

An Institutional Analysis of Canadian Advisory Committees: Linking Committee  
Structure and Function to Policy Changes

By

*Amy Elizabeth Roy*

Submitted in partial fulfillment of the requirements for the degree  
of  
Master of Marine Management

at

Dalhousie University  
Halifax, Nova Scotia

August 2012

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Dalhousie University,  
Marine Affairs Program  
Halifax, Nova Scotia Canada

The undersigned hereby certify that they have read and recommend to Marine Affairs Program for acceptance a graduate research project titled “An Institutional Analysis of Canadian Advisory Committees: Linking Committee Structure and Function to Policy Changes” by Amy Elizabeth Roy in partial fulfillment of the requirements for the degree of Master of Marine Management.

Supervisor: Dr. Robert Fournier, Professor Emeritus, Dalhousie University

Signature: \_\_\_\_\_ Dated: \_\_\_\_\_

**Dalhousie University**

Date: August 15, 2012

Author: Amy Elizabeth Roy

Title: An Institutional Analysis of Canadian Advisory Committees: Linking Committee Structure and Function to Policy Changes

School: Marine Affairs Program, Faculty of Management

Degree: Master of Marine Management

Convocation: October

Year: 2012

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## Table of Contents

List of Tables .....	vi
List of Figures .....	vii
Abstract .....	viii
List of Abbreviations Used .....	ix
Acknowledgements .....	x
Chapter 1: Introduction .....	1
1.1 Introduction .....	1
1.2 Management Problem .....	3
Chapter 2: Advisory Committees Literature Review .....	5
Chapter 3: Theoretical Framework and Research Methods .....	13
3.1 Institutional Analysis and Development Framework .....	13
3.1.1 Introduction to IAD Framework .....	13
3.1.2 Application and Scope of IAD Framework .....	18
3.2 Methods .....	20
3.3 Limitations of Research .....	26
Chapter 4: Canadian Advisory Committee Case Studies .....	28
4.1 Southwest NB Marine Resource Planning Initiative Steering Committee .....	28
4.2 ESSIM Stakeholder Advisory Committee .....	28
4.3 National Harbour Authority Advisory Council .....	29
4.4 Race Rocks Advisory Board .....	30
4.5 Gully Marine Protected Area Advisory Committee .....	30
4.6 Pockwock Lake Watershed Management Committee .....	31

4.7 Drinking Water-Watershed Protection Technical Advisory Committee .....	31
4.8 Drinking Water-Watershed Protection Stewardship Committee .....	32
Chapter 5: IAD Framework Results .....	33
Chapter 6: Discussion .....	47
6.1 Successful Committees .....	47
6.2 Partially Successful Committees .....	50
6.3 Unsuccessful Committees .....	53
6.4 Common Factors .....	54
6.5 Summary .....	57
Chapter 7: Recommendations .....	58
References .....	61
Appendix A .....	69

## List of Tables

Table 1	List of variables and a brief explanation of each used in IAD framework analysis.....	22
Table 2	List of advisory committees selected for IAD framework analysis, the working name used in this report, their respective category of committee and mandates.....	25
Table 3	Results of IAD framework analysis for all case studies. Variables that did not appear to contribute to any committee’s success, or were not universal to all committees were excluded.....	39

## List of Figures

Figure 1	Simplified Institutional Analysis and Development Framework, modified from Ostrom (2005) .....	14
Figure 2	Expanded Institutional Analysis and Development Framework, modified from Ostrom (2005) .....	15
Figure 3	Internal dynamics of the advisory committee, modified from Ostrom (2005) .....	17
Figure 4	Nested Institutional Analysis and Development Frameworks, modified from Ostrom (2005) .....	19

Roy, A.E., 2012. An institutional analysis of Canadian advisory committees: Linking committee structure and function to policy changes [graduate project]. Halifax, NS: Dalhousie University.

## **Abstract**

The creation of Canada's Oceans Act in 1997 encouraged public participation and the use of advisory committees in marine management. To date however, there have been few comparative studies examining whether these advisory committees have influenced any marine management policies. This study addressed three research questions to fill this gap: a) have any Canadian marine or aquatic advisory committees successfully influenced policy, b) if they have, what organizational or procedural characteristics contributed to this success, and c) can any recommendations be made in light of these characteristics to improve the probability of success for future committees? Eight committees were then selected and analyzed using the Institutional Analysis and Development Framework to attempt to answer these questions. Four case studies were judged to be successful at influencing marine or aquatic policy, while two were partially successful, and two were considered unsuccessful. Successful advisory committees were found to have two common elements. First, and most importantly, the committees had political support. In addition, effective communication existed between the committee and the government decision-makers throughout the advisory process. Although personal opinions were not analyzed in this research, and the list of factors examined was not exhaustive, it is the conclusion of this study that organizational and procedural factors should be considered when convening marine advisory committees. Consequently, five recommendations were proposed to improve the likelihood of committee success. However, it would be prudent to view these recommendations circumspectly with additional research into institutional dynamics of advisory committees strongly recommended.

*Keywords:* Advisory committee, marine resource planning, marine protected area, watershed management, Institutional Analysis and Development Framework



## **List of Abbreviations Used**

BC	British Columbia
DFO	Fisheries and Oceans Canada
ESSIM	Eastern Scotian Shelf Integrated Management
HRM	Halifax Regional Municipality
IAD Framework	Institutional Analysis and Development Framework
MPA	Marine Protected Area
NB	New Brunswick
NS	Nova Scotia
RCCOM	Regional Committee on Coastal and Oceans Management
RDN	Regional District of Nanaimo
RHAAC	Regional Harbour Authority Advisory Committee
SCH	Small Craft Harbours
ToR	Terms of Reference

## **Acknowledgements**

I would like to thank my academic supervisor Dr. Robert Fournier as well as my internship supervisors Justin Huston and Sean Weseloh McKeane for their invaluable advice throughout the research process. The opportunity to intern for the Nova Scotia Department of Fisheries and Aquaculture was greatly appreciated. I would also like to thank my second reader Glen Herbert, as well as Russell Henry, Maxine Westhead, Kelly Francis and Marie-Claude Robertson for their assistance in gathering and confirming data. Finally, I would like to thank JF Lebeau for his patience and unconditional love and support throughout this degree.

## **Chapter 1: Introduction**

### **1.1 Introduction**

The act of managing necessitates decision-making. Whether an individual makes decisions regarding personal finances or a multi-national organization decides to launch a new initiative, the act of choosing is an act of management. Governments in particular are expected to manage a variety of concerns.

Management can be broadly classified into a variety of styles, and two of the most common are top-down and bottom-up. In top-down management, decision-making is generally concentrated in the hands of a few individuals who impose their decisions on persons or organizations under their jurisdiction. Conversely, in a bottom-up approach individuals or groups work together to arrive at a decision, and enact the decided-upon changes, often without formal authority. Over the last few decades, the top-down and bottom-up approaches have been mixed with the result that public participation in environmental management has become increasingly common. This principle of public participation was enshrined by the United Nations in the Rio Declaration of Environment and Development (1992), which states “[e]nvironmental issues are best handled with participation of all concerned citizens, at the relevant level” (UNESCO, 1992, p. 3).

Public participation is often viewed as a spectrum, or ladder, where the lower rungs are less involved and the higher rungs represent increasingly greater involvement and control. Arnstein (1969) identified eight rungs of citizen participation (in order of increasing participation): manipulation, therapy, informing, consultation, placation, partnership, delegated power, and finally, citizen control. The first two rungs were considered non-participatory, the middle three were viewed as token attempts to include

the public, and the upper three identified real and tangible control resting with citizens. According to the Rio Declaration, public participation begins at the informational stage and extends, at a minimum, to partnership – thereby providing some capacity to negotiate with state decision makers (Arnstein, 1969; UNESCO, 1992).

One subset of environmental management that embraces many and various opinions is the area of marine management. Marine management is an unspecific term that comprises a variety of oceanic sectors, some of which include urban development, tourism, fisheries, and shipping; all of which often actively use public participation. For example, part II, section 29 of Canada's Oceans Act (1997) requires collaboration between the Minister of Fisheries and Oceans and "other ministers, boards and agencies of the Government of Canada, with provincial and territorial governments and with affected aboriginal organizations, coastal communities and other persons and bodies" to develop a national management strategy for the marine environment (Department of Justice, 2012, p. 14).

