	Because of the limit setting process, public trust in Environment Canterbury has increased
11d	The outcome resonates with and reflects community values and is consistent with general sentiments in the wider community
11e	The community's ideas, analysis and information were taken on board and reflected in the outcome
11f	Maori values and perspectives are adequately reflected in the outcome

11g	The outcome is more reflective of the interests of the people involved in the process rather than the whole community
11h	The aim of the public consultation was to gain support for an already decided policy
11i	The community feel ownership of the process outcomes and are likely to want to be involved in the implementation
11j	The outcome reflects an appropriate balance of science and community input?

Just over half (52%) felt that the outcome reflected community input, ideas and analysis, though fewer felt it resonates with and reflects wider community values (41%). Likewise, many more agreed than disagreed that the outcome reflects the interests of the people involved in the process rather than the whole community. The zone committee and process managers were more positive than the focus group members and other participants for these statements. Around one-quarter (26%) agreed and 46% disagreed that the purpose of the consultation was to promote an already decided policy. Public trust in ECan has increased according to 35% of respondents, though this was elevated by a higher rating given by the process managers compared to the other participant groupings.

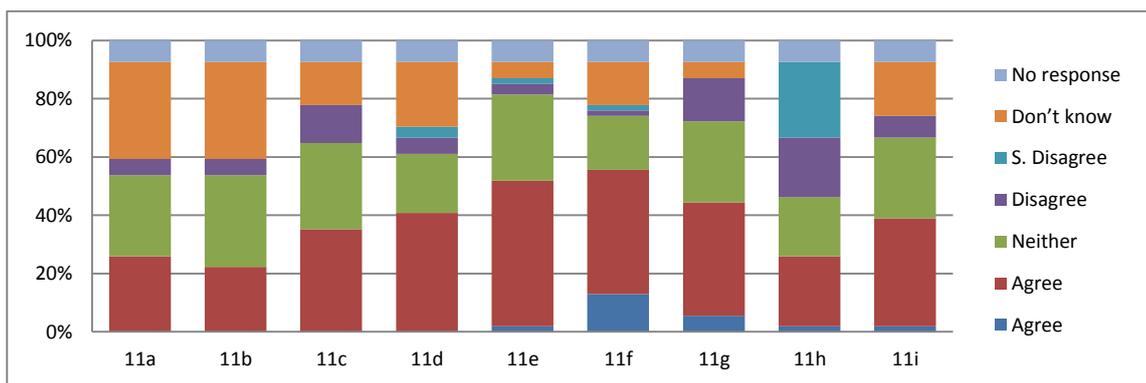


Figure 5-20: Selwyn Waihora Sub-Regional – Perceptions of the Reflection of Community Input

Despite observations by some respondents that the outcome gained a level of community acceptance that 'would never have been possible by staff alone', only 26% felt that the outcome was accepted by the community and 22% felt it had support from the community. It is unsurprising, therefore, the only 39% of respondents felt the community have ownership of the outcomes and will want to be involved in the implementation. Finally, when asked whether the outcome reflects an appropriate balance of science and community input, 59% said it did, while 9% felt it lacked community input and 22% felt it was lacking in scientific input.

Some respondents noted the interactions between the zone committee, focus groups, wider community and ECan could influence whether community input was truly reflected in the outcome. Respondents expressed the need for a better linkage

between the focus groups and the zone committee to transfer community values. Additionally, it was proposed that for the process to be 'truly of the community', ECan staff need to be in the background 'serving' the process rather than running it.

Lawfulness

The final question (Q.12a) focussed on the lawfulness of the process and 39% of respondents felt the process and outcomes upheld laws and regulations, 33% did not know, a further 13% were ambivalent, and 6% questioned its lawfulness.

12a	The process and outcomes uphold all existing laws and regulations
------------	---

5.4.4 Maori participation

While most (81%) respondents felt that Maori had adequate opportunities in the process, the lack of participation by Te Rūnanga was reported and attributed to the unease Te Rūnanga felt about the focus group process. It was noted that Te Rūnanga were often absent from community meetings and were reluctant to explain their visions or perspectives in a public forum. Respondents expressed frustration at 'the manner that the over-represented Maori interests choose to not debate at times, take ideas off the table and run parallel processes without making binding decision'. This was seen by respondents as a lost opportunity to build relationships, and 'these tensions really impeded progress for quite a while'. Improvements in Iwi liaison, engagement and relationship building were suggested by respondents. Overall 56% of respondents felt that Maori values and perspectives are adequately reflected in the outcome.

5.4.5 Barriers to achieving legitimacy

Through the exploration of input, throughput and output criteria, some key themes emerged from Selwyn Waihora respondents regarding the barriers to achieving legitimacy.

Many respondents felt that resource and time constraints reduced the ability of some people to participate effectively. Respondents highlighted the significant commitment asked of participants to attend meetings and observed that many were unable to make the time investment required for 'real participation'. Involvement in other sub-regional processes that were being initiated across Canterbury and running parallel also put pressure on some stakeholder groups, and meant they were unable to sustain their contribution to the Selwyn Waihora process. Despite this recognition of time constraints, many respondents called for the process to be slowed down. From a community perspective, more time was needed to understand and digest the

information and better enable industry and stakeholder groups to consult with and inform their constituents. ECan staff and technical experts also expressed the need for more time, recognising the difficulties associated with providing 'all relevant monitoring results, science information and community input up to decision-making readiness under the existing timeframes'.

Respondents expressed concern that certain groups were excluded, albeit unintentionally, from the process. There was a suggestion that the process tended to favour organised groups, industry and academics, rather than concerned individuals or the general public, and that 'unless you had a reason to be there or were a stakeholder in the process - you were excluded'. Respondents reported that 'normal' farmers and community members felt uninformed and were not provided the opportunity to be involved. Another wrote that 'the vast and silent majority were excluded, primarily unintentionally, resulting in dominance by strongly opinionated or significantly influenced individuals'. Other respondents suggested the process was aimed toward the educated middleclass, with little involvement from the working class, unemployed and socially disadvantaged. The lack of youth and mothers with young families was attributed to the large number, duration and timing of meetings. One respondent also observed that ECan staff were unable to participate other than as council employees, which 'disempowered a large workforce with expertise' and instead staff had to 'preach or facilitate the achievement of the council objectives'. Respondents highlighted the difference between groups that were financially resourced and led by skilled public speakers and politicians, and other less-organised groups that were ill-equipped to present their views. The volume and breadth of technical information and the speed at which it was distributed favoured the groups or sectors that had the time and resources to analyse the information, work through the data and offer up counter arguments.

Yet despite the volume of information produced, a perceived lack of robust science and technical information was also seen as a barrier to legitimacy. While respondents acknowledged the environmental, economic, social and cultural assessment that informed the scenario assessments, there was a perceived lack of analysis of the final limits and methods recommended. There was also a call for technical experts to be more transparent about the trade-offs across the wellbeing's, and avoid creating the expectation that all outcomes can be achieved together when this is unlikely. In the face of uncertainty there was a call for a more iterative approach to setting limits based on a sound assessment of implications.

Similar to the Otago PC6A responses, there was a suggestion that unintentional exclusion may have occurred by not engaging people in a way that made them realise the potential impact of the limits or the importance of their participation. Respondents called for the simplification of information presented and highlighted the need to ensure that all technical presenters are able to communicate complex ideas to a lay audience. It was commented that in order for participants to form a balanced view on what limits are appropriate, they need to understand a range of technical issues; this in turn requires them to 'either read very widely and deeply or have faith in what they are being told by technical experts' – both of which can present a barrier.

Other barriers observed by respondents centred on the capability of the process managers and facilitators. Some respondents were unsure if the process captured the full range of ideas offered through the process suggesting that the focus group facilitators did not 'to get the best out of their groups or tried to put other points of view across to create debate', and that the 'process evolved overtime and often appeared to be driven by a couple of the facilitators not the zone committee'.

Implementation issues were also raised with comments that there was little clarity on how the limits were to be implemented or how the outcomes were to be achieved, and for some this 'raises doubt about the legitimacy of the fuller process'. Respondents also cautioned that there is no guarantee the ZIP Addendum recommendations would survive the RMA Schedule 1 submissions and hearing and, this would dictate the overall satisfaction with the process.

The proof of success will be in how smoothly the planning process goes (if everyone goes back to their corners or not!) and whether the non-regulatory actions get funded and implemented (process manager)

There was the suggestion that if the sub-regional section and implementation is not true to the ZIP Addendum, the process will be seen as a failure. The importance of this next step was acknowledged by process managers, one of which stressed 'for Christ sake let's hope we make good on the plan; monitor and implement it, and change as needed'.

5.5 Non-negotiable elements of a legitimate process

Survey participants were asked to identify the key characteristics that are non-negotiable to them in a limit-setting process. Table 5-2 illustrates that across both the Otago and Selwyn Waihora participants, responses largely align with the legitimacy framework developed in chapter two.

The groupings and repetition in Table 5-2 suggests four essential elements of a legitimate process, consistent between processes: the input legitimacy criterion of inclusiveness, the throughput legitimacy criteria of procedural inclusiveness and information sharing, and the output criterion of outcome effectiveness.

Respondents also suggested two additional 'non-negotiable' elements which were similar across the two processes. The first centred on the need for clear community values and expectations to be understood and articulated at the start of the process, so everyone is clear what the process is aiming to achieve. Otago respondents stated this had not been done with the community in the PC6A process – rather the values were defined by Council staff 'who had a view about what was appropriate'. Similarly, Selwyn Waihora respondents reported the setting of detailed community values was missing and rather 'the values set were high level waffle and the process went straight to limits'. Respondents from both processes stressed that unless the limits achieve *agreed* values or outcomes, they are a waste of time.

The second centred on the need - or not - for bottom lines. There were respondents from both processes who advocated for scientifically defensible environmental bottom-lines to protect the public's ability use the waterways, such as

I strongly disagree, and always have, in vested interests (e.g. lobbyists from out of town) being able to negotiate down environmental bottom lines at the expense of the ecosystem health, public health and the legitimate recreational expectations of the non-vested community. It is ethically and scientifically repugnant.

Other respondents, however, felt there should be no bottom-lines, saying 'everything is negotiable - provided it is based on sensible science' and that 'nothing should be non-negotiable by any party to such a process'. The following comments were made:

We have to be sustainable; not only environmentally but also economically. There is no point whatsoever in bringing an area to its knees economically to appease a section of the community that holds quite idealistic environmental views. Sustainability is achievable, but may not happen overnight.

I stated at the beginning that we all needed to get naked at the table and start again. We did not achieve that but I still believe it and believe that there can be no bottom lines in a collaborative process.

Table 5-2: Non-negotiable elements of a legitimate process

Criteria	Otago responses	Selwyn Waihora responses
Inclusiveness	<ul style="list-style-type: none"> - Real consultation every step of the way - Consultation with involved parties - Consultation with those affected by the changes - Enabling open debate and discussion - Earlier consultation and more work on encouraging interested parties to be involved 	<ul style="list-style-type: none"> - Opportunity to be involved and have voice heard. - Community involvement - Public participation - Involve the movers and shakers – people/ organisations that have clout with the community and funds to make things happen - Consultation occur early in the planning process - Community involvement - Participation open to all - Community led process - Get out on the ground - Industry buy-in - Adequate resourcing
Representation		<ul style="list-style-type: none"> - Representativeness and inclusion - Including social, economic and cultural input from a wide range of stakeholders. - Full involvement - A really good mix of people from throughout the community
Efficiency		<ul style="list-style-type: none"> - Understand/quantify/agree the issues then get to solutions and common ground 'trade-offs' - Must be by informed consensus - Consensus oriented
Accountability		<ul style="list-style-type: none"> - Democratisation of the process - Have a mandate from the authorising agency - Clear accountability - Clear roles - Engage decision-makers as servants of the process
Transparency	<ul style="list-style-type: none"> - Transparency - Clear expectations 	<ul style="list-style-type: none"> - Transparency of process and criteria - Open and transparent processes - Transparent communication of range of options/ scenarios that span range of society expectations
Procedural Inclusiveness	<ul style="list-style-type: none"> - Fair processes - Fairness - Has to be fair to all. 	<ul style="list-style-type: none"> - Open ears, respectful questioning, looking for common solutions - The rights of different groups to be heard - Openness, integrity, freely share information, politeness and civility - Skilled facilitator/chair - Good facilitators, equitable participation by all interest groups, transparency, and openness - Documenting views - Good community facilitation - Not so facilitated by ECan and their scientists. - Respectful dialogue - Listen to the people
Information sharing	<ul style="list-style-type: none"> - Community understanding - Science based with strong economic assessment. - Science based - science indicates the limits of the rivers and catchments. - Economic impact of proposals would be presented for community consultation prior to formal decisions being made. - As much information as possible must be made available to those affected so they can assess how the limits will apply to them. - Backing values with good [community understood] science 	<ul style="list-style-type: none"> - Robust science and clarity of cause and effect. - Reasonable and fair understanding of social and economic impacts of cultural and environmental limits. - A basis in sound science. - Sufficient information - An absolute understanding of the science and the tools that are to be used in the regulation. - Good info across all well-beings - Flexible translation of science - Dedicated multi-disciplinary team - Accurate and sufficient science data used for the future scenarios - Have some peer reviews done

	<ul style="list-style-type: none"> - Expert knowledge given higher weighting than interest groups (Note: this is contrary to literature) 	<ul style="list-style-type: none"> - Quality and mix of community groups and opportunity to mix and share perspectives. - That everyone has a right to provide information and have their view heard and understood
Time		<ul style="list-style-type: none"> - Sufficient time - Time bound
Outcome effectiveness	<ul style="list-style-type: none"> - Clear measurable objectives set - if numeric limits are used, they need to be able to be monitored effectively - Limits meet genuine sustainability criteria as far as we understand them - There are adequate provisions and incentives deliver a high probability that the limits are going to be met. - Setting practical and implementable limits that encourage people to work together to achieve our common goal. - Practical and affordable – farm production not decreased or capped - Has to be both economically and environmentally sustainable - [No] unreasonable idealistic visions of water quality and discharges that significantly affect profitability or demand major land use change - Rules that ensure clean clear rivers and waterways but are also economically sustainable 	<ul style="list-style-type: none"> - For a community process to be effective the community must be able to define their own future providing adequate time to allow for adjustment to a new regime - Activities that clearly have direct environmental effects and the need for community needs to be addressed - Achieve the [CWMS] targets, especially around water - Deliver across all of CWMS target areas - All possible approaches should be considered - The management action when the limits are breached. - Sustainable, culturally sensitive and environmentally responsible - The outcome must be able to be achieved without sending a large number of farmers to the courts to challenge it - Rights to farm/use your freehold land as you wish if not harming environment or breaking law/community standards. - [Not] stopping farmers from farming the way they are although farmers will change their ways once they understand what changes need to occur - Drinking water should be protected, don't want "blue babies" to happen. - Drinking water - Health and well-being of the people in the community - The water entering Lake Ellesmere should have less nitrates than now. - The use of Lake Ellesmere by endangered birds for staging on migration (dependent on lake levels)
Reflection of community input	<ul style="list-style-type: none"> - Not fait accompli policy development - Council taking account of our submissions - Open minded staff – not minds made up before process stated. 	<ul style="list-style-type: none"> - Clear inclusion of community views into the outcomes
Lawfulness	<ul style="list-style-type: none"> - Balance between enabling and protecting values within legal framework 	<ul style="list-style-type: none"> - Outcomes that would fail to comply with existing legal framework - e.g. RMA - Meet RMA requirements

5.6 Summary

This chapter has presented the results from the surveys of participants of the limit setting processes in Otago and Selwyn Waihora (Canterbury).

