A TALE OF TWO COMMITTEES: EVALUATING COLLABORATIVE MANAGEMENT PLANNING IN CANADA'S PACIFIC GROUNDFISH FISHERIES

by

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ABSTRACT

Governing agencies increasingly employ collaborative forms of decision-making in fisheries management to improve decision quality and legitimacy. However, crafting fair and effective collaborative processes which will achieve these benefits is often difficult. In an effort to identify keys and obstacles to success, this research evaluated the Commercial Groundfish Initiative, a collaborative planning process tasked with reforming the management of Canada's Pacific groundfish fisheries. Using semistructured interviews, I gathered the perspectives of participants from the two committees within the process: a consensus-based committee of commercial representatives and a committee broadly representative of other interest groups for which consensus was encouraged but not mandated. Control over the design of a proposal for management reform was asymmetrically divided between the two committees, giving the commercial committee the primary role.

Participants from the commercial committee expressed high levels of support for their consensus process. Keys to this committee's success in reaching a high quality agreement were (i) a strong incentive to cooperate, (ii) consensus decision-making, and (iii) independent process facilitation. The latter two functioned as security measures against the potential for process manipulation by participants or governing agencies. Results from an examination of the broader committee indicate non-commercial respondents were largely accepting of an "oversight" role provided that the scope for their input remained sufficient, which it did not. Early involvement in tasks such as designing the process and defining objectives were particularly critical to non-commercial respondents' perceptions of procedural fairness and their ability to participate effectively. Several participants also raised concerns that the process was not appropriately representative of groups with an interest in groundfish management. The poor performance of the process in these respects overshadowed positive aspects of broadening participation beyond commercial users.

Consensus approaches have gained currency among commercial participants as a result of their positive experience and made some of them more willing to consider meaningful collaboration with a broader range of interest groups. The ineffectiveness of the broader committee suggests there is still work to do in designing processes that will actually achieve this meaningful, broad collaboration.

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LIST OF ACRONYMS

CIC Commercial Industry Caucus CGI Commercial Groundfish Initiative

CGIAC Commercial Groundfish Integrated Advisory Committee

DFO Fisheries and Oceans Canada
ITQ Individual Transferable Quota
NTC Nuu-chah-nulth Tribal Council
PIP Pilot Integration Proposal
TAC Total Allowable Catch

UFAWU United Fishermen and Allied Workers' Union

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DEDICATION

For my parents, Rob and Kathy

CO-AUTHORSHIP STATEMENT

All aspects of this research, including its design, the data collection and analysis, and the written content of this thesis, are the product of the author's work alone.

1 THESIS INTRODUCTION

1.1 Introduction

Many of the world's fisheries appear to be unsustainable. The United Nations Food and Agriculture Organization reports that 50% of the world's fisheries are fully exploited, and a further 25% are over-exploited, depleted, or rebuilding (Food and Agriculture Organization 2007). There are also concerns that decisions regarding fisheries exploitation often result in an unfair distribution of benefits, ignoring the interests of legitimate but unempowered or marginalised groups (Kaczynski & Fluharty 2002; Chuenpagdee et al. 2005). The blame for these problems has frequently been directed at the way in which fisheries are managed (Gray 2005b). Critics suggest that the conventional model of centralised, command-and-control governance is implicated in the poor performance of industrial-era fisheries management (Jentoft 2003; Kooiman & Bavinck 2005). One proposed solution to this problem, increasingly applied over the past few decades, is *increased* stakeholder participation in fisheries decision-making. Others point to governing agency 'capture' by commercial interests as a contributing factor to dissatisfactory and unsustainable management decisions (McCay 1996). Among the antidotes proposed for this problem has been broadened stakeholder participation in decision-making (Mikalsen & Jentoft 2001).

This thesis evaluates the fairness and effectiveness of one effort to both increase and broaden stakeholder involvement in fisheries management planning. It is animated by three underlying questions fundamental to the concept of decision-making, and by extension, the exercise of planning. First, who should be making decisions? Second, what are the claims to inclusion would-be decision-makers possess? Third, in light of choices regarding the preceding questions, what formats of decision-making should be used to make various fisheries management decisions?

The evaluand is the Commercial Groundfish Initiative (CGI) planning process, convened in 2003 to develop a proposal for reforming commercial groundfish management on

Canada's Pacific coast. Fisheries have experienced some of the most dramatic conservation failures and divisive stakeholder conflicts among all natural resources in Canada. As part of an effort to resolve these oft-related challenges, recent legislation and policy relating to fisheries in Canada has emphasised more collaborative approaches to decision-making (Government of Canada 1996; DFO 2002). In the CGI, two stakeholder committees with different compositions and mandates were given the joint responsibility of drafting an integrated groundfish management plan that would meet conservation objectives set out by Fisheries and Oceans Canada (DFO), the federal agency responsible for marine fisheries management (PFMI 2003; DMC 2005).

In order to situate and rationalise the focus of this thesis, I provide a brief review of the theory and practice of participatory decision-making. My specific research question and objectives follow. The introductory chapter concludes with an overview of the thesis' structure.

1.2 Theoretical context and rationale

1.2.1 Defining participation in planning

Planning is a process by which individuals or groups decide what they want (goals) and how they are going to get there (strategies) (Boothroyd 1989). Planners suggest that the uncertainty created by current rates of change, the increasing complexity of social-ecological system interactions, and the resultant expanded scope for conflict make planning particularly valuable in a contemporary resource management context (Boothroyd 1991). In this thesis, planning and decision-making are used synonymously. Though decision-making can refer to the *point* at which a decision is taken, I use it in a planning sense to refer to the *methodical process* by which a decision is taken.

Smith (1984: 253) defines participation in the context of decision-making as "any action taken by an interested individual or group to influence a decision, plan, or policy." Participation can thus come in many forms, from limited information-sharing to shared

responsibility for decision-making between government authorities and stakeholder groups (Vira & Jeffery 2001). The breadth and growing use of the 'participation' concept have spawned the development of numerous associated terms, the definitions of which overlap and sometimes vary among those who use them. Participation is also tied into other concepts such as environmental conflict resolution which has given rise to its own terminology (Dukes 2004), some of which converges with that of the participation concept. Following Chess (2000), I use the terms participation and participatory in their broadest senses to encapsulate all different approaches to involving stakeholders or citizens in resource management decision-making. There are also numerous taxonomies useful for distinguishing the nature and degree of participation in decision-making. They include those deriving from a focus on democratic theory (e.g., managerialist, pluralist, populist), power relationships (e.g., stakeholders informed of decisions vs. stakeholders making decisions), and participation tools or techniques (e.g., surveys, public hearings, workshops) (Dorcey & McDaniels 2001).

Collaborative planning approaches are a loosely defined subset of approaches within the spectrum of participation types. Generally, these approaches emphasise meaningful forms of stakeholder involvement and negotiative consensus-building in decision-making processes. Gray (1989: xvii) offers a broad definition of collaboration as "a process in which those parties with a stake in the problem actively seek a mutually determined solution." Day and Gunton (2003) suggest that collaborative planning approaches are distinguished by their delegation of some or all responsibility for planning to stakeholders. In practice, this responsibility may or may not be accompanied by the authority to ratify agreements. Collaborative planning is relevant to this thesis as the term used to refer to the planning approach of the CGI.

1.2.2 Collaborative planning and co-management

The adoption of collaborative planning approaches is one aspect of broader fisheries management reforms towards decentralisation and stakeholder participation in decision-making, often discussed within the rubric of 'co-management' (Pinkerton 1989; McCay

& Jentoft 1996; Wilson et al. 2003). Co-management is a term used to describe shared decision-making arrangements formalised between governing agencies and stakeholders that apply to all stages of fisheries management (Jentoft 2003). These management models have gained popularity for some of the same reasons as collaborative planning, described in detail below. However, one should not be confused for the other. Collaborative planning, while adhering to the same basic principle of involvement in decision-making, is frequently applied ad hoc without formalised agreements (Susskind & Cruikshank 1987). Where co-management entails an ongoing relationship between involved parties, the lifespan of collaborative planning processes is more typically limited to the particular issue or initiative that the process is formed to address, though such processes may lead to ongoing relationships. Collaborative planning also does not necessarily involve power-sharing with government; indeed, some proponents suggest government should retain final decision-making authority for reasons of accountability (Susskind & Cruikshank 1987). Lastly, co-management has the potential to be broader in scope than most collaborative planning efforts; in some cases it may evolve into a form of governance horizontally and vertically integrated with other governance processes at local, provincial/state, and federal levels (Pinkerton 2003). In these cases, participants set the agenda, develop policy, collect and analyse data, and perform a host of other ongoing functions associated with resource governance.

1.2.3 Roots of participation

Gray (2005b) lists four roots of the rise of participation in fisheries management additional to the failure of conventional management models described in ssection 1.1. First, post-material values in Western countries include heightened concerns for environmental health and an interest in greater self-determination. These have generated a demand for participation in political decisions that affect fisheries in their roles as components of larger ecosystems and as highly symbolic resources. The second, closely related root is the emergence of new social movements supporting causes like environmental protection and community health, and the associated proliferation of

cause-oriented non-governmental organisations demanding involvement in decision-making.

The third root is increasing scepticism in the superiority of experts' knowledge over that of others. This scepticism is accompanied and furthered by a growing recognition that fisheries decisions are value-laden, and that the values of experts like scientists and bureaucrats do not deserve precedence over the values of the broader public. As Cocklin et al. (1998: 216) argue, "managers cannot presume to fully understand the attitudes of different interest groups...nor can they be relied upon to judge what is socially optimal or desirable."

The fourth root Gray identifies is society's aspiration towards the ideal of reasoned dialogue to reach decisions that observe a broad social good (Flyvbjerg 1998). This root draws from philosopher Jurgen Habermas' concept of communicative rationality, which argues that an inclusive discourse is possible where "participants overcome their at first subjectively based views in favour of a rationally motivated agreement" (Habermas 1987: 294), the rational basis of which is universally upheld. The trend towards more rational and intersubjectively-motivated discourse in public administration has been noted beyond fisheries (Hansen 1998).

To Gray's roots, I add one more: the documented success of management models based on social contracts forged between stakeholders made feasible by intimate and repeated interactions (Ostrom 1990). These examples have demonstrated the viability of alternatives to the state-controlled model of common property resource management (Honneland 1998). The growth of co-management arrangements is a related phenomenon which has served as further support for the benefits of stakeholder involvement.

1.2.4 Benefits, drawbacks, and challenges

What are the benefits that a transition to more participatory modes of governance offers? Proponents make several arguments for facilitating higher degrees of participation in decision-making processes. First, there is a normative argument made, based in theories of participatory democracy and procedural justice, that those who are affected by a decision should be able to contribute to the decision's formulation (Thibault & Walker 1975; Olsen 1982; Smith 1984). Second, there is a substantive argument that participation of various 'publics' can help identify problems and solutions to policy issues that experts or authorities miss, thereby facilitating the development of better informed policy or management (Fiorino 1990). Third, theorists suggest that meaningful participation can help ensure the representativeness and responsiveness of decisions, lending legitimacy to decisions, which eases implementation (Jentoft 2000). Initiatives that lack these qualities, it is argued, have less potential to successfully transform patterns of resource use because they are unlikely to adequately relate to stakeholder priorities (Vira & Jeffery 2001).

Research suggests good reason to critically examine participatory forms of decisionmaking, as crafting fair and effective participatory processes can be a major challenge (Dalton 2006). Developing these models is clearly not just a question of more stakeholder involvement, which can lead to its own suite of issues; in fisheries these issues have included questions of who is representative of whom, perceptions of the 'foxes in the henhouse', and intensified challenges of reaching agreement between the multitude of parties granted involvement (McCay 1996; McCay & Jentoft 1996). The challenge is clearly more complex. Involvement does not guarantee that participants will judge the process as fair, which is a key criterion influencing people's satisfaction with decisions (Smith & McDonough 2001); Forester (2006: 447) argues that these participatory processes often produce "more heat than light" and result in little new understanding among stakeholders; ill-considered involvement of non-governmental groups may add to problems of legitimacy and authority faced by political institutions considering whom to involve in decisions and in what capacity (Cupps 1977); and participants in these processes are often self-selecting and of higher socioeconomic status, limiting whose values, interests, and conflicts shape the agenda (Thomas 1995; Hailey 2001; Beierle & Cayford 2003). Wondolleck and Yaffee (2000) organise these various barriers to effective participatory decision-making for natural resources management into three categories: (i) institutional and structural barriers (e.g., constrained resources, conflicting

agency goals), (ii) barriers due to perceptions and attitudes (e.g., mistrust, poor stakeholder relationships), and (iii) barriers within the process itself (e.g., poor process management, insufficient stakeholder representation, lack of collaborative skills among participants).

Much of the debate about participation in fisheries decision-making has focused on how to address the problems and barriers to its effective application, as outlined above (Gray 2005a). This debate begins from the assumption that participation is fundamentally a good idea. However, some critics have also debated the suitability of participatory decision-making altogether. Coglianese (2003) argues that a focus on reaching agreement may come at the expense of good public policy that properly sustains the values associated with natural resources and ecosystems. There are also important questions about what authority collaborative entities have in Western democracies to be shaping decisions that are the mandate of government agencies responsible to the general public (Gray 2005a). Further, the benefits of participatory processes frequently used to justify their use, such as trust formation, resolving conflict, and educating stakeholders, may not extend beyond participants to the broader public (Beierle & Cayford 2003). Others have argued that "participation policies often do not really lead to participation and empowerment" (Henkel & Stirrat 2001: 171), but rather reinforce existing power structures (Cooke & Kothari 2001). In these cases, participation is employed to establish the illusion of stakeholder support for policy and due diligence in consultation on the part of governing agencies. The use of participation in this manner may leave stakeholders worse off if it serves to neutralise their complaints about being ignored.

1.2.5 Research rationale

Despite these difficulties and their increasing application, participatory fisheries planning processes are rarely the subject of systematic evaluation to determine what they are capable of achieving under given conditions, why this is so, and how they can be improved. Participatory approaches must also be considered against other means of resolving conflicts to determine whether they are the most appropriate planning approach

given the characteristics of the issue and stakeholders involved. Given the challenges and increasing use of participatory planning, evaluations are important to help ensure that it is employed as effectively and efficiently as possible. The need for further research evaluating participatory processes in natural resources planning has been widely noted (Cormick et al. 1996; Innes & Booher 1999; Parson 2000; Dorcey & McDaniels 2001).

1.3 Research objectives

In light of the rationale outlined above, the central purpose of this research was:

to evaluate the procedural fairness and effectiveness of the CGI collaborative planning process.

Planning processes consist of issues that involve substantive and procedural elements. Though these elements are intertwined (Smith & McDonough 2001), I focused on procedural elements of fair and effective collaborative planning. The work of the CGI was carried out through two committees, the Commercial Industry Caucus (CIC) and the Commercial Groundfish Integrated Advisory Committee (CGIAC), whose composition, mandates, and decision-making formats differed in important ways. The CIC was composed exclusively of commercial fishery representatives. This committee was tasked with consensually developing management reforms that would achieve accountability, monitoring, and conservation objectives set out by DFO. The CGIAC, broadly representative of other major interest groups, was mandated to provide direction and advice to the work of the CIC. Consensus was encouraged but not required for the CGIAC. I examined whether the committees' mandates were fair and if they were able to execute their mandates effectively. The ways in which the committees interacted was also explored. Fairness and effectiveness can be judged from multiple perspectives, including that of participants and that of the broader social good. Using semi-structured interviews, this work sought the perspectives of participants.

Specific research objectives were:

- 1. To compare evaluation frameworks in the peer-reviewed literature.
- 2. To describe the CGI planning process and structure.

- 3. To evaluate the efficacy and fairness of the CIC consensus process by developing and applying an evaluation framework.
- 4. To evaluate the role of the CGIAC in the CGI and their interaction with the CIC.
- 5. To identify findings from the evaluation that may be relevant to advancing the broader understanding of collaborative fisheries management planning.
- 6. To make recommendations for improvement of the design and management of collaborative fisheries planning processes.

1.4 Thesis structure

Four chapters comprise the remainder of this thesis. To contextualise and inform the evaluative focus of my research, chapter two describes and compares existing frameworks of criteria used to evaluate the quality of participatory environmental decision-making. It highlights the variation among frameworks, identifies what they are capable of telling us about participatory processes, and considers the implications for would-be evaluators of using different frameworks.

Chapter three summarises and analyses participants' evaluations of the fairness and effectiveness of the CIC according to a framework of relevant criteria derived from the literature described in chapter two. I pay particular attention to the keys and obstacles to achieving a high quality process. An introduction to the commercial groundfish sector, the impetus for the CGI process, and the CGI process structure is also included.

Chapter four explores the role of the CGIAC, examining whether their role was perceived as fair and whether it was able to perform its roles effectively. As the CGIAC was defined primarily in relation to the CIC, the interaction between the two committees is also explored. A more inductive and exploratory approach is taken in this chapter, contrasting with the deductive approach of chapter three. By examining the dynamics of the CGIAC's involvement, I extend the literature on collaborative planning in fisheries, which has highlighted the important challenge of asymmetrically involving diverse

stakeholders within decision-making processes (Mikalsen & Jentoft 2001; Jentoft et al. 2003; Nielsen & Christensen 2006) but rarely assessed relevant cases.

The fifth and final chapter summarises the overarching conclusions of the research, focusing on the findings of chapters three and four. I also make a series of recommendations, discuss the strengths and weaknesses of the study, and suggest avenues for further research.

1.5 Assumptions

My research is conducted from a qualitative research paradigm that entails a set of philosophical assumptions. Ontologically, I assume that multiple social realities exist as interpretations of individuals based on their interaction with the world, and that these realities pre-date the research agent (Merriam 2002; Lipscomb 2006). Epistemologically, I assume that the generation of interview data is an interactive construction between individuals. The qualitative researcher is not a passive, neutral receptacle that 'collects' data; s/he is a co-constructor (Kvale 1996). This means that the researcher is not just studying subjective realities and different perspectives, but that the data and subsequent knowledge generated by the research is also an interpretive representation of the studied phenomenon, not simply an objective reproduction (Hammersley 1990; Hammersley 1992; Schwandt 2003). Thus, attempts to determine the nature of the social world are fallible and provisional, in that they are specific to a time and place (Scott 2005; Lipscomb 2006). Nevertheless, Hammersley (1992: 51) suggests that "often we can be reasonably confident about the relative chances of validity of competing claims. Assessment of claims must be based on judgements about plausibility and credibility, on the compatibility of the claim, or the evidence for it, with the assumptions about the world that we currently take to be beyond reasonable doubt." Following Hammersley's argument, I adopt a naturalistic approach that is closely associated with critical realism (Bhaskar 1975, 1986). Critical realism emphasises studying social phenomena in their natural setting and not removed from the context that influences them in innumerable ways (Meyer 2003). Critical realism posits that mind-independent phenomena exist, and

that reconstructions of these phenomena can be more and less accurate and representative, and therefore of variable validity (Scott 2005).

My research uses participant satisfaction as the measurement of the CGI's performance on the fairness and effectiveness criteria that are the foundation of this evaluation. In reporting results, I assume that participants are satisfied with the process for the 'right' reasons – that is, they are satisfied with the process because it was, in fact, fair and effective. This is not always the case. Participants may be satisfied with collaborative processes if they help them to stymie other parties or delay undesirable decisions (Talbot 1983). Participants may also express satisfaction with these processes because they are satisfied with the outcome (Lind et al. 1997). Particularly where collaboration principally involves those being regulated (as it did in the CIC), satisfaction with the outcome may reflect participants' interest in certainty or their relief that regulations are not as forceful as they may have been otherwise (Coglianese 2003). This type of outcome may run contrary to the broader or longer-term public interest.

1.6 Limitations

This research is limited in several ways. First, the information gathered cannot be construed as representative of the evaluations of the stakeholder groups involved. Constituents of the stakeholder groups likely have diverse opinions about the fairness, effectiveness, and value of the CGI planning process that may or may not correspond with those of their representatives. Constituents will also likely have opinions on the appropriateness and performance of their representative – a perspective that is not the focus of this work. Moreover, the experiences of constituents or observers are qualitatively different, as only representatives have direct experience of the process as participants. Hence, this research provides an important but partial perspective on the CGI.

Second, this research examines just one fisheries planning process. There are divergent viewpoints on the generalisability of qualitative research findings (e.g., Glaser & Strauss

1967; Lincoln 1990) and limitations on the ability to extrapolate from one case. I approach this step cautiously, acknowledging the conditional and contextual nature of the data generated.

Third, satisfaction measurements (see section 1.5) are subject to their own relativity (Webler 1995). For example, participants who have experienced high quality collaborative processes in the past may rank this process comparatively poorly. However, they may still find it preferable to other decision-making formats. Other participants may find this process marginally better than recent negative experiences. Expectations among participants, which are also variable, can also differentially influence evaluations (Coglianese 2003). Moreover, when individuals dedicate extensive time and resources to something like a collaborative process, psychological research has demonstrated that they are more likely to express support for it in order to justify the effort they've expended (Harmon-Jones & Mills 1999). This is particularly relevant for the case analysed here given the disparity in the time spent by CIC participants compared to CGIAC participants. All of these factors complicate the interpretation of results. To mitigate the potential of inaccurate interpretations, I asked participants about their expectations, and compared the consistency of their responses over the entirety of the interview. However, accounting for the relative merit of this process in the eyes of each respondent or exploring cognitive dissonance was beyond the scope of this research.

Last, the research is also bounded by the time frame being considered. Meetings and discussions prior to the initiation of the CGI, and concurrent but external to the CGI, undoubtedly shaped the negotiations that lead to the creation of the GIFMP. However, I limit the focus of my interviews to those meetings and discussions that occurred as part of the CGI.

1.7 Literature cited

Beierle, T. C., and J. Cayford. 2003. Dispute resolution as a method of public participation. Pages 53-68 in R. O'Leary and L. B. Bingham, editors. The Promise and Performance of Environmental Conflict Resolution. Resources for the Future, Washington, DC.

Bhaskar, R. 1975. A Realist View of Science. Leeds Books, Leeds.

Bhaskar, R. 1986. Scientific Realism and Human Emancipation. Verso, London.

Boothroyd, P. 1989. Community Planning Handbook. School of Community and Regional Planning, Vancouver.

Boothroyd, P. 1991. Developing community planning skills: applications of a seven-step model. School of Community and Regional Planning, Vancouver.

Chess, C. 2000. Evaluating environmental public participation: Methodological questions. Journal of Environmental Planning and Management **43**(6):769.

Chuenpagdee, R., P. Degnbol, M. Bavinck, S. Jentoft, D. Johnson, R. Pullin, and S. Williams. 2005. Challenges and concerns in capture fisheries and aquaculture. Pages 25-40 in J. Kooiman, M. Bavinck, S. Jentoft and R. Pullin, editors. Fish for Life: Interactive Governance for Fisheries. Amsterdam University Press, Amsterdam.

Cocklin, C., M. Craw, and I. McAuley. 1998. Marine reserves in New Zealand: Use rights, public attitudes, and social impacts. Coastal Management **26**(3):213-231.

Coglianese, C. 2003. Is satisfaction success? Evaluating public participation in regulatory policymaking. Pages 69-86 in R. O'Leary and L. B. Bingham, editors. The Promise and Performance of Environmental Conflict Resolution. Resources for the Future, Washington, DC.

Cooke, B., and U. Kothari. 2001. The case for participation as tyranny. in B. Cooke and U. Kothari, editors. Participation - the New Tyranny? Zed Books, London.

Cormick, G., D. Dale, P. Emond, S. G. Sigurdson, and B. D. Stuart. 1996. Building Consensus for a Sustainable Future: Putting Principles into Practice. National Round Table on the Environment and the Economy, Ottawa.

Cupps, D. S. 1977. Emerging problems of citizen participation. Public Administration Review **37:**478-487.

Dalton, T. M. 2006. Exploring participants' views of participatory coastal and marine resource management processes. Coastal Management **34**(4):351-367.

Day, J. C., and T. I. Gunton. 2003. The theory and practice of collaborative planning in resource and environmental management. Environments **31**(2):5-20.

Diamond Management Consulting Inc. (DMC). 2005. Commercial Industry Caucus Pilot Integration Proposal.

Dorcey, A. H. J., and T. McDaniels. 2001. Great expectations, mixed results: trends in citizen involvement in Canadian environmental governance. Pages 247-302 in E. A. Parson, editor. Governing the Environment. University of Toronto Press, Toronto.

Dukes, E. F. 2004. What we know about environmental conflict resolution: An analysis based on research. Conflict Resolution Quarterly **22**(1-2):191-220.

Fiorino, D. J. 1990. Citizen participation and environmental risk – a survey of institutional mechanisms. Science Technology & Human Values **15**(2):226-243.

Fisheries and Oceans Canada (DFO). 2002. Canada's Oceans Strategy. Fisheries and Oceans Canada.

Flyvbjerg, B. 1998. Habermas and Foucault: Thinkers for civil society? British Journal of Sociology **49**(2):210-233.

Food and Agriculture Organisation. 2007. The State of World Fisheries and Aquaculture 2006. FAO, Rome.

Forester, J. 2006. Making participation work when interests conflict - moving from facilitating dialogue and moderating debate to mediating negotiations. Journal of the American Planning Association **72**(4):447-456.

Glaser, B. G., and A. L. Strauss. 1967. The Discovery of Grounded Theory: Strategies for Qualitative Research. Aldine Publishing, Chicago.

Government of Canada. 1996. Oceans Act. http://lois.justice.gc.ca/en/O-2.4/text.html edition. Government of Canada.

Gray, B. 1989. Collaborating: Finding Common Ground for Multiparty Problems. Jossey-Bass Inc, San Francisco.

Gray, T. S. 2005a. Participatory fisheries governance - three central themes. Pages 343-356 in T. S. Gray, editor. Participation in Fisheries Governance. Springer, Dordrecht.

Gray, T. S. 2005b. Theorising about participatory fisheries governance. Pages 1-26 in T. S. Gray, editor. Participation in Fisheries Governance. Springer, Dordrecht.

Habermas, J. 1987. The Philosophical Discourse of Modernity. MIT Press, Cambridge.

Hailey, J. 2001. Beyond the formulaic: process and practice in South Asian NGOs. in B. Cooke and U. Kothari, editors. Participation - the New Tyranny? Zed Books, London.

Hammersley, M. 1990. What's wrong with ethnography? The myth of theoretical description. Sociology **24**(4):597-615.

Hammersley, M. 1992. What's Wrong with Ethnography? Routledge, London.

Hansen, K. N. 1998. Identifying facets of democratic administration: The empirical referents of discourse. Administration & Society **30**(4):443-461.

Harmon-Jones, E., and J. Mills. 1999. An introduction to Cognitive Dissonance Theory and an overview of current perspectives on the theory. Pages 1-8 in E. Harmon-Jones and J. Mills, editors. Cognitive Dissonance: Progress on a Pivotal Theory in Social Psychology.

Henkel, H., and R. Stirrat. 2001. Participation as spiritual duty: empowerment as secular subjection. in B. Cooke and U. Kothari, editors. Participation - the New Tyranny? Zed Books, London.

Honneland, G. 1998. Enforcement and legitimacy in the Barents Sea fisheries. Pages 116-129 in D. Symes, editor. Northern Waters: Management Issues and Practice. Fishing News Books, Oxford.

Innes, J. E., and D. E. Booher. 1999. Consensus building and complex adaptive systems - A framework for evaluating collaborative planning. Journal of the American Planning Association **65**(4):412-423.

Jentoft, S. 2003. Co-management - the way forward. Pages 1-14 in D. C. Wilson, J. R. Nielsen and P. Degnbol, editors. The Fisheries Co-management Experience: Accomplishments, Challenges and Prospects. Kluwer, Dordrecht.