While potentially affected Canadian stakeholders (including the general public) are expected to participate in the development of marine management plans, the sheer number of affected parties can sometimes preclude individuals from being heard. Consequently, different tools exist to engage the public in marine management. One such tool is that of an advisory committee. Defined by Health Canada as "a group of representatives from a particular community or with differing interests, who are selected by government bodies to advise, comment, review or make recommendations for action on any given issue", advisory committees are permitted in part II, section 32 of the

Oceans Act to assist marine management efforts by the federal government (Department of Justice, 2012; Health Canada, 2007).

## **1.2 Management Problem**

While Canada's Oceans Act has paved the way for community engagement and advisory committees in the various sectors of marine management, very little analysis has been carried out regarding the efficacy of these committees to influence government marine management decisions. As committees increase in number across the country, it is prudent to study various facets of their activities from a cross-section of management sectors to assess their capacity to influence marine policy. Additionally, if some committees are found to have influenced decisions while others have not; then the question of why such a disparity has occurred will also be studied with the hope of discerning the factors responsible for greater committee effectiveness.

Thus this study will examine three research questions related to marine advisory committees. First, are there examples of Canadian advisory committees that have successfully influenced federal, provincial or municipal government policies? Second, do successful examples display commonalities or suggest generalities regarding the establishment and operation of the committees or the implementation of committee recommendations that could have contributed to their success? And third, what recommendations can be drawn from this analysis to improve the potential for advisory committee success?

This research will therefore focus on institutional structure and process, rather than subjective aspects (e.g. personal interactions, political motivation, balances of power

etc.) inherent in advisory committees. This approach was chosen for several reasons. First, time limitations associated with this research constrained the subjective approach. Second, the study of institutions in marine management is becoming more common, but few studies have focused on Canadian marine examples. And third, conveners of committees can much more easily influence organization and procedures, as opposed to subjective elements. Therefore, analysis of structure and processes might be more immediately and directly beneficial to decision-makers who wish to maximize advisory committee effectiveness. This approach would in no way preclude further research in any other aspects of the advisory process.

## **Chapter 2: Advisory Committee Literature Review**

Since Arnstein's (1969) ladder of citizen participation was first published, there have been significant efforts to research community engagement in politics. This body of literature encompasses topics such as community management or co-management, group work dynamics, and citizen and technical advisory committees. In addition, these research efforts have not been limited to a single field of application and have ranged from health care to environmental or marine management. A comprehensive literature review of every article published on community engagement is beyond the scope of this report. Instead, the following section will examine peer-reviewed literature discussing citizen advisory committees or working groups involved in environmental or marine management.

In 1995, Lynn and Busenberg conducted a review of the literature on empirical citizen advisory committee influence on environmental policy. Their review showed that the research conducted at that time varied not only in methods, but also in the definition of committee success, the realized influence of the committees and conclusions as to why some committees were more successful than others. However, certain trends were noted. Generally, Lynn and Busenberg (1995) found that the following factors contributed to an advisory committee's success: the member selection process, the presence of facilitators, agenda-setting methods, the role of independent experts, accountability of the committee to the public it represented, the decision-makers' feedback to the committee, and finally the perceived purpose of the committee. However, the authors' were unable to conclude in what ways the previously listed factors contributed to advisory committee success (e.g. how the committee members should be selected), and further research was recommended.

Following Lynn and Busenberg (1995), Chess and Purcell (1999) compared and contrasted the merits of public meetings, workshops and advisory committees as methods of public participation in environmental decision-making, again basing their research on previously published empirical studies. Participatory success was defined in the literature in one of two ways: either by the very act of inclusion and participation, or by the outcomes of that participation. The form the public participation took was not deemed to influence the likelihood of success (by either definition). Following on the previous study, Chess and Purcell (1999) developed a series of factors, referred to as “rules of thumb”, that they felt were likely to influence success in public participation. Their rules included: clarifying the goals of the public participation, beginning participation early in the management process, using multiple forms of engagement, and finally collecting feedback from the public after the process.

Concurrently with Chess and Purcell (1999), Imperial (1999) examined the merits of using the Institutional Analysis and Development Framework (IAD framework) to improve ecosystem-based management. He argued that if ecosystem-based management was to become an effective tool for environmental managers, an understanding of the institutions and processes of this management paradigm would need to be developed. Ideally, this analytical framework would improve the balance between science and values when making decisions. Since that time, IAD frameworks have been used extensively to examine environmental and marine management institutions (e.g. Chadsey, Trainer & Leschine, 2012; Koontz, 2005).

An increasing number of empirical studies and literature reviews have since used the IAD framework and other methods to understand what factors lead to public



participation and more specifically, advisory committee success. One study of an Alaskan marine oil trade advisory committee tested whether access to resources (e.g. funding or technical expertise) contributed to the committee's ability to influence policy (Busenberg, 2000). However it was found that simple access to resources was insufficient. Instead, political support of a recommendation was often needed for it to be accepted by the government. For example, when the advisory committee could mobilize support among related groups or stakeholders, the government decision-makers were far more likely to approve an initiative or program. In a follow-up study, it was found that while political and stakeholder support was necessary for committee recommendations to be implemented, the scope and overall effectiveness of an advisory committee was limited by access to funding (Busenberg, 2007).

A review of American watershed advisory committees found that consensus was the primary method of decision-making, although each committee defined consensus differently (e.g. majority vote, unanimous agreement, etc.; Leach, Pelkey, & Sabatier, 2002). An attempt to create a definition of watershed committee success was also proposed using six criteria: the committee's perceived effects on specific issues and human or social capital, the amount of detail in the agreed-upon decisions, and the degree of implementation of projects involving restoration, monitoring, and public education. It was also found that the average length of time for a committee to become successful at developing and implementing a plan was at least four years (Leach et al., 2002).

Next, a review of watershed committee literature (one of the more extensively studied areas of public participation in environmental management) found that in 37 empirical studies, 210 distinct factors were identified as affecting advisory committee

success (Leach & Pelkey, 2004). In this review success referred to either policy influence or capacity-building. Of those 210 factors, 28 themes emerged. The top three themes identified as contributing to committee success were access to funding, strong leadership or facilitation, and a limited scope of activities. Other commonly cited factors included broad stakeholder representation, committed members, access to technical experts, clearly defined decision-making rules, and adequate technical information. However, among these themes the scope of activity, stakeholder representation, and decision-making rules were often considered to be controversial, albeit fluctuating in favor of contributing to success. No single factor was unanimously favored to influence success positively. The highest percentage of agreement was access to funding with this cited by 62% of the studies. Finally, the authors cautioned that undefined local circumstances had a high degree of influence on whether an advisory committee would be successful. This, of course, limited any attempt to develop a universally applicable formula that might eventually be applied to various management committees (Leach & Pelkey, 2004).

In a land-use planning study, the IAD framework was used to determine which factors tended to affect advisory committee success, here defined as changes to zoning regulations over the short-term (Koontz, 2005). Committees located in rural areas, with no previous zoning and low political awareness of the issues tended to have no success, whereas committees located in suburban areas with previous zoning regulations and a high degree of concern about land-use had a much greater impact on the regulations. However, it was noted that although the committees in rural areas had negligible impacts on policy, they did increase public awareness of land use concerns, and that alternative

outcomes other than policy changes, should be considered when attempting to define success (Koontz, 2005).

Another study used the IAD framework to analyze four large-scale ecosystem-based management programs and found that when stakeholder advisory committees were created, there was a greater emphasis on using science and technical information to influence decisions, rather than focusing on political or social concerns, which tended to occur in non-participatory decisions (Gerlak & Heikkila, 2006). Overall, when advisory committees participated, success of the management programs depended on secure funding for program implementation and sustained political will to authorize funding and committee recommendations. However, in cases where the results of an initiative developed slowly, there was an increased likelihood of controversy within the committee regarding previous decisions. When a particular committee member or government agency stalled their efforts on a portion of a project, the future ability of the advisory committee and decision-makers to collaborate was compromised. In other words, if a committee felt that its efforts were inconsequential, or that there was a lack of commitment by other members or agencies, the advisory committee was unlikely to be successful in future management efforts (Gerlak & Heikkila, 2006).