The legitimacy of the Otago process was strengthened by the perception that the process was open to involvement and participation by all those interested and affected, that those involved had a valid right to be there, and that the ORC staff leading the process were accessible to the community. Very few respondents felt that the process

provided participants with alternative means of influencing the decision outside the public discussion, also adding to its legitimacy

There were, however, a number of factors that threatened legitimacy claims. There was a perceived lack of willingness by staff to modify or adjust the process, there was a lack of transparency in terms of how any community input would be used, and there was a general feeling that it accepted, robust, reliable information. Responses indicate that the information presented by council was not driven by what the community wanted, and that local layman knowledge was not considered as important or useful as the technical scientific information. Consequently, few believed that the process facilitated a change in community thinking arising from increased understanding and learning. The outcome effectiveness was rated poorly across all indicators, with very few feeling that the council decision was creative, innovative, effective, community enhancing, practical, implementable, or mutually beneficial or trust-inducing. Likewise there was a perception that the outcome failed to reflect community involvement, with participants signifying a lack of acceptance and support for the outcome.

The Selwyn Waihora process performed well against some key legitimacy indicators including the opportunity for the community to be involved, the commitment made to listen to the community, the accessibility of staff and the Selwyn Waihora Zone Committee, the focus on direct rather than indirect involvement, early engagement, the cross-section and validity of people involved, the opportunities provided to contribute to the discussions and the opportunities provided to Maori to participate. Sufficient information was available to anyone wishing to follow the process, and for those directly involved, civility and respect and the opportunity for face to face dialogue strengthened perceptions of legitimacy. There was also a perception that the process enabled people to contribute their ideas, and as a result participants reported an enhanced understanding of the relevant issues and other's views.

Perceptions of the legitimacy of the Selwyn Waihora process were, however, challenged on various fronts. There was general agreement that resource constraints, including time and expertise, limited the ability of some to get involved. While survey respondents felt that they had the opportunity to contribute to the discussion, they felt that this came second best to the technical information provided, and there was also a strong feeling that there were some important information gaps still to be filled. The lack of time provided for robust discussion was also a concern. The effectiveness of the outcome was by no means endorsed by participants, nor was the notion that the

outcome reflected community input. As a result only few felt that the outcome would be accepted or supported by the community

Table 5-3 provides a comparative assessment by summing together those ratings in support (agree or strongly agree) for each criteria, also taking into account those questions termed in the negative, i.e. summing the disagree or strongly disagree for the statement ‘knowledge, skill, or resource constraints influenced some people’s ability to participate effectively’.

Table 5-3: Comparative assessment - % favourable responses provided

Principle	Criteria	Otago	Selwyn Waihora
Input	Inclusiveness	59	67
	Representativeness	38	49
Throughput	Efficiency	28	45
	Accountability	41 (staff)	53 (z. committee)
		32 (councillors)	50 (staff)
			48 (commissioners)
	Transparency	42	57
	Procedural Inclusiveness	48	60
	Information sharing	31	51
Time	37	34	
Output	Outcome effectiveness	20	43
	Reflection of community input	17	37
	Lawfulness	31	39

Drawing a comparison, survey responses indicate that input legitimacy, explored through the criteria of inclusiveness and representativeness was achieved to a higher degree in the Selwyn Waihora process than in the Otago process, with the majority of indicators favouring the Canterbury process. Likewise, the Selwyn Waihora process rated higher in terms of the throughput legitimacy criteria, with the exception of the indicators relating to ‘time’. While the Selwyn Waihora respondents also answered more favourably than the Otago respondents in terms of the output criteria of outcome effectiveness and the reflection of community input in the decision, the ratings given by the former respondents were still low given it was promoted as a community-driven process.

Barriers to achieving legitimacy identified by Otago respondents included resource constraints, technical knowledge barriers, lack of understanding or realisation about the implications of the process and limits, lack of technical analysis, a lack of community engagement, and a widespread perception among the community that the outcome was preordained. Despite the differences between the Otago and Selwyn Waihora processes, many of the barriers to legitimacy were also identified by Selwyn Waihora participants. These barriers included resource constraints with a particular emphasis

on the time commitment required, the 'exclusion of 'normal' community members while favouring organised groups, the lack of robust science and technical information, the staff personnel and expertise, and ongoing doubt regarding implementation.

Finally, when asked what the non-negotiable elements of limit setting process are, the criteria of inclusiveness (input), procedural inclusiveness (throughput), information sharing (throughput), and outcome effectiveness (output) were common themes, indicating these are fundamental to achieving a legitimate process.

These results are discussed in more detail in chapter six, where key themes from the survey are analysed further.

6. Discussion

6.1 Introduction

This chapter examines the survey results to further explore the legitimacy of the Selwyn Waihora and Otago limit-setting processes. Analysis consisted of collating, comparing and drawing out the repeated themes from the survey responses, complemented by excerpts from the document analysis, as recorded in chapter four. The legitimacy of each limit-setting process is discussed in turn, followed by a comparative evaluation. The chapter informs the extent to which each process can be considered legitimate, the barriers that challenge legitimacy claims, and whether one process is more legitimate than the other.

6.2 Data collection

The document analysis of published material provided insight into each limit-setting process and their settings. Reviewing this information revealed differences in the extent of reporting and communication to the public. Where information regarding the Selwyn Waihora meetings, workshops and presentations was generally comprehensive and up-to-date, there was relatively little information available detailing the discussions held as part of the Otago Plan Change 6A (PC6A) limit-setting process. The inconsistency in quality and detail of this dataset, therefore, limits its use in assessing legitimacy and places greater importance on the survey results which provide insights and perceptions relevant to each process. .

The survey covered input, throughput and output legitimacy criteria through Likert scale questions, while open-ended questions enabled the data to be analysed for emerging and repeated themes not specifically related to the assessment criteria or indicators. The research sought to capture a diversity of perceptions, and so was sent to a stratified sample of participants from each limit-setting process. While not exhaustive, the number and breadth of responses received provides confidence in the robustness of the survey data.

6.3 Legitimacy of the Otago limit setting process

Survey responses suggest that the Otago PC6A process was a 'classical top-down approach' where the regional council drove policy development and the role of the community and stakeholders was limited to responding to and commenting on initiatives, rather than helping to develop them.

Respondents acknowledged that there were opportunities for interested and affected parties to participate, firstly by attending public meetings during the drafting phase of PC6A and secondly, through submitting and presenting at council hearings through the RMA Schedule 1 phase. Through these mechanisms they were able to show support or opposition to the proposals presented, however, effective participation was constrained due to a lack of financial resources, time and expertise. Additionally, in the pre-RMA drafting phase, the onus was on stakeholders and community members to identify themselves as being potentially affected and wanting to be involved in public meetings rather than the council actively pursuing diverse community viewpoints. Survey responses indicate that the community, in general, were not aware of the importance of the consultation process, the potential implications of the plan change, how to participate or how crucial their participation was. Consequently, the surveys indicated a perception that there was little opportunity for direct involvement in the process by way of meaningful dialogue and discussion. Respondents also indicated a lack of awareness about the statutory vehicles for involvement through the RMA Schedule 1 process. Of those that did submit, many found it a time-consuming, intimidating and overwhelming in terms of the information they had to digest and understand.

The desire for catchment-scale planning as opposed to regional approaches, was expressed by many survey respondents as a means of improving inclusiveness and, therefore, input legitimacy. Gunningham (2008) identified issues associated with regional rather than catchment planning, many of which were evident in the survey responses. These included the geographical scale being too large to genuinely engage with any community, insufficient resources and subsequent community burnout or disengagement, and the potential for larger groups to dominate the process. In contrast, respondents associated the concept of catchment planning with having the opportunity to get more actively involved, strengthen relationships and develop targeted policy. It was felt that such an approach would also better provide for the community to work together and contribute to the process as a collective rather than as individuals, an aspiration that was clearly articulated in survey responses.

The perceived lack of accountability and representativeness in the Otago process, apparent in the results, suggests a connection between these two legitimacy criteria. Literature recognises that decisions made under top-down approaches are formally legitimised through the election process, where representatives are given the authority to make these decisions on behalf of their constituents. This representative logic is meant to guarantee that someone can be held accountable for decisions (Erling

Klausen and Sweeting, 2005) and that there are sanctions available through elections, when these decisions fail to align with the constituent values and aspirations (Kronsell and Bäckstrand, 2010). It is interesting then, that survey respondents do not see the elected representatives as being accountable for the decisions of the limit setting process. Rather most respondents considered staff more accessible and accountable though only few indicated a confidence that there were processes in place to keep their behaviour in check. The lack of perceived representativeness and accountability aligns with Lockwood's (2010) observation that elections generally only give a broad mandate to government bodies, suggesting that such organisations also need to earn their legitimacy through their actions and processes and the quality of their decisions.

The legitimacy of the Otago PC6A limit setting process suffered from a perception that the information presented was lacking in depth and rigor and the proposals were largely based on information and data produced within the Council, rather than founded on community knowledge and expertise. As a result there was little confidence in the information being generated and used to guide policy development. While there was sufficient biophysical analysis, many respondents reported a dearth of economic and social analysis which was perceived to subsequently bias participation and community discussion. As a result, the robustness and reliability of information provided was questioned and perceptions of transparency were low. Stakeholders felt ignored in terms of both the information they requested and in the information they were willing to contribute to the process. The legitimacy of both the pre-RMA consultation phase and the RMA Schedule 1 council hearing phase suffered as a result.

The written material distributed in the early stages of the plan change process included language that stated or implied there would be opportunities for collaboration, that the limits set would be achievable, and that there would be tools available to assist those affected to reach those limits. Survey responses provide little confidence that this occurred to any great extent, with very low ratings for both outcome effectiveness and the extent to which the outcome reflected the input of the community. Instead, there was a perception that the focus became one of defence from the Council - as if to say "this is our position, we're correct, and we are not going to accept any further input". Many respondents, therefore, perceived the opportunities provided for participation to mean little more than a one-way flow of information and commenting on pre-determined plans. The council hearing provided the formal opportunity for the public to express their opinions, however, due to its adversarial nature it failed to find a satisfactory or mutually beneficial solution in the eyes of many. As such, the outcome

of the hearing process was unacceptable to a number of stakeholders, and multiple Environment Court appeals were lodged.

Some respondents noted the council's intention to facilitate a collaborative process in the implementation phase of the PC6A. The council appeared confident that collaboration would occur as the plan change rules were rolled out and this was considered more important and more likely to bring success than collaboration in the development of the policies and rules. It is noteworthy, therefore, that only a few respondents felt the community has ownership of the process outcomes and are likely to want to be involved in the implementation. The challenge, therefore, is whether the council can secure buy-in and participation in the implementation phase due to the apparent disconnect the community felt during policy development.

It is noteworthy that the process managers responsible for leading the PC6A process were generally more positive and confident toward the survey questions than the other respondents' groups. This was particularly evident in their optimism regarding the notion of early engagement, the provision of adequate information, the effectiveness of the outcome, the extent to which the outcome was accepted and supported, and the relationships and trust built during the process. This suggests a disparity between the process managers and other survey respondents in terms of the perceived value of the process conducted and the outcome produced. Whether this disparity existed throughout the entire process or just emerged in the later stages was not explored but is worthy of further thought and investigation.

While the timing of this research meant that it was not possible to incorporate the Environment Court process into its findings, it is evident from responses that community and stakeholder confidence was to some extent rebuilt during Environment Court mediation. Respondents reported that during mediation the ORC was more willing to listen to and take on board the ideas and proposals put forward by the appellants. It was suggested that had this dialogue and stakeholder involvement occurred during the PC6A drafting or at the council hearing, the whole process would have been more accepted. This also indicates that the community had ideas and solutions that they were willing to contribute to the discussion, and had the council spent more time engaging with the community earlier in the process, some of the tensions and issues that emerged in later stages may have been avoided. The trust and confidence re-built during mediation suggests that the implementation of the plan change may be more successful than the survey responses indicate.

6.4 Legitimacy of the Selwyn Waihora limit setting process

Survey responses indicate a comfort that the Selwyn Waihora process was inclusive and provided opportunities for those interested or affected to be involved. While both the zone committee and the focus groups had restricted membership by way of selection or invitation, respondents appeared to accept that having some constraints on membership and numbers is reasonable. It also reflects a perception that if an appropriate cross-section of the community is included, the voice of those interested or involved can be adequately represented, even if everyone cannot be involved in person. The stakeholder meetings that were held to inform specific primary industry groups and consent holders also strengthened perceptions of inclusiveness.