Jentoft, S., K. H. Mikalsen, and H. K. Hernes. 2003. Representation in fisheries comanagement. Pages 281-292 in D. C. Wilson, J. R. Nielsen and P. Degnbol, editors. The Fisheries Co-management Experience: Accomplishments, Challenges and Prospects. Kluwer, Dordrecht.

Jentoft, S. 2000. Legitimacy and disappointment in fisheries management. Marine Policy **24**(2):141-148.

Kaczynski, V. M., and D. L. Fluharty. 2002. European policies in West Africa: Who benefits from fisheries agreements? Marine Policy **26**(2):75-93.

Kooiman, J., and M. Bavinck. 2005. The governance perspective. Pages 11-24 in J. Kooiman, M. Bavinck, S. Jentoft and R. Pullin, editors. Fish for Life: Interactive Governance for Fisheries. Amsterdam University Press, Amsterdam.

Kvale, S. 1996. InterViews: An Introduction to Qualitative Research Interviewing. Sage Publications, Thousand Oaks.

Lincoln, Y. S. 1990. The making of a constructivist: a remembrance of transformations past. Pages 67-88 in E. G. Guba, editor. The Paradigm Dialogue. Sage, Newbury Park.

Lind, E. A., T. R. Tyler, and Y. J. Huo. 1997. Procedural context and culture: Variation in the antecedents of procedural justice judgements. J. Pers. Soc. Psychol. **73**(4):767-780.

Lipscomb, M. 2006. Critical realism, post-positivism and the possibility of knowledge. Nursing Philosophy **7**(2):104-105.

McCay, B. J. 1996. Foxes and others in the henhouse? Environmentalists and the fishing industry in the U.S. Regional Council System. Pages 380-390 in R. M. Meyer, C. Zhang, M. L. Windsor, B. J. McCay and R. M. Muth, editors. Fisheries Resource Utilization and Policy. Proceedings of the World Fisheries Congress, Theme 2. Science Publishers, Inc, Lebanon.

McCay, B. J., and S. Jentoft. 1996. From the bottom up: Participatory issues in fisheries management. Society & Natural Resources 9(3):237-250.

Merriam, S. 2002. Qualitative research in practice: examples for discussion and analysis. Jossey-Bass, San Francisco.

Meyer, J. 2003. Questioning design and method: Exploring the value of action research in relation to R&D in primary care. Primary Health Care Research and Development **4**(2):99-108.

Mikalsen, K. H., and S. Jentoft. 2001. From user-groups to stakeholders? The public interest in fisheries management. Marine Policy **25**(4):281-292.

Nielsen, J. R., and A. S. Christensen. 2006. Sharing responsibilities in Danish fisheries management - experiences and future directions. Marine Policy **30**(2):181-188.

Olsen, M. E. 1982. Participatory Pluralism. Nelson-Hall, Chicago.

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

Pacific Fisheries Management Inc (PFMI). 2003. Future Direction of the Commercial Groundfish Fisheries in British Columbia: Discussion Paper, October 2003. BC Ministry of Agriculture, Fisheries and Food.

Parson, E. A. 2000. Environmental trends and environmental governance in Canada. Canadian Public Policy XXVI Supplement(2):S123-S143.

Pinkerton, E., editor. 1989. Cooperative Management of Local Fisheries: New Directions for Improved Management and Community Development. University of British Columbia Press, Vancouver.

Pinkerton, E. W. 2003. Toward specificity in complexity: understanding co-management from a social science perspective. Pages 61-76 in D. C. Wilson, J. R. Nielsen and P. Degnbol, editors. The Fisheries Co-management Experience: Accomplishments, Challenges, and Prospects. Kluwer, Dordrecht.

Schwandt, T. A. 2003. Three epistemological stances for qualitative inquiry: interpretivism, hermeneutics, and social constructionism. Pages 292-331 in N. K. Denzin and Y. S. Lincoln, editors. The Landscape of Qualitatve Research: Theories and Issues. 2nd edition. Sage Publications, Thousand Oaks.

Scott, D. 2005. Critical realism and empirical research methods in education. Journal of Philosophy of Education **39**(4):633-646.

Smith, L. G. 1984. Public participation in policy making: The state-of-the-art in Canada. Geoforum **15**(2):253-259.

Smith, P. D., and M. H. McDonough. 2001. Beyond public participation: Fairness in natural resource decision making. Society & Natural Resources **14**(3):239-249.

Susskind, L., and J. L. Cruikshank. 1987. Breaking the Impasse: Consensual Approaches to Resolving Public Disputes. Basic Books, New York.

Talbot, A. R. 1983. Settling Things: Six Case Studies in Environmental Mediation. Conservation Foundation, Washington, DC.

Thibault, J. W., and L. Walker. 1975. Procedural Justice: A Psychological Analysis. Lawrence Erlbaum Associates, Inc., Hillsdale, NJ.

Thomas, J. C. 1995. Public Participation in Public Decisions: New Skills and Strategies for Public Managers. Jossey-Bass Publishers, San Francisco, CA.

Vira, B., and R. Jeffery. 2001. Introduction: analytical issues in participatory natural resource management. Pages 1-16 in B. Vira and R. Jeffery, editors. Analytical issues in participatory natural resource management. Palgrave Publishers, New York.

Webler, T. 1995. "Right" discourse in citizen participation: An evaluative yardstick. Pages 35-86 in O. Renn, T. Webler and P. Wiedemann, editors. Fairness and Competence in Citizen Participation: Evaluating Models for Environmental Discourse. Kluwer, Dordrecht.

Wilson, D. C., J. R. Nielsen, and P. Degnbol, editors. 2003. The Fisheries Comanagement Experience: Accomplishments, Challenges, and Prospects. Kluwer, Boston, MA.

Wondolleck, J. M., and S. L. Yaffee. 2000. Making Collaboration Work: Lessons from Innovation in Natural Resource Management. Island Press, Washington, DC.

2 COMPARING EVALUATION FRAMEWORKS FOR PARTICIPATORY DECISION-MAKING PROCESSES¹

2.1 Introduction

Governmental and non-governmental agencies are increasingly employing participatory forms of environmental decision-making across domains such as development, environmental risk, natural resources management, and land use planning. Smith (1984: 253) defines participation in decision-making as "any action taken by an interested individual or group to influence a decision, plan, or policy". Participation can thus come in many forms, from limited information sharing to shared responsibility for decision-making between government authorities and stakeholder groups (Vira & Jeffery 2001). Decision-making agencies within and outside governments employ these approaches on the basis that participatory processes help in observing procedural justice and lead to more representative, informed, and legitimate decisions, thereby easing policy implementation (Thibault & Walker 1975; Cupps 1977; PCC 1997).

The rise of participatory decision-making for environmental issues has been followed by a growing number of calls for their comprehensive, systematic evaluation (e.g., Rosener 1978; Rowe & Frewer 2000). Evaluation researchers and participatory decision-making theorists promote evaluation as a tool for determining the quality of participatory decision-making processes, often understood in terms of whether a given participatory approach is fair, effective, and efficient. Proponents suggest that evaluation can help to highlight the aspects of participatory decision-making that contribute to a desirable process, what does and does not work under given conditions, why this is so, and where participatory decision-making practices can improve (Innes & Booher 1999; Rowe & Frewer 2000).

A version of this chapter is being prepared for submission to a peer-reviewed journal.

Researchers have developed a growing number of frameworks to facilitate systematic evaluation of participatory decision-making. These frameworks are similar in that they consist of criteria or principles associated with high quality participatory decisionmaking, but their conceptions of quality are variable, as are many of their other attributes. Researchers and practitioners interested in evaluating participatory processes are therefore faced with choices between approaches to systematic evaluation which differ and converge across numerous dimensions. Given the value-laden nature of evaluation (Shadish et al. 1991; Segerholm 2003) and the diversity of (equally value-laden) frameworks available, it is appropriate to examine this body of work. The purpose of this particular examination is to compare evaluation frameworks, documenting the variation amongst them and highlighting the implications of that variation for evaluators. The comparison will help clarify what evaluation frameworks are capable of telling us about participatory decision-making and point towards information that individual frameworks may not capture. It will also help illuminate assumptions regarding participation, knowledge use, valuing, and knowledge construction that evaluators implicitly accept when they apply any evaluation framework (Shadish et al. 1991).

To conduct this examination, I comparatively analyse 12 frameworks designed to evaluate participatory decision-making processes related to environmental issues. After outlining how and why frameworks were selected for examination, the results are presented and discussed in three parts. First, I assess what the frameworks are designed to evaluate – that is, their target and their purpose. Second, I document the origins of the criteria in the frameworks. Third, I compare the composition of criteria in the frameworks.

While researchers are beginning to ask important 'big picture' questions about the systematic evaluation of participation in environmental decision-making, like examining what evaluation has revealed about participatory decision-making thus far (Chess & Purcell 1999; Dukes 2004), exploring methodological choices (Chess 2000), and reviewing the approaches and findings of evaluation case studies (Rowe & Frewer 2004),

a detailed review of the different evaluation frameworks and what they are measuring remains largely unaddressed (though see Conley & Moote 2003).

2.2 Framework selection process

The 12 frameworks selected for this analysis are all relevant to, or explicitly designed for, the evaluation of participatory environmental decision-making processes. Though not an exhaustive list of extant frameworks (for further examples, see Blahna & Yonts-Shepard 1989; NRTREE 1994; Lauber & Knuth 1999; Halvorsen 2001; Rauschmayer & Wittmer 2006), those included here were selected because they are broadly representative of the different approaches to evaluation of participatory environmental decision-making, they span over 20 years of thinking on the topic, and many are commonly cited works in the primary literature.

There is a rich and diverse literature on participatory environmental decision-making, including work that outlines lessons learned, barriers, and keys to success of participatory decision-making (e.g., Harter 1982; Susskind & McMahon 1985; Leach & Pelkey 2001; (EPA) 2001; Smith & Gilden 2002). These provide important bases for the development of evaluation criteria. However, these works are not arranged as frameworks for evaluation and are excluded from this analysis for several reasons; they are often not designed to provide a comprehensive, systematic analysis of factors associated with process quality, nor are they always translatable into criteria suitable for the focus of this analysis. For example, Harter's (1982) preconditions to the success of a negotiated rulemaking process include contextual factors that are largely external to questions of the design and management of effective and fair decision-making processes and therefore cannot be evaluated to determine how well the process 'achieved' them (e.g., 'ripeness' of the issue for resolution). Also excluded are the many case studies that conduct evaluations but do not provide details on the rationale and foundations of the framework used in the evaluation. The analysis here includes only those works in the peer-reviewed literature that explain and justify an evaluation framework. Bounding the analysis in this way serves to ensure a clearer comparison of more 'like' things.

2.3 Target and purpose

2.3.1 Evaluation target

The decision-making process and its outcomes are the two basic aspects of participatory decision-making that are subjected to evaluation. The arrangement of criteria within evaluation frameworks is a useful indicator of which aspect(s) of the participatory process is the focus of evaluation (Table 2.1). For example, Rowe and Frewer's (2000) sets of acceptance and process criteria emphasise process; Beierle (1999) emphasises outcomes; and Innes and Booher (1999) and Susskind and Cruikshank (1987) include both process and outcome criteria. Outcome and process-oriented frameworks have different strengths: outcome evaluations are useful to assess the degree of success in achieving certain goals. Alternatively, to understand why processes are successful, it is necessary to examine procedural elements. In their model of participatory planning, Selin and Chavez (1995) outline three phases that fall within the process of participatory planning: problem-setting, direction-setting, and structuring. The problem-setting phase includes identifying the legitimate stakeholders in an issue, coming to a shared definition of the problem, and exploring the commitment of stakeholders to a participatory planning process. The direction-setting phase involves developing a common purpose among participants, expressing values and goals, setting ground rules, and gathering information. The structuring phase formalises the relationship and roles of participants in the process and sets out the tasks that the process must address, creating an order that governs participant interactions (Selin & Chavez 1995). Selin and Chavez's model is useful as a finer-grained basis for further breaking down the content of evaluation frameworks to reveal which process phases the frameworks are focused on evaluating.

Table 2.1: Evaluation frameworks from the literature

Author(s)	Arrangement of criteria	Foundations of criteria	What framework is designed to evaluate
Beierle 1999	Six outcome criteria related to broad social goals	Empirical literature on problems in U.S. environmental regulatory system	Surveys, focus groups, public comments, information provisions, public notices, public hearings, citizen advisory committees, mediation, regulatory negotiations, citizen juries, consensus conferences. Focus is on environmental risk decisions.
Branch & Bradbury 2006	Five meta-criteria of substantive issues, relationships, decision making process, accountability, and information disclosure	Authors' fieldwork on public participation programs of U.S. Department of Energy and U.S. Army	Participatory processes involving government agency-public interactions. Focus is on citizen advisory boards in environmental risk decisions.
Crosby et al. 1986	Six process meta-criteria	Research findings from U.S. in 1960's and 70's and authors' experience	Participatory processes involving citizens. Focus is on application of criteria to Citizen Panels (randomly selected private citizens brought together to make joint decisions about policy issues).
Dalton 2005	Five meta-criteria of participant involvement, information exchange, fair decision-making, efficient administration, and positive participant interactions	Literature on participation in U.S. natural resources management, using mostly terrestrial examples	Participatory marine protected area planning processes.
Fiorino 1990	Four criteria of process as a democratic decision-making method	Participatory democracy theory	Public hearings, initiatives, public surveys, regulatory negotiations, citizen review panels. Focus is on environmental risk decisions.
Innes & Booher 1999	Sets of process and outcome criteria	Literature, complex systems theory, Habermas' theory of communicative rationality, authors' experience	Consensus-based approaches involving face-to-face dialogue on policy issues among representatives of different interest groups.
Laird 1993	Set of four criteria for each of two ideals for participatory processes	Democratic theories of pluralism and direct participation in the U.S. context	Participatory process performance according to criteria associated with each of two differing democratic ideals: pluralism and direct participation.
Moote et al. 1997	Five outcome criteria stemming from shortcomings of traditional participatory techniques	Participatory democracy theory and literature on public participation	Participatory democracy approaches involving participation throughout planning process and shared responsibility for decisions. Focus is on public lands planning in U.S.

Author(s)	Arrangement of criteria	Foundations of criteria	What framework is designed to evaluate
Poisner 1996	Six criteria measuring extent of process focus on deliberative decision-making that directly involves citizens	Political philosophy of civic republicanism in U.S.	Public participation processes related to environmental risk and health. Focus is on processes developed under the U.S. National Environmental Policy Act.
Rowe & Frewer 2000	Sets of acceptance and process criteria	Suggestions of academics and practitioners and, to a lesser degree, empirical research findings	Referenda, public hearings, public opinion surveys, regulatory negotiations, consensus conferences, citizen juries, citizen advisory committees, focus groups. Focus is on environmental risk and health decisions.
Susskind & Cruikshank 1987	Four outcome-oriented meta- criteria of fairness, efficiency, wisdom, and stability of agreement	Research and writing of dispute resolution experts	Negotiated dispute resolution techniques.
Webler 1995	Two meta-criteria of fairness and competence	Habermas' concepts of communicative competence and the ideal speech situation	Participatory process techniques that are organised to facilitate communication between government, citizens, stakeholders, interest groups, and businesses regarding a specific decision.

2.3.2 Evaluation purpose

Broadly, the purpose of evaluation is to judge performance according to a given quality in order to assess merit (Patton 2002). In the case of evaluating participatory decisionmaking processes, a number of performance qualities can be the focus of evaluation, such as effectiveness, cost effectiveness, efficiency, and appropriateness. Effectiveness, or the degree to which a participatory process meets procedural or outcome objectives (Bellamy et al. 1999), is the primary concern of all of the frameworks analysed here. Some of the frameworks argue the premise that participation of interest groups or individuals in environmental decisions is desirable based on principles of democracy, while others accept this premise and simply acknowledge that participation has been increasingly deemed socially desirable. For most of the 12 frameworks, this is the extent to which they address the question of appropriateness (though see Susskind & Cruikshank 1987). Six of the 12 frameworks also include cost effectiveness as one of their criteria, which Beierle (1999) defines very broadly as whether a participatory process is the least demanding means (in terms of money, time, risk, and opportunity cost) of achieving benefits relative to other decision-making options (Table 2.3). Other frameworks consider cost effectiveness in narrower terms of money and time (e.g., Crosby et al. 1986). Of the frameworks that make mention of the time requirements of participatory approaches, most emphasise providing enough time rather than the efficient use of time (Crosby et al. 1986; Webler 1995; Rowe & Frewer 2000; Dalton 2005) (Table 2.2).

Performance qualities other than effectiveness have been the subject of more detailed examination elsewhere. For example, Coglianese (1997) compared the time required – a measure of efficiency – to develop regulations among United States (US) federal agencies in cases that resorted to negotiated rulemaking, a form of participatory decision-making, to those that did not. Several authors have also detailed when and where participatory techniques are the appropriate means of decision-making (e.g., Harter 1982; Susskind & McMahon 1985; Irvin & Stansbury 2004). Lawrence and Deagen (2001) modify Vroom and Yetton's (1973) model to guide the selection of appropriate participatory process types for environmental decision-making. A series of six questions

through a decision tree point towards the appropriate level of participation required for different kinds of environmental problems. Renn et al. (1995) also propose a conceptual framework for matching environmental problems with process types. Appropriate process types are suggested according to the environmental problem's characterisation within a two dimensional space with axes of "degree of complexity" and "intensity of conflict".

2.3.3 Effectiveness in different terms

Within the quality of effectiveness, authors focus on effectiveness in different terms, such as effectiveness in achieving broad social goals (Beierle 1999) or fair and competent discourse (Webler 1995). Fiorino (1990), Laird (1993), and Poisner (1996) explicitly focus on evaluating decision-making processes' performances as democratic processes according to populist or pluralist democratic ideals. The frameworks also vary in the types of participatory processes they aim to evaluate. For example, Susskind and Cruikshank (1987) address dispute resolution approaches, typified by the negotiation (and sometimes mediation) of a specific issue, such as a proposed land development. Alternately, Innes and Booher (1999) intend their framework for the evaluation of participatory processes that involve broader, "policy-oriented consensus-building" which is not centred on a specific regulation or issue (1999: 420).

Despite these discrepancies among the details of the different frameworks, all 12 frameworks promote models of participation that stipulate relatively high levels of involvement and influence. This is noteworthy, as individual types of participatory processes vary widely in the opportunity for involvement they provide for participants. Arnstein's seminal "ladder of citizen participation" highlights this variation and argues that process types which do not grant citizens significant involvement are less desirable (Arnstein 1969). These 12 frameworks indicate a similar belief, embodied in criteria such as "involvement at an early stage" and "influence over final decisions" which are common, in some form, across most of the frameworks (Table 2.2). However, evidence suggests that no one model is ideal in all situations (Chess & Purcell 1999). Highly involved processes that share significant power among participants can demand

significant commitments of time and money from participants and sponsors. Such a model may not be deemed appropriate or effective by either group for more minor policy or management decisions (Mumpower 1995). Thus, applying one of these 12 evaluation frameworks to the use of process types that entail less involvement risks generating an inappropriately negative evaluation. That is, a less involved process' poor performance according to the criteria in these frameworks does not make the process type a poor type, per se; there may be instances where the application of these types is acceptable. The risk of unsuitable evaluation can be mitigated by ensuring that careful thought is given to another of the performance qualities discussed above: appropriateness. Evaluators should consider to which participation mechanisms these frameworks should be applied. In this respect, although the evaluation frameworks included here do not provide a guide for determining which frameworks are appropriate for which processes, many of them are explicit about the types of processes their frameworks are designed to evaluate (Table 2.1). Irrespective of this, this analysis of a cross section of extant frameworks reveals that frameworks designed to evaluate processes at the less involved end of the spectrum of process types require further development.

Table 2.2: Evaluation framework process criteria

Process Criteria	Beierle 1999	Branch & Bradbury	Crosby et al.	Dalton 2005	Fiorino 1990	Innes & Booher		ird 93 ^a	Moote et al.	Poisner 1996	Rowe & Frewer	Susskind & Cruikshank	Webler 1995
		2006	1986			1999	Pl	Po	1997		2000	1987	
Involvement in setting agenda		✓	✓	✓					✓		✓		✓
Involvement in designing process		✓		✓		✓			✓		✓		✓
Decision-making authority explicitly shared with participants – no exclusive authority rests with agency				✓	~	√		✓	√				
Clearly structured and agreed upon decision-making process		√	✓								✓		✓
Clear, shared purpose & task		✓				✓					✓		✓
Terms, definitions, and concepts are made explicit													✓
Flexibility of process, its goals, & decision-making criteria			✓						√				
Broad representation of interests		✓	✓	✓		✓	✓	✓	✓	✓	√	✓	✓
Selection process for representatives is resistant to manipulation			√										
Appropriate group size to allow discussion			✓										
Involves citizens, not individuals hired to represent citizens/groups								✓		√			

Process Criteria	Beierle 1999	Branch & Bradbury 2006	Crosby et al. 1986	Dalton 2005	Fiorino 1990	Innes & Booher 1999	ird 93 ^a	Moote et al. 1997	Poisner 1996	Rowe & Frewer 2000	Susskind & Cruikshank 1987	Webler 1995
Process is equally				√	√			√		√	√	√
accessible to all				·	·			,		,		,
Equal & adequate opportunity for everyone to voice interests and concerns		✓	✓	✓	✓			✓			√	✓
Participants are committed				✓					✓			✓
Critical reflection on values or assumptions underlying the proposal			✓						✓	✓		✓
Promotes mutual understanding of values & interests among participants						√						√
Respect demonstrated for and among participants & their interests		√		✓				√	✓			√
Multi-directional, face- to-face dialogue		✓	✓	✓	✓	✓		✓	✓		√	
Relevant information is shared & analysed		✓	✓	✓		✓	✓	✓			✓	✓
Information analysis attempts to build common understanding of its meaning						√	✓				√	√
Fully explores different knowledge, interests, & alternatives before developing solutions		√				√						√
Uncertainty of factual information acknowledged												√

Process Criteria	Beierle 1999	Branch & Bradbury 2006	Crosby et al. 1986	Dalton 2005	Fiorino 1990	Innes & Booher 1999	ird 93 ^a	Moote et al. 1997	Poisner 1996	Rowe & Frewer 2000	Susskind & Cruikshank 1987	Webler 1995
Encourages creativity & innovative ideas						✓					✓	
Encourages consideration of broader public good									✓			✓
Financial & technical resources available to equalise participants' ability to participate				✓			~			✓		✓
Appropriate timelines			✓	✓						✓		✓
Limited influence of sponsor agency				✓						✓		
Process & decisions are transparent to participants		✓		✓						✓		
Process & decisions are transparent to public		✓								✓	✓	
Agency/sponsor accountability to public on commitments		✓										
Participants are accountable to their constituents											√	
Means exists for due process complaints to be heard at process conclusion											✓	
Competent & neutral facilitation			✓							✓		

^a Laird proposes criteria according to pluralist (Pl) and populist (Po) variants of democratic theory

Table 2.3: Evaluation framework outcome criteria

Outcome	Beierle 1999	Branch & Bradbury	Crosby et al. 1986	Dalton 2005	Fiorino 1990	Innes & Booher	Lai	ird ^a 993	Moote et al. 1997	Rowe & Frewer	Poisner 1996	Susskind & Cruikshank 1987	Webler 1995
Criteria		2006	1980			1999	Pl	Po	1997	2000		1987	
Learning of skills													
or knowledge				✓		✓	1	✓					
among													
participants													
Educates broader	✓	✓				✓							
public													
Improves													
participants'		√		√				1	✓				
understanding of others' interests &		•		v				•	V				
concerns													
Better													
relationships													
among		✓		✓								✓	
participants													
Generates													
innovation &						✓							
creative ideas													
Sparks spinoff													
partnerships, new						√	1						
practices or						•	•						
institutions													
Agreement is													
technically sound													
& reflective of						✓			✓	√			
participant													
interests													
Agreement			✓										
reached influences			V										
final decision													

Outcome Criteria	Beierle 1999	Branch & Bradbury 2006	Crosby et al. 1986	Dalton 2005	Fiorino 1990	Innes & Booher 1999	ird ^a 993	Moote et al. 1997	Rowe & Frewer 2000	Poisner 1996	Susskind & Cruikshank 1987	Webler 1995
Reduces conflict between parties	✓	✓				✓						
Agreement endures through time											√	
Creates social & political capital						✓						
Incorporates public values into decisions	✓									✓		
Fosters trust in institutions	✓											
Increases substantive quality of decisions	✓											
Cost effective (time and money)	✓		✓	✓		✓			✓		✓	

^a Laird proposes criteria according to pluralist (Pl) and populist (Po) variants of democratic theory

2.4 Criteria origins

Evaluation frameworks act as an ideal against which a particular evaluand can be judged. Evaluators may derive their conception of the ideal participatory decision-making process from different sources, creating the potential for multiple versions of 'ideal'. I consider the sources, or origins, of framework criteria in three senses here: evidential foundations (i.e., anecdotal experience, empirical research, normative theory), geography (i.e., countries and socio-political settings), and subject area (e.g., environmental risk processes).

Framework authors use evidence for their criteria in different ways, drawing from several sources to develop criteria in some cases and developing entire frameworks from one source in others. Fiorino (1990), Laird (1993), and Poisner (1996) develop evaluation frameworks grounded in populist and pluralist theories of participatory democracy. These theories fundamentally argue that individuals or autonomous interest groups should be integrally involved in the decisions that affect them (Dahl 1982; Barber 1984). Philosopher Jurgen Habermas' concepts of ideal speech conditions and communicative competence, based in theories of social interaction and the use of language (Habermas 1984), are also drawn from as the basis of several evaluation frameworks. Webler (1995) derives an exhaustive framework entirely from the work of Habermas. Innes and Booher (1999) draw on Habermas as well as complexity theory and their experience as the sources of their framework. Moote et al. (1997) also draw from multiple sources, including normative theories of participatory democracy and experience with the practice of participation in the design of their framework. The balance of the frameworks are derived primarily from experience with practice. Rowe and Frewer (2000) point out that much of the experience with what contributes to the effectiveness of participatory methods are no more than researchers' suggestions, rather than findings from empirical studies. Though this is a weakness for any frameworks using this body of work as support for their criteria, they are also quick to point out that (i) taken all together, the distillation of researchers' experiences does have value and (ii) the difficulties of experimental

research limit researchers' and evaluators' options for investigating participatory decision making.

Of the frameworks that are based on researchers' experience or empirical research, all draw largely or primarily from the significant pool of studies conducted in the US. Likewise, many of the frameworks are also primarily intended for, or applied to, the American setting. As with any country, the US has a particular set of political beliefs and institutions, a distinct history of public involvement in environmental decision-making, and a unique policy and regulatory framework governing environmental issues (e.g., see Susskind & McMahon 1985). Each of these factors shapes what participatory methods are successful and how success is interpreted. Evaluators in non-US settings may benefit from considering the implications of differences between the US and their locale that could affect the transferability of evaluation frameworks rooted in an American perspective and experience. More broadly however, all of the frameworks included here are concerned with participatory decision-making in western democratic nations which share numerous basic governance traits.