In several studies that examined both public participation and advisory committees associated with forest management, communication was cited as a major factor influencing committee success (Andersson, 2006; McGurk, Sinclair & Diduck, 2006). Andersson (2006) found that success, here defined as perceived process success by stakeholders, increased when there were three types of learning possible through communication. Downward learning involved the government learning about local

conditions from stakeholders. Upward learning informed stakeholders about government decisions and programs. Finally, horizontal learning involved communication between agencies and committees operating with the same amount of power, and coordinating their efforts. Similarly, McGurk et al. (2006) emphasized that committee success improved directly with greater communication; namely, when advisory committees communicated clearly with the decision-makers and the communities they represented, and, as well, when the decision-makers communicated clearly with the advisory committee.

A broad review of environmental management and stakeholder participation literature – including empirical and theoretical studies – by Reed (2008) identified a series of best practices for the participatory process. First, clear objectives, explained and agreed to by the public, need to be established at the outset. Skilled facilitation is necessary, and both traditional ecological knowledge and science need to be integrated into the process to better inform decision-making. The review argues that institutionalizing public participation may be beneficial. Finally, the review highlights that while decisions made using a participatory process tend to be more “durable”, there has been little research to determine whether these decisions tend to be more representative than those made by the government alone (Reed, 2008, p. 2427).

In another large-scale study, fifty-three advisory committees were analyzed for success – measured through participant perception – when advancing sage-grouse conservation measures (Belton & Jackson-Smith, 2010). Committees were judged to be somewhat (66-85%) or very successful (11-28%) for early-stage efforts – i.e. when developing a conservation plan. However, when the committees were evaluated for their

success at implementing those plans, a quarter of the committees were identified as unsuccessful, and less than 10% were considered very successful. In general, early stage success was found to improve the chance of, but not guarantee, later stage success. Other factors that were attributed to increased committee success included: the presence of neutral facilitation, representative membership, a sense of ownership of plan, and authority to enact plans.

Most recently, several studies examining American marine advisory committee success have been published. One case study examined the efforts to improve scientific understanding of hypoxia events in the United States (Sanger et al., 2010). In this study, scientists and marine managers formed a committee to better direct hypoxia research and by extension, improve the management of the environment. Some of the factors that contributed to this committee's success included members who were willing or interested in working in a multidisciplinary environment, member commitment to the work, respect for differing perspectives, commitment of resources and open lines of communication between the researchers and the decision-makers. In other words, efforts were made to improve the managers' understanding of the science and its limitations, and the scientists' research was guided by the questions managers needed answered (Sanger et al., 2010).

In another study, efforts to establish marine protected areas (MPAs) by a stakeholder advisory committee were successful for several reasons (Gleason et al., 2010). In this instance, there was a strong pre-existing legal mandate for the MPA, the committee enjoyed political support, and an effective public-private partnership existed to provide funding and administrative support. In addition, the committee members had been selected for their technical knowledge and commitment to the project. It was noted

that strong facilitation was necessary, and the committee benefitted from having clearly defined roles, responsibilities, goals and a transparent decision-making process (Gleason et al., 2010).

Finally, in a case study similar to Sanger et al. (2010), an advisory committee was established in Washington State in an effort to understand harmful algal blooms as a means of improving clam fishery management (Chadsey, Trainer & Leschine, 2012). Fisheries managers, stakeholders and scientists worked collaboratively to understand and manage the algal blooms and their effects on the fishery. In this study, early trust-building was critical for the success of the committee, which was operating in a multidisciplinary environment for the first time, resulting in greater willingness to collaborate than was predicted (Chadsey et al., 2012).

It is evident from this literature review that the factors attributed to committee success are extremely varied. While some important conclusions gleaned from advisory committee and community engagement literature have been highlighted, this review is by no means exhaustive. However, this section provides a brief glimpse of how this field of research has developed, along with some of the more important results currently found in environmental and marine management literature.

## **Chapter 3: Theoretical Framework and Research Methods**

### **3.1 Institutional Analysis and Development Framework**

#### *3.1.1 Introduction to IAD Framework*

In the current study, case studies were evaluated using a modified version of the Institutional Analysis and Development Framework (IAD framework) in order to understand how the structure of marine advisory committees affects their ability to produce recommendations and influence marine policy. Developed by Elinor Ostrom and the Workshop in Political Theory and Policy Analysis at Indiana University, the IAD framework considers the external and internal factors of an institution that affect the institution's outcomes (Ostrom, 2005). In its simplest form, the IAD framework considers how external variables modify the structure of the institution being analyzed, which in turn, shape the interactions and outcomes that result from the institution (fig. 1). Both the interactions and outcomes can be evaluated using a set of criteria. Depending on the research question, the outcomes from the institution can also be tracked to determine how they alter the external variables or the institution itself over time.

More often, the IAD framework is expanded from its simplest iteration. Typically, the external variables can be divided into three categories: 1) the biophysical world, 2) community attributes, and 3) the rules-in-use (Ostrom, 2005; fig. 2). The biophysical world represents the environmental conditions that can influence or limit the shape and function of the advisory committee while the community attributes are the socio-economic and cultural influences. Finally, the rules-in-use are the formal and/or

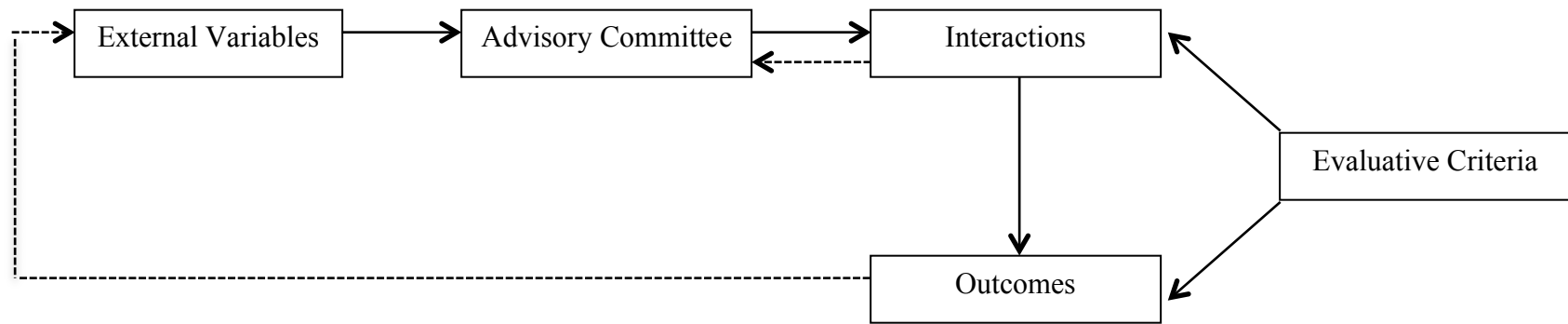


Figure 1: Simplified Institutional Analysis and Development Framework, modified from Ostrom (2005).