Most survey participants associated the Selwyn Waihora process with the notion of direct involvement which allowed community participants to be closely involved in the discussions about the limits, bring their perspectives to the table and question and explore the options. The 'bottom-up' approach drove a perception that the zone committee and focus groups were involved early, before any decisions were made. There was confidence that both the zone committee and ECan staff were accessible and were committed to listening to and incorporating the wider community views. There was some concern, however, around the extent to which the zone committee engaged and consulted with the general public, with particular concern raised about the lack of Ngai Tahu presence at the wider community discussions, especially in light of the Co-Governance agreement.

Only few respondents indicated a belief that the ECan commissioners adequately represented the community or were accessible or committed to listening to the community. This criticism is likely influenced by the governance arrangements that exists in Canterbury under the ECan Act (2010), where a perceived lack of democracy may have biased some responses. This does, however, place a greater importance on the perceived representativeness of both the zone committee and focus groups in order to ensure a legitimate and durable process. It is notable, therefore, that only half the respondents felt the zone committee represents community demands, interests and preferences. This relates to the committee's terms of reference which state that the community members are selected taking into account the balance of interests, the geographic spread and the ability of the applicants to work in a collaborative, consensus-seeking manner. They are at the table to contribute their knowledge and perspective but not promote the views or positions of any particular interest or

stakeholder group. The terms of reference, therefore, require balance rather than representation.

The survey also highlights a perceived lack of transparency in the zone committee selection process and a lack of understanding regarding the criteria that drove selection. As the committee have a lead role in the process, it is important that the community understand why its members were appointed and how it functions. Cliquet et al. (2010) and Erling Klausen and Sweeting (2005) recognise that a policy process that lacks transparency in the selection of participants threatens its legitimacy, and suggests that any model of selective inclusion has to be justified and communicated to everyone, whether actively involved or not. There were also concerns raised regarding the makeup of the zone committee, and whether there was adequate knowledge and skill around the table. Mascarenhas and Scarce (2004) and Häikiö (2012) stress the importance of having the right people involved in the planning process and that these people must be considered legitimate in order to develop a legitimate plan. The concerns raised by survey participants highlight the need to ensure the collaborative group members are capable of producing the outcome expected, as such competency is integral to the perceived legitimacy of the planning process.

Wider community viewpoints were largely represented by 'focus groups', invited to participate on the basis of a particular interest or affiliation. The focus group discussions centred on evaluating a range of scenarios and were considered valuable in terms of community input and education. There was, however, ambiguity around the status of focus group members and whether they were participating as individuals or as representatives of specific sector or community groups. This meant that some participants found themselves in a representative capacity and representing views that they may not have personally agreed with or were counter to their own interests. This aligns with Klausen and Sweeting (2005) observations who warn that people who assume the role of a particular interest or constituency might not necessarily be an official representative of that constituency. Additionally, people might participate as individual citizens, but because they are from a certain district or a particular group, they might be seen as representing that group without any formal mandate for such a role. There was also ambiguity around the extent to which the focus groups were expected to engage with their wider constituents. Each of these factors erodes the legitimacy of the participants involved and indicates the focus groups would have benefited from clear guidance or terms of reference about their role, their representation and the expectations around wider community engagement. It also

suggests that a limit setting process that enables greater input from the general public rather than relying on a selected group may be more appropriate.

Survey respondents generally favoured the consensus approach, which are perceived to reduce conflict and enable participants to explore and find common ground. Reilly (2001) describes the “balance of terror” that keeps participants at the table for fear of losing out if they are not involved. In Selwyn Waihora, this balance of terror may be derived from the removal of Environment Court appeals from the planning process under the ECan Act. However, responses indicate a perception that some groups had not participated meaningfully as they had alternative means of influencing the decision, which suggests this ‘terror’ did not strongly manifest itself in the Selwyn Waihora process. It also indicates a perception that the process was not completely safeguarded against ‘lobbying’ or ‘side agreements’, also eroding perceptions of legitimacy.

Most survey participants agreed that the process took longer due to the consensus approach taken, also evident in the multiple timeline extensions that were granted to the process. This aligns with Coglianese (1999) observation that reaching consensus demands more concentrated amounts of time and organisational resources and is likely to significantly slow down decision making. Most respondents also agreed, however, that the additional time taken was worth it, consistent with the observations of Webler et al. (2001, p. 441) who suggested that for a process to succeed, it should be consensus driven, and this consensus ‘should emerge at its own rate’ rather than be forced. The time factor was important from both a community and process manager perspective, with a clear message to slow the process down.

The survey explored the extent to which the resources required for participation were prohibitive and threatened legitimacy. The capacity of community and stakeholder representatives to participate regularly and effectively was strained in the Selwyn Waihora process, with resource and time constraints a common theme in the survey responses. This is likely to have fuelled the perception that the process favoured organised groups, industry and the educated as opposed to the ‘normal’ community, the working class or the disadvantaged. On the other hand, however, there was recognition that for regional or national sector representatives, the numerous processes occurring in parallel places excessive demands on their capacity. This highlights the pressures created by catchment-based processes where multiple processes can be happening at once, compared to a regional approach which takes a more generic approach but is contained to one project. It also suggests that no matter

what effort is put into developing a diverse collaborative mix, differential access to resources by participants will present a barrier and this needs to be addressed through adequate resourcing and an acknowledgement of the other processes occurring around them.

Bekkers and Edwards (2007) suggest that under a collaborative approach it is much less clear who is accountable for what tasks than in a conventional top-down process. While some collaborative decisions are enforceable by law (Page, 2010) the outcome of the zone committee process was a recommendation to the ECan commissioners and writing instructions to ECan staff for the statutory plan. However, despite the ECan commissioners having ultimate decision making responsibility, the zone committee was seen by most survey respondents as the main accountable and answerable body in the process. While it is likely that this arises from the perceived lack of public accessibility and representativeness of the commissioners, this is interesting given that Zone Committee members were selected and appointed rather than being voted to the positions by the communities of interest. The responses also indicate a situation where responsibility and accountability is being expected of parties without their understanding or agreement. Process managers considered the zone committee accountable; the zone committee considered the ECan staff and commissioners largely accountable, and focus groups and 'other participants' responses were split between the zone committee, commissioners and staff being considered accountable. A lack of clarity around roles, responsibilities and decision making processes has the potential to exacerbate distrust and frustration in the process and requires clarification and reinforcement to ensure accountability and, therefore, legitimacy.

Survey responses suggest that appropriate attention was paid to ensuring opportunities for dialogue through the zone committee and focus group forums. These were organised and run to facilitate discussion and prevent domination and as a result most participants considered the process civil and respectful. Respondents perceived ECan staff to be responsive and open to modifying the process and content in response to suggestions from participants. These all contributed to interest and involvement being maintained throughout the process, despite its significant duration (mid 2011-October 2013). However, while the deliberative process helped to facilitate consideration of the policy options, it was weakened by spending too much time on scenario testing and not enough looking at innovative and creative solutions.

Respondents noted that attention was paid to how knowledge was provided with significant time spent educating and raising awareness of the zone committee, focus

groups and wider community through meetings, workshops, field trips, newsletters and field day stands. The process brought a diverse group of people in direct contact with each other and as a result survey participants responded favourably that it enabled the community to increase their understanding of both the relevant issues and other's perspectives. Respondents did, however, suggest that this understanding of differing viewpoints and realities could have been further enhanced with greater opportunities for cross-sector, rather than sector-based discussions.

Significant technical analysis informed the process and there was an acknowledgement that this information at least attempted to cover the four well beings, despite some criticism regarding the lack of on-farm economic analysis. Yet despite this apparent effort, concerns were expressed regarding the lack of transparency around the form of science and analysis being undertaken, the robustness and reliability of the information provided, and the lack of information about the implications of the chosen limits and rules.

There was a general comfort with the information made available to the wider community, whether involved or not, to understand and follow the process as it evolved. Most zone committee meetings were open to the public and motions passed were recorded as minutes and posted in the website. Summaries of each focus group workshop was also recorded and collated and posted on the website. Process information, agendas, workshop notes and scientific reports were made available on the and updated. It is noteworthy, therefore, that despite the volume of information made available about the process and the discussions being had, responses from the focus group participants and 'other participant' group indicate a perceived lack of understanding and transparency about how the information generated from their discussions was actually going to be used in the process. This feedback process needs to be more clearly defined and articulated to participants, and is particularly important in light of earlier comments about the significant time commitment that was being asked of the participants.

The Selwyn Waihora process was based on the premise that better water management outcomes will be achieved when the community work together to develop local solutions. Survey respondents, however, appeared to lack confidence in this principle. Many respondents answered 'don't know' or 'neither agree nor disagree' to the questions relating to output legitimacy, which is surprising considering the time and effort invested in the process in the hope of getting a better outcome. This ambivalence indicates a disengagement and a weakness in output legitimacy, and is

likely related to the perceived lack of ownership in the process. This in turn may compromise the successful implementation of the sub-regional as a lack of ownership generally equates to a lack of people willing to drive its operation.

Some respondents indicated a sense of frustration that outcome quality had been compromised due to the need to come to an agreeable one and perceived that valuable ideas had been obstructed by minority viewpoints. This is one of the downfalls of the consensus building processes identified by Coglianese (1999) who suggested that such outcomes can be based on cumbersome compromises, the lowest point of agreement, or unimportant but controllable issues. Survey results indicate that while consensus is preferred, there may be situations where consensus is not able to be achieved and 'consensus-oriented' approaches may be appropriate. Less than half the respondents had confidence in the practicality, effectiveness and implementation of the outcome and despite the outcome being driven and informed by community views, many failed to view it as community enhancing. As a result only few agreed that the outcome would be accepted or supported by the community, contrary to the observation by Bäckstrand et al. (2010) that inclusive and participatory decision making will enhance public acceptance for policy decisions.

Baldwin, Tan, White, Hoverman and Burry (2012) recognised the importance of citizens being able to see that their input makes a difference. While results indicate that the process was viewed as a sincere attempt to involve the community in policy development, few felt that the community input was actually considered as important as technical science input. Consequently, the extent to which respondents perceived the community's ideas, analysis and information was taken on board and reflected in the outcome was limited. This highlights that a process can provide all the opportunities to be involved, but unless community knowledge and input is incorporated into the outcome and participants can clearly see their input reflected, perceptions of legitimacy will suffer.

Similar to Otago results, the process managers responsible for facilitating the Selwyn Waihora process gave more optimistic responses than other survey groups against some legitimacy indicators, including the responsiveness of regional council staff, transparency around how the community input would be used and the improvements made in building trust and relationships. Together with the zone committee respondents, the process managers also answered most positively regarding the notion of early engagement, the process being far more than a rubberstamping exercise, the way it enabled the community to better understand and accept the

recommendations, and the extent to which the outcome reflected and resonates with the community. The process managers were, however, less confident regarding the ability of the community to engage with the process. In particular, they questioned whether minority groups were given sufficient opportunity to be involved and they felt that community participants were overwhelmed with the information provided and were fatigued with the number of meetings they had to attend. These sentiments were not supported by responses from the other groups, suggesting that the process managers underestimated the capability and determination of the community to get involved, take the information on board and participate actively.

Finally, while not assessed in this research due to its timing, an important factor in determining legitimacy highlighted in survey responses is the extent to which the decision makers abide by the recommendations of the collaborative group. Political commitment to implementing the consensus outcome is fundamental to the success of a collaborative process. While there was a comfort in the commitment made at the start of the process to listen to and incorporate community perspectives in the outcome, the timing of this research meant that the extent to which this commitment was realised was unable to be tested. Participants highlighted that the process does not finish with the ZIP Addendum, and there is the potential for changes through the RMA Schedule 1 process that could leave sizable questions about the legitimacy of the process. It is not until the final decisions are made, therefore, that the legitimacy of the full process can be entirely assessed.

6.5 Comparison of approaches

Assessing each limit setting process provides an indication of its legitimacy and the barriers to achieving legitimacy. However, the two processes need to be brought together in a comparative evaluation in order to determine whether one process is more legitimate than the other. Table 6-1 summarises some of the key differences and similarities in the processes, articulated in the survey responses and supporting documentation.

Input Legitimacy

The question of inclusiveness comes down to a choice of enabling participation by all or restricting it to some. Preferably, all concerned citizens would have the opportunity to participate in setting environmental limits, thereby satisfying Habermas' idea of communicative rationality. Drawing on this notion, it could be maintained that the Otago process was more 'open and inclusive', with meetings publically advertised and everyone having the opportunity to attend. As Cliquet et al. (2010) suggests, in

situations where every stakeholder has the opportunity to participate, even if some stakeholder is absent, legitimacy will increase. In contrast, the Selwyn Waihora process largely involved a select group of focus group participants, and an even more select group of zone committee members. While zone committee meetings were open to the public, this attendance was generally small, and while there were some wider community meetings, these were still largely for organised primary industry groups by invitation. The opportunity for the general public to attend and actively participate in meetings was, therefore, minimal. However, as indicated by the survey responses, these factors appear to be outweighed by a perception that the Selwyn Waihora limit setting process displayed a genuine commitment to community engagement, while the Otago PC6A process was perceived to view citizen and stakeholder participation as an addition to bureaucratic procedures. This aligns with Lockwood's (2010) observations that inclusiveness not only refers to the opportunities available to participate, but also the opportunity to influence the decision making processes and actions.

Table 6-1: Key difference and similarities between Otago and Selwyn Waihora limit setting processes.