Seven of the 12 frameworks discuss particular environmental subject areas they are derived from and intended for. Five identify primarily environmental risk and health issues; Moote et al. (1997) focus on land use planning issues; and Dalton (2005) draws from terrestrial resource planning research to develop a framework for evaluating participation in marine protected areas planning. Dalton's transference of evaluation research from terrestrial resource issues highlights the comparative lack of frameworks and systematic evaluations of participatory decision making processes dealing with the marine environment. Much has been written about shared responsibility in fisheries management and marine conservation (e.g., Pinkerton 1989; Durrenberger & King 2000; Wilson et al. 2003) and the incorporation of local knowledge (e.g., Ruddle 1994; Berkes 1999; Neis & Felt 2000) – both of which are rich and diverse topics relating to participation in decision-making about the marine environment. However, this author is aware of only one peer-reviewed journal publication (Dalton 2006) that conducts a systematic evaluation of participatory marine decision-making processes. In light of the

growing interest in more participatory approaches, as demonstrated by the growth of the two literatures mentioned above, such evaluative research could be a valuable addition to the study of marine planning and management.

2.5 Composition of criteria

Different approaches to evaluating participatory decision-making exist among the 12 frameworks analysed here. Fiorino (1990), Laird (1993), and Poisner (1996) outline a small number of overarching, politically-oriented criteria grounded in participatory democracy theory. Webler (1995) argues that the macro-level factors like those identified by Laird (1993) (Table 2.2, Table 2.3) must be augmented with criteria related to the psychological micro-level dynamics of participation in decision-making such as aspects of small group interaction in order to assess how and why participation is effective. The similarity of Laird's (1993) framework, in structure and content, with Fiorino's (1990) and Poisner's (1996) make Webler's criticism applicable to these frameworks as well. Many of the other frameworks include the more operational-level factors that Webler has in mind, including the extent of information exchange, motivation of participants, existence of a common purpose, and constructive personal behaviour (e.g., Moote et al. 1997; Rowe & Frewer 2000; Dalton 2005; Branch & Bradbury 2006) - none of which are accounted for by the frameworks limited to overarching criteria. Webler's (1995) framework for evaluating discourse is the most detailed of the 12, both in terms of the criteria included and their explication. However, limited as it is to discourse, it too is likely insufficient as it does not provide adequate means for understanding other factors important to the success of participatory decision-making such as the amount of time provided, the political and material support for the process, and the quality of process management and facilitation (Mumpower 1995; Abelson et al. 2003).

2.5.1 Individual criteria

A number of commonalities and differences in criteria exist among the frameworks. The three most commonly included criteria address (i) broad, inclusive representation of

affected interests in the process, (ii) the accessibility and sharing of information, (iii) and multi-directional communication. The primacy of these criteria has also been highlighted elsewhere (e.g., Rauschmayer & Wittmer 2006). The criteria among frameworks diverge in other respects. Some frameworks emphasise the value of clarity and definition in the process purpose, tasks, and goal, while others specify the importance of flexibility and revision in the process. For example, Susskind and Cruikshank (1987) argue that in negotiation processes where the goal is to solve a problem, consistent rules and tasks do not make sense; the process must be flexible to ensure that all tools can be brought to bear on the development of solutions. Rowe and Frewer (2000) acknowledge the importance of both clarity and flexibility as well as possible tradeoffs between the two. They suggest that clearly defining the conditions under which changes to rules or tasks are permissible may be one partial means of realising the benefits of both.

Frameworks also place variable emphasis on the degree of participant involvement versus the efficiency of the process. Both criteria can pose challenges. More and earlier participant involvement may hinder decision-making, overemphasise the interest of active publics, and make defining the issue difficult and time consuming (Chakraborty & Stratton 1993; Dorcey & McDaniels 2001). Not enough scope for meaningful participation may harm the legitimacy of the process in participants' eyes (Mascarenhas & Scarce 2004). The sharing of decision-making power is another subject on which the frameworks diverge. Although all generally acknowledge that processes must have some discernible influence on decisions, some frameworks stipulate that decision-making authority should explicitly rest with the participants in the process (e.g., Fiorino 1990; Moote et al. 1997) whereas others argue that conventional agencies and officials must retain decision-making authority in order to ensure accountability for decisions (Susskind & Cruikshank 1987).

In addition to discrepancies between frameworks, there are also some features of decision-making processes that are under-represented. Much is made of early involvement in the decision-making process and influence over decisions, but the involvement of participating parties and communication with agencies at the

implementation stage after decisions have been made is largely ignored. Moote et al. (1997) are alone in explicitly stipulating the continuity of participation through all stages of the participatory process. Rowe and Frewer (2000) hint at involvement in the implementation stage in their suggestion that processes seek agreement about how outputs will be used and how they will affect policy. Implementation can be a delicate stage: missteps can (i) bungle the content of the agreements reached, (ii) dissolve the trust of constituents in their representatives and the trust between representatives, and (iii) draw out implementation (Leroy et al. 2004).

Also, an insufficient number of frameworks include the role of independent facilitation in participatory processes. Some frameworks profess to be non-specific to participation techniques (e.g., Branch & Bradbury 2006) and may have excluded facilitation as a criterion on this premise. However, facilitation is common across many types of participatory processes, particularly those with higher levels of participation where all of these frameworks are focused. Research has documented the importance of facilitation in numerous cases (e.g., Pinkerton 1991; Jackson 2002).

2.6 Synthesis

Four broad types of evaluation frameworks emerge from this analysis (Table 2.4). The variables used to distinguish among the framework types in this classification are (i) the target of evaluation, (ii) the evidential foundations of the criteria, and (iii) the level of detail provided in the framework's criteria. In reality, many more variables likely affect the structure and content of evaluation frameworks. However, this classification provides a reasonably meaningful characterisation of the different types of frameworks that exist among the 12 analysed. It can be used to aid the selection of a framework appropriate to an evaluator's needs. Though other properties of the frameworks discussed in the analysis clearly differ or have the potential to differ, such as the socio-political setting and subject area they are derived from, these properties had no discernible effect on the structure and content of the frameworks.

The first type of framework evaluates the participatory decision-making process as a democratic process according to populist and pluralist variants of normatively-derived democratic theory. The level of detail provided in the criteria is minimal. Fiorino (1990), Laird (1993), and Poisner (1996) frameworks all fall into this category. The second type of framework also focuses primarily on process, but the frameworks in this category provide more operational-level details that are useful in understanding how or why participatory processes succeed or fail. Moote et al. (1997) and Crosby et al. (1986) are the least detailed of the six frameworks in this category, although each framework offers criteria not found in the other frameworks. Criteria are drawn from normative and empirical sources. The third category contains two frameworks with criteria that address both process and outcomes, drawing criteria from normative theory, analytic theory, and experience. Both frameworks in this category offer a moderate level of detail. The fourth type of framework is Beierle's (1999) list of criteria focused solely on a process' ability to achieve six broad social goals. Beierle develops the goals from an analysis of the problems with more traditional, less participatory forms of decision-making. His framework does not consider process elements.

Table 2.4: Framework typology

	Category 1	Category 2	Category 3	Category 4
Category Description	Examines process, normatively derived criteria, minimally detailed criteria	Examines process, criteria from multiple sources, moderately – highly detailed criteria	Examines process and outcomes, criteria from multiple sources, moderately detailed criteria	Examines outcomes, criteria from empirical sources, minimally detailed criteria
Evaluation Frameworks	Fiorino 1990, Laird 1993, Poisner 1996	Crosby et al. 1986, Webler 1995, Moote et al. 1997, Rowe & Frewer 2000, Dalton 2005, Branch & Bradbury 2006	Susskind & Cruikshank 1987, Innes & Booher 1999	Beierle 1999

2.7 Conclusions

The selection of an evaluation framework is an important consideration that evaluators should attend to in designing an evaluation of a participatory environmental decision-making process. While the 12 frameworks analysed in this work are similar in the broad sense of promoting high levels of participation in decision-making, there are important differences among more specific details of the frameworks. First, frameworks are intended to evaluate different aspects of decision-making processes, from their achievement of intersubjective social goals to their adherence to procedural principles of democracy. Second, their criteria offer variable levels of detail. Third, there are points upon which frameworks diverge in their conception of a high quality participatory decision-making process.

In the same way that there is no one ideal model of participatory processes, there is also no ideal evaluation framework. Evaluators must begin from a clear understanding of their goals and select their framework accordingly, defining what they mean by a high quality process. Evaluators must also choose the methods they will pair with their choice of evaluation framework. While a diversity of evaluation approaches can be useful through time, within any one evaluation exercise evaluators should consider the compatibility of their set of methodological choices about how they will conduct an evaluation – clearly, some combinations of choices are more compatible than others. For example, gathering only process participants' perspectives would be insufficient for determining how well a participatory process achieves Beierle's (1999) framework of broader social goals.

Evaluators may similarly benefit from comparing multiple frameworks as this work has done to bring the content of frameworks into greater relief and facilitate the choice of a framework that is well-aligned with their goals and values. Future frameworks can help evaluators in making informed choices by ensuring clarity and explication of their criteria, such as the nature of those that should be involved in a participatory process – representatives of groups or unaligned individuals? Informed framework choices will generate evaluations that better meet evaluator's needs.

2.8 Literature cited

Abelson, J., P. G. Forest, J. Eyles, P. Smith, E. Martin, and F. P. Gauvin. 2003. Deliberations about deliberative methods: Issues in the design and evaluation of public participation processes. Social Science & Medicine **57**(2):239-251.

Arnstein, S. R. 1969. Ladder of citizen participation. Journal of the American Institute of Planners **35**(4):216-224.

Barber, B. A. 1984. Strong Democracy: Participatory Politics for a New Age. University of California Press, Los Angeles, CA.

Beierle, T. C. 1999. Using social goals to evaluate public participation in environmental decisions. Policy Studies Review **16**(3/4):75-105.

Bellamy, J. A., G. T. McDonald, G. J. Syme, and J. E. Butterworth. 1999. Evaluating integrated resource management. Society & Natural Resources **12**(4):337-353.

Berkes, F. 1999. Sacred Ecology: Traditional Ecological Knowledge and Resource Management. Taylor and Francis, Philadelphia.

Blahna, D. J., and S. Yonts-Shepard. 1989. Public involvement in resource planning toward bridging the gap between policy and implementation. Society & Natural Resources **2**(3):209-227.

Branch, K. M., and J. A. Bradbury. 2006. Comparison of DOE and army advisory boards: Application of a conceptual framework for evaluating public participation in environmental risk decision making. Policy Studies Journal **34**(4):723-753.

Chakraborty, S., and R. Stratton. 1993. An integrated regional approach to risk management of industrial-systems. Nuclear Safety **34**(1):1-8.

Chess, C., and K. Purcell. 1999. Public participation and the environment: Do we know what works? Environmental Science & Technology **33**(16):2685-2692.

Chess, C. 2000. Evaluating environmental public participation: Methodological questions. Journal of Environmental Planning and Management **43**(6):769.

Coglianese, C. 1997. Assessing consensus: The promise and performance of negotiated rulemaking. Duke Law Journal **46**(6):1255-1349.

Conley, A., and M. A. Moote. 2003. Evaluating collaborative natural resource management. Society & Natural Resources **16**(5):371-386.

Crosby, N., J. M. Kelly, and P. Schaefer. 1986. Citizens panels - a new approach to citizen participation. Public Administration Review **46**(2):170-178.

Cupps, D. S. 1977. Emerging problems of citizen participation. Public Administration Review **37:**478-487.

Dahl, R. A. 1982. Dilemmas of Pluralist Democracy: Autonomy vs. Control. Yale University Press, Binghamton, NY.

Dalton, T. M. 2005. Beyond biogeography: A framework for involving the public in planning of US marine protected areas. Conservation Biology **19**(5):1392-1401.

Dalton, T. M. 2006. Exploring participants' views of participatory coastal and marine resource management processes. Coastal Management **34**(4):351-367.

Dorcey, A. H. J., and T. McDaniels. 2001. Great expectations, mixed results: trends in citizen involvement in Canadian environmental governance. Pages 247-302 in E. A. Parson, editor. Governing the Environment. University of Toronto Press, Toronto.

Dukes, E. F. 2004. What we know about environmental conflict resolution: An analysis based on research. Conflict Resolution Quarterly **22**(1-2):191-220.

Durrenberger, E. P., and T. D. King, editors. 2000. State and Community in Fisheries Management: Power, Policy, and Practice. Bergin and Garvey, Westport, CT.

Fiorino, D. J. 1990. Citizen participation and environmental risk - a survey of institutional mechanisms. Science Technology & Human Values **15**(2):226-243.

Habermas, J. 1984. The Theory of Communicative Action, Volume 1: Reason and the Rationality of Society. Polity Press, Cambridge.

Halvorsen, K. E. 2001. Assessing public participation techniques for comfort, convenience, satisfaction, and deliberation. Environmental Management **28**(2):179-186.

Harter, P. J. 1982. Negotiating regulations - a cure for malaise. Georgetown Law Journal **71**(1):1-118.

Innes, J. E., and D. E. Booher. 1999. Consensus building and complex adaptive systems - A framework for evaluating collaborative planning. Journal of the American Planning Association **65**(4):412-423.

Irvin, R. A., and J. Stansbury. 2004. Citizen participation in decision making: Is it worth the effort? Public Administration Review **64**(1):55-65.

Jackson, L. S. 2002. Consensus processes in land use planning in British Columbia: The nature of success. Progress in Planning **57:**1-90.

Laird, F. N. 1993. Participatory analysis, democracy, and technological decision-making. Science Technology & Human Values **18**(3):341-361.

Lauber, T. B., and B. A. Knuth. 1999. Measuring fairness in citizen participation: A case study of moose management. Society & Natural Resources **12**(1):19-37.

Lawrence, R. L., and D. A. Deagen. 2001. Choosing public participation methods for natural resources: A context-specific guide. Society & Natural Resources **14**(10):857-872.

Leach, W. D., and N. W. Pelkey. 2001. Making watershed partnerships work: A review of the empirical literature. Journal of Water Resources Planning and Management-Asce 127(6):378-385.

Leroy, S., R. Dobell, T. Dorcey, and J. Tansey. 2004. Public Process and the creation of the Race Rocks Marine Protected Area. Pages 1-12 Georgia Basin/Puget Sound Research Conference. Georgia Basin Ecosystem Initiative and Puget Sound Action Team, Vancouver, BC.

Mascarenhas, M., and R. Scarce. 2004. "The intention was good": Legitimacy, consensus-based decision making, and the case of forest planning in British Columbia, Canada. Society & Natural Resources 17(1):17-38.

Moote, M. A., M. P. McClaran, and D. K. Chickering. 1997. Theory in practice: Applying participatory democracy theory to public land planning. Environmental Management **21**(6):877-889.

Mumpower, J. L. 1995. The Dutch Study Groups revisited. Pages 321-338 in O. Renn, T. Webler and P. M. Wiedemann, editors. Fairness and Competence in Citizen Participation. Kluwer, Boston.

National Round Table on the Environment and the Economy (NRTREE). 1994. Local Round Tables: Realizing Their Full Potential. British Columbia Round Table on the Environment and the Economy, Commission on Resources and Environment, Fraser Basin Management Program and National Round Table, Ottawa.

Neis, B., and L. F. Felt, editors. 2000. Finding Our Sea Legs: Linking Fishery People and Their Knowledge with Science and Management. ISER Books, St. John's.

Patton, M. Q. 2002. Qualitative Research and Evaluation Methods. 3rd edition. Sage Publications, Thousand Oaks, CA.

Pinkerton, E., editor. 1989. Cooperative Management of Local Fisheries: New Directions for Improved Management and Community Development. University of British Columbia Press, Vancouver.

Pinkerton, E. 1991. Locally based water-quality planning - contributions to fish habitat protection. Canadian Journal of Fisheries and Aquatic Sciences **48**(7):1326-1333.

Poisner, J. 1996. A civic republican perspective on the national environmental policy act's process for citizen participation. Environmental Law **26:**53-95.

Presidential/Congressional Commission on Risk Assessment and Risk Management (PCC). 1997. Framework for Environmental Health Risk Management. Washington, DC.

Rauschmayer, F., and H. Wittmer. 2006. Evaluating deliberative and analytical methods for the resolution of environmental conflicts. Land Use Policy **23**(1):108-122.

Renn, O., T. Webler, and P. Wiedemann. 1995. The pursuit of fair and competent citizen participation. Pages 339-368 in O. Renn, T. Webler and P. Wiedemann, editors. Fairness and Competence in Citizen Participation: Evaluating Models for Environmental Discourse. Kluwer, Dordrecht.

Rosener, J. B. 1978. Citizen participation – can we measure its effectiveness. Public Administration Review **38**(5):457-463.

Rowe, G., and L. J. Frewer. 2000. Public participation methods: A framework for evaluation. Science Technology & Human Values **25**(1):3-29.

Rowe, G., and L. J. Frewer. 2004. Evaluating public-participation exercises: A research agenda. Science Technology & Human Values **29**(4):512-557.

Ruddle, K. 1994. Local knowledge in the folk management of fisheries and coastal marine environments. Pages 161-206 in C. L. Dyer and J. R. McGoodwin, editors. Folk Management in the World's Fisheries. University Press of Colorado, Niwot, Colorado.

Segerholm, C. 2003. Researching evaluation in national (state) politics and administration: A critical approach. American Journal of Evaluation **24**(3):353-372.

Selin, S., and D. Chavez. 1995. Developing a collaborative model for environmental planning and management. Environmental Management **19**(2):189-195.

Shadish, W. R., T. D. Cook, and L. C. Leviton. 1991. Foundations of Program Evaluation: Theories of Practice. Sage Publications, Thousand Oaks, CA.

Smith, C. L., and J. Gilden. 2002. Assets to move watershed councils from assessment to action. Journal of the American Water Resources Association **38**(3):653-663.

Smith, L. G. 1984. Public participation in policy making: The state-of-the-art in Canada. Geoforum **15**(2):253-259.

Susskind, L., and J. L. Cruikshank. 1987. Breaking the Impasse: Consensual Approaches to Resolving Public Disputes. Basic Books, New York.

Susskind, L., and G. McMahon. 1985. The theory and practice of negotiated rulemaking. Yale Journal on Regulation **3**(1):133-166.

Thibault, J. W., and L. Walker. 1975. Procedural Justice: A Psychological Analysis. Lawrence Erlbaum Associates, Inc., Hillsdale, NJ.

U.S. Environmental Protection Agency (EPA). 2001. Stakeholder Involvement and Public Participation at the U.S. EPA: Lessons Learned, Barriers, and Innovative Approaches. U.S. Environmental Protection Agency.

Vira, B., and R. Jeffery. 2001. Introduction: analytical issues in participatory natural resource management. Pages 1-16 in B. Vira and R. Jeffery, editors. Analytical Issues in Participatory Natural Resource Management. Palgrave Publishers, New York.

Vroom, V. H., and P. W. Yetton. 1973. Leadership and Decision-making. University of Pittsburgh Press, Pittsburgh, PA.

Webler, T. 1995. "Right" discourse in citizen participation: An evaluative yardstick. Pages 35-86 in O. Renn, T. Webler and P. Wiedemann, editors. Fairness and Competence in Citizen Participation: Evaluating Models for Environmental Discourse. Kluwer, Dordrecht.

Wilson, D. C., J. R. Nielsen, and P. Degnbol, editors. 2003. The Fisheries Comanagement Experience: Accomplishments, Challenges, and Prospects. Kluwer, Boston, MA.

3 EVALUATING THE COMMERCIAL INDUSTRY CAUCUS CONSENSUS PROCESS²

3.1 Introduction

Resolving conflicting objectives among stakeholders regarding the use of fisheries resources is one primary challenge for sustainable fisheries management (Cochrane 2000). Developing well-informed management strategies in a way that respects tenets of procedural justice is another (Hernes et al. 2005). Collaborative forms of planning have demonstrated promise for addressing challenges like these and their use is growing (Bingham 1986; Susskind & Cruikshank 1987; McManus et al. 1999; Wondolleck & Yaffee 2000; Butler et al. 2001; Verheij et al. 2004; Sidaway 2005; Alpizar 2006; da Silva & Kitts 2006; Baine et al. 2007; Mow et al. 2007). However, research has also found that crafting fair and effective collaborative processes is often difficult, and not simply a matter of 'more' stakeholder involvement (McCay 1996).

Despite the difficulties and their growing use, collaborative fisheries planning processes have rarely been the subject of systematic evaluation that comprehensively assesses their performance. This chapter begins to address that gap. It evaluates the Commercial Industry Caucus (CIC) process, a recent multi-sectoral planning process tasked with reforming the management of Canada's Pacific groundfish fisheries. The evaluation focuses on fairness and effectiveness, two procedural attributes frequently associated with high quality collaborative decision-making processes (Susskind & Cruikshank 1987; Albin 1993; Rowe & Frewer 2000; Germain et al. 2001; Hunt & Haider 2001; Smith & McDonough 2001). Using a framework of criteria derived from empirical literature, I sought participants' perceptions of the performance of the CIC process on these attributes. Participants' perspectives are useful for determining process designs that are acceptable to stakeholders – an important criterion in considering a process model's

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suitability for future use (Webler 1995; Dalton 2006). Collaborative planning also demands significant commitments of time and money from participants and sponsoring agencies. Determining whether and why these processes are successful can help ensure that both of these limited resources are spent effectively (Innes & Booher 1999). Results provide early feedback on a decision-making format that has been promoted for Canadian fisheries in recent legislation and policy reviews (Government of Canada 1996; IDR 2001).

The balance of the chapter is divided into five sections. It begins with a review of the rationale for, and challenges of, collaborative planning, and then provides a case description. The methods section and results follow. The chapter closes with a discussion of keys and obstacles to success and the practical implications of participants' evaluations for collaborative fisheries planning process design.

3.2 Theoretical background: collaborative planning

Collaborative planning approaches are a subset of participatory planning types distinguished by their delegation of some or all responsibility for planning to stakeholders (Day & Gunton 2003). This responsibility may or may not be accompanied by the authority to ratify agreements. Emphasising interest-based negotiations and consensus-building, collaborative planning approaches have developed partly in response to the shortcomings of other decision-making models that provide for only one-way information flows and insufficient stakeholder involvement (Renn et al. 1995; Gray 2005). Their early applications as short term interventions in issue-specific conflicts have evolved to include more recent use as longer term, relationship-building initiatives addressing multiple issues at broad scales (Wondolleck & Yaffee 2003). The adoption of collaborative fisheries planning approaches is one aspect of broader fisheries management reforms towards decentralised decision-making authority and stakeholder participation noted in many parts of the world (McCay & Jentoft 1996).

Conflict resolution and planning literatures provide an overview of the benefits to collaborative planning, which can be grouped into three broad categories. First, collaborative approaches help observe the normative principle, based in theories of participatory democracy, that those affected by a decision should be able to contribute to the decision's formulation (Olsen 1982; Smith 1984). Second, collaboration can contribute substantive benefits where stakeholders identify problems and solutions to policy issues that experts or authorities are unaware of, thereby facilitating the development of better informed policy or management (Fiorino 1990; Dyer & McGoodwin 1994). Third, collaboration can help ensure that all stakeholders' interests are addressed, reducing conflict and increasing the representativeness and responsiveness of decisions (Fisher & Ury 1991; Wondolleck & Yaffee 2000). This in turn contributes to the legitimacy and acceptability of decisions, increasing compliance (Pinkerton 1989; Jentoft et al. 1998). These claims are the basis of an instrumental benefit to collaborative planning approaches as a means to the end of successful policy implementation.

Realising these benefits in fisheries planning has proven difficult. Issues related to the adequacy and breadth of representation, power imbalances, varying capacities to participate among stakeholders, incompatible participant interests, and uneven incentives to negotiate are just some of the obstacles that have frustrated collaborative fisheries planning efforts (MacInnes & Davis 1996; McCay & Jentoft 1996; Pinkerton 1996; Mikalsen & Jentoft 2001; Coffey 2005). These difficulties have negatively affected trust among stakeholders, and between stakeholders and governing agencies (Pinkerton 1996). Stakeholders have also perceived decisions made by governing agencies following ineffective or inadequate collaboration as unfair, diminishing the legitimacy of management measures, and leading to non-compliance (Elliott et al. 2001).

3.3 The case

3.3.1 The commercial groundfish sector

Canada's Pacific groundfish fishery involves between 300 and 400 vessels and is the coast's most valuable commercial fishery sector, with landed values exceeding \$140 million (Cdn) annually (DFO 2005). The sector is divided into seven principal fisheries which are largely artefacts of a limited licensing system that has progressively partitioned the management of groundfish into species-specific fisheries beginning in the late 1970s³. The seven fisheries vary by gear employed, size, value, and licensing and management histories (Table 3.1). This variation is correlated with disparities in the wealth and degree of political organisation among the fisheries. The individual transferable quota (ITQ) licensing regimes introduced throughout the 1990s to the halibut, trawl, and sablefish fisheries by Canada's marine fisheries management agency, Fisheries and Oceans Canada (DFO), were followed by trends towards fleet consolidation and increased user involvement in management (Butler 2004; DFO 2006; DFO 2007a). All three fisheries have industry-funded associations which share fishery management costs and responsibilities through formal agreements with DFO (DFO 2006). In contrast, the lingcod, dogfish, and rockfish fisheries have historically been less valuable and fleetlevel organisation has been more recent and limited. Irrespective of these disparities, all of the groundfish fisheries are linked by virtue of their overlapping catch of a diverse set of ecologically interacting species. The fisheries are also linked through the participation of many fishers in more than one groundfish fishery. The susceptibility of some species to multiple gear types makes harvesting and management measures functionally interdependent – a characteristic that further connects the fisheries and that has contributed to numerous management challenges (PFMI 2003; Koolman et al. 2007).

The changes to the halibut, trawl, and sablefish fisheries embody broader trends in the current management of Canada's Pacific fisheries, which provide useful context for

³ DFO's role in partioning fisheries has lead some commentators to suggest that the resultant segmentation of fishers has reinforced the differentiation of interests and facilitated conflict among fishers (MacInnes and Davis 1996).

understanding the participants and outcomes from the CIC planning process. They have included the strengthening of individual harvest rights (through ITQs), the downloading of management costs from DFO onto fishers, and the rise of private, third-party contractors to perform monitoring and data collection services. The trends are among those associated with the "neoliberalisation" of resource conservation and management (Igoe and Brockington 2007). Proponents suggest this approach to fisheries management captures more resource rent and restructures users' incentives to better achieve sustainable use (Bjorndal and Munro 1999). However, critics have argued that such management changes increase enforcement costs, encourage high grading, and partition access to resources in ways that often does not benefit smaller actors (Copes 1986; Igoe and Brockington 2007). The development of this management approach in Canada's Pacific fisheries was accompanied by a large vessel buyback program and increased gear and geographic restrictions on fisheries, collectively introduced under the DFO's Mifflin Plan in 1996. Together, these recent fleet reduction and privatisation policies have been a strong selective force shaping the demographics of current commercial fishery participants. The policies have resulted in (i) the disproportionate loss of fishing licenses from smaller coastal communities and aboriginals and (ii) the concentration of licenses among more highly capitalised fishing enterprises in a handful of larger population centres (Edwards et al. 2005).

Table 3.1: Groundfish sector structure (pre-integration)

Fishery (gear ^a)	Limited licenses	ITQ ^b	Annual value ^c (million Cdn)	Active licenses ^c	Industry association (year established)
Dogfish (LL)	No	No	\$1.5	44	Dogfish Association (2001)
Lingcod (HL)	No	No	\$1.6	66	Groundfish Hook & Line Association ^d (2003)
Inside Rockfish ^e (HL)	Yes	No	¢2.2	25	None
Outside Rockfish ^e (LL)	Yes	No	\$2.3	77	None
Trawl (Tr)	Yes	Yes	56.4	78	Groundfish Research & Conservation Society (1994)
Halibut (LL)	Yes	Yes	\$50.1	221	Pacific Halibut Management Association (1997)
Sablefish (LL, T)	Yes	Yes	\$23.7	30	Canadian Sablefish Association (1987)

^a HL – hook-and-line, LL – longline, T – trap, Tr – trawl

3.3.2 Management issues

Despite various regulatory and licensing changes throughout the 1990s, groundfish management faced significant environmental and economic challenges at the end of the decade. New oceans legislation prescribed more precautionary management, industry groups were voicing concerns about mounting costs and operational challenges posed by licensing regulations, and a selective fishing policy was being finalised (DFO 2001; Glavin 2001; DFO 2002; PFMI 2003). Most significantly though, rockfish were becoming a focal point of conservation concern (Yamanaka & Lacko 2001). Rockfish are a suite of species with infrequent years of successful recruitment and naturally low rates of population growth, which make them vulnerable to fishing pressure (Parker et al. 2000). Declines in many inshore stocks spurred reductions in some annual total allowable catches (TACs) of up to 75% between 2002 and 2005 (DFO 2007a).