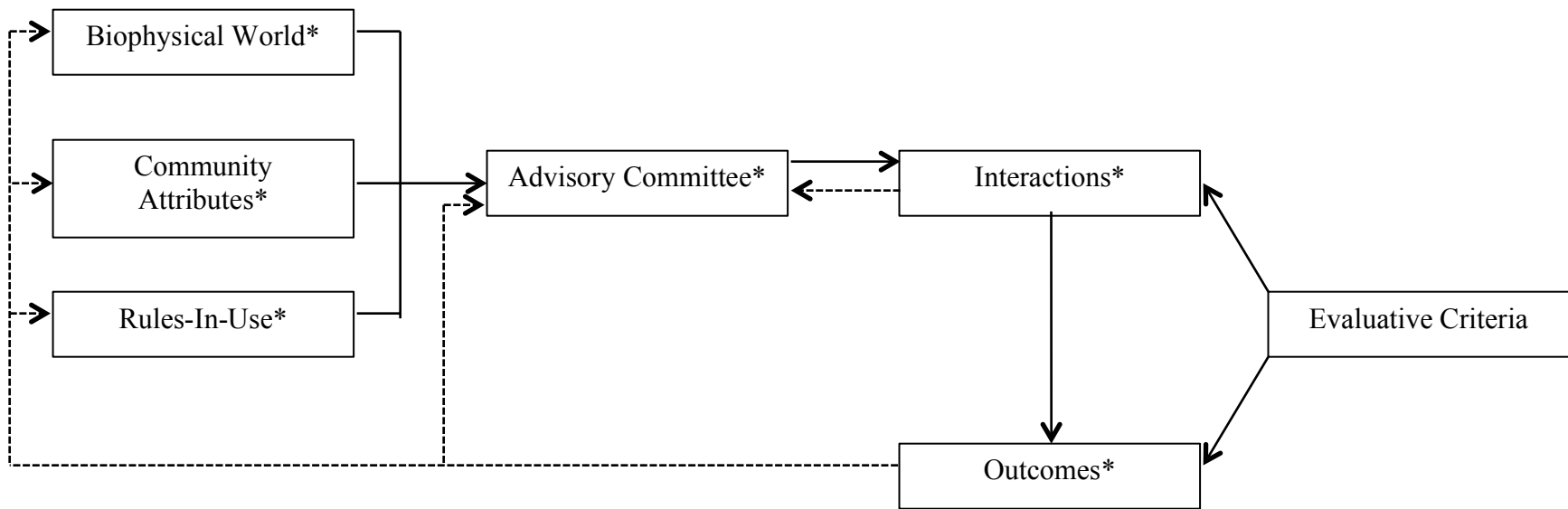


Figure 2: Expanded Institutional Analysis and Development Framework, modified from Ostrom (2005). Factors with an \* were included in the analysis.

generally understood instructions that structure the advisory committee and constrain the committee members' actions (Ostrom, 2005). Combined, these three categories will influence how an advisory committee will be formed, how it will function once it is convened, and by extension, shape the outcomes of the advisory committee.

Similar to the external variables, the institution (termed action arena in Ostrom, 2005) can be divided into several categories to elucidate how the institution actually functions (fig. 3). These categories include: participants, positions, actions, information, control, net costs and benefits, and potential outcomes (Ostrom, 2005). In this paper, the advisory committee members are the participants; while the positions are the roles each member may hold while on the committee (e.g. chairperson, voting member, observer etc.). Predictably, each position has certain responsibilities and privileges associated with it, and these are the actions assigned to each position. Henceforth, the participants will be referred to as committee members (or simply members), the roles will be termed positions, and the actions termed responsibilities. Committee members also have information or data available to them to assist them when developing recommendations.

Depending on the institution being analyzed, certain members may have more influence or control over the outcomes than others, and most members will consider the net costs and benefits to individual and group actions. All of these elements can combine to create different potential outcomes for an institution (Ostrom, 2005). Since the control and benefits or costs are intangible elements within an advisory committee and based on perception, these variables will not be considered in this study. Additionally, since the outcomes of each committee will be known, developing predictions of potential outcomes was not required.

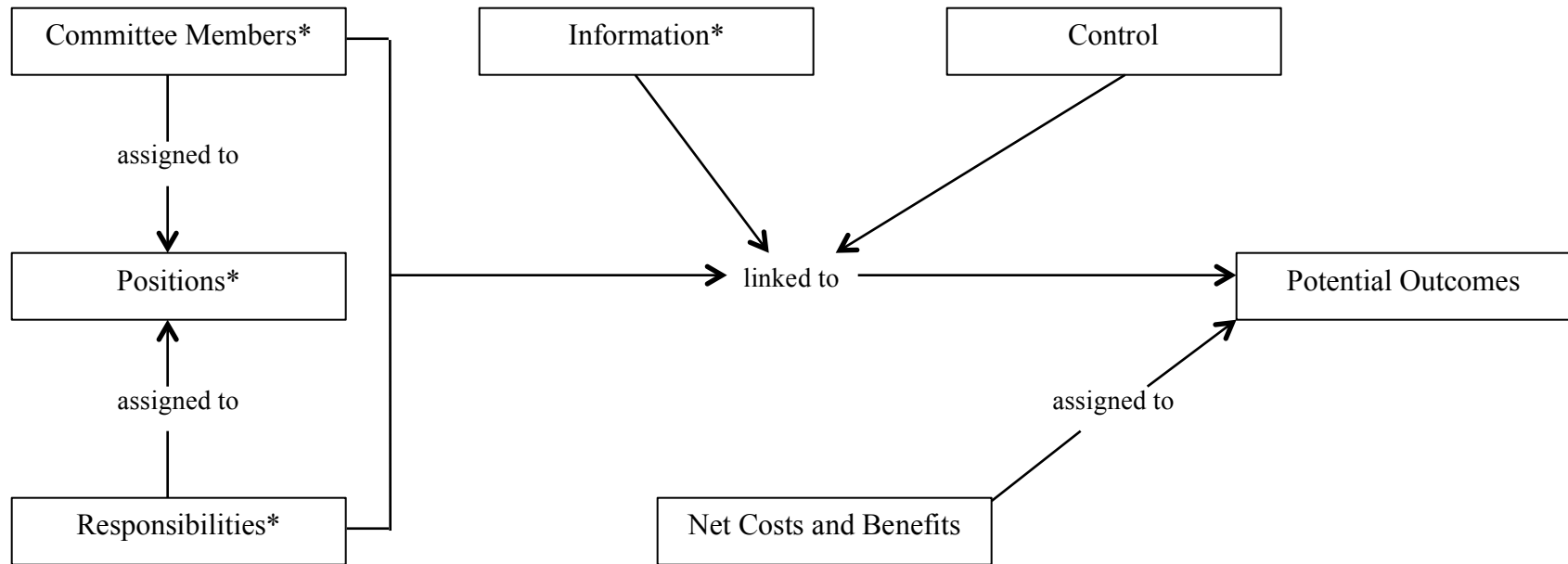


Figure 3: Internal dynamics of the advisory committee, modified from Ostrom (2005). Factors with an \* were included in the analysis.

The interactions of an IAD framework can be defined as the communication or exchange of information that members of an advisory committee have with one another within the committee or to the decision-makers (which in this paper is the government). The outcomes of an advisory committee include the recommendations (or lack thereof) produced by the committee, the influence those recommendations had on marine policy and other consequences of those suggestions.

Finally, it should be noted that IAD frameworks can be nested. In other words, an institution can create a second institution, which in turn, can create a third institutional level (Ostrom, 2005). The outcomes of the first institution are therefore the rules used by the second institution. While this paper only examines an operational level of institution (the advisory committee), it is recognized that the rules employed by the advisory committee were influenced or created by a higher tier of institution (generally a government department), which in turn was created and defined by a still higher tier of institution (the municipal/provincial/federal government as a whole; fig. 4). This creation of advisory committees tends to be a top-down approach.

### *3.1.2 Application and Scope of IAD Framework*

The IAD framework provides an excellent analytic model to evaluate the organizing factors that contribute to marine advisory committee influence. The external variables (biophysical world, community attributes, and rules-in-use) consider the context as well as the defined scope and structure of the advisory committee. The internal and interaction factors (members, positions, responsibilities, and information available) consider how the committee will function. Finally, the outcomes of the IAD framework permit the committee's effectiveness to be evaluated. By comparing multiple case