Differences in approaches	
Otago	Selwyn Waihora
Meetings open to everyone in community to participate - onus on community to identify themselves as being affected and understand how to be involved	Participation at meetings restricted to selected group of zone committee or focus group members or other invited participants
Involving the community at a regional scale about region wide issues.	Involving the community at a catchment based scale about local catchment issues
Urban, environmental and national/outside interests more dominant	Rural, economic and local interests more dominant
Emphasis on indirect involvement and RMA schedule 1 phase	Emphasis on direct involvement in pre-RMA phase
Trust rebuilt in Environment Court process	Aimed to build trust in early stages
Information based on biophysical analysis with a lack of social-economic analysis	Information provided sufficiently spanned the four well-beings
Science used to justify a position	Science used to inform decisions
Community participation only requested at certain points in the planning process	Community participation throughout planning process
Perception that the outcome was pre-ordained - 'decide , announce, defend' approach	Perception that the community could influence the decision
Full RMA Schedule 1 process available, plus democratic election process as means of influencing the decision	No environment court option available, and no means or replacing government-appointed commissioners – fewer opportunities to influence decision outside collaborative process
Majority vote decision making in legal (adversarial) process.	Consensus-based decision making in collaborative process
Focus on collaboration in plan implementation	Focus on collaboration in plan development
Comfort in environmental effectiveness of the outcome	Lack of confidence that the outcome will lead to and environmental improvement
Similarities across processes	
Perceived lack of accountability of decision makers; and perceived lack of deterrence to prevent inappropriate behaviour of these decision makers	
Lack of support and acceptance of the outcome	
Perception that community input not as valuable as technical science info	
Lack of community resources (time, finances, expertise) to get involved and commit to the process	
Face to face dialogue enabled	
Perception that there were still significant information gaps to be filled	

Credible political commitment to listening to and incorporating community ideas and values in the outcome is a prerequisite for input legitimacy. If a process lacks this political commitment, public scepticism and distrust in the intent of the process and process managers is likely to emerge and legitimacy will suffer (Appelstrand, 2002; Rowe and Frewer, 2000). In the Otago process, the role of the public was perceived to be limited to commenting on and responding to initiatives coming from the council. As a result, it was alleged that the council imposed policy decisions without any genuine, robust consultation. In contrast, the Selwyn Waihora process generated a stronger sentiment that genuine commitment was made to listen to the community and get them directly involved at an early enough stage to influence the process.

Rowe and Frewer (2000) note the importance of ensuring that participants comprise a broadly representative sample of the affected population. To be fully representative, participants need to come from a wide interest base, therefore, the survey explored whether participation was perceived to be balanced or dominated by a certain interest or sector. Urban and environmental interests appear to be more influential in the Otago process, and rural and economic interests in Selwyn Waihora. Local interests were stronger in the Selwyn process, and national or outside interests in Otago. These factors reflect the difference in geographic scale of the discussion – while Selwyn Waihora process was catchment-based, the Otago process had a regional focus. The Selwyn Waihora responses suggest the need for clarity regarding whether participants are there representing a group or are there as individuals. For the collaborative process, in particular, it is important to clarify whether participants are ‘around the table’ to act in a private or representative interest and to ensure that these interests are balanced.

Survey responses from both processes indicate a perception that focussing discussions at a catchment rather than regional scale is more legitimate. However, as can be seen from Selwyn Waihora responses, national or regional environmental and industry bodies which are spread across multiple processes may struggle to stay actively involved. Likewise, McCloskey (1996) observes (in Leach, 2006) that national environmental organisations may be disadvantaged and disenfranchised from local processes, due to the remoteness, local focus and number of resource management processes they must be involved in throughout the country. Furthermore, because environmental interests often align with urban interests (Leach, 2006), this latter group may also be unintentionally excluded from catchment-based processes.

While more evident in responses from Selwyn Waihora participants, both processes demonstrate that financial, technical, time and resource constraints can negatively impact the ability of citizens and stakeholders to get involved and remain involved in the process. Those financially and technically resourced are in a better position to respond and be actively involved, whereas the lay audience often struggle to participate effectively or even know that they should be participating. As a result, some organisations are better equipped to use the opportunities provided. However, despite these limitations, most respondents refuted the notion that limit setting should be based on science alone and left to the experts; rather, there was a strong feeling across both processes that community engagement was non-negotiable. Legitimacy will suffer if personal costs, resources and time constrain involvement, creating a feeling of tokenism and a lack of meaningful engagement (Leach, 2006; Tippett, Searle, Pahl-Wostl and Rees, 2005). This raises an important tension between the desire for community input and the ability of the community to participate and highlights the need for resource differentials in society to be recognised and, where possible, managed to create a more equitable platform for involvement.

Survey responses indicate that Maori participation was better enabled in the Selwyn Waihora process than in Otago. Similarly, Maori values and perspectives were better reflected in the outcome in Selwyn Waihora. It was notable that most Otago respondents either did not know or were ambivalent about the level of Maori involvement, suggesting a disconnect or lack of understanding about Maori values and rights. Many Canterbury respondents, however, were more forthcoming about the engagement or lack of engagement by Maori, and the need to improve liaison and relationship building with Maori. This aligns with throughput legitimacy findings that the Selwyn Waihora process better enabled mutual learning and understanding among different sectors of the community.

Throughput Legitimacy

The willingness of the community and stakeholders to get involved and engaged in discussion and dialogue can be influenced by whether or not there exists a feasible alternative means of achieving their goals and objectives. This in turn influences perceptions of throughput legitimacy. In Otago, the community had the full RMA Schedule 1 process, including submissions, council hearings and Environment Court appeals, available to them. Additionally, Otago citizens are able to replace 'failing' elected councillors every three years. Some participants suggested that some major stakeholders prefer these alternative avenues to resolve their issues, and these groups will continue to focus their attention on such processes rather than spend time, money

and manpower on the collaborative approach. In comparison, the ECan Act (2010) means there is no representative election in Canterbury and no appeals to the Environment Court and, as a result, greater enticement to participate in collaboration. Consequently, responses indicate that there was more incentive to participate in the Selwyn Waihora process than in the Otago process. There was, however, a greater perception in Selwyn Waihora that some groups did not participate in the discussions because they felt they were more likely to achieve their objectives outside the collaborative process, which contributed to the sense of secrecy expressed by a number of the respondents. .

Despite the differing governance arrangements between the processes, with elected regional councillors in Otago, and government-appointed commissioners in Canterbury, there was little difference in how the respondents viewed these governing bodies in terms of accessibility, involvement, representativeness and accountability. Accountability was instead assumed, indirectly, by the zone committee in Selwyn Waihora and ORC staff in Otago. For ORC staff, accountability comes from their accessibility and visibility in the community, while the zone committee's accountability is likely to come from their status as Committees of Council and because they were associated with various sector groups in the catchment and wider region. However, while across the accountability indicators the zone committee rated more highly than the ORC staff, neither prompted high confidence ratings. This was influenced by a perception that there were inadequate mechanisms in place to deter inappropriate behaviour, as well as a perceived lack of outreach and communication with the wide community.

Transparency regarding who is accountable and ultimately responsible is important in any process. The public need to understand which parties are making the recommendations and decisions and what mechanism are in place to keep these groups in check. Haus and Heinelt (2005) suggest that accountability requires the clear assignment of political decisions, and can be reached by a clear separation, as well as an interplay between 1) decisions made by representative bodies elected and authorised to make such decisions and 2) participatory deliberation and joint policy implementation based on community involvement. For Otago, this means that the accountability of councillors will likely increase if it is preceded by a community-based participatory process to assist policy development. In Canterbury, under the current governance arrangements, this suggests that decisions made by the commissioners must be backed by a thorough consultation process, to be considered lawful and sound.

Transparency in communication about the process, agreements or resolutions made during the process, are also important to create greater acceptance for decisions (Schmidt, 2013). The extent of this transparency was informed by an analysis of the ORC and ECan webpages and printed information which show a significant amount of process and technical information provided for the Selwyn Waihora process, compared to that available for PC6A. Consistently, survey responses indicated that overall transparency was considered higher in the Selwyn Waihora process, and this led to a greater understanding of the recommendations.

As asserted by Page (2010), and in light of the perception that participants across both processes had unequal access to resources, it is important that the process, discussions and interactions are structured to avoid undue influence by stakeholders with resource and power advantages. Procedural fairness was perceived to be higher in the Selwyn Waihora process than in Otago, with greater confidence in the opportunities to contribute to the discussions and influence the decision. This is likely linked to the positive responses from Selwyn Waihora respondents that, despite the long timeframes and work involved, community interest was maintained throughout.

An important area of inquiry was whether sufficient understandable information was provided to inform discussions and responses from the community. The Selwyn Waihora process was viewed more favourably overall in terms of the information provided and the extent to which it was driven by what the community requested. Respondents agreed the breadth of information sufficiently spanned the four well-being's, though some drew attention to the lack of robust and timely on-farm analysis. The Otago process faced criticism that there was a dearth of information made available on the social and economic impacts at the time of consultation. This significantly weakened the perceived legitimacy of the process, especially in the eyes of the landowners impacted by the rules.

Both processes also identified the need for the information presented to be couched at a level that matches the understanding of the audience. As stated by an Otago respondent, participants know what values they want to protect, but they are not in a position to say what the actual limits need to be to protect these values. The process managers must have the ability to take the values, translate them into the limits required to safeguard these values, and report this and the implications of the limits back to the community. This is what enables the trade-off discussions to occur.

Responses indicate a perception that the science in the Selwyn Waihora process was undertaken and presented to inform discussions, whereas in Otago it was provided to justify a predetermined outcome. Consistently, there was a greater perception among the Selwyn Waihora respondents that the community had the opportunity to contribute their own information, compared with Otago where the flow of information was considered largely one-way. The view that participants changed their opinions as learning and understanding increased was stronger among Selwyn Waihora than Otago participants. There was, however, a strong perception across both processes that layman information was considered inferior to the technical information presented by process managers, indicating a discrepancy between the community having the opportunity to present their views, and actually having their views taken on board. Furthermore, across both processes, respondents indicated there was still some outstanding information to be provided or knowledge gaps to be filled. This was more evident in Selwyn Waihora and may have contributed to the feeling of secrecy expressed by some respondents. It is important, therefore, that the knowledge of both the experts and the community is drawn on to fill these gaps and strengthen the policy decision.

The Otago PC6A process rated more favourably regarding the overall timescale of the project. The Selwyn Waihora process commenced in mid-2011 and had just concluded the council hearing at the completion of this research with the council decision pending (November 2014); the Otago PC6A process commenced in mid-2010 and was completed in early 2014 with mediation settlement. The collaborative process was, therefore, no shorter than the council-driven process, in contrast to Appelstrand's (2002) suggestion that participation promotes a shorter process. Selwyn Waihora respondents indicated that the process took longer because of the consensus approach taken and they highlighted the significant time commitment required. However, many also indicated a lack of time to analyse and interpret the data, consider and assess the information, and have a full deliberation on all the issues. The lack of support for a faster process and the multiple time extensions granted in Selwyn-Waihora, both indicate the need for realistic timeframes to be set at the outset of the process. These timeframes must allow for the required technical work to occur and enable the process managers to respond to information requests. Timeframes must also allow the community to prepare for discussions, digest the information presented and process the feedback and outcomes from any meetings attended.

Output Legitimacy

The Selwyn Waihora outcome was considered more effective and community enhancing, practical and implementable than the Otago outcome. Lockwood (2010) and Carr and Halvorsen (2001) both suggest that if citizens are able to contribute diverse, local knowledge and perspectives, the process is likely to yield outcomes that are more creative and suited to local conditions. Survey results align with this sentiment, with a greater sense of innovation coming from Selwyn Waihora respondents than those involved in Otago. This was likely enabled and strengthened by the catchment approach adopted compared to a regional one where the issues are broad and it can be difficult to find an approach to suit all situations. Creative and innovative thinking also requires that trust is first established and there appears a better foundation for this trust and relations in Selwyn Waihora compared to Otago. There was a stronger perception of mutual gain among Selwyn Waihora respondents, as well as a greater confidence that common ground had been reached and conflict reduced through discussions.

Effectiveness is, however, also be assessed in terms of the environmental outcome, and Kronsell and Bäckstrand (2010) and Newig and Fritsch (2009) suggest that participation and collaboration are expected to lead to more effective improvements in environmental quality. Yet contrary to this theory, several Selwyn Waihora respondents specifically questioned and criticised the environmental effectiveness of the outcome, with a strong message given by some that the environment would continue to degrade under the proposed regime. Where this environmental effectiveness has been the driver for participation, perceptions of legitimacy will suffer.

The incorporation of public values and ideas into policy decisions is a fundamental prerequisite to securing acceptance and support for the outcome and, therefore, output legitimacy. The extent to which the Otago community's beliefs and opinions were reflected in the outcome was largely perceived as inadequate by survey participants. Compared to those who indicated that the ORC had made a genuine commitment at the start of the process to take on board their opinions, agreement halved when asked whether the communities' ideas and information was taken on board in the outcome. This suggests a changing attitude or philosophy being taken by the Council as the limit setting process progressed and a move away from a collaborative effort to a process more consistent with the 'decide, announce and defend' approach. As a result the local community and stakeholders could not identify with the policy outcomes or the technical arguments put forward, contributing to dissent and opposition and subsequently leading to Environment Court Appeals.

There was, therefore, a stronger perception that the outcome was accepted and supported in Selwyn Waihora than in Otago, and a greater belief that the community's ideas and input were taken on board. One respondent in particular stated, 'I have had about 40 years involved in water management, particularly in Canterbury - this approach is better than anything I have seen previously'. However, it is important to acknowledge that while the Selwyn Waihora process rated more favourably *relative* to the Otago process in terms of outcome legitimacy, the outcome effectiveness was by no means endorsed by all participants, nor was the notion that the outcome reflected community input. Taking into account the time and energy that went into the process by community participants, this lack of confidence in outcome legitimacy is significant.

When survey participants were asked to compare the two approaches – top-down council led and collaborative - there was greater support for the latter across both processes. However survey responses indicate that it not clearly understood when "top down" becomes "collaborative" and vice versa. It was suggested that conventional processes can exhibit instances of collaboration, such as the dialogue and discussion during the Otago PC6A mediation. Similarly, the Selwyn Waihora process has been widely termed 'collaborative' despite the fact that the zone committee and focus groups were selected or invited by council and the policy development was guided by ECan staff under the leadership of government-appointed commissioners. The distinction between top-down and bottom-up is not clear cut and some respondents suggested it is not about choosing one, but rather developing a hybrid of the two approaches. Under this hybrid, the Councils role is to initiate and drive progress, ensure that any required bottom-lines are met, put a framework around the policy and make sure the hard decisions are being made. This, however, should be founded on meaningful community engagement and discussion to better understand the implications of any policy options for communities and the practicalities of the limits they are setting.