^b ITQ – Individual transferable quota licensing

^c Numbers are averages of years 2002-2005. Values refer to the fishery, not species. The number of active licenses is based on vessels reporting landings within the license type and likely overestimates dedicated dogfish and lingcod vessels.

^d This association was around prior to 2003 but had become inactive. It was reactivated as a lingcod-focused association in 2003. It is also informally referred to as the lingcod association.

^e Inside and Outside Rockfish fisheries are prosecuted along geographically separated areas of the coast, but the individual values of their catch is not distinguished in available DFO data. (Source: (DFO 2007a; DFO 2007b)

Rockfish conservation concerns were compounded by the lack of total mortality data for these species which hindered the informed development of annual TACs (PFMI 2003). In addition to being a target species in the trawl and rockfish fisheries, rockfish are caught as bycatch in the other four groundfish fisheries. The restrictions on retention in those four fisheries were resulting in an unknown amount of at-sea rockfish discards. Partial at-sea observer programs and logbook regulations were in place for the hook-and-line and longline fleets, but there were questions about the reliability of these data (Koolman et al. 2007). Though mortality rates of rockfish discards are not well known (Hannah & Matteson 2007), they are thought to be high (DFO 2002). Thus, the uncertainty around the discarded portion of total catch equated to potentially large errors in calculations of true mortality for rockfish species.

3.3.3 The collaborative planning process

In 2003, DFO decided to commence groundfish management and licensing reforms, emphasising the need for rockfish conservation. Having been the subject of growing scrutiny over the consistency and transparency of their consultation procedures (IDR 2001), they convened a broad stakeholder advisory process called the Commercial Groundfish Initiative. The process, composed of a committee and a sub-committee, was tasked with developing a new approach to commercial groundfish management that would observe five guiding principles identified by DFO (Table 3.2). The Commercial Groundfish Integrated Advisory Committee (CGIAC) included representatives from commercial and recreational fishing interests, government, aboriginal groups, labour, and community organisations. In a departure from the sectorally-based advisory structure then in place for the commercial groundfish fisheries, the sub-committee in the process brought all seven groundfish sectors as well as processors from the CGIAC together as the CIC. The CIC assumed responsibility for developing an integrated management strategy that would be shared with the CGIAC and submitted to DFO for consideration (DMC 2005).

Table 3.2: Guiding principles and final features of the Pilot Integration Proposal

DFO guiding principles	Main features of the
Dro guiding principles	Pilot Integration Proposal (PIP)
1. All rockfish catch must be accounted for	1. Individual vessel accountability for all catch
2. Rockfish catches will be managed according to	2. Individual transferable quotas for dogfish,
established rockfish management areas	lingcod, and rockfish fisheries which were not previously under a quota regime
3. Fishers will be individually accountable for their catch	3. Limited transferability of quotas between all groundfish fisheries to help fishers account for bycatch
4. New monitoring standards will be established and implemented to meet the above three objectives	4. 100% observer coverage or at-sea electronic monitoring
5. Species and stocks of concern will be closely examined and actions such as reduction of TACs and other catch limits will be considered and implemented to be consistent with the	-
precautionary approach for management	

Source: (DMC 2005; DFO 2006)

Working within a consensus-based decision-making framework with two seats for each of the eight participating parties, the CIC began meeting independently of the CGIAC and DFO in monthly closed-door discussions. Industry participants, provincial government agencies, and DFO agreed to a cost-sharing arrangement to fund independent facilitation services and the use of meeting facilities. After the first year, the CIC invited DFO to some of their meetings to provide resources and feedback on the feasibility of implementing the CIC's emerging proposal. Later on, provincial government representatives were also invited in a non-participant role for similar reasons, bringing the total number of parties to 10. In 2005, the CIC submitted a Pilot Integration Proposal (PIP) for groundfish management to CGIAC and DFO for their review (Table 3.2). Acknowledging that many of each sector's target species were bycatch in other sectors, the CIC's proposal expanded on DFO's principles for rockfish management and outlined a plan for accountability and transferability of catch allocations amongst all groundfish stocks (for details see Koolman et al. 2007). Following a period of consultation with other stakeholders, DFO accepted the CIC's proposal and implemented it in April 2006. The CIC continues to meet and refine their agreements in response to the effects of integration.

3.4 Methods

3.4.1 A framework for evaluation

The procedural quality of a collaborative planning process can be defined in different terms. Fairness and effectiveness are two attributes commonly associated with high quality processes. These multi-faceted concepts have been defined in reference to different concepts. For example, fairness can be defined in procedural terms (fairness of the process used to reach a decision), which this research is interested in, or substantive terms (fairness of a decision) (Thibault & Walker 1975; Leventhal 1980). I draw from Webler's (1995) definition, which encompasses some of the key components of procedural fairness described in empirical research: there must be equal opportunities for participants to shape the agenda, develop rules for discourse, speak and question, and influence decisions. I consider a collaborative planning process effective if measures are in place that enable the process to efficiently pursue its objectives (Bellamy et al. 1999). Using these definitions as starting points, I reviewed literature on the evaluation of collaborative environmental planning processes to derive criteria associated with fairness and effectiveness (e.g., Crosby et al. 1986; Susskind & Cruikshank 1987; Moote et al. 1997; Innes & Booher 1999; Lauber & Knuth 1999; Rowe & Frewer 2000; Webler & Tuler 2000; Germain et al. 2001; Hunt & Haider 2001; McCool & Guthrie 2001; Smith & McDonough 2001; Leach et al. 2002; Halvorsen 2003; Frame et al. 2004; Mascarenhas & Scarce 2004; Branch & Bradbury 2006; Dalton 2006). From this review, I synthesised 16 of the most commonly cited procedural criteria that (i) were relevant to this case and (ii) captured micro-level dynamics of participation in decision-making, such as aspects of small group interaction, necessary for understanding how and why collaborative processes are effective (Webler 1995) (Table 3.3).

Table 3.3: Procedural evaluation criteria

Process structure

- 1. Clear purpose: process has a clearly articulated purpose
- 2. *Incentive to participate:* there are incentives for stakeholders to participate
- 3. *Full representation*: participants are broadly representative of those groups with an interest in the issues negotiated. The representative selection process is transparent and resistant to manipulation.
- 4. *Procedural framework*: participants collaborate to develop principles, rules, and operating procedures for the process that are responsive to their needs.
- 5. *Continuous involvement*: participants are involved in decisions throughout the different stages of process planning and decision-making.
- 6. *Flexibility*: participants and convenor are prepared to adapt plans, process, or scope where advantageous and agreed upon.
- 7. Sufficient scope: the process addresses all of the relevant aspects of the issue.
- 8. *Effective facilitation*: process is lead by an independent, effective facilitator.

Decision-making process

- 9. Equal opportunity: process provides participants equal opportunity to influence decisions.
- 10. *Freedom to explore*: participants fully explore and discuss all proposed alternatives before decisions are taken.
- 11. *Transparency*: participants and those outside process can determine how decisions are made and by whom.

Support

- 12. *Quality information*: the best available information is provided to the process and there are opportunities to discuss its meaning.
- 13. *Adequate resources*: money and expertise are provided for the process and to enable equal participation of all stakeholders.
- 14. *Adequate time*: deadlines allow enough time for informed decisions but also act as incentives for efficient progress.

Participant conduct

- 15. *Commitment*: participants are committed to seeking solutions within the process.
- 16. *Good personal conduct*: participants partake in open, interest-based negotiations and are respectful of the interests and contributions of others.

3.4.2 Research design and analysis

All of the primary representatives from each of the sectors at the CIC table were invited to participate in a semi-structured interview (Kvale 1996). Between June and September 2007, I conducted 15 interviews with representatives from eight of the 10 parties at the CIC table, including all seven fisheries sectors that were the main negotiating parties in the process. Interviews averaged two hours in length and consisted of questions about the performance of the CIC process according to the framework criteria as well as openended questions about the strengths, weaknesses, and obstacles within the process.

Correspondence and reports about the process and the groundfish sectors were also reviewed to develop a detailed understanding of the case (Yin 1994).

Interview data were transcribed and then analysed using QSR's N6 qualitative research software program (QSR International Pty Ltd 2002). Analysis consisted of coding segments of the interview transcripts according to the pre-established 'themes' of the evaluation framework criteria, although additional codes not accounted for by the criteria were also created (Boyatzis 1998). I examined commonalities and differences within the codes, comparing sentiments of interviewees from different sectors and from the three wealthier sectors versus the four less wealthy sectors (Yin 1994). Interviewees' evaluative responses to the CIC process' performance on each criterion were interpreted as positive or negative and responses were summed for presentation here. The semi-structured nature of the interviews created different numbers of responses for some criteria, thus results are reported in percentages for consistency⁴. Responses to openended questions about strengths and weaknesses are reported as tallies.

Direct quotations from respondents are included to illustrate some of the issues described in the results. Due to anonymity concerns, sectors are not specified and names of respondents are pseudonyms.

3.5 Results

Thirteen of the 15 interviewees, accounting for seven of the eight CIC parties interviewed, provided primarily positive evaluations of the process' fairness and effectiveness. The remaining two interviewees, both associated with the same sector (sector A), were more critical of the process and the resultant PIP. No response patterns emerged from a comparison of participants' responses from wealthier and less wealthy sectors. Evaluation results are presented under the evaluation framework's four process features (Table 3), focusing on criteria that were important or contentious among respondents.

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⁴ The number of responses to interview questions about individual criteria ranged between 13-15.

3.5.1 Process structure

All interviewees reported that they experienced a strong incentive to take part in the CIC process, which many cited as essential to promoting agreement between the sectors (Table 3.4). Interviewees explained that if their sector had not participated in the CIC process, their interests would have been overlooked in CIC decisions. There was also a collective incentive for the CIC to negotiate a management proposal because the alternative of DFO imposing management reforms was regarded as much less desirable:

We knew we wouldn't like the way they [DFO] did it. They'd try and do their best, but they wouldn't have a clue how to do it in a way that wouldn't impact a lot of people negatively...we didn't want to turn over the power of that decision to the department [DFO]. (Seymour, CIC member)

All interviewees also believed the rules and principles within the CIC's procedural framework were reasonably clear. Several respondents mentioned the consensual development of process principles which set rules for personal conduct and bounded possible outcomes as an important element of the process. These principles facilitated cooperation, mollified sector concerns about being infiltrated or overtaken by other sectors, and provided benchmarks against which the CIC could consider the suitability of management strategies proposed by sectors throughout the planning process:

In the development of them [principles]...there was a lot of common ground and a lot of working together, and a lot respect built. (*Stu, CIC member*)

Though rules were clear, respondents indicated rules were not exhaustive. Many of the CIC participants held licenses or quota in multiple groundfish fisheries which fuelled conflict of interest accusations and strained relations between several sectors.

Respondents from these sectors mentioned this dynamic as one of the most unpleasant aspects of the CIC process, yet no protocol was developed to address conflicts of interest. A more detailed code of conduct that would include conflict of interest protocols such as the disclosure of holdings was a commonly suggested improvement for the CIC process (Table 3.5).

Respondents from the majority of sectors were unclear on the representative selection process for other sectors. The lack of consistency in the selection process fuelled speculation about representatives' motives for participating in the CIC. It also contributed to the common perception among interviewees that DFO often tries to manipulate the composition of consultative and advisory bodies. Representatives were divided on whether the CIC was fully representative of commercial groundfish interests, though all recognised the difficulty of appropriate representation. Challenges cited included representation posed by a lack of organisation and no efficient means of communication with constituents in some fisheries. Sixty percent of respondents felt the CIC process was as representative as possible given these challenges:

The people there were representative probably with a majority of people within their interest groups – not really representative of everybody because the opinion diverged so much that I don't know that you really could do that. (Bob, CIC member)

All respondents found the process sufficiently flexible, suggesting that because the CIC was working with new ideas and limited data in an unfamiliar consensus decision-making format, they needed flexibility to adapt as they learned. Sixty two percent agreed the scope of the process was appropriate, and 85% agreed the CIC has had the opportunity to be involved throughout the process (Figure 3.1). Key to all three of these criteria appears to be participants' concept of the CIC as a living entity and their integration proposal as a work in progress. By continuing to meet, they can respond to issues arising from integration as they become apparent.

Participants' Process Evaluations

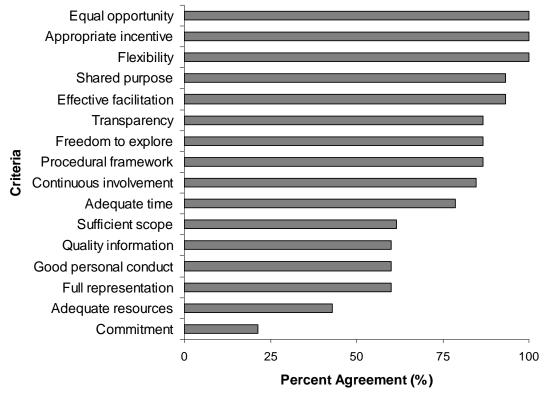


Figure 3.1: Percentage of respondents who agree that each criterion was met within CIC process

All respondents stated facilitation was necessary and 87% agreed that the facilitator was sufficiently fair and effective. Twelve respondents cited the facilitation as an essential element of the process (Table 3.4). The facilitator's key traits were (i) his independence from DFO and the fishing industry and (ii) his experience with consensus decision-making, and (iii) his role as a force counteracting power imbalances between wealthier and smaller sectors:

The fact is that by having an independent facilitator and by having a process that was actually designed as a consensus process, including building our own principles and objectives and so on, that it strengthened the hand of a lot of the people in that room that normally have no power at all in the political process. (*Lou, CIC member*)

3.5.2 Decision-making process

Ninety three percent of respondents stated that despite widespread scepticism about the plausibility of the consensus format at the process' outset, they believe in retrospect that this was the only format that could have satisfied all sectors' concerns about participating in the CIC (Table 3.4).

Eighty seven percent of interviewees agreed the CIC had the freedom to explore many different ideas about how to redesign groundfish management. Interviewees from sector A disagreed, stating that the CIC focused on developing one model for integration. Several respondents mentioned that fully examining all ideas and 'showing their work' before arriving at answers helped sector representatives and DFO develop common understandings which facilitated 'buy-in' on decisions:

We went up all kinds of blind alleys and had to turn around and come back...sometimes it happened just because we had to go all the way to the end of that blind alley and we had to feel all the way around and everybody had to be convinced that it was a blind alley before we could go back and take another path. (*Willy, CIC member*)

Respondents acknowledged that the CIC's closed meetings and confidential meeting minutes reduced the transparency of the process, but 93% felt this was appropriate under the circumstances as it allowed more open discussion about sensitive issues like sectoral bycatch and potential management reforms.

Table 3.4: Process aspects most commonly mentioned as key strengths

Strength	Mentions ^a	Functions
Consensus	14	Equalises influence on decisions, forces participants past positioning
Independent facilitation	12	Guides & teaches process, enforces rules, counteracts power imbalances
Incentive	11	Undesirable consequences of non-agreement motivates commitment and compromise
High quality participants	8	Cooperate and innovate, lead by example, willing to change
Process independence	5	Helps prevent government manipulation
Respectful communication	4	Builds relationships, facilitates cooperation, keeps process focused on finding solutions
Government support	4	Encourages participant commitment, facilitates informed decisions by providing requisite time and information

^a Number of participants volunteering aspect as a strength

Table 3.5: Process aspects most commonly mentioned as key areas for improvement

Weakness	Mentions ^a	Suggested improvements
Representative selection	6	DFO should create and enforce a formalised, consistent, and
process		transparent representative selection process
Code of conduct	6	CIC should create more detailed rules/agreements
		addressing conflicts of interest and conduct outside process
Government support	4	DFO should provide greater political support, financial
		support, and human resources

^a Number of participants volunteering aspect as a weakness

3.5.3 Support

Most interviewees reported that accessing fisheries information from DFO and affiliated service providers was sometimes difficult and time consuming. Bycatch and discard mortality data was lacking, resulting in the use of anecdotal or second hand information which was sometimes contentious. Sixty percent of respondents thought that despite these challenges, the availability of information was generally sufficient. DFO faced the most criticism from interviewees for their financial and human resource support, which 57% characterised as minimal and reluctant. Interviewees criticised the lateness of DFO's process funding payments and a lack of expertise and funding for developing the technology necessary to implement the PIP. The lack of support meant some CIC members invested personal resources to cover the costs of participation.

3.5.4 Participant conduct

There were two perspectives on the level of commitment to the CIC process among interviewees. Sector A respondents believed all participants were committed to developing solutions in the CIC process. Interviewees from all other sectors believed that although sector A was a committed attendee, they did not participate in good faith as all other sectors did, hence the low percentage (21%) of overall agreement that the 'Commitment' criterion was met (Figure 3.1). These respondents pointed to sector A's lobbying and end-runs away from the CIC table as the biggest hurdle in the process. It eroded trust among sectors and made agreements more difficult to reach:

That's the single biggest issue that I think...was in most people at CIC's hearts and minds and passions about ...what went sideways during the development of that plan: individuals, or individual sectors trying to disrupt it. (*Moe, CIC member*)

The efforts of sector A to pursue their interests outside the CIC made DFO's insistence that issues be resolved within the CIC a key to progress for some participants (Table 3.4):

To the government's credit from what I understand is that [DFO official] and others constantly said to them "go back to the table, that's where you're doing your work, and figure it out there." And that's what needed to happen. If they didn't get that message, it would have unravelled everything. (*Lou, CIC member*)

Interviewees indicated the commitment of most participants generated additional benefits. These included high continuity of individuals' participation in the process, a willingness to compromise, and the dedication of time and resources that was particularly valuable in the absence of sufficient financial and human resource support from DFO.

All interviewees agreed respectful and open communication was a very positive aspect of the process. Sixty percent of respondents thought participants remained mostly respectful, the remaining 40% characterised respectfulness as more variable.

3.5.5 Additional criteria

Interviewees identified several factors contributing to a fair and effective collaborative process not covered by the evaluation framework. Three stand out for their importance and frequent mention: political support, high quality individuals, and participants' prior experiences. Several interviewees stressed that as the convening agency, DFO must demonstrate consistent public support for, and explanation of, the process to secure participant commitment and counteract the spread of misinformation outside the process. This support must extend beyond departments directly involved to the highest levels of the governing agency in order to mitigate the destabilising influence of lobbying campaigns outside the process. Respondents also emphasised the influence that individuals' characters have on moving the process forward (Table 3.4). Last, all interviewees had observed or experienced the failure of certain fisheries to address similar management issues in the past. Negative impacts of the subsequent management measures acted as a powerful motivator to avoid a similar fate. Additionally, consensus in a similar restructuring process from the 1990s within the trawl sector acted as a positive incentive, demonstrating that agreement on accountability measures and integration involving multiple species was possible.

3.6 Discussion

3.6.1 Understanding success

Despite mistrust, inexperience working together, and inexperience with the consensus decision-making format at the process outset, the CIC successfully developed a proposal for integrated groundfish management that was adopted by DFO. Many interviewees expressed surprise that the CIC was able to generate a proposal acceptable to the diverse interests of the different fisheries at the table, and stated that such an achievement was possible due largely to the design of the planning process. Interviewees' responses suggest that three design elements were indispensable: (i) a shared incentive to participate, (ii) consensus-based decision-making, and (iii) independent facilitation. The

absence of any one of these three elements would have likely precluded the possibility of the CIC reaching a comprehensive agreement on fisheries management reforms that all participants could live with, if not endorse.

The three indispensable elements related differently to fairness and effectiveness. The perceived ability of the consensus model to be effective was mediated primarily by the strength of the incentive to participate, which catalysed a high degree of participant commitment to seeking agreement. Implicit here is the importance of the CIC's exclusively commercial membership to DFO's ability to construct an effective incentive. Participants' livelihoods were dependent on the groundfish fishery and they were united in their need for regulatory access to rockfish as directed catch or bycatch. DFO had recognised authority to control that access, giving them a clear 'hammer' to hold over the heads of participants. DFO's ability to construct similarly persuasive incentives that would unite commercial and other stakeholders is weaker. Sectors such as recreational fisheries and aboriginal groups have significantly different interests from those of commercial fisheries and there are divergent views about resource ownership and the legitimacy of DFO's authority to manage the resource. Though beyond the scope of this chapter, this raises important questions about whether processes like the CIC are fair if potentially legitimate stakeholders are marginalised or excluded from decision-making in the interest of expediting agreement.

Participants characterised consensus decision-making and independent facilitation as the keys to ensuring fairness. The disparities in the values of the fisheries and the degree of organisation among sectors was a common cause for concern; wealthy sectors feared losing their valuable exclusivity of access to their fisheries, while less wealthy sectors worried that the political clout of wealthy sectors could direct reforms in a way that would eliminate their ability to persist. Consensus provided essential security against these possibilities. Facilitation not only enforced this security, its independence from all vested interests, particularly government, was insulation against the potential for process manipulation that has hobbled other collaborative planning efforts (Wondolleck & Ryan 1999; Pinkerton 2007b).

The importance of these elements in the CIC process supports much of the literature on successful shared decision-making. The necessity of sufficient group incentives to reach agreement has been noted in discussions of non zero-sum game theory (Schelling 1960), dispute resolution (Bingham 1986), and negotiation (Fisher & Ury 1991). The preceding paragraph highlights the value of consensus for avoiding the 'tyranny of the majority' which can result from alternate decision-making formats like voting (Susskind & Cruikshank 1987). Also, independent and professional facilitation is a commonly-cited success factor in case studies of collaborative processes (Leach & Pelkey 2001). However, deriving a universally applicable theory of the elements essential to success may not be realistic. Past efforts, such as Harter's (1982) eight hypothesised preconditions for success of negotiated rule-making were later debated using cases where agreement was reached in the absence of some of Harter's preconditions (Susskind & McMahon 1985). Leach and Sabatier (2003) found that the use of a professional facilitator was negatively correlated with the level of agreement reached in a review of 50 collaborative processes. Moreover, participants from some case studies have ranked different elements of greater importance than the three key elements identified in this case (Schuett et al. 2001; Leach & Sabatier 2003). The variable importance and effect of procedural elements may be partly explained by the potential for collaborative planning processes to interact with the history and context of the case, and the experiences of all involved (Chess & Purcell 1999). Thus, what may be useful is the development of theories about essential procedural elements that are responsive to certain contextual details of a case.

Contextual factors can not only affect the importance of procedural elements, they themselves can be key determinants of process success; results from this case and others (Leach & Pelkey 2001; Smith & Gilden 2002; Knapman 2005) document the significance of high quality participants (Table 3.4). This suggests a fair and effective collaborative process is not obtained wholly through the planning method's design and structure alone.

3.6.2 Obstacles and improvements

One indispensable element, the incentive to participate, was also implicated in the obstacles cited for the process. Not all sectors saw a negotiated agreement to be in their best interests. Sector A respondents perceived diminished control over resource access with little potential for compensatory gains – a situation that has stifled cooperation in other shared fisheries decision-making contexts (Chuenpagdee & Jentoft 2007). However, sector A saw the alternative of not participating in the process as even less appealing, given the risk that agreements made in the absence of any one sector could still have been ratified. Consequently, they remained a CIC participant while lobbying against the PIP outside the CIC's negotiations, causing tensions that strained relations among sectors and making agreements more difficult to reach.

Other obstacles stemmed from how sectors were represented, often one of the primary challenges to designing user participation in fisheries management (McCay & Jentoft 1996). While the prevalence of individuals with multiple fisheries holdings (licenses and quotas) on the CIC was not necessarily atypical of the constituents they represented, it did complicate perceptions of representatives' motives among some fellow representatives. This issue is likely relevant elsewhere given the prevalence of multiple holdings among fishers in industrialised fisheries around the world (e.g., Holland et al. 1999; Scholz et al. 2004; Stump & Kriwoken 2006). Research on the effects of individual representatives for a sector that have vested interests in other sectors has not been the subject of much research attention in fisheries (Jentoft et al. 2003). Cloutier (1996) describes problems of perceived conflicts of interest, such as unrepresentative actions in self-interest, among fishery representatives on Regional Fishery Management Councils in the United States. These problems are similar to those reported in this case, although her work does not explicitly examine representatives with multiple vested interests.

Respondents pointed to the variation and informality of the representative selection process among sectors as further supporting grounds for their concerns about representation. Their suggestions of (i) a more formalised and transparent selection

process instead of accepting or appointing volunteers, (ii) a more detailed code of conduct requiring the disclosure of holdings, and (iii) broader and more proactive communication with constituents may be helpful. The development of sector associations appears to be particularly constructive in achieving the latter (Young et al. 1996), provided that they are inclusive of their sector.

3.6.3 Practical implications

Interviewees' responses reaffirm that government plays numerous influential roles in collaborative processes (Chess & Purcell 1999). These roles are a departure from government's traditional position as simply the command-and-control regulator, and they require careful balancing (Wondolleck & Ryan 1999). While government should support the process, that support cannot bleed into influence over its progress or outcome (Rowe & Frewer 2000). They must be flexible in some respects (e.g., a process design that can be moulded by participants to meet their needs), but consistent in others (e.g., establishing a formalised representative selection process). Further, their distance from the process must be sufficient to foster participants' ownership of the process and the outcome, but they must consistently re-affirm that the process was convened to address government-mandated reforms in order to maintain the legitimacy of the process in the eyes of outsider observers. The presence of "Government support" among the process' cited strengths and weaknesses illustrates the challenge of satisfactorily fulfilling these tasks.

Determining whether a better decision-making process leads to a better outcome is an important but difficult policy question (Beierle 1999). Practical and ethical challenges of experimental research on collaborative planning processes are compounded by their interactions with context (Smith et al. 1997; Dorcey & McDaniels 2001). My data document *perceptions* that a better process led to a better outcome, but causality in this relationship is difficult to determine. Procedural fairness research has shown that perceptions of a fairer decision-making process increase the acceptability of suboptimal outcomes (Walker et al. 1974; Tyler & Rasinski 1991; Lauber & Knuth 1999). However,

perceived favourability of an outcome can also work in the other direction, influencing evaluations of the decision-making process (Lind et al. 1997).

Positive *ad hoc* collaborative planning experiences like the CIC can act as a stepping stone to developing more permanent collaborative partnerships, the promise of which has been widely discussed under the rubric of co-management (e.g., Pinkerton 1994; Wilson et al. 2003; Pomeroy et al. 2007). Such planning processes absorb a portion of the front-loaded social and political transaction costs associated with bringing multiple sectors together under new institutional arrangements like co-management (Heylings & Bravo 2007) and provide an opportunity to build on newly established relationships and trust between participating stakeholders (Pretty 2003). The ongoing and integrated participation of groundfish sectors should enable more responsive management of the cross-cutting effects of fisheries that are ecologically and operationally interactive.

3.7 Literature cited

Albin, C. 1993. The role of fairness in negotiation. Negotiation Journal-on the Process of Dispute Settlement **9**(3):223-244.