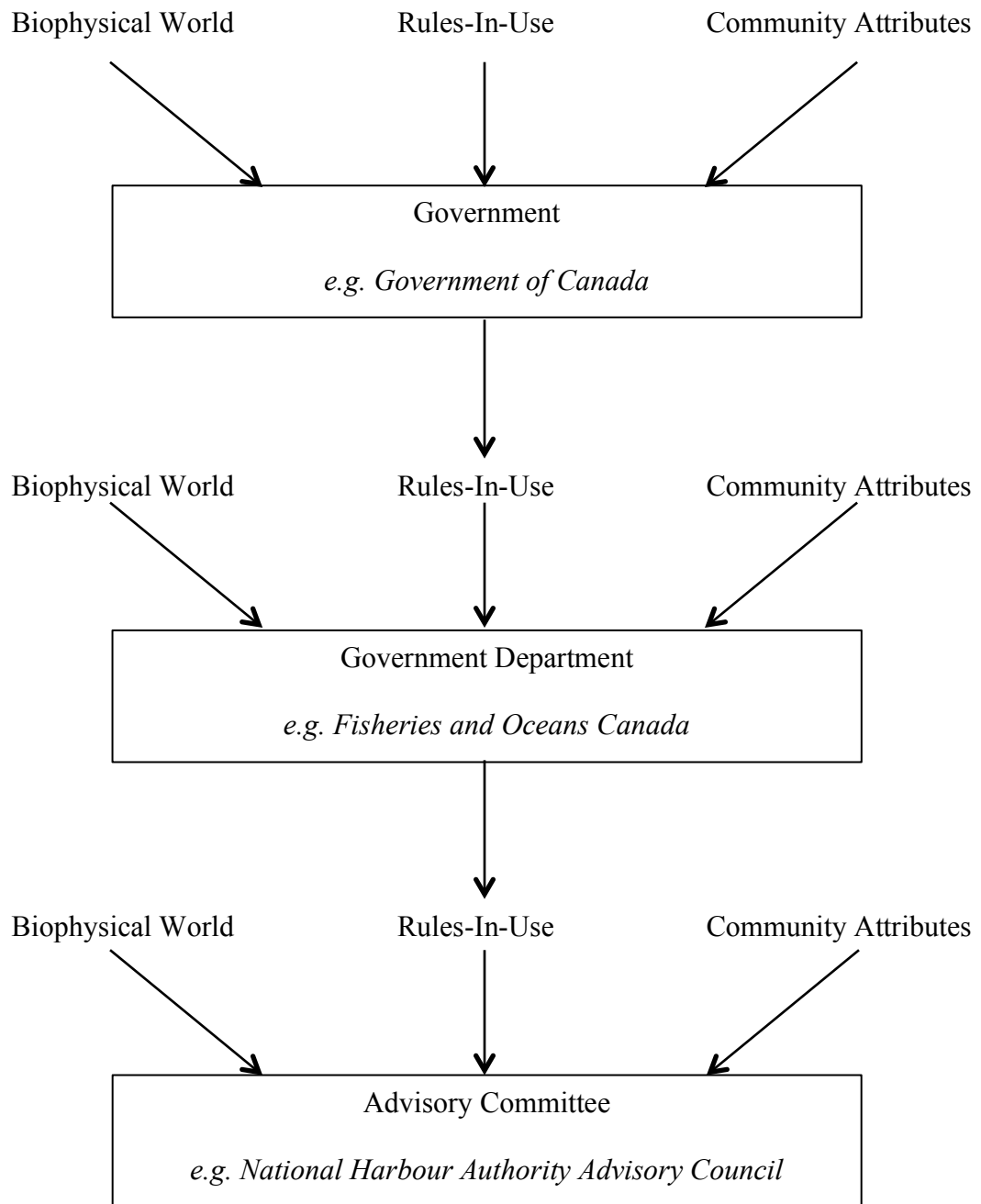


Figure 4: Nested Institutional Analysis and Development Frameworks, modified from Ostrom (2005). Only the advisory committee level was included in the analysis.

studies that have been analyzed using this framework, it is possible to determine which organizing factors of advisory committees promote their success.

It is recognized that this analysis has its limitations as well. While an empirical analysis of the structure and formal interactions can be evaluated for their importance to advisory committee success, the more intangible aspects of group work are not examined. For example, this research does not consider the power (perceived or real) of different individuals or interests within the committee, or the possible motivations for each committee member's participation. Additionally, the political motivation or will that inevitably will decide whether a committee's recommendations are accepted was not considered in this analysis. Thus, this framework will aid the development of a series of recommendations of how to build a committee to improve its chances of successfully informing policy, rather than provide a guarantee that the committee will produce perfect marine management recommendations for decision-maker.

### **3.2 Methods**

In order to identify some of the factors that contribute to advisory committee success, the complete IAD framework presented by Ostrom (2005) was modified similar to Koontz (2005; i.e. factors identified with an \* in fig. 3 & 4). Instead of considering the potential outcomes of an institution, an empirical analysis was conducted using case studies where the outcomes – both in terms of advisory committee recommendations and their reception with government – were known. Consequently, the external and internal variables and interactions that led to the known outcomes could then be examined to determine if and how they contributed to those results.

Using the Koontz (2005) method as a model, a list of variables to be considered in the IAD framework was developed. These variables elaborated on the IAD framework shown in figure 2, and consider the biophysical world, community attributes, rules-in-use, participants, positions, responsibilities, information available, committee interactions, and outcomes. Due to temporal limitations, the variables selected were objective (i.e. did not involve personal opinion), documented and were acquired through desktop research. Subjective factors that might involve interviews (e.g. impressions of power distribution within the committee, political motivation for convening a committee) were not considered, and the variables employed are not an exhaustive list of the potential factors affecting an advisory committee. Consequently, an ethics approval was not required for this research. For a full list of the variables considered in this research, along with a brief explanation, please see Table 1.

Once the variable list had been defined, eight case studies were selected for analysis. Each case study addresses one advisory committee, with at least one known outcome selected for analysis. Where committee activities are ongoing, one particular recommendation and its influence on marine policy was considered, rather than trying to “average out” a committee’s influence over several pieces of advice. The eight case studies can be classified into four categories: 1) marine resource planning, 2) marine protected area management, 3) watershed management, and 4) national advisory boards. The first three categories fall across a spectrum with respect to mandate, spatial scale of the area to be managed, and level of government. The fourth category was selected to provide a counter-point in the analysis, as these committees are not responsible for advising management activities within a defined area. All case studies involve

Table 1: List of variables and a brief explanation of each used in IAD framework analysis. Table continues onto next page.

IAD Framework	Variable	Explanation
Biophysical World	Environment	Identifies type of environment to be managed
	Size of Area	The size of the area to be managed (in km <sup>2</sup> )
	Industries Present	Lists any industries or prominent uses of the area to be managed
Community Attributes	Legislative Basis	Identifies if there is a legislated requirement for the committee
	Level of Education	Mode level of education for the nearest census district in 2006
	Median Income	Annual median income per person for the nearest census district in 2006
	Mean Income	Annual mean income per person for the nearest census district in 2006
	Population Size	Population size of the nearest census district in 2006
	Population Rate of Change	Population rate of change of the nearest census district between 2001 and 2006
	Previous Awareness	Identifies whether there were any previous committees or initiatives related to the mandate of the committee
Rules-In-Use	Terms of Reference Availability	Identifies whether Terms of Reference (ToR) were provided to the committee
	ToR Drafting Process	Identifies who drafted the ToR
	ToR Mandate	Lists the mandate or purpose stated in the ToR
	ToR Deliverables	Lists any and all products expected to be produced by the committee as stated in the ToR
	ToR Proxy Rules	Identifies if and what the rules for alternate members attending are, in lieu of the normal member
	Appointment to Committee	Describes how a member is typically appointed to the committee
	Appointment to Positions	Describes how members of the committee are appointed to a position
	Participation Incentives	Lists any incentives or reimbursements associated with a member's participation on the committee, as listed on the ToR
	Committee Structure	Describes whether the committee operates as a single unit, or has multiple working groups



IAD Framework	Variable	Explanation
Rules-In-Use (continued)	Collective Decision Process	Describes how the committee is expected to decide on a recommendation
	Meeting Frequency	Identifies how often the committee is expected to meet
	Deadlines	Identifies any deadlines associated with the listed deliverables
	Reporting Structure - To whom	Identifies to whom the committee makes their recommendations
	Reporting Structure - How	Identifies how the recommendations are communicated by the committee
Action Situation	Number of Members	Total number of committee members
	Member Positions	List of official committee positions
	Position Responsibilities	Describes position responsibilities
	Information Available	Lists the reports and presentations available to committee members
Interactions	Government Presence	Indicates if any government representatives were committee members
	Government Presence Over Time	Indicates if government members had changes in committee attendance over time
	Government Presence - Representative's Rank	Identifies the rank of the government representative(s)
	Diversity of Interests	Number of differing sectors/government departments/industries represented on committee
	Technical Expertise	Indicates degree of relevant expertise among committee members
Outcomes	Recommendations - Developed	Indicates if the committee produced recommendations or deliverables
	Recommendations - Level of Advice	Describes level of advice contained in recommendations
	Timeliness of Deliverable(s)	Indicates the length of time required by the committee to produce the recommendations
	Degree of Policy Change	Indicates if, and to what degree, the recommendations altered marine policy
	Other Outcomes	Lists any other outcomes from the committee's recommendations

Canadian advisory committees, primarily from the Maritimes but with some representation from British Columbia and Newfoundland and Labrador. In addition, all case studies occur after the Oceans Act of 1997 was implemented. For a complete list of the case studies selected, their respective categories, and their mandates, see Table 2.