6.6 Summary: overall legitimacy

This chapter has discussed the results of the survey, complimented with findings from the document analysis. Results indicate that, overall, the collaborative Selwyn Waihora limit setting process was perceived to be more legitimate than the top-down Otago planning process.

Responses indicate various conditions or prerequisites to securing and maintaining legitimacy in a collaborative process. There must be a commitment made by decision makers to listen to community viewpoints and the outcome must clearly honour this commitment. It is apparent that catchment-based conversations that enable local

communities to understand local issues and come up with local solutions, are preferable to regional conversations. There must be opportunities for the general population to get involved and influence the decision, as well as more structured collaborative group discussions. Importantly, collaborative group participants, and any support networks, should have equal access to resources or where that is not possible a fair deliberative process that prevents domination by specific groups. It is important that alternative means of influencing the decision outside the collaborative forum are prevented, to increase the incentive of active and continued participation. It is also important to ensure the collaborative group members are capable of producing the outcome and that the selection criterion for the group is transparent and understood. Fundamentally, the accountable actors must accept responsibility, and be accepted as being responsible.

It is clear from survey responses that early communication and engagement is essential in terms of informing of the implications of different policy options. The process must allow sufficient time for discussion and deliberation and be able to respond to information requests from the community; yet it must also be time bound to prevent a drawn out protracted process where consensus is used to delay or avoid change. Effort must be put into building trust among participants, staff and the decision makers in order to foster innovation and deal with incomplete information, and where possible parties should work together in joint fact finding to develop accurate, robust and agreed information that sufficiently spans the social, cultural, economic and environmental well-beings. Planners writing the policy need to be embedded in the process and part of the discussions to understand the rationale behind any collaborative group recommendations.

Overall, the Selwyn Waihora process performed reasonably strongly against input and throughput legitimacy criteria. It provided structured deliberative opportunities, open access to information, and demonstrated a genuine commitment to community involvement and engagement through both the zone committee and focus group work. Across the three legitimacy areas, output legitimacy performed least favourably, in terms of both the effectiveness of the outcomes and in the way the community ideas were reflected in this outcome. A theme coming through the survey responses was that continued learning, adjustments and improvements were essential, and it was recognised that subsequent processes have already benefited from learnings in Selwyn Waihora.

7. Conclusion

7.1 Introduction

The aim of the research was to assess the legitimacy of collaborative planning in setting water resource limits. The research employed a comparative case study approach to examine two regional council limit-setting processes – a conventional council-led approach in Otago, and a collaborative community-driven approach in Selwyn Waihora, Canterbury. It has examined the strengths and weaknesses of these differing approaches, against the criteria of input, throughput and output legitimacy and has identified the elements that promote or challenge legitimacy claims. This final chapter concludes the research and presents the main findings from the research as they relate to the research aims and objectives.

7.2 The legitimacy of collaborative planning: general observations and recommendations

Overall, the collaborative Selwyn Waihora limit-setting process was perceived to be more legitimate than the top-down Otago planning process. This infers that the legitimacy of regional council planning and decision making is more likely to be achieved through the adoption of a collaborative approach.

The research has demonstrated that collaboration enables better local input, more buy-in, greater opportunities for information sharing and deliberation, a better understanding of the views and potential implications on others and facilitates a sense of commitment in engaging and involving the community. Research results suggest that providing collaborative opportunities enhances problem-solving and innovation and the likelihood that common ground can be realised. Fundamental to securing legitimacy is that those involved are engaged in the process from an early stage, through the entire policy development process, and that the policy makers and decision makers demonstrate a genuine commitment to listen to and take the community seriously.

The research highlights concern surrounding the outcome quality and the extent to which the community could see the results of their participation in the outcome. This poses a potential threat to the uptake and success of collaborative planning and must be the focus of attention for future process managers and facilitators. For a process to fully satisfy legitimacy demands, the community needs assurance that the outcomes are effective – both for the people and for the environment - and the community values and ideas are reflected in the outcome. It is not enough that there are opportunities provided for the community to contribute; there must be a clear commitment made by

the decision makers to listen to the community and the outcome must visibly honour this commitment. The quality, credibility and legitimacy of any policy decision will suffer if citizens perceive their efforts to stay informed, provide feedback and actively participate have been ignored.

Respondents did acknowledge, however, that collaboration in the limit-setting arena is relatively new, that regional councils are still 'finding their feet' and though they may not have perfected the process, it is still preferable to the alternative top-down approach. There will continue to be considerable learning and adaptation and process managers and facilitators must be willing to listen to suggestions from participants and make changes as appropriate to respond to community concerns. The assessment framework developed in this research could be utilised to identify key challenges and limitations to any collaborative strategy being developed, prompting questions such as whether any groups are being excluded, whether all citizens have the capability to participate, whether there are sufficient opportunities for the wider community to access information, or whether the lines of accountability are clearly articulated.

Freshwater planning and management is not easy, and this research has shown that collaboration presents its own challenges – it takes time, money, energy and skill on the part of both the process managers and the community. Resource constraints can limit the ability of communities and stakeholders to get involved in and remain involved in the process, as well as the ability of process managers to implement an effective collaborative strategy. Efficiencies across New Zealand must be found in order for this new approach to be successful and central and local government need to investigate new ways to be efficient with resources, sharing and coordinating approaches across regions, while also providing for discussions at a catchment level. Regional councils entering this 'brave new world' of collaborative planning and decision making need to work together and share experiences, what works, what doesn't and what can be improved. Likewise, primary industry, environmental groups, iwi and other key stakeholders across New Zealand must engage in the process with an open mind and a willingness to build the required trust. Without the buy-in of these major stakeholder groups, locally, regionally and nationally, the longevity and success of the collaborative approach may be compromised.

Collaboration should not be considered as a replacement of the representative model, despite the current governance arrangements in Canterbury; rather collaboration should be a means of complementing and strengthening it. Accordingly, the collaborative group and the wider community should be engaged in discussions early

and directly and make recommendations on policy, with regional councils taking a coordinating and facilitating role. The ultimate decision making responsibility should remain with elected representatives to provide a check on overly optimistic or costly solutions coming from the collaborative group, or policy approaches that may be contrary to the wider community values. Fundamentally, transparency of where the responsibility and ultimate accountability lies is important to make clear in any process. The community need to fully understand who is making the recommendations, who is making the decisions and what mechanisms are in place to keep these parties in check.

Finally, collaboration should not be treated as the solution for all situations. Rather, each situation must be assessed in order to determine whether the adoption of a collaborative process is the most efficient and effective approach. If the resource is not under stress, it may be that the conflicting values and expectations are not as strong and an accepted policy approach can be established through participation and consultation. Alternatively, the resource may be under so much stress, that a drawn out collaborative approach may not provide the immediate halt to deterioration that is required. Councils must also evaluate whether they have the resources to undertake a fully collaborative process and the costs associated with such a process at a regional and catchment scale.

7.2 Further investigations

The research limitations arising from the timing of data collection are acknowledged. The nature of the research meant that neither process had reached its final point – Otago was still to work through Environment Court mediation, while the recommendations made through the collaborative Selwyn Waihora process still needed to go through the statutory RMA test of submissions and council hearing. As articulated in survey responses, it is not until the final decisions are made that the legitimacy of the full process can be entirely assessed. Because legitimacy can be eroded, contested, or rebuilt, a further investigated is warranted at the end of these processes to determine:

- Whether participant's perception of legitimacy changed when the final outcome became known and, therefore, the relative influence of output legitimacy on overall legitimacy beliefs.

- Whether the Selwyn Waihora Zone Committee's consensus recommendations withstood the council hearing process and were adopted and implemented in part or in full.

Furthermore, this research identified that where the Selwyn Waihora process focused on collaboration at a plan development stage in the hope it will assist implementation, the Otago process managers saw more value in fostering collaboration in plan implementation. It has not been possible to assess the implementation phase in this research. A further investigation is merited within the next 3-5 years to determine the full success of implementation:

- Which process has a more engaged community, involved in implementation?
- Has progress been made towards achieving any environmental targets identified?
- Has implementation changed the perceived legitimacy of the full process; that is, can a process that suffers from a legitimacy deficit in terms of input, throughput and output, be made more legitimate through implementation and vice versa.

As a new form of planning and decision making, collaborative processes will continue to evolve and be tailored or adapted to suit specific regions, issues or communities. The assessment framework developed and utilised in this research, at a principle, criteria and indicator level, provides a useful tool to assess the legitimacy of proposed, current and past collaborative processes. Government authorities at both a local and central government level must continue to evaluate these processes and be willing to modify their approach in order to meet legitimacy requirements.

8. References

- Aars, J., and Fimreite, A. L. (2005). Local Government and Governance in Norway: Stretched Accountability in Network Politics. *Scandinavian Political Studies* 28(3): 239-256.
- Alexander, K. S., Moglia, M., and Miller, C. (2010). Water needs assessment: Learning to deal with scale, subjectivity and high stakes. *Journal of Hydrology* 388: 251-257.
- Ananda, J., and Proctor, W. (2013). Collaborative approaches to water management and planning: An institutional perspective. *Ecological Economics* 86: 97-106.
- Ansell, C., and Gash, A., (2007). Collaborative Governance in Theory and Practice. *Journal of Public Administration Research and Theory* 18: 543-571.
- Appelstrand, M. (2002). Participation and societal value: the challenge for lawmakers and policy practitioners. *Forest Policy and Economics* 4: 281-290.
- Arnstein, S. R. (1969). A Ladder of Citizen Participation. *Journal of the American Institute of Planners* 35(4) 216-224. Retrieved from <https://www.planning.org/pas/memo/2007/mar/pdf/JAPA35No4.pdf>.
- Ashford, N. A., and Rest, K. M. (1999). *Public participation in contaminated communities*. Massachusetts Institute of Technology, Centre for Technology, Policy, and Industrial Development: Cambridge.
- Bäckstrand, K., Khan, J., Kronsell, A., and Lövbrand, E. (2010). The promise of new modes of environmental governance. In Bäckstrand, K., Khan, J., Kronsell, A., and Lövbrand, E. (Eds) *Environmental Politics and Deliberative Democracy. Examining the promise of new modes of governance*. Edward Elgar Publishing Ltd, Cheltenham.
- Baldwin, C., Tan, P., White, I., Hoverman, S., and Burry, K. (2012). How scientific knowledge informs community understanding of groundwater. *Journal of Hydrology* 474: 74-83.
- Bartholomew, K. (2007). Land use-transportation scenario planning: promise and reality. *Transportation* 34: 397-412.
- Beetham, D. (1991). *The Legitimation of Power*. MacMillan, London.
- Beierle, T.C. (2002). The quality of stakeholder-based decisions. *Risk analysis* 22(4): 739-749.
- Bekkers V., and Edwards, A. (2007). Legitimacy and Democracy: a conceptual framework for assessing governance practices. In Bekkers, V., Dijkstra, G., Edwards, A., and Fenger, M. (Eds) *Governance and the Democratic Deficit: Assessing the Democratic Legitimacy of Governance Practices*. Ashgate Publishing Ltd, Hampshire.
- Benhabib, S. (1996). *Democracy and difference: Contesting the boundaries of the political*. Princeton University Press: Princeton, New Jersey.

- Benson, D., Jordan, A., Cook, H., and Smith, L. (2013). Collaborative environmental governance: Are watershed partnerships swimming or are they sinking? *Land Use Policy* 30: 748-757.
- Bernauer, T., and Gampfer, R. (2013). Effects of civil society involvement on popular legitimacy of global environmental governance. *Global Environmental Change* 23(2): 439-449.
- Biermann, F., and Gupta, A. (2011). Accountability and legitimacy in earth system governance: A research framework. *Ecological Economics* 70: 1856-1864.
- Blackstock, K. L., Kelly, G. J., and Horsey, B. L., (2007). Developing and applying a framework to evaluate participatory research for sustainability. *Ecological Economics* 60: 726-742.
- Booher, D. E., and Innes, J. E. (2005). Comment. *Planning Theory and Practice* 6(3): 431-435.
- Boreux, V., Born, J., and Lawes, M. J. (2009). Sharing ecological knowledge: opportunities and barriers to uptake. *Biotropica: The Journal of Tropical Biology and Conservation* 41(5): 532-534.
- Brewer, B., Vose, J., Van Raalte, J., and Petitpas, A. (2011). Metaqualitative reflections in sport and exercise psychology. *Qualitative Research in Sport, Exercise and Health* 3(3): 329-334.
- Brody, S., Godschalk, D., and Burby, R. (2003). Mandating citizen participation in plan making: six strategic planning choices. *Journal of the American Planning Association* 69(3): 245-264.
- Callon, M. (1999). The role of lay people in the production and dissemination of scientific knowledge. *Science Technology Society* 4: 81-94.
- Canterbury Mayoral Forum (2009). *Canterbury Water Management Strategy: Strategic Framework – November 2009*. Retrieved from <http://ecan.govt.nz/publications/Plans/cw-canterbury-water-wanagement-strategy-05-11-09.pdf>
- Carr, D. S., and Halvorsen K. (2001). An evaluation of three democratic, community-based approaches to citizen participation: surveys, conversations with community groups, and community dinners. *Society and Natural Resources: An International Journal* 14(2): 107-126
- Carr, L. (1994). The strengths and weaknesses of quantitative and qualitative research: what method for nursing? *Journal of Advanced Nursing* 20: 716-721.
- Chakraborty, A. (2012). Recognising uncertainty and linked decisions in public participation: a new framework for collaborative urban planning. *Systems Research and Behavioural Science* 29: 131-148.