Alpizar, M. A. Q. 2006. Participation and fisheries management in Costa Rica: From theory to practice. Marine Policy **30**(6):641-650.

Baine, M., M. Howard, S. Kerr, G. Edgar, and V. Toral. 2007. Coastal and marine resource management in the Galapagos Islands and the Archipelago of San Andres: Issues, problems and opportunities. Ocean & Coastal Management **50**(3-4):148-173.

Beierle, T. C. 1999. Using social goals to evaluate public participation in environmental decisions. Policy Studies Review **16**(3/4):75-105.

Bellamy, J. A., G. T. McDonald, G. J. Syme, and J. E. Butterworth. 1999. Evaluating integrated resource management. Society & Natural Resources **12**(4):337-353.

Bingham, G. 1986. Resolving Environmental Disputes: A Decade of Experience. The Conservation Foundation, Washington, DC.

Bjorndal, T., and G. Munro. 1999. The economics of fisheries management: a survey. Pages 153-188 in T. Tietenberg and H. Folmer, editors. The International Yearbook of Environmental and Resource Economics 1998/1999. Edward Elgar Publishing, Northampton, MA.

Boyatzis, R. E. 1998. Transforming Qualitative Information: Thematic Analysis and Code Development. Sage, Thousand Oaks, CA.

Branch, K. M., and J. A. Bradbury. 2006. Comparison of DOE and army advisory boards: Application of a conceptual framework for evaluating public participation in environmental risk decision making. Policy Studies Journal **34**(4):723-753.

Butler, C. 2004. Fishing for a pension or peanuts? Samudra (39):8-14.

Butler, M. J., L. L. Steele, and R. A. Robertson. 2001. Adaptive resource management in the New England groundfish fishery: Implications for public participation and impact assessment. Society & Natural Resources **14**(9):791-801.

Chess, C., and K. Purcell. 1999. Public participation and the environment: Do we know what works? Environmental Science & Technology **33**(16):2685-2692.

Chuenpagdee, R., and S. Jentoft. 2007. Step zero for fisheries co-management: What precedes implementation. Marine Policy **31**(6):657-668.

Cloutier, T. 1996. Conflicts of interest on regional fishery management councils: Corruption or cooperative management? Ocean and Coastal Law Journal **2:**101-152.

Cochrane, K. L. 2000. Reconciling sustainability, economic efficiency, and equity in fisheries: The one that got away? Fish and Fisheries **1**(1):3-21.

Coffey, C. 2005. What role for public participation in fisheries governance? Pages 27-44 in T. S. Gray, editor. Participation in Fisheries Governance. Springer, Dordrecht.

Copes, P. 1986. A critical-review of the individual quota as a device in fisheries management. Land Economics **62**(3):278-291.

Crosby, N., J. M. Kelly, and P. Schaefer. 1986. Citizens panels - a new approach to citizen participation. Public Administration Review **46**(2):170-178.

da Silva, P. P., and A. Kitts. 2006. Collaborative fisheries management in the northeast US: Emerging initiatives and future directions. Marine Policy **30**(6):832-841.

Dalton, T. M. 2006. Exploring participants' views of participatory coastal and marine resource management processes. Coastal Management **34**(4):351-367.

Day, J. C., and T. I. Gunton. 2003. The theory and practice of collaborative planning in resource and environmental management. Environments **31**(2):5-20.

Diamond Management Consulting Inc. (DMC). 2005. Commercial Industry Caucus Pilot Integration Proposal.

Dorcey, A. H. J., and T. McDaniels. 2001. Great expectations, mixed results: trends in citizen involvement in Canadian environmental governance. Pages 247-302 in E. A. Parson, editor. Governing the Environment. University of Toronto Press, Toronto.

Dyer, C., and J. R. McGoodwin, editors. 1994. Folk Management in the World's Fisheries. University of Colorado Press, Niwot.

Edwards, D. N., A. Scholz, E. E. Tamm, and C. Steinback. 2005. The catch 22 of licensing policy: socio-economic impacts in British Columbia's commercial ocean fisheries. In U. R. Sumaila and A. D. Marsden, editors. 2005 North American Association of Fisheries Economists Forum Proceedings. Fisheries Centre Research Reports **14**(1): 65-76. University of British Columbia Fisheries Centre, Vancouver.

Elliott, G., B. Wiltshire, I. A. Manan, and S. Wismer. 2001. Community participation in marine protected area management: Wakatobi national park, Sulawesi, Indonesia. Coastal Management **29**(4):295-316.

Fiorino, D. J. 1990. Citizen participation and environmental risk - a survey of institutional mechanisms. Science Technology & Human Values **15**(2):226-243.

Fisher, R., and W. Ury. 1991. Getting to Yes: Negotiating Agreement Without Giving In. 2nd edition. Penguin Books, Toronto.

Fisheries and Oceans Canada (DFO). 2001. A Policy for Selective Fishing in Canada's Pacific Fisheries.

Fisheries and Oceans Canada (DFO). 2002. Canada's Oceans Strategy. Fisheries and Oceans Canada.

Fisheries and Oceans Canada (DFO). 2002. Integrated Fisheries Management Plan: Rockfish Hook and Line Inside. Available from http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/MPLANS/archive/2002/InsideZN02pl.PDF (accessed 08/27 2007).

Fisheries and Oceans Canada (DFO). 2005. Pacific Region - State of the Fisheries 2005. Fisheries and Oceans Canada, Pacific Region.

Fisheries and Oceans Canada (DFO). 2006. Pacific Region Integrated Fisheries Management Plan: Groundfish. Fisheries and Oceans Canada Pacific Region.

Fisheries and Oceans Canada (DFO). 2007a. Archived Fisheries Management Plans 2002-2005. Available from http://www-ops2.pac.dfo-mpo.gc.ca/xnet/content/MPLANS/archive.htm (accessed 09/12 2007).

Fisheries and Oceans Canada (DFO). 2007b. Regional Data Unit statistics.

Frame, T. M., T. Gunton, and J. C. Day. 2004. The role of collaboration in environmental management: An evaluation of land and resource planning in British Columbia. Journal of Environmental Planning and Management **47**(1):59-82.

Germain, R. H., D. W. Floyd, and S. V. Stehman. 2001. Public perceptions of the USDA forest service public participation process. Forest Policy and Economics 3(3-4):113-124.

Glavin, T. 2001. The Conservation of Marine Biological Diversity and Species Abundance on Canada's West Coast: Institutional Impediments. Groundfish: A Case Study. Sierra Club of British Columbia.

Government of Canada. 1996. Oceans Act. Available from http://lois.justice.gc.ca/en/O-2.4/text.html edition (accessed 04/12 2007).

Gray, T. S. 2005. Theorising about participatory fisheries governance. Pages 1-26 in T. S. Gray, editor. Participation in Fisheries Governance. Springer, Dordrecht.

Halvorsen, K. E. 2003. Assessing the effects of public participation. Public Administration Review **63**(5):535-543.

Hannah, R. W., and K. M. Matteson. 2007. Behavior of nine species of Pacific rockfish after hook-and-line capture, recompression, and release. Transactions of the American Fisheries Society **136**(1):24-33.

Harter, P. J. 1982. Negotiating regulations - a cure for malaise. Georgetown Law Journal **71**(1):1-118.

Hernes, H. K., S. Jentoft, and K. H. Mikalsen. 2005. Fisheries governance, social justice and participatory decision-making. Pages 103-118 in T. S. Gray, editor. Participation in Fisheries Governance. Springer, Dordrecht.

Heylings, P., and M. Bravo. 2007. Evaluating governance: A process for understanding how co-management is functioning, and why, in the galapagos marine reserve. Ocean & Coastal Management **50**(3-4):174-208.

Holland, D., E. Gudmundsson, and J. Gates. 1999. Do fishing vessel buyback programs work: A survey of the evidence. Marine Policy **23**(1):47-69.

Hunt, L., and W. Haider. 2001. Fair and effective decision making in forest management planning. Society & Natural Resources **14**(10):873-887.

Igoe, J., and D. Brockington. 2007. Neoliberal conservation: A brief introduction. Conservation and Society **5**(4):432-449.

Innes, J. E., and D. E. Booher. 1999. Consensus building and complex adaptive systems - A framework for evaluating collaborative planning. Journal of the American Planning Association **65**(4):412-423.

Institute for Dispute Resolution (IDR). 2001. Independent Review of Improved Decision Making in the Pacific Salmon Fishery.

Jentoft, S., K. H. Mikalsen, and H. K. Hernes. 2003. Representation in fisheries comanagement. Pages 281-292 in D. C. Wilson, J. R. Nielsen and P. Degnbol, editors. The Fisheries Co-management Experience: Accomplishments, Challenges and Prospects. Kluwer, Dordrecht.

Jentoft, S., B. J. McCay, and D. C. Wilson. 1998. Social theory and fisheries comanagement. Marine Policy **22**(4-5):423-436.

Knapman, P. 2005. Participatory governance in inshore fisheries: co-management in England and Wales. Pages 163-192 in T. S. Gray, editor. Participation in Fisheries Governance. Springer, Dordrecht.

Koolman, J., B. Mose, R. D. Stanley, and D. Trager. 2007. Developing an integrated commercial groundfish strategy for British Columbia: insights gained about participatory management. Pages 287-300 in J. Heifetz, G. DiCosimo A.J., M. S. Love, V. M. O'Connell and R. D. Stanley, editors. Biology, Assessment, and Management of North Pacific Rockfishes. Alaska Sea Grant College Program, Fairbanks.

Kvale, S. 1996. InterViews: An Introduction to Qualitative Research Interviewing. Sage Publications, Thousand Oaks.

Lauber, T. B., and B. A. Knuth. 1999. Measuring fairness in citizen participation: A case study of moose management. Society & Natural Resources **12**(1):19-37.

Leach, W., and P. Sabatier. 2003. Facilitators, coordinators and outcomes. Pages 148-171 in R. O'Leary and L. B. Bingham, editors. The Promise and Performance of Environmental Conflict Resolution. Resources for the Future, Washington, DC.

Leach, W. D., and N. W. Pelkey. 2001. Making watershed partnerships work: A review of the empirical literature. Journal of Water Resources Planning and Management-Asce **127**(6):378-385.

Leach, W. D., N. W. Pelkey, and P. A. Sabatier. 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.

Leventhal, G. S. 1980. What should be done with equity theory? New approaches to the study of fairness in social relationships. Pages 27-55 in K. J. Gergen, M. S. Greenberg and R. H. Willis, editors. Social Exchange: Advances in Theory and Research. John Wiley, New York.

Lind, E. A., T. R. Tyler, and Y. J. Huo. 1997. Procedural context and culture: Variation in the antecedents of procedural justice judgements. Journal of Personality and Social Psychology **73**(4):767-780.

MacInnes, D., and A. Davis. 1996. Representational management or management of representation?: The place of fishers in Atlantic Canadian fisheries management. Pages 317-332 in R. M. Meyer, C. Zhang, M. L. Windsor, B. J. McCay, L. J. Hushak and R. M. Muth, editors. Fisheries resource utilization and policy. Proceedings of the World Fisheries Congress, Theme 2. Science Publishers, Lebanon, USA.

Mascarenhas, M., and R. Scarce. 2004. "The intention was good": Legitimacy, consensus-based decision making, and the case of forest planning in British Columbia, canada. Society & Natural Resources **17**(1):17-38.

McCay, B. J. 1996. Foxes and others in the henhouse? Environmentalists and the fishing industry in the U.S. Regional Council System. Pages 380-390 in R. M. Meyer, C. Zhang, M. L. Windsor, B. J. McCay and R. M. Muth, editors. Fisheries Resource Utilization and Policy. Proceedings of the World Fisheries Congress, Theme 2. Science Publishers, Inc, Lebanon.

McCay, B. J., and S. Jentoft. 1996. From the bottom up: Participatory issues in fisheries management. Society & Natural Resources **9**(3):237-250.

McCool, S. F., and K. Guthrie. 2001. Mapping the dimensions of successful public participation in messy natural resources management situations. Society & Natural Resources **14**(4):309-323.

McManus, L. T., A. C. Yambao, S. G. Salmo, and P. M. Alino. 1999. Bolinao, Northern Philippines: Participatory Planning for Coastal Development. Pages 151-163 in D. Buckles, editor. Cultivating Peace: Conflict and Collaboration in Natural Resource Management. International Development Research Centre, Ottawa.

Mikalsen, K. H., and S. Jentoft. 2001. From user-groups to stakeholders? the public interest in fisheries management. Marine Policy **25**(4):281-292.

Moote, M. A., M. P. McClaran, and D. K. Chickering. 1997. Theory in practice: Applying participatory democracy theory to public land planning. Environmental Management **21**(6):877-889.

Mow, J. M., E. Taylor, M. Howard, M. Baine, E. Connolly, and M. Chiquillo. 2007. Collaborative planning and management of the San Andres Archipelago's coastal and marine resources: A short communication on the evolution of the seaflower marine protected area. Ocean & Coastal Management **50**(3-4):209-222.

Olsen, M. E. 1982. Participatory Pluralism. Nelson-Hall, Chicago.

Pacific Fisheries Management Inc (PFMI). 2003. Future Direction of the Commercial Groundfish Fisheries in British Columbia: Discussion Paper, June 2003. BC Ministry of Agriculture, Food and Fisheries.

Parker, S. J., S. A. Berkeley, J. T. Golden, D. R. Gunderson, J. Heifetz, M. A. Hixon, R. Larson, B. M. Leaman, M. S. Love, J. A. Musick, V. M. O'Connell, S. Ralston, H. J. Weeks, and M. M. Yoklavich. 2000. Management of Pacific rockfish. Fisheries **25**(3):22-30.

Pinkerton, E., editor. 1989. Cooperative Management of Local Fisheries: New Directions for Improved Management and Community Development. University of British Columbia Press, Vancouver.

Pinkerton, E. 1996. The contribution of watershed-based multi-party co-management agreements to dispute resolution: The Skeena Watershed Committee. Environments **23**(2):51-68.

Pinkerton, E. 2007. Watershed partnerships: how much have we learned? in C. Krueger and C. Zimmerman, editors. Symposium on th Sustainability of the Arctic-Yukon-Kuskokwim Salmon Fisheries. Alaska SeaGrant, Anchorage.

Pomeroy, R., J. Parks, R. Pollnac, T. Campson, E. Genio, C. Marlessy, E. Holle, M. Pido, A. Nissapa, and S. Boromthanarat. 2007. Fish wars: Conflict and collaboration in fisheries management in Southeast Asia. Marine Policy **31**(6):645-656.

Pretty, J. 2003. Social capital and the collective management of resources. Science **302**(5652):1912-1914.

Renn, O., T. Webler, and P. Wiedemann. 1995. A Need for Discourse on Citizen Participation: Objectives and Structure of the Book. Pages 1-16 in O. Renn, T. Webler and P. Wiedemann, editors. Fairness and Competence in Citizen Participation. Kluwer, Dordrecht.

Rowe, G., and L. J. Frewer. 2000. Public participation methods: A framework for evaluation. Science Technology & Human Values **25**(1):3-29.

Schelling, T. S. 1960. The Strategy of Conflict. Harvard University, Cambridge.

Scholz, A., K. Bonzon, R. Fujita, N. Benjamin, N. Woodling, P. Black, and C. Steinback. 2004. Participatory socioeconomic analysis: Drawing on fishermen's knowledge for marine protected area planning in California. Marine Policy **28**(4):335-349.

Schuett, M. A., S. W. Selin, and D. S. Carr. 2001. Making it work: Keys to successful collaboration in natural resource management. Environmental Management **27**(4):587-593.

Sidaway, R. 2005. Resolving Environmental Disputes: From Conflict to Consensus. Earthscan, Sterling, VA.

Smith, C. L., and J. Gilden. 2002. Assets to move watershed councils from assessment to action. Journal of the American Water Resources Association **38**(3):653-663.

Smith, L. G. 1984. Public participation in policy making: The state-of-the-art in Canada. Geoforum **15**(2):253-259.

Smith, L. G., C. Y. Nell, and M. V. Prystupa. 1997. The converging dynamics of interest representation in resources management. Environmental Management **21**(2):139-146.

Smith, P. D., and M. H. McDonough. 2001. Beyond public participation: Fairness in natural resource decision making. Society & Natural Resources **14**(3):239-249.

Stump, N. E., and L. K. Kriwoken. 2006. Tasmanian marine protected areas: Attitudes and perceptions of wild capture fishers. Ocean & Coastal Management **49**(5-6):298-307.

Susskind, L., and J. L. Cruikshank. 1987. Breaking the Impasse: Consensual Approaches to Resolving Public Disputes. Basic Books, New York.

Susskind, L., and G. McMahon. 1985. The theory and practice of negotiated rulemaking. Yale Journal on Regulation **3**(1):133-166.

Thibault, J. W., and L. Walker. 1975. Procedural Justice: A Psychological Analysis. Lawrence Erlbaum Associates, Inc., Hillsdale, NJ.

Tyler, T. R., and K. Rasinski. 1991. Procedural justice, institutional legitimacy, and the acceptance of unpopular United States Supreme Court decisions - reply. Law & Society Review **25**(3):621-630.

Verheij, E., S. Makoloweka, and H. Kalombo. 2004. Collaborative coastal management improves coral reefs and fisheries in Tanga, Tanzania. Ocean & Coastal Management **47**(7-8):309-320.

Walker, L., S. LaTour, E. A. Lind, and J. Thibault. 1974. Reactions of participants and observers to modes of adjudication. Journal of Applied Social Psychology **4:**295-310.

Webler, T. 1995. "Right" discourse in citizen participation: An evaluative yardstick. Pages 35-86 in O. Renn, T. Webler and P. Wiedemann, editors. Fairness and Competence in Citizen Participation: Evaluating Models for Environmental Discourse. Kluwer, Dordrecht.

Webler, T., and S. Tuler. 2000. Fairness and competence in citizen participation - theoretical reflections from a case study. Administration & Society **32**(5):566-595.

Wilson, D. C., J. R. Nielsen, and P. Degnbol, editors. 2003. The Fisheries Comanagement Experience: Accomplishments, Challenges, and Prospects. Kluwer, Boston, MA.

Wondolleck, J. M., and S. L. Yaffee. 2000. Making Collaboration Work: Lessons from Innovation in Natural Resource Management. Island Press, Washington, DC.

Wondolleck, J. M., and S. L. Yaffee. 2003. Collaborative ecosystem planning processes in the United States: Evolution and challenges. Environments **31**(2):59-72.

Wondolleck, J. M., and C. M. Ryan. 1999. What hat do I wear now?: An examination of agency roles in collaborative processes. Negotiation Journal-on the Process of Dispute Settlement **15**(2):117-133.

Yamanaka, K. L., and L. C. Lacko. 2001. Inshore Rockfish Stock Assessment for the West Coast of Canada and Recommendations for Management. Canadian Science Advisory Secretariat. Research Document 2001/139.

Yin, R. K. 1994. Case Study Research: Design and Methods. 2nd edition. Sage Publications, Thousand Oaks.

Young, J. A., A. P. Smith, and J. F. Muir. 1996. Representing the individual fishermen: An attitudinal perspective on one PO's membership. Marine Policy **20**(2):157-169.

4 EVALUATING THE ROLE OF THE COMMERCIAL GROUNDFISH INTEGRATED ADVISORY COMMITTEE⁵

4.1 Introduction

Fisheries policy-making is a multi-lateral political process that involves attempts to reconcile conflicting interests among stakeholders. Balancing different interests is becoming more challenging and important as the ways in which the marine environment is valued diversify. Management decisions formerly seen primarily as issues of production and allocation among commercial user groups are now also seen in terms of (i) environmental sustainability, (ii) community well-being, and (iii) allocation between commercial sectors, recreational sectors, and aboriginal groups whose historical resource claims are increasingly recognised (McCay 1996; Mikalsen 1998; Mikalsen & Jentoft 2003). Such is the case in Canada's Pacific groundfish fisheries. Environmental groups and community organisations are identifying unique priorities for fisheries management, commercial sectors must address overlapping catches of multiple species within fully utilised fisheries, the recreational groundfish fishery is growing, and aboriginal groups have requested 50% of all access to commercial fisheries (PFMI 2003a; First Nation Panel on Fisheries 2004).

In accordance with theories of pluralist democracy (Dahl 1982) and the public ownership of fisheries resources, the aforementioned groups are increasingly acknowledged as stakeholders⁶ and granted some form of a voice in decisions that affect them. The participation of commercial user groups in fisheries management decision-making is widely accepted and its various forms, implications, and bounds have been discussed at length (e.g., Pinkerton 1989; Hanna 1995; McCay 1996; Wilson et al. 2003; Gray 2005a).

⁵ A version of this chapter has been submitted for review at a peer-reviewed journal.

⁶ Many aboriginal groups in British Columbia reject the term 'stakeholder' in issues of land and resource use. Unceded rights and title to their traditional territories and resources distinguish them from other interest groups labeled as stakeholders. With no intention of derogating those claims, they are included in the term 'stakeholder' here to remain consistent with common terminology in the broader academic literature.

The more controversial and less understood dimension of participation is the extent to which the non-commercial stakeholders should be involved (Mikalsen & Jentoft in press). This research focuses on the less understood dimension. It examines one model of how diverse stakeholders were involved by governing agencies in a collaborative fisheries management planning process. The Commercial Groundfish Initiative (CGI) advisory process was struck in 2003 to reform the management of Canada's Pacific groundfish fisheries. The CGI grouped stakeholders into two advisory committees with less and more control over the design of reforms, respectively: the Commercial Groundfish Integrated Advisory Committee (CGIAC), broadly representative of commercial and non-commercial stakeholders, and the Commercial Industry Caucus (CIC), a subcommittee composed exclusively of the commercial participants from the CGIAC. In order to identify key criteria of meaningful process involvement for noncommercial stakeholders, I investigate participants' evaluations of the CGIAC's role within the CGI process. Specifically, I explore (i) what roles participants perceived for the CGIAC, (ii) whether the CGIAC's roles were fair given the stakes of participants, and (iii) whether the CGIAC was able to perform its roles effectively. By examining these questions in the context of a multi-committee process, I extend the literature on collaborative fisheries planning, which has highlighted the challenge of asymmetrically involving diverse stakeholders within decision-making processes (e.g., Mikalsen & Jentoft 2001; Jentoft et al. 2003; Nielsen & Christensen 2006) but rarely assessed relevant cases.

The paper proceeds with a review of the theory and rationale for asymmetrically involving stakeholders in management decisions. A case description, the research methods, and the results follow. Then, the discussion section highlights key criteria for meaningfully involving non-commercial stakeholders. It also considers the practical implications of an asymmetrical, multi-committee process design for involving non-commercial stakeholders. A brief conclusion draws together the main findings of the research and links them to related challenges for fisheries management.

4.2 Theoretical background

Similar to other jurisdictions (e.g., Coffey 2005), recent federal oceans legislation and policy in Canada has emphasised broader stakeholder involvement in decision-making (Government of Canada 1996). The 2002 national marine policy framework, Canada's Oceans Strategy, cites collaboration as the central governance principle for a new, integrated mode of oceans management (DFO 2002). However, a collaborative form of governance must address the differences – in kind and in strength – among the 'stakes' of various stakeholders (Fisher & Ury 1991; Jentoft & McCay 1995). Fisheries management entails decisions on many issues, and the variety of interests among stakeholders implies that some stakes will be more affected than others by any given decision. A common practice that follows is the allocation of a greater say in decisions to those with more at stake, often as defined by their degree of dependency and the extent of their effects on the claimed resources (Mikalsen 1998; Brunk & Dunham 2000). Conroy et al. (2001) distinguish between primary and secondary stakeholders, the former being those that depend significantly on the resource in question for their livelihoods (e.g., commercial fishers). Alternatively, Mitchell et al. (1997) identify three basic attributes underlying the strength of a stake: the *power* of the stakeholder to influence management decisions, the legitimacy of their claim to involvement in management (moral, legal, or otherwise), and the *urgency* of their claim⁷. Though useful heuristics, these tools for distinguishing among stakeholders still leave designers of collaborative decision-making processes without an objective means of measuring these attributes or easy and fair solutions to the dilemma of stakeholders who may wield influence due to a high score on one attribute, such as power, despite low scores on legitimacy and urgency (Jentoft et al. 2003). Moreover, stakeholders may contest the stake that others define for them. These dynamics contribute to the difficulty of determining how to fairly and effectively involve diverse stakeholders in collaborative decision-making and allocate them roles commensurate with their stake (Mikalsen & Jentoft 2001).

⁷ See (Mikalsen & Jentoft 2001) for a scoring of fisheries stakeholders according to Mitchell's attributes.

Defining fair and effective stakeholder involvement is an important challenge for resource managers, who must work to efficiently implement measures that will sustain fisheries resources and associated economic opportunities. Perhaps the most persuasive rationale for its importance lies in the frequently cited relationship between stakeholder participation in decision-making, the legitimacy of management decisions, and compliance with the rules or regulations that result from such decisions (Kuperan & Sutinen 1998). In order to achieve efficiency and ensure that management measures are effective, stakeholders must comply with them. Research indicates the extent of compliance can be affected by the perceived legitimacy of management measures (Tyler 1990; Hatcher et al. 2000). Participation in decision-making can increase legitimacy by providing stakeholders opportunities to better understand the rationale underlying measures and contribute to their formulation (Sutinen et al. 1990; Nielsen & Mathiesen 2003). However, the design of participatory mechanisms mediates the degree to which compliance benefits are realised (Thomas 1995; Jentoft 2000), leading back to the question of how to involve stakeholders in decision-making.

4.3 The Commercial Groundfish Initiative

In the late 1990s, conservation and management issues related to Pacific groundfish stocks became subjects of growing concern. Environmental organisations highlighted the lack of scientific data informing groundfish management, stock assessments had documented significant population declines of numerous rockfish species, and regulations forcing discarding were out of step with a new selective fishing policy (DFO 2001; Glavin 2001; Yamanaka & Lacko 2001). Following a series of informal scoping discussions with environmental and commercial fishing representatives, the federal fisheries management agency, Fisheries and Oceans Canada (DFO), convened a stakeholder advisory process in 2003. They tasked the process with generating recommendations for commercial groundfish management reforms that would achieve more stringent fisher accountability and monitoring objectives (see Koolman et al. 2007 for details).

Roles and responsibilities for participating groups were defined through their appointments to the two committees formed within the process. The Commercial Groundfish Integrated Advisory Committee (CGIAC) included representatives of government, labour, aboriginal groups, communities, the recreational fishery, and commercial fisheries⁸ (Table 4.1). The CGIAC was tasked with providing overarching policy advice and recommendations regarding groundfish management to DFO and to the second committee within the process, the Commercial Industry Caucus (CIC) (PFMI 2003b). This second committee was defined at the outset as a subcommittee taking direction from and reporting to the CGIAC. Comprised of only the commercial fishing representatives from the CGIAC, the CIC was defined at the process outset as a subcommittee taking direction from and reporting to the CGIAC. Though nominally a subcommittee, the CIC took on the primary role within the process, assuming responsibility for negotiating a proposal for management reform. Working within a consensus decision-making arrangement, the CIC held monthly closed meetings. Although the CGIAC's terms of reference encouraged them to develop consensus on their recommendations and advice, consensus was not required. Both committees were facilitated by the same independent facilitator, hired from outside the fishing industry.