A definition of success was developed for this research that contains three criteria. First, the committee must have submitted a recommendation regarding a particular issue to responsible authorities. If this first criterion was not met, the committee was considered unsuccessful. Assuming a recommendation was submitted, the subsequent criterion considered acceptance or endorsement of the advice by the decision-makers. Finally, attention was paid to the degree of implementation of the submitted recommendation. If a committee met all three criteria, it was deemed to be successful. If a committee made recommendations, and some of them were implemented without formal endorsement from the decision-makers, the committee was identified as partially successful. Finally, if only the first criterion was achieved, the committee was considered to be unsuccessful.

For each case study, the advisory committee's website, Terms of Reference, meeting minutes, published management plans, and evaluations were mined for data, where available. If no data were available for a particular variable, the person responsible for handling committee inquiries was contacted. The socio-economic data listed under community attributes were gathered from Statistics Canada's 2006 census and represent the nearest whole Canadian census division to the management area. Most advisory committees were in existence during this census period. For population rate of change, the time interval was 2001-2006. A standard time interval was used to collect

Table 2: List of advisory committees selected for IAD framework analysis, the working name used in this report, their respective category of committee and mandates.

Advisory Committee	Working Name	Category	Mandate
Southwest New Brunswick Marine Resources Planning Initiative Steering Committee	NB Marine Resource committee	Marine Resources Planning	Develop marine resources plan
Eastern Scotian Shelf Integrated Management Stakeholder Advisory Committee	ESSIM Stakeholder committee	Marine Resources Planning	Assist in developing marine resources plan
National Harbour Authority Advisory Council	National Harbours committee	National Advisory Board	Provide advice on issues of national interest
Race Rocks Advisory Board	Race Rocks committee	Marine Protected Area Management	Enable MPA designation
Gully Marine Protected Area Advisory Committee	Gully committee	Marine Protected Area Management	Provide advice on MPA management
Pockwock Lake Watershed Management Committee	Pockwock Lake committee	Watershed Management	Provide advice on watershed management
Drinking Water-Watershed Protection Technical Advisory Committee	Nanaimo Technical committee	Watershed Management	Advise on implementation of watershed management plan
Drinking Water-Watershed Protection Stewardship Committee	Nanaimo Stewardship committee	Watershed Management	Develop watershed management plan

the necessary data (regardless of when the committee operated) to simplify analysis, as some advisory committees were in existence for greater than five years (over two census periods).

Once all the data were collected, an IAD framework matrix was constructed to facilitate analysis, similar to Koontz (2005, tables 2-4, pp. 469, 471-472). Using this matrix, variable similarities and differences were subjectively compared among and between advisory committees and their respective mandates and success levels to determine which organizing factors appear to affect the likelihood of advisory committee success. This examination was supplemented by a literature review.

### **3.3 Limitations of Research**

It is important to note that this research has certain limitations. First, the variables examined only consider the organizing structure and function of marine advisory committees. The subjective factors that can influence an advisory committee and its likelihood of success were not considered (e.g. political motivation for convening an advisory committee, political will following receipt of recommendations, personal interactions or personal experiences with advisory committees, etc.). Nor is the list of organizing factors exhaustive. However, the purpose of this research is to attempt to identify certain aspects of advisory committees that may increase the likelihood of success; both in producing a plan, and having that plan accepted to any degree. In general, those convening or organizing an advisory committee can influence most of these variables, and thus the recommendations produced in this report may prove useful.

Finally, while the list of variables is not exhaustive, it is extensive relative to the number of advisory committees analyzed. Correlation, rather than causation was studied.

Consequently, the conclusions and recommendations drawn from this research will lack certainty and must be treated with a degree of circumspection. They will not guarantee a functioning, efficient advisory committee, but rather identify possible trends among advisory committees that should be taken into consideration.

## **Chapter 4: Canadian Advisory Committee Case Studies**

### **4.1 Southwest New Brunswick Marine Resource Planning Initiative Steering Committee**

The Southwest New Brunswick Marine Resources Planning Initiative Steering Committee (NB Marine Resource committee) was formed to develop a marine resource plan for the southwest New Brunswick portion of the Bay of Fundy (Marine Resource Committee, 2005). The initiative was initially convened in 2004 by the New Brunswick Department of Agriculture, Fisheries and Aquaculture and the federal department of Fisheries and Oceans (DFO) with the goal to “improve resource planning and management” in the Bay of Fundy (Marine Resource Committee, 2005, p. 3). The first phase of this initiative involved a committee of stakeholders composed of provincial, federal and first nation governments. They defined what a marine resource plan should entail, compiled a vision statement, established guiding principles, and provided legislative and management contexts along with Terms of Reference for the NB marine resource committee (Marine Resource Committee, 2005). In phase two, the NB Marine Resource committee was convened for the purpose of developing the plan. Only phase two was considered in the IAD framework, which included the marine resource plan, and its reception and outcomes by the NB Dept. of Agriculture, Fisheries and Aquaculture, and Fisheries and Oceans Canada.

### **4.2 Eastern Scotian Shelf Integrated Management Stakeholder Advisory Committee**

The Eastern Scotian Shelf Integrated Management Stakeholder Advisory Committee (ESSIM Stakeholder committee) was formed in 2005 to assist in the development of the Eastern Scotian Shelf Integrated Ocean Management Plan (Fisheries

and Oceans Canada, in press). Following the creation of the Ocean's Act in 1996, the Eastern Scotian Shelf Integrated Management Initiative (ESSIM) was announced as a pilot project to fulfill the expected legislative requirements and a collaborative planning model was developed to guide the initiative's progress. This involved three mechanisms for governance: the ESSIM Forum, the Regional Committee on Coastal and Oceans Management (RCCOM), and the Stakeholder committee. Under this model, the Stakeholder committee was designed to represent various sectorial and government interests affected by the ESSIM Initiative. Together with the RCCOM, it was responsible for guiding the final development phases of the ESSIM management plan, including approval of the plan by the Minister of Fisheries and Oceans (Fisheries and Oceans Canada, in press). For this study, the ESSIM Stakeholder committee alone was examined under the IAD framework, focusing on its efforts to develop and gain endorsement for the plan.

#### **4.3 National Harbour Authority Advisory Council**

The Small Craft Harbours Program (SCH) within DFO (Small Craft Harbours, 2012) established the National Harbour Authority Advisory Committee (National Harbour committee) in 2001. Designed with the dual purpose of advising SCH on matters of national interest and promoting communication between the various regions in Canada. It carries out the latter responsibility by coordinating information exchange between the Regional Harbour Authority Advisory Committees (RHAAC) and Small Craft Harbours (Small Craft Harbours, 2009). The council was chosen as something of an outlier in the IAD framework as it has no specific responsibilities regarding management advice, but rather operates by liaising between regions. Only the National

Harbour committee was examined in the IAD framework, and the meeting minutes from 2009-2011 were examined for outcomes.

#### **4.4 Race Rocks Advisory Board**

The Race Rocks Advisory Board (Race Rocks committee) was established for the first time in 1999 by DFO and British Columbia Parks to develop a marine protected area (MPA) plan under the mandate of the Ocean's Act (Race Rocks Advisory Board, 2000*a*). At the time of the Board's formation, Race Rocks had existed as a provincial ecological reserve for almost twenty years; but additional protection and conservation were possible if the Race Rocks area was designated as a federal MPA (Race Rocks Advisory Board, 2000*b*). Despite the fact that a recent revival of the Race Rocks committee has been attempted, for the purposes of this study, only the 1999-2002 committee deliberations, outcomes and government responses will be evaluated in the IAD framework.

#### **4.5 Gully Marine Protected Area Advisory Committee**

Fisheries and Oceans Canada originally convened the Gully Marine Protected Area Advisory Committee (Gully committee) in 2003 to assist with the establishment of the Gully MPA (Fisheries and Oceans Canada, 2011*a*). Following its designation as an MPA in 2004, the Gully committee was formally recognized as the primary provider of management advice for the MPA (Gully Advisory Committee, 2006). Since that time, the committee has reported to the Oceans and Coastal Management Division of DFO. For the purposes of this study, the Gully committee was evaluated for its contributions to the Gully Marine Protected Area Management Plan, rather than for its work during the MPA establishment process.