- Cliquet, A., Kervarec, F., Bogaert, D., Maes, F., and Queffelec, B. (2010). Legitimacy issues in public participation in coastal decision making processes. Case studies from Belgium and France. *Ocean and Coastal Management* 53: 760-768.
- Coglianesi, C. (1999). The limits of consensus. *Environment*, 41, 28–33.
- Conley, A., and Moote, M. A. (2003). Evaluating collaborative natural resource management. *Society and Natural Resources* 16 (5): 371-386.
- Connelly, S., Richardson, T., and Miles, T. (2006). Situated legitimacy: Deliberative arenas and the new rural governance. *Journal of Rural Studies* 22: 267-277.
- Connick, S., and Innes, J. E. (2003). Outcomes of collaborative policy making: applying complexity thinking to evaluation. *Journal of Environmental Planning and Management* 46(2): 177-197.
- Copland, R. J., and Stevens, D. R. (2012). The changing face of southern New Zealand farming: opportunities of land use change. *Proceedings of the New Zealand Grassland Association* 74: 1-6.
- Creech, W., Jenkins, M., Hill, H., and Low, M. (2010). *Investigating the Performance of Environment Canterbury under the Resource Management Act and Local Government Act, February 2010*. Retrieved from <http://www.mfe.govt.nz/publications/rma/investigation-performance-environment-canterbury/investigation-performance-environment-canterbury.pdf>
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Third Edition*. Sage Publications Inc: Thousand Oaks, California.
- Cundill, G., and Rodela, R. (2012). A review of assertions about the processes and outcomes of social learning in natural resource management. *Journal of Environmental Management* 113: 7-14
- de Fine Licht, J. (2011). Do we really want to know? The potentially negative effect of transparency in decision making on perceived legitimacy. *Scandinavian Political Studies* 34(3), 183-201.
- Dryzek, J. S. (2001). Legitimacy and economy in deliberative democracy. *Political Theory* 29(5): 651-669.
- Environment Canterbury (2011a). *Canterbury Water: The Regional Context. Chapter 9: Irrigated land area*. ECan: Canterbury. Retrieved from <http://ecan.govt.nz/publications/Plans/cw-regional-context-part9.pdf>
- Environment Canterbury (2011b). *Canterbury Water: The Regional Context. Chapter 2: Setting the scene – key challenges in Canterbury*. ECan: Canterbury. Retrieved from <http://ecan.govt.nz/publications/Plans/cw-regional-context-part2.pdf>
- Environment Canterbury (2011c). *Selwyn Waihora Zone Implementation Programme*. ECan: Canterbury. Retrieved from <http://ecan.govt.nz/publications/General/cw-selwyn-waihora-zip.pdf>

Environment Canterbury (2012a). *The preferred approach for managing the cumulative effects of land use on water quality in the Canterbury: a working paper*. ECan: Canterbury. Retrieved from <http://ecan.govt.nz/publications/Reports/luwq-preferred-approach-report-jan2012.pdf>

Environment Canterbury (2012b). *Newsletter on limit setting. Selwyn Waihora Zone update, August 2012*. ECan: Canterbury. Retrieved from <http://ecan.govt.nz/publications/Plans/selwyn-waihora-information-sheet-2-000812.pdf>

Environment Canterbury (2012c). *Information sheet: Limit setting – an introduction March 2012*. ECan: Canterbury. Retrieved from <http://ecan.govt.nz/publications/Plans/selwyn-te-waihora-focus-group-info-sheet1.pdf>

Environment Canterbury (2013a). *Canterbury Regional Policy Statement 2013*. ECan: Canterbury. Retrieved from <http://ecan.govt.nz/our-responsibilities/regional-plans/rps/Pages/regional-policy-statement.aspx>

Environment Canterbury (2013b). *Selwyn Waihora limit setting process: An overview of current status in 2012*. ECan: Canterbury. Retrieved from <http://ecan.govt.nz/publications/Plans/selwyn-tewaihora-current-state-overview-290312.pdf>

Environment Canterbury (2013c). *Selwyn Waihora ZIP Addendum, October 2013*. ECan: Canterbury. Retrieved from <http://ecan.govt.nz/publications/General/zip-addendum-at-150613-v6.pdf>

Environment Canterbury (2014a). *Proposed Variation 1 to the Proposed Canterbury Land and Water Regional Plan*. ECan: Canterbury. Retrieved from <http://ecan.govt.nz/publications/Plans/lwrp-variation-1-0214.pdf>

Environment Canterbury (2014b). *Proposed Variation 1 to the Proposed Canterbury Land and Water Regional Plan Section 32 Evaluation Report February 2014*. ECan: Canterbury. Retrieved from <http://ecan.govt.nz/publications/Plans/lwrp-s32-report-0214.pdf>

Environment Canterbury (2014c). *Canterbury Water Management Committee (CWMS) Zone and Regional Committees Terms of Reference*. ECan: Canterbury. Retrieved from <http://ecan.govt.nz/publications/Council/cwms-tor-oct.pdf>

Environment Canterbury (2014d). *Selwyn and Te Waiohoro*. Retrieved from <http://www.ecan.govt.nz/our-responsibilities/regional-plans/regional-plans-under-development/ellesmere-selwyn/Pages/Default.aspx> Environmental Defence Society (2008). *Media Statement: Unique Forum to Focus on Rural Land Use*. Retrieved from: www.eds.org.nz/content/documents/pressreleases/Sustainable%20Forum%20PR.pdf.

Environmental Defence Society (2014). *Environment Canterbury (Temporary Commissioners and Improved Water Management) Act 2010*. Retrieved from <http://www.rmaguide.org.nz/regional-legislation/canterbury.cfm>

Erling Klausen, J., and Sweeting, D. (2005). Legitimacy and community involvement in local governance. In Haus, M., Heinelt, H., and Stewart, M. (2005). *Urban*

Governance and Democracy: Leadership and community involvement. Routledge Studies in Governance and Public Policy: Oxon.

European Commission (2000). *Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy*. Official Journal L 327, 22/12/2000 P. 0001 – 0073. Retrieved from http://ec.europa.eu/environment/water/water-framework/index_en.html.

Fenger, M. and Bekkers V. (2007). The governance concept in public administration. In Bekkers, V., Dijkstra, G., Edwards, A., and Fenger, M. (Eds) *Governance and the Democratic Deficit: Assessing the Democratic Legitimacy of Governance Practices*. Ashgate Publishing Ltd: Hampshire.

Fish, R. D., Ioris, A. A. R., and Watson, N. M. (2010). Integrating water and agricultural management: Collaborative governance for a complex policy problem. *Science of the Total Environment* 408: 5623-5630.

Gearey, M. and Jeffrey, P. (2006). Concepts of legitimacy within the context of adaptive water management strategies. *Ecological Economics* 60: 129-137.

Gibbs, G. R. (2007). Analysing qualitative data. In U. Flick (Eds). *The Sage qualitative research kit*. Sage: London.

Gray, B. (1985). Conditions facilitating interorganisational collaboration. *Human Relations* 38(10): 911-936.

Gregory, R., McDaniels, T., and Fields, D. (2001). Decision aiding, not dispute resolution: creating insights through structured environmental decisions. *Journal of Policy Analysis and Management* 2(3): 415-432.

Grimble, R. J., and Chan, M-K. (1995). Stakeholder analysis for natural resource management in developing countries. Some practical guidelines for making management more participatory and effective. *Natural Resources Forum* 19(2): 113-124.

Godschalk, D. R., and Mills, W. (1966) A collaborative approach to planning through urban activities. *Journal of the American Institute of Planners* 32: 86-95.

Gunningham, N. (2008). *Innovative Governance and Regulatory Design: Managing Water Resources*. Landcare Research Contract Report: LC0708/137. Prepared for FRST: New Zealand.

Habermas, J. (1979). *Communication and the Evolution of Society*. Polity Press, Oxford.

Habermas, J. (1984). *The theory of communicative Action: Reason and the Rationalisation of Society*. Translated by T McCarthy. Beacon Press, Boston, MA.

Hacker, J. S. (1997). *The road to nowhere: the genesis of President Clinton's Plan for Health Security*. Princeton University Press. Princeton, New Jersey.

- Häikiö, L. (2012). From innovation to convention: legitimate citizen participation in local governance. *Local Government Studies* 38(4) 415-435.
- Hanberger, A. (2003). Public policy and legitimacy: a historical policy analysis of the interplay of public policy and legitimacy. *Policy Sciences* 36: 257-278.
- Harris Consulting (2004): *Property Rights in Water Quality: A Review of Stakeholders' Understanding and Behaviour*. Report prepared for the Ministry for the Environment. Retrieved from: <http://www.mfe.govt.nz/publications/water/property-rights-water-quality-apr04/html/index.html>
- Haus, M., and Heinelt, H. (2005). How to achieve governability at the local level? Theoretical and conceptual considerations on a complementarity of urban leadership and community involvement. In Haus, M., Heinelt, H., and Stewart, M. (2005). *Urban Governance and Democracy: Leadership and community involvement*. Routledge Studies in Governance and Public Policy. Oxon.
- Hechter, M. (2009). Legitimacy in the modern world. *American Behavioural Scientist* 53(3): 279-288.
- Hegtvædt, K. A., and Johnson, C. (2009). Power and Justice: Toward and understanding of legitimacy. *American Behavioural Scientist* 52(3): 376-399.
- Hill, Z. (2013). *Rural land use change in Canterbury 1995-2012*. ECan Technical Report No R13/54. Canterbury.
- Himmelman, A. T. (2001). On coalitions and the transformation of power relations: collaborative betterment and collaborative empowerment. *American Journal of Community Psychology* 29(2) 277-284.
- Hurrelmann, A., Krell-Laluhová, Z., Lhotta, R., Nullmeier, F., and Schneider, S. (2005) Is there legitimacy crisis of the nation state? *European Review* 13 (S1), 119-137.
- Huxham, C. (2003). Theorising collaboration practice. *Public Management Review* 5(3): 401-423.
- Innes, J. (2004). Consensus building: clarification for the critics. *Planning Theory* 3: 5-20.
- Innes J., and Booher, D. E. (2010). *Planning with complexity: an introduction to collaborative rationality for public policy*. Routledge, Oxon.
- Irrigation New Zealand (INZ) (2013a). *IrrigationNZ News, Winter 2013*. Irrigation New Zealand, Christchurch.
- Irrigation New Zealand (INZ) (2013b). *IrrigationNZ News, Spring 2013*. Irrigation New Zealand, Christchurch.
- Irvin, R. A., and Stansbury, J. (2004). Citizen participation in decision making: is it worth the effort? *Public Administration Review* 64(1): 55-65.

- Kallis, G., Kiparsky, M., and Norgaard, R. (2009). Collaborative governance and adaptive management: lessons from California's CALFED Water Program. *Environmental Science and Policy* 12: 631-643.
- Kerr, S., Claridge, M., and Milicich, D. (1998). *Devolution and the New Zealand Resource Management Act*. Treasury Working Paper 98/7. Retrieved from <http://www.treasury.govt.nz/publications/research-policy/wp/1998/98-07/twp98-07.pdf>.
- Khan, K., (2010). Local climate mitigation and network governance: progressive policy innovation or status quo in disguise? In Bäckstrand, K., Khan, J., Kronsell, A., and Lövbrand, E. (Eds) *Environmental Politics and Deliberative Democracy. Examining the promise of new modes of governance*. Edward Elgar Publishing Ltd, Cheltenham.
- Kronsell, A., and Bäckstrand, K. (2010). Rationalities and forms of governance: a framework for analysing the legitimacy of new modes of governance. In Bäckstrand, K., Khan, J., Kronsell, A., and Lövbrand, E. (Eds) *Environmental Politics and Deliberative Democracy. Examining the promise of new modes of governance*. Edward Elgar Publishing Ltd, Cheltenham.
- Lachapelle, P. R., McCool, S. F., and Patterson, M. E., (2003). Barriers to effective natural resource planning in a "messy" world. *Science and Natural Resources: An International Journal* 16(6): 473-490.
- Land and Water Forum (2010). *Report for the Land and Water Forum: A fresh start for freshwater*. Retrieved from <http://www.landandwater.org.nz/>.
- Land and Water Forum (2012a). *Second Report of the Land and Water Forum: Setting limits for water quality and quantity freshwater policy and plan making through collaboration*. Retrieved from <http://www.landandwater.org.nz/>.
- Land and Water Forum (2012b). *Third report of the Land and Water Forum: Managing water quality and allocating water*. Retrieved from <http://www.landandwater.org.nz/>.
- Leach, W. D. (2000). *Evaluating watershed partnerships in California: Theoretical and methodological perspectives*. PhD dissertation, Department of Ecology, University of California.
- Leach, W.D. (2006). Collaborative public management and democracy: evidence from western watershed partnerships. *Public Administration Review* 66: 100-110.
- Leach, W., Pelkey, N., and Sabatier, P. (2002). Stakeholder Partnerships as Collaborative Policymaking: Evaluation criteria applied to watershed management in California and Washington. *Journal of Policy Analysis and Management* 21(4): 645-670.
- Legacy, C. (2012). Achieving legitimacy through deliberative plan making processes – lessons for metropolitan strategic planning. *Planning Theory and Practice* 13(1): 71-87.
- Lejano, R. P., and Ingram, H. (2009). Collaborative networks and new ways of knowing. *Environmental Science and Policy* 12:653-662.

- Likert, R. (1932). A Technique for the Measurement of Attitudes. *Archives of Psychology*, 140, 1–55.
- Lockwood, M. (2010). Good governance for terrestrial protected areas: a framework, principles and performance outcomes. *Journal of Environmental Management* 91: 745-766.
- Lowery, D., Hoogland DeHogg, R., and Lyons, W.E. (1992). Citizenship in the empowered locality: an elaboration, a critique, and a partial test. *Urban Affairs Review* 28: 69-103.
- Lubell, M., Sabatier, P. A., Vedlitz, A., Focht, W., Trachtenburg, Z., Matlock, M., (2005). Conclusions and recommendations. In Sabatier, P.A., Focht, W., Lubell, M., Trachtenberg, Z., Vedlitz, A., Matlock, M., (Eds) *Swimming Upstream: Collaborative Approaches to Watershed Management*. MIT Press, Cambridge MA.
- Mäntysalo, R., Saglie, I-S., and Cars, G. (2011). Between input legitimacy and output legitimacy: defensive routines and agonistic reflectivity in Nordic land-use planning. *European Planning Studies* 19(12): 2109-2126.
- Mascarenhas, M., and Scarce, R. (2004). “The intention was good”: legitimacy, consensus-based decision making, and the case of forest planning in British Columbia, Canada. *Society and Natural Resources* 17(1): 17-38.
- McKay, S., Murray, M., and Ping Hui, L. (2011). Pitfalls in strategic planning: lessons for legitimacy. *Space and Polity* 15(2):107-124.
- McNeill, J. (2008). *The public value of regional government: how New Zealand’s Regional Councils manage the environment*. A dissertation in partial fulfilment of the requirements for the degree of PhD in politics. Massey University, Turitea, New Zealand.
- McNeill, J., Cheyne, C., and Summers, R. (2013). Spatial dimensions of New Zealand’s environmental management. *New Zealand Geographer* 69: 136–149.
- Memon, P. A. (1997). Freshwater management policies in New Zealand. *Aquatic Conservation: marine and freshwater ecosystems* 7: 305-322.
- Memon, P. A., Kirk, N. A., and Selsky, J. W. (2011). Limits to Ecological Modernisation as a framework for sustainable fresh water governance. *Land Use Policy* 28(3): 534–541.
- Memon, A., Duncan, R., and Spicer, A. (2012). The Hurunui Waiau Zone Implementation Programme as a collaborative planning process: a preliminary review. Report prepared for Environment Canterbury: Canterbury. Retrieved from: <http://ecan.govt.nz/publications/Reports/hurunui-waiiau-zip-collaborative-planning-process.pdf>
- Memon, A., and Kirk, N. (2012). Role of indigenous Maori people in collaborative water governance in Aotearoa/New Zealand. *Journal of Environmental Planning and Management* 55(7): 941-959.