Table 4.1: Committee membership

Commercial Groundfish Integrated Advisory Committee	Commercial Industry Caucus
(CGIAC)	(CIC)
Fisheries and Oceans Canada	Dogfish
British Columbia Ministry of Agriculture, Food and	Lingcod
Fisheries	Trawl (multi-species)
United Fishermen and Allied Workers' Union	Sablefish
Nuu-chah-nulth Tribal Council	Halibut
Sport Fishing Advisory Board	Inside Rockfish ^a
Coastal Community Network	Outside Rockfish ^a
Commercial Industry Caucus members	Fish processors ^b

^a Inside and Outside Rockfish fisheries are prosecuted along geographically separated areas of the coast and licensed separately.

^b Fish processing representatives were minimally involved in the CIC consensus process.

⁸ The Marine Conservation Caucus (MCC), an umbrella group of British Columbia environmental nongovernmental organisations, left the CGIAC shortly after its inception in protest of DFO's data sharing policies and their refusal to adopt a framework for bounding and assessing the outcomes of the process. Nevertheless, MCC members did attend several subsequent CGIAC meetings as observers.

Following a one year extension of the process deadline, nearly 100 days of CIC meetings, and 9 CGIAC meetings, the CIC achieved consensus on a proposal for integrating groundfish management in early 2005 (see chapter 3 for details of the CIC process). The CIC stated that the proposal consisted of interdependent and conditional agreements between sectors; each sector had agreed to certain aspects of the proposal which they found disagreeable in exchange for advantageous concessions from other sectors in other aspects of the proposal. Thus, the CIC stressed that the proposal's design required the acceptance of all its elements in order to preserve its status as a consensual document (DMC 2005). Despite objections to several of the proposal's main features by labour, sport fishery, and aboriginal Nuu-chah-nulth Tribal Council (NTC) representatives, and a withdrawal of support for the proposal by one CIC member group, DFO decided to accept the CIC's proposal and implemented it as a three year pilot plan in 2006.

The NTC also found fault with DFO's consultation procedure. They argued that DFO failed to fulfill their duty to consult and attempt to accommodate the NTC's unextinguished aboriginal rights and title interests in fisheries, as specified in recent Canadian case law (Haida Nation v. British Columbia [Minister of Forests] 2004; Ahousaht First Nation v. Canada [Fisheries and Oceans] 2007). Shortly after the plan's implementation, they initiated litigation against DFO. The federal court ruled against the NTC, who have since announced their intention to appeal the verdict (Ahousaht First Nation v. Canada [Fisheries and Oceans] 2007; Steel 2007).

4.4 Methods

Using qualitative methods and a case study approach (Yin 1994), this research sought the perspectives of Commercial Groundfish Initiative (CGI) process participants. Data were generated through semi-structured interviews with the primary representatives of groups participating on the CIC and CGIAC. Interviews were chosen instead of other methods, such as surveys, because they provide more space for respondents to explain their statements and raise relevant issues not anticipated by the researcher. This technique

facilitates a better understanding of respondents' complex perceptions and the relationships they make between different aspects of the process (Fontana & Frey 1994). Between June and October 2007, a total of 22 representatives from 13 of the 15 groups in the process participated in interviews which averaged 1.5 hours in length. Respondents were posed a series of open-ended questions about the (i) structure of the process, (ii) the role(s) of the CGIAC, (iii) the effectiveness of the CGIAC in performing these roles, (iv) the reasons for its (in)effectiveness, and (v) what, if anything, they would have changed about the process. Consistent with case study methods, I also reviewed process documents, reports, and written communications to inform my interview questions and my understanding of the process (Yin 1994).

Interviews were recorded and transcribed, then analysed using QSR's N6 qualitative research software program (QSR International Pty Ltd 2002). Analysis consisted of inductively coding segments of interview data according to themes present in interviewee's responses (Kvale 1996; Boyatzis 1998). Responses of all interviewees were then aggregated under the themes to facilitate comparison among them. Results summarise interviewees' evaluations, using direct quotes from interviewees to help convey the meaning of their responses. Due to anonymity concerns arising from the small number of process participants, the names of those quoted are pseudonyms and their respective sectors are not specified. Though CIC representatives were also members of the CGIAC, they are referred to here as CIC members, while references to CGIAC members refer only to the interviewees that were not on the CIC.

4.5 Results

This section begins by summarising results related to the design of the process, including its structure and the roles allocated to the CGIAC. This is followed by a description of the CGIAC's ineffectiveness and the reforms suggested for its improvement.

4.5.1 Organisational structure

Almost all respondents supported the division of commercial and non-commercial interests into two committees. Respondents also agreed with the CIC's role as architects of the management proposal. Most acknowledged that the overarching task set for the advisory process related primarily to the regulation of the commercial industry, making commercial representatives the most legitimate and knowledgeable parties to develop a proposal for management. CIC members emphasised the value of a separate committee and closed meetings for enabling open discussion about their sectors' management issues:

Industry was not comfortable opening their books or opening discussions on what was really going on in any fishery to the general public. They were somewhat comfortable discussing what the problems were and what they needed to do to fix it amongst themselves, but there was no way that discussion was going to happen with DFO, and environmentalists, and the natives, and you name it in the room. (*Carl, CIC member*)

The CIC was dominated by license and quota owners. As such, several respondents suggested that, as a distinct group directly affected by fisheries management, a representative of crewpersons should have been included on the CIC:

The problem that I have with all the DFO processes is that they're really focused on who owns the fish...deckhands - not owners of quotas, not owners of vessels - are really under-represented throughout all DFO processes...they're in such a weak position in the industry. (Waylon, CGIAC member)

4.5.2 CGIAC roles

Interviewees described three primary roles for the CGIAC, with most agreeing that the CGIAC was effective in serving the first two of these roles. First, the CGIAC was seen as a means for non-commercial stakeholders to stay informed of the plans the CIC was developing to reform groundfish management:

You have a choice I guess. You can just refuse [to participate], you can not like the decisions and rant and pound and meanwhile things are going on and you have no idea what's being said, or you can say "ok, well, what can we do with the situation we have at hand?"...and continue on with the

process of trying to ensure that DFO does consult with you properly. (*Nick, CGIAC member*)

Relatedly, several respondents stated that the creation of the CGIAC was itself an important step towards their broader objective of transforming the way fisheries decisions were made:

We wanted to open up the process. We wanted to make decisions affecting marine biological diversity and the abundance and distribution of marine species...more public, more transparent, more accountable. (Marvin, CGIAC member)

Second, the CGIAC functioned as a forum for non-commercial stakeholders to voice their positions and concerns about the emerging management plan to DFO. Respondents mentioned this as an important avenue for pursuing the protection of their interests.

However, respondents from both the CIC and CGIAC almost unanimously agreed that the CGIAC was ineffective in its third role of contributing input to the process. Despite serving the first two functions, its failure in this third role left most respondents with overall impressions of the CGIAC as a 'token' process. CGIAC respondents from several groups pointed to their lack of involvement at the outset of the process as an indication that the invitation for their participation was a token gesture. They stated that a basic model of the process and its objectives had already been defined by the time they were invited. As a result, these respondents had the impression they were taking part in a *fait accompli* that left little scope for their input:

The first meeting that I attended...I was handed a document which was now at the stage where they were trying to get sign off on the structure of CGIAC and its relationship with the Commercial Industry Caucus. And at that point it was pretty much a done deal. (Ned, CGIAC member)

Its token role discouraged attendance of some parties and lead to little meaningful dialogue:

We went to a meeting...with a full agenda and we thought we were going to have a lot of input from the CGIAC, and we get there at 9:00 in the morning... Each sector gave a presentation about what their fleet was doing and what changes were happening last year, and we're open for

comments, and everybody would sit there and bang – it was over. (*Ralph*, *CIC member*)

Respondents were divided about the importance of the CGIAC's ineffectiveness. Most CIC respondents and several from the CGIAC did not perceive a prominent role for the CGIAC in the process to begin with, so its failure to contribute meant little to their impression of the process' quality. However, the balance of CGIAC respondents expressed dissatisfaction and suggested that the CGIAC should have had greater opportunities to contribute input to the process.

4.5.3 Causes of ineffectiveness

Interviewees identified a number of reasons why the CGIAC was ineffective. The minimal involvement of some CGIAC groups in the proposal's development and their limited familiarity with its details constrained their ability to provide thorough feedback. Moreover, some CGIAC respondents suggested it was not the operational details of reforms that interested them, but the broader concepts, such as the implementation of individual transferable quotas (ITQs), that were of concern. The CGIAC's focus on these broader issues created challenges, as CIC interviewees responded that such issues were beyond their authority to address, and therefore difficult to account for in their proposal.

Many pointed to the CGIAC's terms of reference as sources of confusion and mixed expectations about the CGIAC's role. The CIC's definition as a subcommittee reporting to the CGIAC gave some respondents the impression that the CGIAC would have a greater say in guiding the progress of the CIC:

Technically CIC was supposed to be a subcommittee of the bigger board [CGIAC]...but it never really worked that way. Decisions were made at the CIC, and they were brought to the bigger board not so much as recommendations, but as "this is the way it's going to be" or "this is what's been decided", so it didn't work exactly as planned. (Carl, CIC member)

Central in the minds of many was also the contrasting decision-making rules for the two committees; whereas the CIC was bound to consensus, the CGIAC had no mandatory

decision-making rule. For some, the lack of any decision-making responsibilities for the CGIAC discouraged meaningful engagement of its members:

It...was recognised almost immediately by most of those players there that the framework for decision-making on that board [CGIAC] was a waste of time, a waste of effort to even begin to participate in. (Lou, CIC member)

In turn, CIC respondents often found the CGIAC's feedback positional and predictable, which did little to further a collaborative search for solutions:

When we brought the result of our consensus process back to the CGIAC, a number of the sectors there said exactly what they'd said before the whole thing even started — "we don't like it for this reason, this reason, and this reason." We knew they were gonna say that, they knew they were gonna say that, and they did say that. (Willy, CIC member)

However, not all respondents believed that the process design was responsible for the positional behaviour of some CGIAC participants. Several respondents from the CIC and CGIAC suggested that stakeholder groups were provided with sufficient opportunity to meaningfully participate, but that some participants chose a positional, less cooperative approach.

At a more operational level, several respondents from the CGIAC and CIC pointed out that the CIC could have provided CGIAC members with more time to review the CIC's progress reports before meetings to better allow for informed feedback:

CIC would take a position on something, and darn it, this stuff's fairly complicated. And we would go to a CGIAC meeting and the facilitator would hand out a whole bunch of sheets – "what do you think?" Well what do you mean what do I think? Don't give me a piece of paper and expect me to give you a response to this complicated proposal... Why wasn't this circulated 2 weeks in advance so I can have a study of this? (*Lenny, CGIAC member*)

4.5.4 Reforms and alternatives

Respondents suggested reforms to the process model employed in the CGI and evaluated the merit of alternative models that would have included the CGIAC in the consensual development of the management proposal (Figure 4.1). The most commonly suggested

reforms were (i) developing clearer terms of reference that were up front about the CGIAC's role in the process from the outset and (ii) providing the CGIAC with the opportunity to develop a framework of overarching objectives for the future of the groundfish fishery that would guide and bound the CIC's subsequent development of a management proposal. Most interviewees' responses suggest that these reforms would be preferable to mandating a consensus process for the CGIAC because the disparity of interests (i) between commercial and non-commercial participants, and (ii) among non-commercial participants made consensus an unattainable prospect. CIC respondents were also doubtful that sufficient incentives existed for CGIAC participants to agree on management reforms. Negative consequences of non-agreement for CGIAC participants were less immediate and more diffuse than they were for CIC participants, who faced the possibility of commercial fishery closures if they could not agree to reforms that would meet DFO's objectives.

4.6 Discussion

4.6.1 Understanding meaningful non-commercial stakeholder involvement

Asymmetrically involving stakeholders within an advisory process is one way governing agencies can attempt to achieve inclusivity while observing stakeholders' variable stakes in a particular issue. My results demonstrate that CGIAC participants are supportive of an inclusive approach that assigns asymmetrical process roles for stakeholders, such that those most directly affected by the relevant issue assume primary responsibility for its resolution. This suggests a different notion of fair participation than that offered by some definitions prevalent in the literature. For example, Webler's (1995) definition stipulates equal opportunities for participants to speak, question, and influence decisions. These results suggest the fairness of participation for non-commercial stakeholders is not necessarily enhanced by equal inclusion across the breadth of tasks and decisions within the process. Numerous CGIAC respondents made clear they were not interested in dedicating the time and energy to the process that the CIC did. Rather, CGIAC

Perceived challenges and benefits of different levels of non-commercial stakeholder influence

Challenges

- Little engagement of secondary stakeholders in process (no perceived influence = no effort towards solutions)
- Positional behaviour among secondary stakeholders, little constructive dialogue
- Persistence of lobbying as a means of advancing secondary stakeholder interests

- Diversity of interests that must be reconciled hinders or precludes reaching agreement
- Lack of familiarity with commercial fishery issues among secondary stakeholders slows progress
- Lack of consequences of non-agreement for secondary stakeholders hinders or precludes reaching agreement

Low

Non-commercial stakeholder influence on advisory process

High

Benefits

- Most knowledgeable and directly affected groups are responsible for decisions, ensuring their operational feasibility and reducing the time required to reach them
- Fewer influential participants expedites decision-making
- Secondary stakeholders not required to commit time and energy to a decision-making process that only peripherally involves them
- Decisions more accurately reflect broader public interest in fishery resources
- Encourages engagement of secondary stakeholders and movement past positional behaviour
- Avoids inevitable conflicts that remain unaddressed after less inclusive processes

Figure 4.1: Challenges and benefits reported by respondents that arise from different levels of non-commercial stakeholder influence within the Commercial Groundfish Initiative advisory process. Sentiments on the left side of the spectrum reflect the challenges and benefits perceived by respondents regarding what actually occurred with the CGIAC. Sentiments on the right reflect the challenges and benefits perceived by respondents regarding what might have occurred had the CGIAC been granted more influence in the advisory process.

respondents' notions of fair participation were more related to involvement in several specific aspects of the process. Insufficient opportunities and contributions in these specific aspects indicate why, despite respondents' agreement with the structural organisation of the advisory process, most CGIAC respondents expressed dissatisfaction with the CGIAC process.

The insufficiencies mentioned by CGIAC respondents related primarily to their limited role in the early stages of the process. These include involvement in (i) process design, (ii) the definition of the issues to be addressed, and (iii) the definition of long term principles and objectives for healthy groundfish fisheries. The importance of early involvement to meaningful participation has been widely promoted in the participatory decision-making literature (Webler 1995; Innes & Booher 1999; Rowe & Frewer 2000; Dalton 2005; Branch & Bradbury 2006). Carefully constructing the initial stages of a participatory decision-making process has been shown to mitigate other challenges and deficiencies that can arise later in the process (Potapchuk & Crocker 1999; EPA 2001). The confusion and variable expectations about the role of the CGIAC reported by some respondents is an example of one challenge that greater and more inclusive deliberation at the outset may have helped in resolving. Early deliberations would have also provided CGIAC participants an opportunity to voice concerns about overarching concepts for reform before the process was under way. Both of these challenges were identified as impediments to the ability of the CGIAC to carry out its mandate. Thus, early involvement may contribute to the fairness and effectiveness of broadened stakeholder involvement.

Another insufficiency somewhat distinct from those relating to early process involvement was the lack of representation for commercial fishers and crew members who do not own licenses or quotas on the CIC. These include (i) deckhands and (ii) fishers who rent boats, licenses, and/or quota (collectively referred to as non-owners here, though they are internally diverse). Issues of representation are often contentious within Canada's Pacific fisheries, as elsewhere (McCay & Jentoft 1996). Inclusive representation also ranks among the most frequently cited criteria of fair collaborative processes (Table 2.2). The

argument for the inclusion of a representative for non-owners is based on the assertion that they, like vessel and quota owners, are among those most directly affected by management reforms involving ITQs. This is supported by several studies on the Pacific groundfish sector. The studies demonstrate that introducing ITQs dramatically increases the value of licenses and creates value in quotas, creating financial barriers to entering fisheries for subsequent generations of fishers (Butler 2004, Edwards et al. 2005). Many of these fishers become "rental skippers" who must lease licenses and quota because they cannot afford to buy them, affecting their positions within commercial fisheries and in turn, their interests. Costs incurred in quota leasing arrangements made possible by the introduction of ITQs can also have disproportionately negative effects on crew sizes and crew incomes compared to license and quota owners (Butler 2004, Nelson 2006). There is also a precedent for non-owner representation in collaborative decision-making in the groundfish sector; crew members were represented through the United Fishermen and Allied Workers' Union in a similar management reform process within the Canada's Pacific trawl fishery in the mid-1990s.

Perspectives on the nature of fair and effective participation for non-commercial stakeholders varied between CIC and CGIAC respondents. Most CIC respondents did not echo CGIAC respondents' emphasis on greater influence for the CGIAC over the early stages of the process. Some CIC respondents suggested that the CGIAC sufficed as a forum for the CIC to inform other stakeholders of their progress in developing the management proposal. They also argued that the CGIAC could have been more valuable had it adopted a less positional, more cooperative approach and made more effort to contribute to the development of the CIC's management proposal. This spirit of cooperation is implicated in several commonly cited criteria of good participatory decision-making processes such as commitment, open communication, and innovation (Wilson & McCay 1998; Innes & Booher 1999; Webler & Tuler 2000). However, engagement and cooperation are often secured through greater sharing of decision-making power (Pinkerton 1994; Wondolleck & Yaffee 2000; EPA 2001), a notion that very few CIC interviewees supported for the CGIAC (Figure 4.1).

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⁹ Leasing refers to the temporary, one-way "rental" of quota from one party to another.

4.6.2 Practical implications for asymmetrical multi-committee processes

The importance of early involvement may be amplified in the context of multi-committee processes that separate commercial users from other stakeholders and assign them asymmetrical roles, for two reasons. First, the early stages may be the most *likely* opportunity for non-commercial stakeholders to shape the process and its outcome. This is due to the constraints that a consensual agreement imposes on input from outside the consensual group at later stages of the process. The CIC emphasised that the interdependent and conditional nature of their consensual agreement on a management proposal precluded the possibility of making alterations to components of the completed proposal without negating the acceptability of the proposal in its entirety. This condition significantly increased the political and temporal costs of incorporating input from outside the CIC and decreased the likelihood that such input could be accommodated without losing the CIC's support. The unlikelihood of alterations to the CIC's proposal in response to CGIAC input during the latter stages of the process was furthered by the different characters of each committee's 'voice'. It is typically more difficult for government to ignore the requests and advice of groups like the CIC who have worked towards compromise and cooperation in order to establish a unified voice than it is to ignore groups fractured by many different voices, like the CGIAC (Jentoft & McCay 1995).

Second, the early stages may also be the point at which the broader group of stakeholders have the most *legitimate* claim to influencing the process. This is based on the public ownership of fisheries combined with the value-laden, overarching nature of decisions relevant to the CGI's initial stages (e.g., what should be the objectives for reform? What are acceptable means of achieving these objectives? Who should be involved in the advisory process in what capacities?). These overarching questions are likely to have similarly broad and overarching consequences. So long as governing agencies adhere to the democratic rationale, present in policies like Canada's Oceans Strategy, of including those affected in decision-making, parties additional to commercial users will have

stronger claims to involvement in these early decisions (DFO 2002). Gray (2005) suggests this may be increasingly relevant as civil society decreasingly accepts the priority of experts' and commercial users' values over their own for value-laden decisions. Also, quality constraints on decisions that require specialised knowledge, such as professional standards, legislative mandates, or the operational feasibility of regulatory choices (Thomas 1995), are not so prevalent at this stage that they preclude broadened involvement.

The extent of involvement is also typically weighed against considerations of process efficiency (Thomas 1995). High levels of early involvement increase the number of decisions that must be made collaboratively and can make defining the scope and focus of the process more difficult, which in turn makes the process more time consuming (Dorcey & McDaniels 2001). Efficiency considerations may be important for both governing agencies and participants. Where decision-making processes are struck to address issues that are perceived as pressing, such as the conservation of declining rockfish stocks, the emphasis governing agencies place on efficiency can be expected to increase (Susskind & Cruikshank 1987). Jentoft (2000) argues that the proliferation of required decisions may also serve to discourage participation if it overtaxes or exasperates participants. Of course, the reverse may also be true. Participants' interests may occasionally be well served by large numbers of decisions that act to delay progress towards undesirable final outcomes (Talbot 1983). Where the former applies, it suggests that progressively more involvement may not progressively improve process quality for participants; a balance must be struck between involvement and other considerations like efficiency.

4.7 Conclusions

This research indicates that establishing multiple committees can enable broadened and asymmetrical participation. This in turn improves information sharing and helps ensure awareness of fellow stakeholders' issues. In these respects, the existence of the CGIAC represents incremental progress towards more transparent and inclusive decision-making

in Pacific groundfish management in Canada. However, some roles are clearly more important to the determination of overall process quality than others. The scope for input, particularly in the early stages, was critical to CGIAC respondents' perceptions of fairness and their ability to be effective. Poor performance in this respect overshadowed other benefits of the process format.

CGIAC respondents' emphasis on input in the early stages of process design and setting objectives suggests meaningful participation of a broadened group of stakeholders will lengthen the planning process and reduce the efficiency of decision-making. In the longer term though, immediate gains in process efficiency obtained by marginalising or excluding some stakeholders may be reduced by the costs of subsequent protests or impediments to implementation raised by the excluded stakeholders (Sidaway 2005). The litigation initiated by the NTC following the CGI is an example of such costs. Further, excluding legitimate stakeholders makes processes prone to generating substantively unfair outcomes.

Greater deliberation at early process stages may also provide opportunities to address broader governance challenges¹⁰. Kooiman and Jentoft (2005) argue that current deficiencies in fisheries governance practices are partly explained by insufficient attendance to the basic values, concerns, and principles that should guide decisions on more immediate questions about the means of achieving management objectives. Inattention to value differences can also prolong resource conflicts (LeBaron 2003). Within individual decision-making processes, where the magnitude of the issues warrants such deliberation, the early stages of the process are the logical point at which to consider these aspects of governance.

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¹⁰ Use of the term 'governance' in fisheries is growing and its meaning is still being refined. Generally, definitions have emphasised that governance encompasses interacting sets of processes, structures, and principles related to decision-making (Hanna 1999; Pierre 2000; Gray 2005b). The term extends beyond the state-centric 'government' concept, facilitating a better understanding of the important roles played by non-state actors in the market and civil society (Kooiman & Bavinck 2005). Governance also subsumes the operational and regulatory foci of the term 'management', referring to larger questions about overarching objectives for fisheries and a philosophy of how to govern at all relevant levels.

Though the CGIAC was disbanded in 2006, DFO has initiated discussions about establishing a more permanent entity with a similar composition of stakeholders, called the Groundfish Integrated Advisory Board. Transitioning from an *ad hoc*, temporary committee to a more permanent body would enable continual public oversight of groundfish management and provide a forum for ongoing dialogue. This may (i) help foster relationships and learning between stakeholders (Wondolleck & Yaffee 2000; Kearney et al. 2007) and (ii) function as an institutional entity from which to develop future processes. Both of these functions would be valuable for dealing with other important groundfish issues on Canada's Pacific coast, such as intersectoral allocation between commercial, recreational and aboriginal fisheries. To effectively serve these functions though, process convenors must address the shortcomings of the CGIAC's design.

4.8 Literature cited

Boyatzis, R. E. 1998. Transforming Qualitative Information: Thematic Analysis and Code Development. Sage, Thousand Oaks, CA.

Branch, K. M., and J. A. Bradbury. 2006. Comparison of DOE and army advisory boards: Application of a conceptual framework for evaluating public participation in environmental risk decision making. Policy Studies Journal **34**(4):723-753.

Brunk, C., and S. Dunham. 2000. Ecosystem justice in the Canadian fisheries. Pages 9-33 in H. G. Coward, R. E. Ommer and T. Pitcher, editors. Just fish: Ethics and Canadian Marine Fisheries. ISER Books, St. John's.

Coffey, C. 2005. What role for public participation in fisheries governance? Pages 27-44 in T. S. Gray, editor. Participation in Fisheries Governance. Springer, Dordrecht.

Conroy, C., A. Mishra, A. Rai, N. M. Singh, and M. K. Chan. 2001. Conflicts affecting participatory forest management: their nature and implications. Pages 165-184 in B. Vira and R. Jeffrey, editors. Analytical Issues in Participatory Natural Resource Management. Palgrave, New York.

Dahl, R. A. 1982. Dilemmas of Pluralist Democracy: Autonomy vs. Control. Yale University Press, Binghamton, NY.

Dalton, T. M. 2005. Beyond biogeography: A framework for involving the public in planning of US marine protected areas. Conservation Biology **19**(5):1392-1401.

Diamond Management Consulting Inc. (DMC). 2005. Commercial Industry Caucus Pilot Integration Proposal.

Dorcey, A. H. J., and T. McDaniels. 2001. Great expectations, mixed results: trends in citizen involvement in Canadian environmental governance. Pages 247-302 in E. A. Parson, editor. Governing the Environment. University of Toronto Press, Toronto.

Edwards, D. N., A. Scholz, E. E. Tamm, and C. Steinback. 2005. The catch 22 of licensing policy: socio-economic impacts in British Columbia's commercial ocean fisheries. in U. R. Sumaila and A. D. Marsden, editors. 2005 North American Association of Fisheries Economists Forum Proceedings. Fisheries Centre Research Reports **14**(1): 65-76. University of British Columbia Fisheries Centre, Vancouver.

First Nation Panel on Fisheries. 2004. Our Place at the Table: First Nations in the B.C. Fishery.

Fisher, R., and W. Ury. 1991. Getting to Yes: Negotiating Agreement Without Giving In. 2nd edition. Penguin Books, Toronto.

Fisheries and Oceans Canada (DFO). 2001. A Policy for Selective Fishing in Canada's Pacific Fisheries.

Fisheries and Oceans Canada (DFO). 2002. Canada's Oceans Strategy. Fisheries and Oceans Canada.

Fontana, A., and J. H. Frey. 1994. Interviewing: The art of science. Pages 361-376 in N. Denzin and Y. Lincoln, editors. Handbook of Qualitative Research. Sage, Thousand Oaks, CA.

Glavin, T. 2001. The Conservation of Marine Biological Diversity and Species Abundance on Canada's West Coast: Institutional Impediments. Groundfish: A Case Study. Sierra Club of British Columbia.

Government of Canada. 1996. Oceans Act. http://lois.justice.gc.ca/en/O-2.4/text.html edition. Government of Canada.

Gray, T. S., editor. 2005a. Participation in Fisheries Governance. Springer, Dordrecht.

Gray, T. S. 2005b. Theorising about participatory fisheries governance. Pages 1-26 in T. S. Gray, editor. Participation in Fisheries Governance. Springer, Dordrecht.

Haida Nation v. British Columbia (Minister of Forests). 2004. 3 S.C.R. 511, 2004 SCC 73.

Hanna, S. S. 1995. User participation and fishery management performance within the pacific fishery management council. Ocean & Coastal Management **28**(1-3):23-44.

Hanna, S. S. 1999. Strengthening governance of ocean fishery resources. Ecological Economics **31**(2):275-286.

Hatcher, A., S. Jaffry, O. Thebaud, and E. Bennett. 2000. Normative and social influences affecting compliance with fishery regulations. Land Economics **76**(3):448-461.

Innes, J. E., and D. E. Booher. 1999. Consensus building and complex adaptive systems - A framework for evaluating collaborative planning. Journal of the American Planning Association **65**(4):412-423.

Jentoft, S., K. H. Mikalsen, and H. K. Hernes. 2003. Representation in fisheries comanagement. Pages 281-292 in D. C. Wilson, J. R. Nielsen and P. Degnbol, editors. The Fisheries Co-management Experience: Accomplishments, Challenges and Prospects. Kluwer, Dordrecht.