#### **4.6 Pockwock Lake Watershed Management Committee**

The Pockwock Lake Watershed Management Committee (Pockwock Lake committee) was established in 1994 under the Pockwock Lake Watershed Protected Water Area regulations (Halifax Water, 2009). Prior to its creation a watershed advisory committee had been established in 1975 to direct the construction of a water treatment plant in the Halifax Regional Municipality (HRM). In 2005, new Terms of Reference were drafted relevant to the current system of management (Halifax Water, 2009). Its purpose is now to advise the Nova Scotia Minister of the Environment and Halifax Water on all activities or management policies that may affect the watershed. For the purposes of this study, the current structure of the Pockwock Lake committee (including the 2005 Terms of Reference) was examined using the IAD framework. In particular, its efforts to update the Pockwock Lake and Tomahawk Lake Watersheds Source Water Protection Plan were examined as outcomes.

#### **4.7 Drinking Water-Watershed Protection Technical Advisory Committee**

The Drinking Water-Watershed Protection Technical Advisory Committee (Nanaimo Technical committee) was established in 2009 by the Regional District of Nanaimo, following the development of the Drinking Water and Watershed Protection Action Plan in 2007 (Regional District of Nanaimo, 2012a). This advisory committee was established to evaluate and guide the implementation of the action plan in 2010 (the Watershed Snapshot Report). This evaluation and its reception were considered the outcomes in the IAD framework.

#### **4.8 Drinking Water-Watershed Protection Stewardship Committee**

The Drinking Water-Watershed Protection Stewardship Committee (Nanaimo Stewardship committee) was the precursor to the Nanaimo Technical committee. The Regional District of Nanaimo established it in 2006 to develop the Drinking Water and Watershed Protection Action Plan (Drinking Water-Watershed Protection Stewardship Committee, 2007). For the purposes of this paper, the action plan and its approval were considered the outcomes in the IAD framework.

## Chapter 5: IAD Framework Results

Several of the variables studied in the IAD framework were universal across all advisory committees, regardless of mandate or success (Table 3). All committees had some awareness of the issues prior to their establishment. In addition, all committees were provided with or permitted to develop Terms of Reference, thereby allowing each group to operate as a single entity. Decision-making was identified in all Terms of Reference as consensus-based, although the definition of consensus and solutions for an impasse situation differed among the committees. All committees had either selected or elected chairpersons, along with their general members. Typically, the chairperson organized and chaired the meetings, and sometimes acted as spokesperson for the committee (to the media, public, or decision-makers), while members had speaking and voting responsibilities. Finally, all committees had access to relevant information to inform the decision-making process, namely, technical reports, access to experts, public consultation data, etc. It should be noted that the National Harbour committee, unlike other committees, did not have a formally accepted method for decision-making. Presumably, this was due to its *de facto* role as a forum for communication, rather than its *de jure* mandate of advising on matters of national interest (M.C. Robertson, personal communication, June 21, 2012).

In addition to the factors that were universal to all committees, there were others that were found common only to marine resource planning, MPA management, or watershed management committees (Table 3). In the marine resource planning cases (NB Marine Resource and ESSIM Stakeholder), both had information exchange fora as precursors to the advisory committee and the committees themselves developed

recommendations that were strategic in scope. In other words, these plans tended to identify the long-term goals and objectives of the project and identified possible methods to achieve those goals.

The MPA management advisory committees (Race Rocks and the Gully) were identified as conservation-motivated efforts for at least a decade prior to the formal establishment of the advisory committee. In addition, the plans developed by the committees were typically strategic and to some degree, tactical in scope. Specifically, the long-term goals and objectives were identified, along with a more specific plan on how those goals were to be achieved. However, the plans did not include the day-to-day management decisions.

Finally, the watershed management committees (Pockwock Lake and Nanaimo Technical and Stewardship) contained government decision-makers as members. In addition, the plans produced by the committees ranged across the spectrum and included strategic, tactical and operational considerations. Not only were the long-term goals and methods for achieving those goals identified, these committees also advised on the day-to-day decisions necessary to manage the watershed.

Four of the above committees were identified as successful, two were identified as partially successful, and two committees were unsuccessful (Table 3). Of the four successful case studies, the NB Marine Resource, Nanaimo Technical and Nanaimo Stewardship committees met all three criteria for success (recommendations were produced, they were approved by decision-makers, and they were implemented to some degree), while the fourth committee, Pockwock Lake, produced a recommendation that was approved, though not yet implemented. The two partially successful committees –

ESSIM Stakeholder and the Gully – were identified as such for several reasons. In the case of the ESSIM Stakeholder committee, while a plan was produced and elements of the recommendations were implemented, the Eastern Scotian Shelf Integrated Ocean Management Plan was never formally endorsed by the Minister of Fisheries and Oceans. In contrast, while the Gully committee assisted in the production of the Gully Marine Protected Area Management Plan, committee members had low attendance levels throughout the process, thereby generating doubts as to whether the plan was the work of the advisory committee. Finally, the Race Rocks and National Harbour committees were classified as unsuccessful for two different reasons. For the Race Rocks committee, while it produced an MPA designation proposal, the designation was never accepted or implemented by DFO. In the case of the National Harbour committee, no recommendations were produced or submitted during timeframe studied.

Interestingly, there were no organizing factors that were specific only to the defined successful committees, or even to successful and partially successful committees (Table 3). However, in general, the advisory committees studied could be identified by one of three broad goals: to develop, to implement, and/or to inform. In other words, committees were either responsible for: developing a plan (i.e. NB Marine Resource, Nanaimo Stewardship, ESSIM Stakeholder, Gully, Race Rocks); advising on the implementation of a pre-existing plan (i.e. Pockwock Lake, Nanaimo Technical); or, they functioned principally as an information exchange forum (National Harbour ).

If the advisory committees are grouped according to their goals and then re-examined within those goals for trends in organizing factors, several patterns emerge (Table 3). Committees who were tasked to develop a plan (regardless of its success) had

government-appointed chairpersons and, with one exception, met frequently (between 4-12 times annually, with an average frequency of 10 meetings yr<sup>-1</sup>). In contrast, committees responsible for implementing a plan did not necessarily have a government-appointed chair but they did have a decision-maker presence on the committee. In addition, the frequency of committee meetings was much lower at 2-3 annually.

Within the development committee group, there were also some variables that differentiated between successful, partially successful and unsuccessful committees (Table 3). Successful committees tasked with developing a plan (NB Marine Resource and Nanaimo Stewardship) were not required by legislation, meaning the organizations responsible for their creation were not legally required to request advice. In addition, the government drafted the committees' Terms of Reference and government-appointed chairpersons regularly communicated the committee's plans, activities and recommendations to the government, thereby receiving continuing feedback. The partially successful Gully committee resembled the successful developing committees, except that the Gully committee met more infrequently (2 meetings annually). In contrast, the partially successful ESSIM Stakeholder and unsuccessful Race Rocks committees developed their own Terms of Reference, and had reduced frequency and ease of communications with the decision-makers. All three partially successful and unsuccessful committees also did not provide financial reimbursement for committee members. Finally, the partially successful ESSIM stakeholder can be differentiated from the unsuccessful Race Rocks by the rank of government presence on the committee. The ESSIM Stakeholder committee had members who were civil servants with the authority to appropriate resources and implement part of the management plan without formal

endorsement from the Minister of Fisheries and Oceans. In contrast, the Race Rocks committee was comprised of government employees who were unable to take individual initiatives without prior approval.

Successful advisory committees tasked with advising on the implementation of a pre-existing plan were distinguished from developing committees by several factors (Table 3). In particular, successful implementing committees (Pockwock Lake and Nanaimo Technical) drafted their own Terms of Reference and formally reported their recommendations to the government indirectly (i.e. not through committee members). In addition, these committees included at least one government decision-maker as a member and the average time to produce a recommendation was 6 months.

Many of the variables examined using the IAD framework, such as descriptions of the biophysical world, did not appear to influence the probability of advisory committee success (Appendix A, Table 1). The areas under management ranged from 2 km<sup>2</sup> to 325,000 km<sup>2</sup> and included terrestrial watersheds, coastlines, inshore and offshore marine environments and contained a variety of industries. Community attributes, such as average population income, educational levels, size, and rate of change did not appear to influence committee success.