Merghani, M. M. O., and Savenije, H. H. G (1995). Incorporation of People's Participation in Planning and Implementation of Water Resources Projects. *Physics and Chemistry of the Earth* 20(3-4), 229-236.

Metservice (2014). *New Zealand Metservice*. Retrieved from <http://about.metservice.com/our-company/learning-centre/new-zealand-climate/>

Ministry for the Environment (undated). *Climate Change Impacts on New Zealand*. New Zealand Climate Change Office, Wellington. Retrieved from: <http://www.mfe.govt.nz/publications/climate/impacts-on-new-zealand/impacts-on-new-zealand.pdf>

Ministry for the Environment (2007a). *Environment New Zealand 2007 Summary*. Ministry for the Environment, Wellington. Retrieved from: <http://www.mfe.govt.nz/publications/ser/enz07-dec07/>

Ministry for the Environment (2007b). *Environment New Zealand 2007*. Ministry for the Environment, Wellington. Retrieved from: <http://www.mfe.govt.nz/publications/ser/enz07-dec07/>

Ministry for the Environment (2011). *National Policy Statement for Freshwater Management*. Retrieved from: <http://www.mfe.govt.nz/publications/rma/nps-freshwater-management-2011/docs/nps-freshwater-mgmt-2011.pdf>

Ministry for the Environment (2013a). *Freshwater reform 2013 and beyond*. Ministry for the Environment: Wellington. Retrieved from: <http://www.mfe.govt.nz/publications/water/freshwater-reform-2013/freshwater-reform-2013.pdf>

Ministry for the Environment (2013b). *Trends in the amount of land irrigated by consented water takes*. Retrieved from <http://www.mfe.govt.nz/environmental-reporting/fresh-water/freshwater-demand-indicator/land-irrigated-trends.html>

Ministry of Primary Industries (2013a). *Agriculture and the New Zealand Economy*. Retrieved from www.mpi.govt.nz/agriculture.

Ministry of Primary Industries (2013b). *Irrigation*. Retrieved from www.mpi.govt.nz/environment-natural-resources/water/irrigation.aspx

Molloy, L. (1988). *Soils in the New Zealand landscape: the living mantle*. Mallinson Rendel: Wellington.

Moug, P. (2011). Decisions, dilemmas and deliberation: exploring the legitimacy of the organisation and design of a stakeholder workshop in an environmental research project. *Local Environment* 16(2): 129-145.

Muro, M., and Jeffrey, P. (2012). Time to talk? How the structure of dialog processes shapes stakeholder learning in participatory water resources management. *Ecology and Society* 17(1): 3-16.

Newig, J., Pahl-Wostl, C., and Sigel, K. (2005). The role of public participation in managing uncertainty in the implementation of the Water Directive Framework. *European Environmental* 15: 333-343.

Newig, J., and Fritsch, O. (2009). Environmental Governance: participatory, multi-level – and effective? *Environmental Policy and Governance* 19: 197-214.

National Institute of Water and Atmospheric Research Limited (2010). *How clean are our rivers?* Water and Atmosphere, Issue 1, July 2010. NIWA: Hamilton.

Office of the Auditor General (2011). *Managing Freshwater Quality: Challenges for regional councils*. OAG: Wellington. Retrieved from <http://www.oag.govt.nz/2011/freshwater/part2.htm>

O'Connor, M., B. Small & M.E. Wedderburn (2010), *Sustainable Agriculture in Aotearoa: Social Learning through Piecewise Deliberation*. AgResearch: Hamilton, New Zealand; KerBabel™ and REEDS: Rambouillet, France; submitted for publication. Retrieved from <http://www.creatingfutures.org.nz/assets/CF-Uploads/Publications/Deliberation-Matrix/Agriculture-in-Aotearoa-Social-learning-Through-Piecewise-Deliberation.pdf>.

O'Leary, Z. (2010). *The essential guide to doing your research project*. Sage: London.

O'Meara, P., Chesters, J., and Han, G. (2004). Outside – looking in: evaluating a community capacity building project. *Rural Society* 14(2): 126-141.

Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press, Cambridge.

Otago Regional Council (2007a). *State of the Environment Report: Surface water quality in Otago, May 2007*. ORC: Dunedin. Retrieved from <http://www.orc.govt.nz/Publications-and-Reports/Research-and--Technical-Reports/Surface-Water-Quality/State-of-Environment-Report-Surface-Water-Quality-in-Otago/>

Otago Regional Council (2007b). *Surface Water Quality and Future Waterway Protection: Report 2007/261*. ORC: Dunedin. Retrieved from <http://www.orc.govt.nz/Documents/Publications/Regional/Water/Plan%20Change%206A/Science-Reports/Surface-Water-Quality-and-Future-Waterway-Protection.pdf>

Otago Regional Council (2009). *New approach to non-point pollution: Report 2009/593*. ORC: Dunedin. Retrieved from <http://www.orc.govt.nz/Documents/Publications/Regional/Water/Plan%20Change%206A/Science-Reports/New-Approach-to-Non-Point-Pollution.pdf>

Otago Regional Council (2010a). *Water quality forum 2010 proceedings*. ORC: Dunedin. Retrieved from <http://www.orc.govt.nz/Publications-and-Reports/Conference-Proceedings/Water-Quality-Forum-Proceedings-2010/>

Otago Regional Council (2010b). *Otago Regional Council Urban Water Quality Strategy*. ORC: Dunedin. Retrieved from <http://www.orc.govt.nz/Publications-and-Reports/Regional-Policies-and-Plans/Urban-Water-Quality-Strategy1/>

Otago Regional Council (2011a). *Otago Regional Council Rural Water Quality Strategy*. ORC: Dunedin. Retrieved from <http://www.orc.govt.nz/Publications-and-Reports/Regional-Policies-and-Plans/Rural-Water-Quality-Strategy/>

Otago Regional Council (2012a). *Regional Plan: Water for Otago, updated to 1 March 2012*. ORC: Dunedin. Retrieved from <http://www.orc.govt.nz/Documents/Publications/Regional/Water/Water%20Plan%202012/3%20Regional%20Description.pdf>

Otago Regional Council (2012b). *State of the environment: Surface water quality in Otago*. ORC: Dunedin. Retrieved from <http://www.orc.govt.nz/Publications-and-Reports/Research-and--Technical-Reports/Surface-Water-Quality/State-of-the-environment-Surface-water-quality-in-Otago/>

Otago Regional Council (2012c) *Regional Plan: Water for Otago. Proposed Plan Change 6A (Water Quality)*. ORC: Dunedin.

Otago Regional Council (2012d) *Regional Plan: Water for Otago. Proposed Plan Change 6A (Water Quality). 31 March 2012. Section 32 Report – Consideration of alternatives, benefits and costs*. ORC: Dunedin.

Otago Regional Council (2012e) *Proposed Plan Change 6A (Water Quality) to the Regional Plan: Water for Otago PC6A. Officers report on decisions requested*. ORC: Dunedin.

Otago Regional Council (2014). *Otago Regional Council*. Retrieved from <http://www.orc.govt.nz/>

Overdeest, C. (2000). Insights and Applications – participatory democracy, representative democracy, and the nature of diffuse and concentrated interests: a case study of public involvement on a National Forest District. *Society and Natural Resources: An International Journal* 13(7): 685-696.

Page, S. (2010). Integrative leadership for collaborative governance: civic engagement in Seattle. *The Leadership Quarterly* 21: 246-263.

Papadopoulos, Y., and Warin, P. (2007) Are innovation, participatory, and deliberative procedures in policy making democratic and effective? *European Journal of Political Research* 46: 445-472.

Parkins, J.R., and Mitchell, R.E. (2005). Public Participation as Public Debate: A Deliberative Turn in Natural Resource Management. *Society & Natural Resources: An International Journal* 18(6): 529-540.

Peart, R. (2011). Innovative approaches to water resource management: a comparison of the New Zealand and South African approaches. *New Zealand Journal of Environmental Law*. 5(127-158).

Pinkerton, E., and John, L. (2008). Creating local management legitimacy. *Marine Policy* 32: 680-691

- Polsby, N. W. (1984) *Political innovation in America. The politic of policy initiation*. Yale University Press: New Haven, London.
- Prell, C., Reed, M., Racin, L., and Hubacek, K. (2010). Competing structure, competing views: the role of formal and informal social structures in shaping stakeholder perceptions. *Ecology and Society* 15(4): 34-51.
- Randolf, J., and Bauer, M. (1999). Improving environmental decision-making through collaborative methods. *Policy Studies Review* 16(3/4): 168-191.
- Rauschmayer, F., and Wittmer, H. (2006). Evaluating deliberative and analytical methods for the resolution of environmental conflicts. *Land Use Policy* 23: 108-122.
- Rauschmayer, F., Berghöfer, A., Omann, I., and Zikos, D. (2009). Examining processes or/and outcomes? Evaluation concepts in European Governance of Natural Resources. *Environmental Policy and Governance* 19: 159-173.
- Reilly, T. (2001). Collaboration in Action: An Uncertain Process. *Administration in Social Work*, 25(1): 53–73.
- Rittel, H. W. J., and Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences* 4: 155-169.
- Rodela, R. (2012). Advancing the deliberative turn in natural resource management: An analysis of discourses on the use of local resources. *Journal of Environmental Management* 96: 26-34.
- Rowe, G., and Frewer, L. (2000). Public Participation Methods: A Framework for Evaluation. *Science Technology Human Values* 25(3): 512-556.
- Salmon, G. (2012). *Canterbury Water Management Strategy – a case study in collaborative governance*. Report prepared for the Ministry for the Environment by Ecologic Foundation.
- Salmon, G, Sundström, M and Zilliacus, K 2005. *Environmental Management and Natural Resource Allocation Frameworks of New Zealand, Sweden and Finland: A Comparative Description*. Ecologic Research Report No 1. Ecologic Foundation, Nelson.
- Salmon, G., Zilliacus, K., Scherser, J., and Bärlund, H-M. (2008). *Collaborative governance on environmental policies affecting rural landowners: comparing Nordic and New Zealand practices*. Paper presented at the Yale University/UNITAR Conference on Environmental Governance, Yale University 10 May 2008.
- Saravanan, V. S., McDonald, G. T., Mollinga, P. P. (2009). Critical review of Integrated Water Resources Management: moving beyond polarised discourse. *Natural Resource Forum* 33: 76–86.
- Scharpf, F. W (1999). *Governing in Europe: Effective and Democratic?* Oxford University Press, Oxford.

Schmidt, V. A. (2013). Democracy and legitimacy in the European Union revisited: Input, Output and 'Throughput'. *Political Studies*. 61(1): 2-22.

Schouten, G., Glasbergen, P. (2011). Creating legitimacy in global private governance. The case of the Roundtable on Sustainable Palm Oil. *Ecological Economics* 70, 1891–1899.

Slovic, P., Fischhoff, B., and Lichtenstein (1976). Cognitive processes and societal risk taking. In J. Carroll and J. Payne (Eds). *Cognition and social behaviour*. Hillsdale, NJ: Erlbaum.

Smith, N. (2009). Speech: Agenda for freshwater reform. 8 June 2009. Retrieved from <http://www.beehive.govt.nz/speech/agenda-fresh-water-reform>.

Stevenson, M., Wilks, T., and Hayward, S. (2010). *An overview of the state and trends in water quality of Canterbury's rivers and streams*. Environment Canterbury Technical Report No. R10/117. ECan: Canterbury.

Suchman, M. (1995). Managing legitimacy: strategic and institutional approaches. *Academy of Management Review* 20(3): 571-610.

Tan, P-L., Bowmer, K. H., and Mackenzie, J. (2012). Deliberative tools for meeting the challenges of water planning in Australia. *Journal of Hydrology* 474: 2-10.

Thomas, J. (1993). Public involvement and governmental effectiveness: a decision-making model for public managers. *Administration and Society* 24(4): 444-469.

Tippett, J., Searle, B., Pahl-Wostl, C., and Rees, Y. (2005). Social learning in public participation in river basin management - early findings from HarmoniCOP European case studies. *Environmental Science & Policy* 8: 287–299.

Treib, O., Bähr, H., and Falkner, G. (2007). Modes of governance: towards a conceptual clarification. *Journal of European Public Policy* 14(1): 1-20.

Trist, E. (1980). The environment and system-response capability. *Futures* 12: 113–27.

Tyler, T. R. (2006). Psychological perspectives on legitimacy and legitimation. *Annual Review of Psychology* 57: 375-400.

United Nations (1992). United Nations Sustainable Development. United Nations Conference on Environment and Development, Rio de Janeiro, Brazil 3 to 14 June 1992. Agenda 21. Retrieved from <http://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>.

Valkeapää, A., and Karppinen, H. (2013). Citizens' view of legitimacy in the context of Finnish forest policy. *Forest Policy and Economics* 28: 52-59.

van Buuren, A., Klijn E-H., and Edelenbos (2012). Democratic legitimacy of new forms of water management in the Netherlands. *International Journal of Water Resources Development* 28(4): 629-645.