Jentoft, S. 2000. Legitimacy and disappointment in fisheries management. Marine Policy **24**(2):141-148.

Jentoft, S., and B. McCay. 1995. User participation in fisheries management - lessons drawn from international experiences. Marine Policy **19**(3):227-246.

Kearney, J., F. Berkes, A. Charles, E. Pinkerton, and M. Wiber. 2007. The role of participatory governance and community-based management in integrated coastal and ocean management in Canada. Coastal Management **35**(1):79-104.

Kooiman, J., and M. Bavinck. 2005. The governance perspective. Pages 11-24 in J. Kooiman, M. Bavinck, S. Jentoft and R. Pullin, editors. Fish for Life: Interactive Governance for Fisheries. Amsterdam University Press, Amsterdam.

Kooiman, J., and S. Jentoft. 2005. Hard choices and values. Pages 285-302 in J. Kooiman, M. Bavinck, S. Jentoft and R. Pullin, editors. Fish for Life: Interactive Governance for Fisheries. Amsterdam University Press, Amsterdam.

Koolman, J., B. Mose, R. D. Stanley, and D. Trager. 2007. Developing an integrated commercial groundfish strategy for British Columbia: insights gained about participatory management. Pages 287-300 in J. Heifetz, G. DiCosimo A.J., M. S. Love, V. M. O'Connell and R. D. Stanley, editors. Biology, Assessment, and Management of North Pacific Rockfishes. Alaska Sea Grant College Program, Fairbanks.

Kuperan, K., and J. G. Sutinen. 1998. Blue water crime: Deterrence, legitimacy, and compliance in fisheries. Law & Society Review **32**(2):309-337.

Kvale, S. 1996. InterViews: An Introduction to Qualitative Research Interviewing. Sage Publications, Thousand Oaks.

LeBaron, M. 2003. Cultural and worldview frames. in G. Burgess and S. Burgess, editors. Beyond Intractability. Conflict Research Consortium, University of Colorado, Boulder.

McCay, B. J. 1996. Foxes and others in the henhouse? Environmentalists and the fishing industry in the U.S. Regional Council System. Pages 380-390 in R. M. Meyer, C. Zhang, M. L. Windsor, B. J. McCay and R. M. Muth, editors. Fisheries Resource Utilization and Policy. Proceedings of the World Fisheries Congress, Theme 2. Science Publishers, Inc, Lebanon, USA.

McCay, B. J., and S. Jentoft. 1996. From the bottom up: participatory issues in fisheries management. Society & Natural Resources 9(3):237-250.

Mikalsen, K. H. 1998. Regulation and representation: institutional challenges in fisheries management. Pages 100-115 in T. S. Gray, editor. The Politics of Fishing. St. Martin's Press, Inc., New York.

Mikalsen, K. H., and S. Jentoft. in press. Participatory practices in fisheries across Europe: Making stakeholders more responsible. Marine Policy.

Mikalsen, K. H., and S. Jentoft. 2001. From user-groups to stakeholders? The public interest in fisheries management. Marine Policy **25**(4):281-292.

Mikalsen, K. H., and S. Jentoft. 2003. Limits to participation? On the history, structure and reform of Norwegian fisheries management. Marine Policy **27**(5):397-407.

Mitchell, R. K., B. R. Agle, and D. J. Wood. 1997. Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. Academy of Management Review **22**(4):853-886.

Nielsen, J. R., and A. S. Christensen. 2006. Sharing responsibilities in Danish fisheries management - experiences and future directions. Marine Policy **30**(2):181-188.

Nielsen, J. R., and C. Mathiesen. 2003. Important factors influencing rule compliance in fisheries lessons from Denmark. Marine Policy **27**(5):409-416.

Pacific Fisheries Management Inc (PFMI). 2003a. Future Direction of the Commercial Groundfish Fisheries in British Columbia: Discussion Paper, June 2003. BC Ministry of Agriculture, Food and Fisheries.

Pacific Fisheries Management Inc (PFMI). 2003b. Future Direction of the Commercial Groundfish Fisheries in British Columbia: Discussion Paper, October 2003. BC Ministry of Agriculture, Fisheries and Food.

Pierre, J. 2000. Introduction: Understanding governance. Pages 1-10 in J. Pierre, editor. Debating Governance: Authority, Steering, and Democracy. Oxford University Press, Oxford.

Pinkerton, E., editor. 1989. Cooperative Management of Local Fisheries: New Directions for Improved Management and Community Development. University of British Columbia Press, Vancouver.

Pinkerton, E. W. 1994. Local fisheries comanagement - a review of international experiences and their implications for salmon management in British Columbia. Canadian Journal of Fisheries and Aquatic Sciences **51**(10):2363-2378.

Potapchuk, W. R., and J. Crocker. 1999. Implementing consensus-based agreements. Pages 527-556 in L. Susskind, S. McKearnan and J. Thomas-Larmer, editors. The Consensus Building Handbook: A Comprehensive Guide to Reaching Agreement. Sage, Thousand Oaks.

Rosener, J. B. 1978. Citizen Participation – can we measure its effectiveness. Public Administration Review **38**(5):457-463.

Rowe, G., and L. J. Frewer. 2000. Public participation methods: A framework for evaluation. Science Technology & Human Values **25**(1):3-29.

Sidaway, R. 2005. Resolving Environmental Disputes: From Conflict to Consensus. Earthscan, Sterling, VA.

Steel, D. 2007. More time in court in store for the Nuu-chah-nulth. Ha-shilth-sa Newspaper 34 (14):9.

Susskind, L., and J. L. Cruikshank. 1987. Breaking the Impasse: Consensual Approaches to Resolving Public Disputes. Basic Books, New York.

Sutinen, J. G., A. Rieser, and J. R. Gauvin. 1990. Measuring and explaining noncompliance in federally managed fisheries. Ocean Development and International Law **21**(3):335-372.

Talbot, A. R. 1983. Settling Things: Six Case Studies in Environmental Mediation. Conservation Foundation, Washington, DC.

Thomas, J. C. 1995. Public Participation in Public Decisions: New Skills and Strategies for Public Managers. Jossey-Bass Publishers, San Francisco, CA.

Tyler, T. R. 1990. Why People Obey the Law. Yale University Press, New Haven.

U.S. Environmental Protection Agency (EPA). 2001. Stakeholder Involvement and Public Participation at the U.S. EPA: Lessons Learned, Barriers, and Innovative Approaches. U.S. Environmental Protection Agency.

Webler, T. 1995. "Right" discourse in citizen participation: An evaluative yardstick. Pages 35-86 in O. Renn, T. Webler and P. Wiedemann, editors. Fairness and Competence in Citizen Participation: Evaluating Models for Environmental Discourse. Kluwer, Dordrecht.

Webler, T., and S. Tuler. 2000. Fairness and competence in citizen participation - theoretical reflections from a case study. Administration & Society **32**(5):566-595.

Webler, T., and S. Tuler. 2006. Four perspectives on public participation process in environmental assessment and decision making: Combined results from 10 case studies. Policy Studies Journal **34**(4):699-722.

Wilson, D. C., J. R. Nielsen, and P. Degnbol, editors. 2003. The Fisheries Comanagement Experience: Accomplishments, Challenges, and Prospects. Kluwer, Boston, MA.

Wilson, D. C., and B. J. McCay. 1998. How the participants talk about "participation" in mid-atlantic fisheries management. Ocean & Coastal Management **41**(1):41-61.

Wondolleck, J. M., and S. L. Yaffee. 2000. Making Collaboration Work: Lessons from Innovation in Natural Resource Management. Island Press, Washington, DC.

Yamanaka, K. L., and L. C. Lacko. 2001. Inshore Rockfish Stock Assessment for the West Coast of Canada and Recommendations for Management. Canadian Science Advisory Secretariat. Research Document 2001/139.

Yin, R. K. 1994. Case Study Research: Design and Methods. 2nd edition. Sage Publications, Thousand Oaks.

5 CONCLUSIONS

This research examined participants' perspectives on procedural aspects of the Commercial Groundfish Initiative advisory process. To conclude the examination, this chapter (i) summarises and synthesises the main results of the case study, (ii) makes recommendations for the improvement of collaborative fisheries management planning, (iii) reflects on the strengths and weaknesses of the research design, and (iv) suggests avenues for further research.

5.1 Synthesising results

5.1.1 Success of the CIC process

The CIC's agreement on comprehensive management reforms was seen as a positive achievement by almost all CIC and CGIAC respondents. Their agreement was significant given the diversity of commercial sectors involved, their inexperience working collaboratively with each other, and the often-conflictual nature of the fishing industry. The design of the CIC process appears largely responsible for enabling this agreement. In particular, an incentive to participate, consensus decision-making, and independent facilitation were essential to ensuring the fairness and effectiveness of the process. Together, these elements motivated agreement while providing security against process manipulation and domination by both participants and governing agencies. Consensus approaches have clearly gained currency among most CIC participants as a result of this success, and demonstrate promise for further use in fisheries decision-making.

5.1.2 Ineffectiveness of the CGIAC process

Contrasting with the success of the CIC described by its participants, most interviewees characterised the CGIAC as an ineffective component of the advisory process. For most CGIAC respondents, this was a significant deficiency. For most CIC respondents, the CGIAC's ineffectiveness was of little consequence or concern. These two perspectives

are in part due to how the CGIAC's ineffectiveness affected respondents' respective interests, and in part due to mixed expectations about the CGIAC's role; the CIC's definition as a subcommittee reporting to the CGIAC gave some respondents the impression that the CGIAC would have a meaningful say in guiding the progress of the CIC. In practice, the CIC did little more than inform the CGIAC of their progress.

This and several other CGIAC-related issues cited by respondents can be traced back to a lack of opportunity for involvement in the early stages of the advisory process. No CGIAC respondents were interested in being involved at the detailed, operational level of planning that the CIC undertook. They sought involvement in the overarching tasks of designing the process and defining objectives. These tasks may be the points at which non-commercial participants have the most legitimate claim to influencing the process, and their most realistic opportunity to do so.

The lack of decision-making rules and responsibilities for the CGIAC also contributed to their 'token' role in the process. Several respondents made clear that CGIAC participants quickly realised the lack of decision-making authority meant little of substance would be achieved at the CGIAC table. This discouraged the investment of time and energy into the CGIAC process and weakened the CIC's incentive to address the issues and concerns raised by CGIAC participants.

5.1.3 Implications

Together, the findings summarised above indicate there is still work to do in designing opportunities for broadened and meaningful involvement of non-commercial stakeholders that do not unjustifiably diminish the role for commercial users in fisheries management decisions. This is a challenging task with groups as diverse as the participants in the CGI. Their interests, agendas, and relations to fisheries resources vary significantly, as may their conceptions of an appropriate process design (Forester 2006; Webler & Tuler 2006). It is also an important task. Though marginalising the feedback from non-commercial and non-owner stakeholders may facilitate consensus at the commercial level, it can also

increase the potential for resultant decisions to be substantively unfair, where meaningful consideration of legitimate interests has been overlooked. Also, the ineffectiveness of non-commercial stakeholder participation threatens the legitimacy of the CIC process in the eyes of the broader public, as represented by those non-commercial stakeholders. The litigation initiated by the NTC illustrates the financial and political costs of perceptions of inappropriate participation in fisheries decision-making.

Results support others' suggestions about careful attention to contextual elements of the case, such as the history of the issue, the history of participants' interactions, and the expertise of convenors and participants in collaborative decision-making (Chess & Purcell 1999). More specifically, this research suggests that where multiple committees are involved, process convenors should pay particular attention to the interactions this creates. That is, they must not treat the tasks and roles of each committee in isolation, but define the *relationship* between the two committees and consider the design of each committee *in light of* the other's design. Inadequate consideration of these aspects may result in unintended consequences for the ability of committees to execute their mandates (see section 4.6.2). Inclusive dialogue and clearly communicated expectations at the outset of the planning process may help to avoid these problems.

Results also suggest that definitions of fair participation such as Webler's (1995) may be more or less applicable in certain participatory arrangements. The definition, which stipulates equality of opportunities and influence, appeared compatible with notions of fairness for the CIC process. However, it did not reflect the interests of many non-commercial participants from the CGIAC, who did not want to be equally involved in all decisions. Processes involving stakeholders with significantly different stakes may require a more specifically tailored definition of procedural fairness.

On a positive note, the CIC's success working in a highly collaborative format has fostered a greater willingness among CIC members to work more collaboratively in the future on related issues with the broader array of groups present on the CGIAC. Thus, success at one scale has created opportunities for new initiatives that individuals or

groups were largely unwilling to entertain previously. This outcome reflects the cascading changes in attitudes and practices that can accompany high quality collaborative planning (Innes & Booher 1999). Pinkerton and Weinstein (1995) note a similar process of building on smaller successes for co-management efforts. This is relevant here because positive collaborative planning experiences can lead to the development of more permanent and formalised co-management arrangements.

5.2 Recommendations

In light of the successes and shortcomings of the CGI process, I suggest a series of recommendations for achieving fair and effective collaborative fisheries planning processes. Recommendations are aimed primarily at DFO who, as the governing agency, will be centrally involved in designing and convening planning processes. However, some recommendations are also appropriate for process participants. These recommendations are largely meant to address some of the particular issues that arose during the CGI process. While they may help resolve those issues, they may also create others. As such, they should be approached as a starting point for further discussion. The first five recommendations relate to the commercial sectors and the CIC process. The sixth and seventh recommendations apply to the CIC and CGIAC. The last two recommendations relate to the CGIAC process. Although recommendations arise from one specific case, I suggest that many are likely relevant more broadly, at least within Canadian fisheries.

1. Encourage the development of sector associations in the inside and outside rockfish fisheries

Currently, these are the only two commercial groundfish sectors without sector associations. In the context of collaborative planning, sector associations are useful to help define the constituents in fisheries without a dedicated license, such as dogfish and lingcod. This in turn can facilitate a more informed and democratic selection of representatives for DFO advisory boards and other collaborative processes like the CIC.

Sector associations are also useful structures for enabling communication among constituents, and between representatives and constituents. Associations can play these roles even in situations, like the CIC, where process representatives are drawn from DFO advisory boards¹¹; associations can confirm or contest the representatives selected from advisory boards, and provide a forum for the communication outlined above. To be effective in these capacities, associations must attempt to be inclusive of their sector and outline clear procedures detailing how representatives will be held accountable to constituents.

2. Use negative incentives judiciously

The threat of unilateral DFO management action was a powerful incentive for commercial sectors to reach agreement on management reform. However, such incentives may act to, *de facto*, force participation, which can create a more difficult negotiating environment. This may be an unavoidable cost of what is an essential element in some cases, but each case should be considered carefully to determine the implications of such choices.

3. Develop a code of conduct for participants that mandates the disclosure of holdings and the conscientious representation of their sector's interests

Representatives' holdings in multiple groundfish fisheries fuelled suspicions about conflicts of interest. As a measure of transparency, disclosing each representative's holdings would allow constituents to make informed judgements about the suitability of nominated representatives. It may also help to diffuse the suspicions and accusations among process participants that make relationship-building among sectors more difficult. Given the length of such processes, disclosures should be periodic to capture any changes in each representative's holdings. A code of conduct should also go beyond simply

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¹¹ Though the initial reports outlining the CGI process structure identified DFO advisory boards as the intended source of CIC representatives, the reality ended up more complex. Four of the seven fishery sectors involved representatives from industry associations that were not on DFO advisory boards at the time for some portion of the CIC process.

stating the need for accountability to outlining the procedures that would enable direct communication and accountability to constituents.

4. Ensure consistent, vocal support for consensus processes to the highest levels of government

DFO's political commitment to the CIC's consensus process encouraged participants to develop negotiated agreements. If participants had found that their interests would be accommodated outside the process, the consensus process likely would have failed.

5. Grant a representative of non-owners a 'voting' seat at the CIC table

Canada's Pacific commercial fisheries include many fishers that predominantly rent or do not own highly valuable licenses or quota, as well as crew members who don't own a commercial fishing vessel, license, or quota. The nature of their interests are thus different from those of license and quota owners. Like owners though, non-owners are among those most directly affected by the management reforms discussed at the CIC. Despite this, non-owners had no dedicated representation on the CIC, which was dominated by license and quota owners. As an affected and distinct group, non-owners should be represented within consensus processes addressing fisheries management reforms like the CIC. Since the development of the Pilot Integration Proposal, the United Fishermen and Allied Workers' Union (UFAWU), which represents small operators and some crew members, has joined the CIC. However, unlike the representatives for each of the groundfish sectors, the UFAWU representative is an observer without voting privileges in the consensus process. UFAWU is the organisation best positioned to represent non-owners within the CIC process, though their credibility and capacity as this representative could be augmented with the growth of their constituent base within groundfish fisheries.

6. Make the use of independent process facilitation a standard practice for collaborative fisheries decision-making processes where the need for user or public acceptance of decisions is high

This recommendation reinforces a similar suggestion from the Institute for Dispute Resolution's 2001 review of decision-making in Canada's Pacific salmon fisheries (IDR 2001). In Canadian fisheries, as elsewhere, participants in collaborative processes often perceive government as a stakeholder with its own agenda and interests (Pinkerton 1996, Tyler 1999). Consequently, DFO is not seen as a credible facilitator of collaborative processes because they lack neutrality. Adopting this position may also allow DFO to be more forthright in representing their own interests in such processes (IDR 2001). DFO's decision to allow the CIC to find their own facilitator was essential to the legitimacy of the CIC process.

7. Develop a permanent, integrated groundfish advisory process

Currently, there is no formal mechanism that enables integrated dialogue among commercial stakeholders, non-commercial stakeholders, and DFO in groundfish management decision-making. Nor is there any permanent forum that brings all commercial groundfish sectors together. However, an initiative is under way to develop an integrated advisory body, which has been termed the Groundfish Integrated Advisory Board. There are several reasons warranting an integrated advisory body. A lack of non-commercial involvement challenges democratic notions of involving those affected by decisions in their formulation and falls short of the related commitment to inclusive management outlined in the Oceans Act and Canada's Oceans Strategy (Government of Canada 1996, DFO 2002). The lack of *integrated* consultation and dialogue also poses challenges, as it does not account well for the ecological and operational interactions among groundfish fisheries. Decisions made from advisory processes within one fishery may conflict with decisions from other fisheries because these interactions are not adequately considered or understood (Pinkerton 2007a). A permanent advisory structure that brings all commercial groundfish sectors and non-commercial stakeholders together

could (i) mitigate the inefficiencies and conflicts caused by sectoral management and (ii) facilitate the development of relationships and understanding between parties, and (iii) facilitate consideration of cumulative impacts (Foster et al. 2005), all of which can contribute to better-informed decision-making (Figure 5.1). Permanency would also enable the development of parties' capacities to participate effectively in more integrated, collaborative decision-making as they learn from their accumulated experience (Kearney et al. 2007). Cortner and Moote (1999) argue that this integration across sectoral boundaries is necessary for achieving the goal of ecosystem-based management – one of the principles intended to guide ocean management in Canada (Government of Canada 1996, DFO 2002). More specifically, an integrated advisory structure could act as the forum for addressing looming groundfish issues that involve multiple sectors, such as allocation between commercial, recreational, and aboriginal fisheries. The CIC and CGIAC provide logical starting points for developing a more permanent and integrated advisory process. This kind of advisory process is not without precedent on the Pacific coast; the Integrated Herring Harvest Planning Committee and Integrated Salmon Harvest Planning Committee both bring a broad cross-section of stakeholders together to provide advice and enable face-to-face dialogue.

Creating such an integrated committee will demand careful consideration of its relationship and role with respect to the existing sectoral advisory boards. The division of roles and responsibilities between an integrated advisory board and sectoral advisory boards should be guided by considerations of which entity is more suitable for which tasks, given the overarching goal of sustainable, equitable, and efficient resource management. Such decisions should not be guided by considerations of how well select interests are served by the existing advisory structure at the expense of other consituents, other sectors, or the health of groundfish resources.

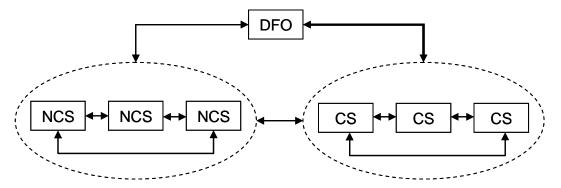


Figure 5.1: The proposed advisory structure. NCS = non-commercial stakeholders, CS = commercial stakeholders. The thicker arrow connecting commercial stakeholders to DFO reflects the need for greater frequency and scope of integrated consultation between commercial stakeholders and DFO compared to the probable frequency and scope of consultation necessary between non-commercial stakeholders and DFO or between non-commercial stakeholders and commercial stakeholders in issues of commercial groundfish management.

8. Contact all potentially affected groups before the process is designed

The CGI process only included some groups in the earliest stages. As a result, some groups from the CGIAC had the impression they were taking part in a *fait accompli*. This can (i) give rise to suspicions about understandings reached in one's absence and (ii) convince parties that the subsequent invitation for their input is nothing more than a token gesture (Arnstein 1969). Some groups may not show interest in a stage so distant from final decisions, but a clearly expressed, sincere invitation to be involved may at least assuage their suspicion and contribute to the legitimacy of the process.

9. Provide an opportunity for the collaborative development of an overarching framework of objectives within which detailed negotiations are bounded

Where planning processes are addressing issues with sweeping implications for the structure of the fishery like the CGI, they will likely shape and constrain the possible alternatives to still-unresolved issues involving non-commercial stakeholders, or create new issues that affect these groups. The settlement of groundfish allocation between commercial, aboriginal, and recreational sectors is one such issue currently foremost in the minds of many. This, and the public ownership of Canadian fisheries resources,

suggests that a broad cross-section of stakeholders should be provided the opportunity to contribute to a framework of overarching objectives for groundfish fisheries within which the detailed negotiations of commercial bodies like the CIC would be bounded. Such objectives would function as a broader backdrop for the more specific and narrower objectives DFO set out for groundfish management reform.

Recommendations 8 and 9 are likely to arouse concerns about the time required for the process. Governing agencies wish for the efficient resolution of urgent issues and volunteer participants have finite time and energy for such processes (Susskind & Cruikshank 1987; Jentoft 2000). While I acknowledge the validity of these concerns, I offer three counterpoints for consideration that may support such involvement from a 'bigger picture' perspective. First, the urgency of the issue may reflect how long it was ignored before hard choices (Bailey & Jentoft 1990) about action could no longer be avoided. In other words, the perceived necessity of skipping important procedural steps may be a result of earlier choices. Thus, foresight and a proactive approach could allow for a more thorough process. Admittedly, this may be easier prescribed than observed; Kingdon (1995) argues that problems must be coupled with good prospects for their resolution, a political receptivity to the issue, and a lack of significant constraints before they are likely to be addressed. Further, there are typically no shortage of urgent issues before governing agencies, which limits the attention paid to issues not yet urgent (Kingdon 1995). Governing agencies, however, are not passive actors in the process of defining important issues. Elected officials and civil servants have the legislative mandate to address fisheries management issues and tremendous human and financial resources at their disposal to do so.

The second point of support for involvement is that immediate gains in process efficiency obtained by limiting the scope of involvement may be reduced by the costs of subsequent protests or impediments to implementation raised by marginalised stakeholders (Sidaway 2005). The court action initiated by the NTC following the CGI is an example of such costs.

Third, involvement of diverse stakeholders in designing the process and defining objectives may actually reduce the need for their involvement in subsequent stages of the process. That is, time spent at the outset may save time later on. One respondent went as far as suggesting:

had there been better ground rules in terms of the management – in terms of the use and allocation of the resource in the first place...I don't think it would have been necessary for us to be there [later on]. (*Lenny, CGIAC member*)

5.3 Strengths and weaknesses of the research

5.3.1 Strengths

1. Studying both committees

The CGI involved two committees with different compositions and mandates. By examining both committees and the way in which they interacted, this research provides a more complete picture of the CGI's evolution. It also captures the range of participant perspectives on the process that a focus on just one committee would not have permitted.

2. High rates of research participation

Due primarily to the agreeability and generosity of CGI participants (but also some persistence on my part), this research includes the perspectives of 13 of the 15 groups involved in the CGI and almost all of the individuals that served as the primary representatives for their group. It is difficult to be precise about the total number of primary representatives, as individual participation varied, making the determination of primary representatives somewhat subjective. I estimate that my interviews account for 22 of approximately 29 primary representatives. This high rate of participation in the research allowed me to develop a fuller and more representative understanding of the process, and strengthens the trustworthiness of my interpretations of the data.

Trustworthiness is an important measure of qualitative research rigour (Anastas 2004).

3. Interviews as the primary research method

Interviews were well suited to the investigation of my research questions. They allowed a depth of understanding and captured the relationships among issues as they were perceived by respondents. They were also valuable for investigating not just what respondents thought about the CGI process, but *why* they thought what they did. Thus, among other things, I was better able to draw inferences about respondents' perceptions of relationships among issues. Interviewing thus holds a particular advantage over alternate methods such as surveys which do not permit probing dialogue.

5.3.2 Weaknesses and limitations

1. A snapshot in time

As is the case with so much research, this study provides only a snapshot of participants' evaluations of the CGI process. As such, it does not allow a comparison of perspectives at different points in time to detect change. Longitudinal studies of collaborative processes are lacking (Conley & Moote 2003) (though see Pinkerton 1996 and Pinkerton 2007b for a collaborative fisheries process revisited). Also, some of the major potential benefits of collaborative processes, including their role in the creation of new practices and institutions and the facilitation of social learning, may only become apparent long after the completion of the process (Innes & Booher 1999; Chess 2000). My research, conducted shortly after the completion of the CIC's integration proposal, probably does not capture longer term effects.

2. Documenting what respondents say

As Forester (2006: 448) points out, participants in planning processes "posture, hide information, stereotype…as well as exaggerating, manipulating, and misrepresenting [sic]". There is support for the notion that these strategic and misleading behaviours may

also extend to how participants talk about planning processes. Psychological research demonstrates that perceived favourability of a decision's outcome can influence evaluations of the decision-making process (Lind et al. 1997). It is perhaps noteworthy that respondents' satisfaction with the CGI process corresponded closely with their satisfaction with the outcome. Attempting to understand interviewees' responses in terms of how it served their underlying interests and objectives was not a focus of this research. Such an effort may have generated a different story about participants' evaluations of the CGI process.

3. A partial and personal picture of the process

Though this research accounts for most of the process participants' perspectives, it still provides only a partial picture of the CGI process. Valuable perspectives on the fairness, effectiveness, and value of this process, such as those of the constituents of groups represented at the CGI, are not included. The perspectives of these groups are an important consideration for managers or policy makers deciding on the suitability of collaborative processes as a means of making decisions and resolving disputes. For example, the limited transparency of the CIC consensus process was a point of contention among some constituents of the commercial groundfish sectors represented on the CIC.

The thesis is also necessarily partial in another way. The 22 interviews I conducted for this research generated over 600 pages of transcribed data. My interpretation of these data as represented in this thesis has not and could not have captured their full breadth and diversity. I have attempted to capture the most prominent overall themes, but sacrificed other details which some individual interviewees undoubtedly perceived as important.