- von Korff, Y., Daniell, K. A., Moellenkamp, S., Bots, P., and Bijlsma, R. M. (2012). Implementing participatory water management: recent advances in theory, practice, and evaluation. *Ecology and Society* 17(1): 30.
- Wallner, J. (2008). Legitimacy and public policy: seeing beyond effectiveness, efficiency, and performance. *The Policy Studies Journal* 36(3): 421-443.
- Weber, E. P., Memon, A., and Painter, B. (2011). Science, Society and Water Resources in New Zealand: Recognising and Overcoming Social Impasse. *Journal of Environmental Policy and Planning* 13(1): 49-69.
- Webler, T., Tuler, S., and Krueger, R. (2001). What is a good public participation process? Five perspectives from the public. *Environmental Management* 27(3): 435-450.
- Weible, C. M., and Sabatier, P. A. (2009). Coalitions, Science and Belief Change: Comparing Adversarial and Collaborative Policy Subsystems. *The Policy Studies Journal* 37(2): 95-212.
- Wondolleck, J. M., Yaffee, S. L. 2000. Making Collaboration Work: Lessons from Innovation in Natural Resource Management: Island Press, Washington DC.
- World Wildlife Fund (2013). *Temperate grasslands, savannas and shrublands: Southeastern part of New Zealand's South Island*. Retrieved from <http://www.worldwildlife.org/ecoregions/aa0801>.
- Yin, R. K. (2009). *Case study research: design and method: fourth edition*. Applied Social Research Methods Series, Volume 5. Sage: California.
- Young, I. M. (2000) *Inclusion and democracy*. Oxford University Press: Oxford, UK.

APPENDIX 1: Survey questions

Q. No.	S-W	Otago	Question
1a	√		Which of the following describes your role / affiliation in the Selwyn Waihora Sub-Regional limit setting process (you may tick multiple boxes) 1) Regional Council Staff 2) Regional Council Commissioner 3) Technical expert/consultant 4) Zone Committee member 5) Industry or stakeholder group representative 6) Community member 7) Focus Group member 8) other
1a		√	Which of the following describes your role / affiliation in the Otago Plan Change 6A limit setting process (you may tick multiple boxes) 1) Regional Council Staff 2) Regional Councillor 3) Technical expert/consultant 4) Industry or stakeholder group representative 5) Community member 6) Submitter 7) other
1b	√	√	Which of the following describes your level of involvement in the <i>Selwyn Waihora Sub-Regional / Otago Plan Change 6A (water quality)</i> limit setting process 1) Actively involved 2) some involvement 3) viewed process from a distance
2a	√	√	Everyone interested in or affected by the limit setting process had an opportunity to be involved
2b	√		The following parties expressed a commitment at the start of the process to listen to, and incorporate the views of the community in the recommendation / decision 1) Environment Canterbury 2) Selwyn Waihora Zone Committee
2b		√	The Otago Regional Council expressed a commitment at the start of the process to listen to, and incorporate the views of the community in the recommendation / decision
2c	√		The decision makers (Environment Canterbury Commissioners) were actively involved in the process and discussions with the Zone Committee and wider community
2c		√	The decision makers (Otago Regional Councillors) were actively involved in the process and discussions with the community
2d	√		The following parties were accessible to the community 1) Decision makers (Environment Canterbury Commissioners) 2) Environment Canterbury staff 3) Selwyn Waihora Zone Committee
2d		√	The following parties were accessible to the community 1) Decision makers (Otago Regional Councillors) 2) Otago Regional Council staff
2e	√		The criteria used to select the Zone Committee was transparent
2f	√	√	The process had a stronger focus on direct involvement (community deliberation and debate) than indirect involvement (letter writing, lobbying, letters to editor)
2g	√	√	The community were engaged early in the process, before any key decisions were made
2h	√	√	Community involvement occurred too late in the limit setting process to be influential i.e. it was a 'rubberstamping' exercise
2i	√	√	<i>Environment Canterbury / Otago Regional Council</i> staff were open to modifying the process to meet the demands and concerns of the community
2j	√	√	Everyone involved in the process had a valid right to participate
2k	√	√	Everyone involved in the process had an incentive to participate
2l	√	√	Knowledge, skill, or resource constraints influenced some peoples ability to participate effectively
2m	√	√	The limit setting process should have been based on science alone and 'left to the experts'
2n	√	√	Were any sectors of the community excluded - intentionally or unintentionally – from the process? If so, who?
2o	√	√	Everyone / I had sufficient opportunity to question and express approval or opposition to the options and proposals discussed
2p	√	√	Opportunities to contribute to the discussion were limited to certain speakers or topics
2q	√	√	Adequate opportunities were provided for Maori to participate in the process
2r	√	√	Were there any barriers to participation in the limit setting process? If so, how could these barriers be overcome?

3a	√	√	The limit setting process involved a good cross-section of the community and affected or interested parties
3b	√	√	The process was dominated by the following interests 1) rural interests 2) urban interests 3) environmental interests 4) economic interests 5) local interests 6) national/outside interests
3c	√	√	Minority groups were encouraged to be involved
3d	√	√	Minority groups had too much say in the process
3e	√		The following parties adequately represent community demands, interests and preferences 1) Environment Canterbury Commissioners 2) Selwyn Waihora Zone Committee
3e		√	The decision makers (Otago Regional Councillors) adequately represent community demands, interests and preferences
3f	√	√	Were there any major organisations, stakeholder groups, communities of interest or demographic or social-economic category, not represented or under-represented in the limit setting process? If so, who and why?
4			
4a	√	√	Some groups did not participate in the discussions because they saw alternative means of influencing the decision to achieve their goals and objectives
4b	√	√	New 'common ground' between parties has been found through the process
4c	√		The collaborative, consensus approach adopted by the Zone Committee was appropriate for this process i.e. it suited the complexity of the situation and issues
4c		√	The top-down council led approach appropriate for this process, i.e. it suited the complexity of the situation and issues
4d	√		The consensus approach meant that some valuable ideas were obstructed by minority viewpoints
4e	√		Do you believe it took longer to deliver the recommendations because a consensus approach was taken? If yes, was the additional time spent on it worth it?
4f	√		The consensus approach reduced conflict between parties
4g	√		A top-down, council led approach would have been more appropriate for this limit setting process
4g		√	A collaborative, consensus seeking approach would have been more appropriate for this limit setting process
5			
5a	√		Who do you feel was the main accountable and answerable body in this limit setting process? 1) Selwyn Waihora Zone Committee 2) Environment Canterbury Commissioners 3) Environment Canterbury staff 4) other?
5a		√	Who do you feel was the main accountable and answerable body in this limit setting process? 1) Otago Regional Councillors 2) Otago Regional Council staff 3) other
5b	√	√	The accountable actors had authority to make the recommendations/decisions
5c	√	√	The accountable actors were sufficiently connected to the diverse societal interests affected by the recommendations/decisions
5d	√	√	There were measures available to deter inappropriate actions by the accountable actors
5e	√	√	The accountable actors consulted with the community in an appropriate manner, i.e. frequency and content
5f	√	√	The accountable actors achieved and maintained status and credibility throughout the process
5g	√	√	The accountable actors had sufficient resources and information to enable them to fulfil their responsibilities
5h	√	√	The accountable actors demonstrated fairness, consistency and integrity (e.g. declared conflicts of interest; were unbiased; did not seek to manipulate outcomes; behaved honestly)
6			
6a	√	√	It was clearly explained at the start of the limit setting process: 1) who could participate and how 2) what form the discussions would take, 3) what analysis would inform the discussions 4) who would make the recommendations and decisions 5) how the decisions would be made 6) how community input (feedback/comments) would be used

6b	√	√	Sufficient information, including agendas, minutes and record of agreements, was made available to anyone wishing to follow the process
6c	√	√	The process had no sense of secrecy or 'hidden agenda'
6d	√	√	The decisions, and the rationale for these, have been clearly explained
6e	√	√	The process has enabled the community to understand more fully and better accept the recommendations, even if they don't necessarily agree with it
7			
7a	√		The Zone Committee had clear ground rules / terms of reference to guide their work
7b	√	√	Civility and respect was maintained during the limit setting process
7c	√	√	The process was conducted in a fair, impartial manner
7d	√	√	Face to face dialogue was enabled as part of this process
7e	√	√	The process was managed to prevent coercion or domination by certain organisations, groups or individuals
7f	√	√	The process was too controlled / structured
7g	√	√	The process accommodated and respected debate and conflict, rather than closing it down
7h	√	√	The community were able to articulate their views clearly, in a safe, non-threatening environment
7i	√	√	Community interest and involvement was maintained throughout the process
8			
8a	√		The information provided/presented to the Zone Committee and community was: 1) accurate and up-to-date 2) accepted and robust 3) understandable and usable 4) reliable 5) provided in a timely manner 6) driven by what the community requested 7) spanned the 4 well-beings (social, sc, env, cultural)
8a		√	The information provided/presented to the community was: 1) accurate and up-to-date 2) accepted and robust 3) understandable and usable 4) reliable 5) provided in a timely manner 6) driven by what the community requested 7) spanned the 4 well-beings (social, sc, env, cultural)
8b	√	√	Members of the community / I felt overwhelmed at the amount of information that was provided and found it difficult to digest it all
8c	√	√	The process enabled the community to increase their understanding of:
8d	√	√	It was evident that some community members changed their views as the process developed and their understanding and learning increased
8e	√	√	The limit setting process was a one-way flow of information from the Council to the community
8f	√	√	The community was provided the opportunity to contribute their own knowledge / information
8g	√	√	Local 'layman' knowledge was considered just as important as technical scientific information.
8h	√	√	There are some significant information gaps remaining at the end of the limit setting process that still need to be filled
9			
9a	√	√	Some members of the community / I did not have the time to participate effectively in the process
9b	√	√	Sufficient time was provided to digest the information, consider the issues and challenges, and provide feedback where requested
9c	√	√	The limit setting process should have moved faster
9d	√		Sufficient time was provided for a full discussion on all the relevant issues
9e	√	√	People were / I was tired of attending meetings by the end of the process
9f	√	√	The overall timescale was appropriate to ensure a robust process
10			
10a	√		The consensus approach meant that emphasis was put on achieving an agreeable outcome, rather than a quality one
10b	√	√	The limit setting process fostered creativity and innovative solutions, not obvious at the outset
10c	√	√	The outcomes of the process are effective
10d	√	√	The outcomes of the process are community enhancing
10e	√	√	The outcome is practical and implementable

10f	√	√	Everyone gains, to some degree, from the outcome
10g	√	√	Relationships or partnerships between the community and <i>Environment Canterbury / Otago Regional Council</i> have improved as a result of this process
11a	√	√	The outcomes of the limit setting process are 1) accepted by the community; 2) supported by the community
11b	√	√	Because of the limit setting process, public trust in <i>Environment Canterbury / Otago Regional Council</i> has increased
11c	√	√	The outcome resonates with and reflects community values and is consistent with general sentiments in the wider community
11d	√	√	The community's ideas, analysis and information were taken on board and reflected in the outcome
11e	√	√	Maori values and perspectives are adequately reflected in the outcome
11f	√	√	The outcome is more reflective of the interests of the people involved in the process rather than the whole community
11g	√	√	The aim of the public consultation was to gain support for an already decided policy
11h	√	√	The community feel ownership of the process outcomes and are likely to want to be involved in the implementation
11i	√	√	The outcome reflects an appropriate balance of science and community input?
12a	√	√	The process and outcomes uphold all existing laws and regulations
13a	√	√	Have you been involved in other Regional Council planning processes (in <i>Canterbury/Otago</i> or elsewhere)? How was this similar or different?
13b	√	√	Overall, has this been a satisfying process to be involved in? Why / why not?
13c	√	√	If you could make any changes to the process, what would these be and for what reasons?
13d	√	√	What are the key characteristics that are non-negotiable to you in a limit setting process?
13e	√	√	With the benefit of hindsight, would you have participated in a different way? Why and how?
13f	√		Would you have preferred the alternative top-down, council led approach? Why / why not?
13f		√	Would you have preferred the alternative collaborative consensus-seeking approach? Why / why not?
13g	√	√	Do you have any final comments?

APPENDIX 2: Ethics Low Risk Notification Letter



MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA

20 August 2013

Julia Crossman
12A Craighead Street
Highfield
TIMARU 7910

Dear Julia

Re: The Legitimacy of Collaborative Governance: Setting Water Resource Limits

Thank you for your Low Risk Notification which was received on 30 July 2013.

Your project has been recorded on the Low Risk Database which is reported in the Annual Report of the Massey University Human Ethics Committees.

The low risk notification for this project is valid for a maximum of three years.

Please notify me if situations subsequently occur which cause you to reconsider your initial ethical analysis that it is safe to proceed without approval by one of the University's Human Ethics Committees.

Please note that travel undertaken by students must be approved by the supervisor and the relevant Pro Vice-Chancellor and be in accordance with the Policy and Procedures for Course-Related Student Travel Overseas. In addition, the supervisor must advise the University's Insurance Officer.

A reminder to include the following statement on all public documents:

"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research."

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Professor John O'Neill, Director (Research Ethics), telephone 06 350 5249, e-mail humanethics@massey.ac.nz".

Please note that if a sponsoring organisation, funding authority or a journal in which you wish to publish requires evidence of committee approval (with an approval number), you will have to provide a full application to one of the University's Human Ethics Committees. You should also note that such an approval can only be provided prior to the commencement of the research.

Yours sincerely

John G O'Neill (Professor)
**Chair, Human Ethics Chairs' Committee and
Director (Research Ethics)**

cc Dr Jeff McNeill
School of People, Environment and Planning
PN331

Mrs Mary Roberts, HoS Secretary
School of People, Environment and Planning
PN331

Massey University Human Ethics Committee
Accredited by the Health Research Council

Research Ethics Office

Massey University, Private Bag 11222, Palmerston North 4442, New Zealand T +64 6 350 5673 +64 6 350 5575 F +64 6 350 5622
E humanethics@massey.ac.nz animalethics@massey.ac.nz gtc@massey.ac.nz www.massey.ac.nz