Further, the process of identifying prominent higher order themes and aggregating data under them has been unavoidably interpretive and by extension, unavoidably personal. My own interests and background have therefore informed the presentation of this thesis. Taking my own recommendation for participants in collaborative planning processes, I thus include my 'intellectual holdings' – that is, some of the motivation and logic that

underlaid this thesis as the final product of my research. First, I began my research as a supporter of stakeholder participation in decision-making and spent more time considering questions of how to improve such decision-making formats rather the logically prior question of assessing their merit against other decision-making formats. Second, I brought an interest in issues of procedural and substantive justice to my work that meant I tried to pay particular attention to smaller, less empowered groups within the planning process. Third, as my time working within the academic community grew, I became increasingly aware of the emphasis placed on contributing something new to one's field of study. This is especially evident in my approach to chapter 4 of the thesis, which casts the CGI design in a way that distinguishes it from how most collaborative planning processes have been (at least) described in the literature, if not actually structured. This characterisation in turn shaped my interpretation of interview data and the points that I chose to highlight in my discussion. In addition to novel elements, I also sought to identify key elements to success or failure of the collaborative planning process. The breadth of themes present in the data was given secondary importance to developing these novel and key themes in greater depth. While I think this approach was constructive in distilling and clearly communicating select findings, this was achieved at the cost of relating a more complete and diverse story about the data.

4. Comparing collaborative models

Determining whether a better decision-making process leads to a better outcome is an important policy question (Beierle 1999). Comparing collaborative models against other decision-making formats would help to answer this question. However, practical and ethical challenges of experimental research on collaborative planning processes are compounded by their interactions with context, making such comparisons very difficult (Smith et al. 1997; Dorcey & McDaniels 2001). Another type of comparison – comparing different cases – can also lead to valuable insights. Though two committees were examined here, this research is still a single case study. Single cases may lack the 'robustness' of multiple case studies (Rossi et al. 1999). Conversely, they do allow a

more detailed analysis than would be possible for a multiple case study given the same time and resources.

5.4 Further research

Based on my case and the existing state of relevant literature, I suggest four avenues for further research.

The first suggestion relates to understanding the success of ongoing collaborative processes that demand high levels of cooperation. This is particularly relevant for the CIC. Their success has stimulated interest in a more permanent integrated commercial groundfish committee capable of cooperatively addressing issues that may arise due to the ecologically and operationally interactive nature of groundfish fisheries. In light of this, I pose the following question: to what extent is the viability of an ongoing collaborative process dependent on the relationships developed among individual participants compared to the structure of the process that is established? The answer to this question has fundamentally important implications for the sustainability of such processes; if the trust built between specific individuals over time is key (Pretty 2003), how much can be expected of processes where participants come and go over time? Should term commitments be established for participants to ensure the development of trust between new batches of participants? Extant research suggests relationships and the establishment of a structure that serves participants' interests are both important to enduring collaboration (Wondolleck & Yaffee 2000), but the *relative* importance of these factors, and how their relative importance is affected by other factors, appears less understood.

Returning to the rationale for the focus of chapter four, my second suggestion is for further research on the dynamics of asymmetrical participation in fisheries decision-making for a broadened array of stakeholders. This would include explorations of process formats involving multiple committees. Almost all of the literature on participatory decision-making and collaborative planning focuses on (i) multiple groups within a single

entity, such as a committee or advisory board or (ii) a single group or sector (though perhaps internally diverse) involved or formally sharing in decision-making with governing agencies. The latter commonly consists of arrangements between commercial user groups and governing agencies, or alternately, aboriginals and governing agencies (e.g., Pinkerton 1989; Wilson et al. 2003). While power dynamics may, in practice, make the former format an instance of asymmetrical participation, this is not the same as purposeful, explicit, and structurally reinforced asymmetrical involvement, nor has it been examined as such. As global interest in broadened participation grows (Mikalsen & Jentoft 2001; Gray 2005; Suarez de Vivero et al. in press), questions of how to effectively and fairly involve diverse stakeholders with qualitatively different 'stakes' will surely become more pressing.

My third suggestion is that evaluation research on collaborative decision-making explicitly focus on the initial conditions and context of the case(s) being evaluated. Such a focus would facilitate the investigation of relationships between the success of the process and the characteristics of the case. Understanding these relationships would contribute to the development of principles governing the suitability of various forms of participation (e.g., public consultations, advisory panels, workshops) for cases with certain suites of key characteristics. Such research could greatly enhance simple models like Thomas' (1995) or Lawrence and Deagen's (2001) modifications of Vroom and Yetton's (1973) model for determining the appropriate level of public involvement in decision-making. This may help managers design more effective processes, or alternatively, indicate where managers should convene participants to design processes.

Last, with specific reference to the integration of groundfish management that has resulted from the CGI process, I suggest an evaluation of integration's social, economic, and ecological effects. Groundfish integration has introduced individual quota licensing to the lingcod, dogfish, and rockfish fisheries, and the transferability of quotas among all groundfish fisheries. Though lauded for improving the economic viability of fisheries and the conservation of the species they are applied to, the introduction of individual transferable quota licensing to other Pacific fisheries in Canada, which began in the late

1980s, has also been linked to rising license costs, problematic leasing arrangements, and the consolidation of access to fisheries, with disproportionate losses of licenses in smaller coastal communities (Butler 2004; Edwards et al. 2005). The complex and far-reaching effects of management choices such as quotas warrant a careful assessment of the benefits and drawbacks of moving additional fisheries to quota, as well as how such benefits and drawbacks are distributed.

Other elements of the integration plan will change fishing behaviour. For example, groundfish fishers are now required to account for all catch. They must have quota for all fish landed, or pay for their discards based on mortality rate calculations for each species (DMC 2005). This is a strong incentive to avoid discarding and in turn, a strong incentive to avoid fishing in areas with the potential for catching species for which one does not have quota. In essence, integrated groundfish management has the potential to concentrate fishing in certain areas or at particular times of year when unintended catch is predictably low. This may have important biological implications for fished stocks and ecological implications for areas subjected to intensified or lessened fishing pressure.

Integrated groundfish management is still very new, and still a pilot program. An evaluation in the immediate future would inform DFO's decision regarding the future of this pilot program. Assuming the more permanent adoption of the pilot, an evaluation 5-10 years from now would also be valuable to capture some of integration's effects which may take longer to emerge.

5.5 Literature cited

Anastas, J. W. 2004. Quality in qualitative evaluation: Issues and possible answers. Research on Social Work Practice **14**(1):57-65.

Arnstein, S. R. 1969. Ladder of citizen participation. Journal of the American Institute of Planners **35**(4):216-224.

Bailey, C., and S. Jentoft. 1990. Hard choices in fisheries development. Marine Policy **14**(4):333-344.

Beierle, T. C. 1999. Using social goals to evaluate public participation in environmental decisions. Policy Studies Review **16**(3/4):75-105.

Butler, C. 2004. Fishing for a pension or peanuts? Samudra (39):8-14.

Chess, C., and K. Purcell. 1999. Public participation and the environment: Do we know what works? Environmental Science & Technology **33**(16):2685-2692.

Chess, C. 2000. Evaluating environmental public participation: Methodological questions. Journal of Environmental Planning and Management **43**(6):769.

Conley, A., and M. A. Moote. 2003. Evaluating collaborative natural resource management. Society & Natural Resources **16**(5):371-386.

Cortner, H. J., and M. A. Moote. 1999. The Politics of Ecosystem Management. Island Press, Washington, DC.

Diamond Management Consulting Inc. (DMC). 2005. Commercial Industry Caucus Pilot Integration Proposal.

Dorcey, A. H. J., and T. McDaniels. 2001. Great expectations, mixed results: trends in citizen involvement in Canadian environmental governance. Pages 247-302 in E. A. Parson, editor. Governing the Environment. University of Toronto Press, Toronto.

Edwards, D. N., A. Scholz, E. E. Tamm, and C. Steinback. 2005. The catch 22 of licensing policy: socio-economic impacts in British Columbia's commercial ocean fisheries. in U. R. Sumaila and A. D. Marsden, editors. 2005 North American Association of Fisheries Economists Forum Proceedings. Fisheries Centre Research Reports **14**(1): 65-76. University of British Columbia Fisheries Centre, Vancouver.

Fisheries and Oceans Canada (DFO). 2002. Canada's Oceans Strategy. Fisheries and Oceans Canada.

Forester, J. 2006. Making participation work when interests conflict - moving from facilitating dialogue and moderating debate to mediating negotiations. Journal of the American Planning Association **72**(4):447-456.

Foster, E., M. Haward, and S. Coffen-Smout. 2005. Implementing integrated oceans management: Australia's South East Regional Marine Plan (SERMP) and Canada's Eastern Scotian Shelf Integrated Management (ESSIM) initiative. Marine Policy **29**(5): 391-405.

Government of Canada. 1996. Oceans Act. http://lois.justice.gc.ca/en/O-2.4/text.html. Government of Canada.

Gray, T. S., editor. 2005. Participation in Fisheries Governance. Springer, Dordrecht.

Innes, J. E., and D. E. Booher. 1999. Consensus building and complex adaptive systems - A framework for evaluating collaborative planning. Journal of the American Planning Association **65**(4):412-423.

Institute for Dispute Resolution (IDR). 2001. Independent Review of Improved Decision Making in the Pacific Salmon Fishery: Final Recommendations. Institute for Dispute Resolution, University of Victoria, Victoria, BC.

Jentoft, S. 2000. Legitimacy and disappointment in fisheries management. Marine Policy **24**(2):141-148.

Kearney, J., F. Berkes, A. Charles, E. Pinkerton, and M. Wiber. 2007. The role of participatory governance and community-based management in integrated coastal and ocean management in Canada. Coastal Management **35**(1):79-104.

Kingdon, J. W. 1995. Agendas, Alternatives, and Public Policies. 2nd edition. HarperCollins College Publishers, New York.

Lawrence, R. L., and D. A. Deagen. 2001. Choosing public participation methods for natural resources: A context-specific guide. Society & Natural Resources **14**(10):857-872.

Lind, E. A., T. R. Tyler, and Y. J. Huo. 1997. Procedural context and culture: Variation in the antecedents of procedural justice judgements. Journal of Personality and Social Psychology **73**(4):767-780.

Mikalsen, K. H., and S. Jentoft. 2001. From user-groups to stakeholders? The public interest in fisheries management. Marine Policy **25**(4):281-292.

Pinkerton, E., editor. 1989. Cooperative Management of Local Fisheries: New Directions for Improved Management and Community Development. University of British Columbia Press, Vancouver.

Pinkerton, E. W. 1994. Local fisheries comanagement - a review of international experiences and their implications for salmon management in British Columbia. Canadian Journal of Fisheries and Aquatic Sciences **51**(10):2363-2378.

Pinkerton, E. 1996. The contribution of watershed-based multi-party co-management agreements to dispute resolution: The Skeena Watershed Committee. Environments **23**(2):51-68.

Pinkerton, E. W., and M. Weinstein. 1995. Fisheries That Work: Sustainability Through Community-Based Management. David Suzuki Foundation, Vancouver.

Pinkerton, E. 2007a. Integrating Holism and Segmentalism: Overcoming Barriers to Adaptive Co-Management Between Management Agencies and Multi-Sector Bodies. in D. Armitage, F. Berkes and N. Doubleday, editors. Adaptive Co-Management: Collaborative Learning and Multi-level Governance. University of British Columbia Press, Vancouver, BC.

Pinkerton, E. 2007b. Watershed partnerships: how much have we learned? in C. Krueger and C. Zimmerman, editors. Symposium on the Sustainability of the Arctic-Yukon-Kuskokwim Salmon Fisheries. American Fisheries Society, under review.

Pretty, J. 2003. Social capital and the collective management of resources. Science **302**(5652):1912-1914.

Rossi, P. H., H. E. Freeman, and M. W. Lipsey. 1999. Evaluation: A Systematic Approach. 6th edition. Sage, Thousand Oaks, CA.

Sidaway, R. 2005. Resolving Environmental Disputes: From Conflict to Consensus. Earthscan, Sterling, VA.

Smith, L. G., C. Y. Nell, and M. V. Prystupa. 1997. The converging dynamics of interest representation in resources management. Environmental Management **21**(2):139-146.

Suarez de Vivero, J.L., J. C. Rodriguez Mateos, and Florido del Corral, D. in press. The paradox of public participation in fisheries governance: The rising number of actors and the devolution process. Marine Policy.

Susskind, L., and J. L. Cruikshank. 1987. Breaking the Impasse: Consensual Approaches to Resolving Public Disputes. Basic Books, New York.

Thomas, J. C. 1995. Public Participation in Public Decisions: New Skills and Strategies for Public Managers. Jossey-Bass Publishers, San Francisco, CA.

Tyler, S. R. 1999. Policy implications of natural resource conflict management. Pages 263-280 in D. Buckles, editor. Cultivating Peace: Conflict and Collaboration in Natural Resource Management. International Development Research Centre, Ottawa.

Vroom, V. H., and P. W. Yetton. 1973. Leadership and Decision-making. University of Pittsburgh Press, Pittsburgh, PA.

Webler, T. 1995. "Right" discourse in citizen participation: An evaluative yardstick. Pages 35-86 in O. Renn, T. Webler and P. Wiedemann, editors. Fairness and Competence in Citizen Participation: Evaluating Models for Environmental Discourse. Kluwer, Dordrecht.

Webler, T., and S. Tuler. 2006. Four perspectives on public participation process in environmental assessment and decision making: Combined results from 10 case studies. Policy Studies Journal **34**(4):699-722.

Wilson, D. C., J. R. Nielsen, and P. Degnbol, editors. 2003. The Fisheries Comanagement Experience: Accomplishments, Challenges, and Prospects. Kluwer, Boston, MA.

Wondolleck, J. M., and S. L. Yaffee. 2000. Making Collaboration Work: Lessons from Innovation in Natural Resource Management. Island Press, Washington, DC.

APPENDICES

Appendix 1 – Behavioural Research Ethics Board Certificate of Approval



The University of British Columbia Office of Research Services **Behavioural Research Ethics Board** Suite 102, 6190 Agronomy Road, Vancouver, B.C. V6T 1Z3

CERTIFICATE OF APPROVAL - MINIMAL RISK

PRINCIPAL INVESTIGATOR:	INSTITUTION / DEPARTMENT:	UBC BREB NUMBER:		
Paul Wood	UBC/Forestry/Forest Resources Mgt	H07-01153		
INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT:				
Institution		Site		
N/A	N/A	·		
subject's places of work, subject's h	nomes, community centres or librarie	es		
CO-INVESTIGATOR(S):				
Neil Davis				
SPONSORING AGENCIES: N/A				
PROJECT TITLE:				
An Evaluation of the Fairness a	nd Effectiveness of the Commerc	cial Groundfish Initiative Planning		

CERTIFICATE EXPIRY DATE: May 23, 2008

DOCUMENTS INCLUDED IN THIS APPROVAL:	DATE APPROVED:	
	May 23, 2007	
Document Name	Version	Date
Protocol:		
Research proposal	N/A	April 12, 2007
Consent Forms:		
Consent form	N/A	April 12, 2007
Questionnaire, Questionnaire Cover Letter, Tests:		•
Interview Script	N/A	April 12, 2007
Letter of Initial Contact:		•
Letter of Initial Contact	N/A	April 12, 2007
		•

The application for ethical review and the document(s) listed above have been reviewed and the procedures were found to be acceptable on ethical grounds for research involving human subjects.

Approval is issued on behalf of the Behavioural Research Ethics Board and signed electronically by one of the following:

Dr. Peter Suedfeld, Chair Dr. Jim Rupert, Associate Chair Dr. Arminee Kazanjian, Associate Chair Dr. M. Judith Lynam, Associate Chair Dr. Laurie Ford, Associate Chair

Appendix 2 – Commercial Industry Caucus interview script

CIC Interview Script

Research Study: An Evaluation of the Fairness and Effectiveness of the Commercial

Groundfish Initiative Planning Process

Primary Investigator: Dr. Paul M. Wood, Associate Professor, Forest Resources

Management.

Co-investigator/Interviewer: Neil Davis, MSc Candidate, Forest Resources

Management.

Thank you for consenting to participate as an interview subject in this research study. - Refer to the letter of initial contact explaining objectives, confidentiality, etc.- I am going to ask you to respond to about thirty questions, in three general topic areas. Some of these questions are open-ended, which means you may take as much time as you like to answer them, and some other questions are specific, which means that it may take you less than a minute to answer them. At the end of the interview, you will also have the opportunity to provide additional comments or information, at your discretion.

As part of the interview process I would like to be tape recording our discussion and taking notes. Only discussion arising from the formal interview session will be tape-recorded. All information will be considered "on the record" unless you clearly indicate that you would like to be "off the record". Please feel free to ask any questions you might have at any time during the interview. Do you agree with this? -If yes, start tape recording and ask them the same question again.

Interviewee number:	Gender:
interviewee number:	Gender:

I will start with some general questions about your involvement in the process.

A) Context

- 1. What was your role in the Groundfish Integrated Fisheries Management Plan planning process?
- 2. How were you selected to participate in the process?
 - o Who invited you/your group (which one?) to participate?
- 3. Were you able to attend all of the meetings held during the process?
 - o (if not, was there someone who filled in for you?)
- 4. What were some of the reasons your group/organisation decided to participate in this planning process?
 - o Did you consider any alternatives?

- 5. Have you participated in other consultations or planning processes related to fisheries?
 - o (if yes, did they have an influence on your approach to the CGI?)
- 6. What did you want to get out of the process?
 - o Were your expectations of the process met?
- 7. what do you think other participants' expectations of the process were?

B) Structure of the collaborative planning process

My research questions for this section

- what was the structure and design of the planning process?
- What were the roles of the two committees?
- How did this structure and design come into being?
- What were the strengths and weaknesses of this design?

Ok, now switching gears a little, and thinking about the structure and design of the whole Commercial Groundfish Initiative...

- 1. who was involved in designing the process? (ie the two committees and developing their terms of reference?)
 - a. How were these people selected to discuss the design? Were there others that should have been involved but weren't?
- 2. what were some of the reasons that the CIC was created?
- 3. what were the reasons for making the CIC a consensus process?
- 4. What were the reasons for *not* making the CGIAC a consensus process?
- 5. What was the purpose of the CGIAC?
- 6. what were the actual tasks and decisions that the CGIAC discussed or negotiated?
- 7. did the CIC receive direction on priorities and initiatives from the CGIAC?
 - a. Was the CGIAC able to come to consensus on any of their advice for CIC?
 - b. Was the direction helpful?
 - c. What was the effect of having advice from multiple sides vs. one voice?
 - d. How was it incorporated into the CIC's negotiations? What did it change?
 - e. Were there any requirements for the CIC to demonstrate how CGIAC input had been accounted for?
 - f. How did the CGIAC ensure their input was accounted for?
- 8. did the CIC provide the pilot integration proposal to the CGIAC?
 - a. What did the CGIAC do with it?
- 9. So coming back to the CGIAC's role, if they weren't that involved or effective in guiding the process, how could they have been more effective?, then should the negotiations that took place at CIC been done with CGIAC?
 - a. Should the negotiations on the integration proposal been done with the whole CGIAC instead of the CIC?
- 10. did this process address all of the aspects of groundfish management that it should have?

- 11. did you find any parts of the process's design or structure that were particular strengths of the process?
- 12. if this process started over again next week, is there anything you would have liked to see done differently that we haven't touched on?
- 13. So thinking of the process as a whole, if you were going to give a verdict for this process that delivered the take home message on how it went, what would you say?

Now I'm going to ask a bunch of questions that outline features of a collaborative planning process that are generally associated with successful processes. I want to know your perspective on how well you thought these were handled in the CIC process. I should also be clear that you are free to disagree that these are important features of a successful process – those thoughts can also be part of our discussion.

C) Aspects of the Planning Process

- 1. how clear was the purpose and goal of the CIC?
 - Oftentimes it is a challenge to really get a grip on what exactly you're aiming to achieve in processes like these what did it involve in this case? Did you know you'd be submitting a proposal for the redesign of groundfish management?
- 2. were there clear rules for the CIC table about things like how meetings would be run and who was permitted to attend? (think observers and rotating reps)
 - were there any rules about divulging your personal interests or how you might benefit from knowledge of proposed management changes?
 - Was this an issue that came up?
 - What was the plan if the group could not achieve consensus?
- 3. do you think those at the CIC table were fully representative of the various groups with an interest in groundfish management?
 - What were the considerations that lead to the arrangement of 2 representatives for each fishery?
 - There was some changeover in representatives over time what effects did this have on the process?
- 4. how equal was the opportunity to influence decisions between parties when it came right down to it? (especially given the changeover). I know it was consensus, but what were the dynamics among the reps that might have made things less simple than this?
- 5. how much opportunity did you have at the various stages of the process?
 - defining the groundfish management problems that the process was intended to address?
 - designing the CGI process?
 - influence the agenda and discussions at meetings?
 - Involvement in the final decision about the proposal?
- 6. how did the tone of communication and interaction between representatives unfold during the process? i.e. were people respectful of each others' different interests and open about their own interests?

- 7. did you feel free to propose and explore lots of different ideas for how to redesign groundfish management?
 - Did the process as a whole explore lots of different ideas?
- 8. How available were the different kinds of information you needed to come to informed decisions?
 - Did you have access to other resources that would allow you to participate effectively? (e.g., support to attend meetings, meetings in accessible places)
- 9. was everyone sufficiently familiar with collaborative consensus processes? Ie. Did they get any training or have some experience?
- 10. DFO was the initiator of this process. How appropriate was their support of the process?
 - Was there any other important leadership or support that came from or was lacking in other places?
- 11. was the process flexible to allow adjustment as you progressed?
- 12. How committed were all of the parties to making this process work?
 - Was there any activity among the parties going on outside the meetings that helped or hindered the process?
 - What was DFO's response to the approaches of parties outside the process?
 - Was DFO committed to the process were there any inconsistencies in their behaviour or policies that challenged negotiations?
 - Did all of the parties have equal access to communicating with DFO decision makers?
- 13. Do you think the decision making process was transparent? Ie. could those outside of the CIC like your fisheries constituents or the public follow the progress of the CIC?
- 14. did the process have enough time to address the task that had been set for it?
- 15. How helpful or effective was the process facilitation?
 - Were members treated equally?
 - Were both tables treated equally?
- 16. were there any factors in particular that were very important to the CIC process?
- 17. how did the design of this process (collaborative, industry-lead, consensus based) influence the outcome?

That completes my list of interview questions. Do you have any comments you would like to add, regarding earlier questions or just in general?

Thank you again for your time and effort. It is greatly appreciated. If you are interested in the results of this research study, I would be happy to send a follow-up communication at a later date to keep you informed of related publications and presentations.

Appendix 3 – Commercial Groundfish Integrated Advisory Committee interview script

CGIAC Interview Script

Research Study: An Evaluation of the Fairness and Effectiveness of the Commercial

Groundfish Initiative Planning Process

Primary Investigator: Dr. Paul M. Wood, Associate Professor, Forest Resources

Management.

Co-investigator/Interviewer: Neil Davis, MSc Candidate, Forest Resources

Management.

Thank you for consenting to participate as an interview subject in this research study. <u>Refer to the letter of initial contact explaining objectives, confidentiality, etc.-</u> I am going to ask you to respond to about thirty questions, in three general topic areas. Some of these questions are open-ended, which means you may take as much time as you like to answer them, and some other questions are specific, which means that it may take you less than a minute to answer them. At the end of the interview, you will also have the opportunity to provide additional comments or information, at your discretion.

As part of the interview process I would like to be tape recording our discussion and taking notes. Only discussion arising from the formal interview session will be tape-recorded. All information will be considered "on the record" unless you clearly indicate that you would like to be "off the record". Please feel free to ask any questions you might have at any time during the interview. Do you agree with this? <u>-If yes, start tape recording and ask them the same question again.</u>

Interviewee number:	Gender:
	Gender:

I will start with some general questions about your involvement in the process.

A) Context

- 8. What was your role in the Groundfish Integrated Fisheries Management Plan planning process?
- 9. How was your group selected to participate in the process?
- 10. How were you selected to represent your group?
 - o Who invited you/your group (which one?) to participate?
- 11. Did you attend all of the meetings held during the process?
 - o (if not, was there someone who filled in for you?)
- 12. What were some of the reasons your group/organisation decided to participate in this planning process?

- 13. Have you participated in other consultations or planning processes related to fisheries?
 - o (if yes, did they have an influence on your approach to the CGI?)
- 14. What did you expect to happen in this process?
- 15. What did you want to happen?
 - o Were your expectations of the process met?
- 16. what do you think other participants' expectations of the process were?

B) Structure of the collaborative planning process

My research questions for this section

- what was the structure and design of the planning process?
- What were the roles of the two committees?
- How did this structure and design come into being?
- What were the strengths and weaknesses of this design?

Ok, now switching gears a little, and thinking back to the structure and design of the whole Commercial Groundfish Initiative...

- 14. who was involved in the early stages of designing the process? Ie. setting up the two committees and developing their terms of reference?
 - a. Were there any other parties or individuals that should have been involved?
- 15. do you think those at the CGIAC table were fully representative of the various groups with an interest in groundfish management?
- 16. when in the process was the CIC created?
 - a. Were you supportive of creating the CIC?
 - b. What was your understanding of the purpose for creating it?
- 17. was the division of roles for the CIC and CGIAC appropriate?
- 18. what were the reasons for making the CIC a consensus process?
- 19. What were the reasons for *not* making the CGIAC a consensus process?
 - a. Did the CGIAC have to make any decisions?
 - b. Was there a decision making rule for the CGIAC?
- 20. who was involved in determining the decision making rules for each committee?
- 21. what was the purpose of the CGIAC?
 - a. Did your understanding of the purpose change or evolve from the beginning to the end of the process?
- 22. as a CGIAC member, was there equal opportunity to get issues on the agenda?
 - a. Did you find that there were equal opportunities to contribute to the discussion?
- 23. what were the actual tasks that the CGIAC discussed or negotiated?
 - a. How did it actually spend its time? What would happen when it met?
- 24. was the CGIAC able to provide policy direction and advice to the CIC?
 - a. Was there anything that made it easier or more difficult to provide advice to CIC?
 - b. Was the CGIAC able to come to consensus on any of their advice for CIC?

- c. Was the direction helpful?
- d. Did you see evidence that the CIC's incorporated that advice into their planning?
- 25. was the CIC process transparent to you as a CGIAC member? Could you get the information about it that you wanted?
 - i. were there any rules about CIC members divulging their personal interests or discussions about how they might benefit from knowledge of proposed management changes?
- 26. how committed were all of the parties, including representatives, the facilitator, and DFO to making this process work?
 - a. were you pursuing any other ways of getting your interests about groundfish management addressed outside of the process during that time?
 - b. Were there any other activities going on outside the process that helped or hindered the progress at the CGIAC?
 - c. Was DFO committed to the process were there any inconsistencies in their behaviour or policies that made negotiations difficult?
 - d. How were those efforts received by DFO?
 - e. Did everyone have equal access to communicating with DFO decision makers?
- 27. did the CIC provide the CGIAC with the draft pilot integration proposal?
 - a. What happened then?
- 28. so then, in the end, what kind of influence did you have over the development of the pilot integration proposal? (i.e. review and provide comments vs. help draft etc)
- 29. so coming back to the CGIAC's role, if they weren't that involved or effective in guiding the process, should something have been done differently? How could the CGIAC been a more effective committee?
 - a. should the negotiations that took place at CIC been done with CGIAC?
 - b. Were any other participants involved in activities outside the process that helped or hindered the progress of the process?
- 30. did DFO consult with you about the integration proposal?
 - a. Did you find that your input was taken into account?
- 31. did this process address all of the aspects of groundfish management that it should have?
- 32. did you find any parts of the process's design or structure that were particular strengths of the process?
- 33. if this process started over again next week, is there anything you would have liked to see done differently that we haven't touched on?
- 34. So thinking of the process as a whole, if you were going to give a verdict for this process that delivered the take home message on how it went, what would you say?

That completes my list of interview questions. Do you have any comments you would like to add, regarding earlier questions or just in general?

Thank you again for your time and effort. It is greatly appreciated. If you are interested in the results of this research study, I would be happy to send a follow-up communication at a later date to keep you informed of related publications and presentations.