When the rules-in-use were examined, the expected deliverables, appointment process to the committee, the presence of deadlines and the identity of the decision-makers also did not appear to affect committee success (Appendix A, Table 1). It should be noted that even though deadlines were often part of the Terms of Reference, committees generally had difficulty meeting them. Committees ranged in size from 8 and 30 members, often with a broad diversity of interests yet these factors were judged to be

independent of committee success and also did not appear to influence the length of time it took committees to produce a recommendations.



Table 3: Results of IAD framework analysis for all case studies. Variables that did not appear to contribute to any committee’s success, or were not universal to all committees were excluded. Table continues for eight pages.

Variable	Case Studies	
	NB Marine Resource Planning Committee	ESSIM Stakeholder Advisory Committee
Committee Success Assessment	Successful	Partially Successful
Committee Mandate	Develop	Develop
<b><i>Biophysical World</i></b>		
<b><i>Community Attributes</i></b>		
Legislative Basis for Committee	Not required	Required
Previous Awareness	Forum for information sharing, localized marine resource planning efforts, Phase 1 committee	Gully MPA Advisory Committee, ESSIM Forum
<b><i>Rules-In-Use</i></b>		
Terms of Reference Availability	Provided	Provided
Drafting Process	Developed by Phase 1 committee, approved by government	Developed by committee
Participant Proxy Rules	Not provided	Proxy must be fully briefed on content, principles and process
Appointment Process - To positions	Chairperson appointed by government	Co-chair - DFO position is ex-officio, second chair is nomination and secret ballot (50%+1 wins)
Participation Incentives	Per diem and expenses	None
Committee Structure	Single committee	Single Committee with sub-committees/working groups as needed
Collective Decision Process	Consensus	Consensus (among all members) for Plan and planning process, for administration, consensus or majority vote
Meeting Frequency	~ 12 per year	4-8 per year
Deadlines	None	None
Reporting Structure - How	Via Chair, with committee present	In conjunction with the RCOM

<b>Variable</b>	<b>Case Studies</b>	
	NB Marine Resource Planning Committee	ESSIM Stakeholder Advisory Committee
<b><i>Action Situation</i></b>		
Participant Positions	Chairperson, Members, Ex-officio Members	Co-chairs, members
Position Responsibilities	Chair - draft recommendations, communicate with high-ranking community members and deputy ministers, coordinate meetings, Members - participate in discussions, vote, Ex-Officio members - observe and provide administrative support	Co-chairs - chair meetings, ensure that processes/principles followed, develop agenda, Members - vote, participate in discussion
Information Available	Background Report, preliminary & expanded public consultation reports, description of marine resource plan elements, vision statement & guiding principles	Reports on ecosystem, socio-economics, management philosophies, teamwork, public and stakeholder consultations
<b><i>Interactions</i></b>		
Government Level of Involvement - Presence on committee	Observers only	Present
Gov't Level of Involvement - Over time	Variable	Constant
Gov't Level of Involvement - Representative's rank	Civil servant	High to mid-level civil servant
Technical Expertise of Committee	High	Varied
<b><i>Outcomes</i></b>		
Recommendations - Developed	Developed	Developed
Recommendations - Level of Advice	Strategic and tactical	Strategic
Timeliness of Deliverable(s)	42 months	24 months
Degree of Policy Change	High priority recommendation co-selected by government and committee and implemented	Not formally endorsed, some initiatives implemented
Other Outcomes	Greater public awareness of issues	Governance infrastructure developed, comprehensive research conducted, improved understanding of ICOM

<b>Variable</b>	<b>Case Studies</b>	
	Race Rocks Advisory Board	Gully Advisory Committee
Committee Success Assessment	Not Successful	Partially Successful
Committee Mandate	Develop	Develop
<b><i>Biophysical World</i></b>		
<b><i>Community Attributes</i></b>		
Legislative Basis for Committee	Not required	Not required
Previous Awareness	Provincial Ecological Reserve since 1980	Area of conservation interest since early 1990's, Area of Interest in 1998
<b><i>Rules-In-Use</i></b>		
Terms of Reference Availability	Provided	Provided
Drafting Process	Developed by committee	Developed between DFO and interim committee
Participant Proxy Rules	Permitted as required	Alternates permitted if well informed and can represent sector. Regular member to notify DFO in advance
Appointment Process - To positions	DFO appoints chair	Chairperson - ex officio to DFO, non-government co-chair - appointed by committee
Participation Incentives	None	None
Committee Structure	Single committee	Single committee with working groups as needed
Collective Decision Process	Consensus	Consensus (defined as general agreement or majority), dissenting opinions also noted
Meeting Frequency	10 per year	2 per year
Deadlines	4 months	None
Reporting Structure - How	Recommendations submitted to DFO and BC Parks	DFO Chair acts as liaison between committee and DFO senior management
<b><i>Action Situation</i></b>		
Participant Positions	Chair, members	Chair, members
Position Responsibilities	Chair - facilitator, media spokesperson	Co-chair - chair meetings, act as spokesperson, DFO Chair - communicate recommendations, Members - liaise with their organizations, participate in discussions

<b>Variable</b>	<b>Case Studies</b>	
	Race Rocks Advisory Board	Gully Advisory Committee
<b><i>Action Situation</i></b>		
Information Available	Public consultation, First Nations cultural importance, socio-economics report, feasibility study	Sector expertise, presentations by experts, scientific literature
<b><i>Interactions</i></b>		
Government Level of Involvement - Presence on committee	Present	Present
Gov't Level of Involvement - Over time	Constant	Constant
Gov't Level of Involvement - Representative's rank	Civil servants	Civil servants
Technical Expertise of Committee	Varied	High
<b><i>Outcomes</i></b>		
Recommendations - Developed	Developed	Developed
Recommendations - Level of Advice	Strategic and tactical	Strategic and tactical
Timeliness of Deliverable(s)	10 months	48 months
Degree of Policy Change	Plan altered without informing committee, never approved	Assisted in development of Gully Management Plan
Other Outcomes	Second advisory committee established in 2009	Poor attendance by committee members, some disenfranchisement with top-down structure

<b>Variable</b>	<b>Case Studies</b>	
	Pockwock Lake Watershed Management Committee	Nanaimo Technical Advisory Committee
Committee Success Assessment	Successful	Successful
Committee Mandate	Implement	Implement
<b><i>Biophysical World</i></b>		
<b><i>Community Attributes</i></b>		
Legislative Basis for Committee	Required	Not required
Previous Awareness	Watershed advisory committees existing since 1975, current committee in existence since 1994	Vancouver Island-wide Watershed Steering Committee, Drinking Water-Watershed Protection Steering Committee
<b><i>Rules-In-Use</i></b>		
Terms of Reference Availability	Provided	Provided
Drafting Process	Developed by committee	Developed by committee
Participant Proxy Rules	Alternates can be appointed and attend meetings as observers, voting only when primary member is absent	No proxies permitted
Appointment Process - To positions	Appointed by members annually	Chair position - ex officio
Participation Incentives	None	None
Committee Structure	Single committee	Single committee
Collective Decision Process	Consensus first, if no consensus can be reached then by vote with minimum 5 votes for quorum, if not reached, then more information gathered	Consensus if possible, by vote if not (minority opinions can also be submitted to Board in that case)
Meeting Frequency	Minimum 2 meetings per year	Minimum 3 per year
Deadlines	None	None
Reporting Structure - How	Via Waterworks Operator	Via Sustainability Select Committee
<b><i>Action Situation</i></b>		
Participant Positions	Chair, vice-chair, representative	Chairperson, members
Position Responsibilities	Chair - spokesperson for committee	Members - speaking and voting

<b>Variable</b>	<b>Case Studies</b>	
	Pockwock Lake Watershed Management Committee	Nanaimo Technical Advisory Committee
<b><i>Action Situation</i></b>		
Information Available	Industry actions, public consultation (occasional), day-to-day activities in management area	Expert presentations, various reports, water quality monitoring programs
<b><i>Interactions</i></b>		
Government Level of Involvement - Presence on committee	Present	Present
Gov't Level of Involvement - Over time	Constant	Constant
Gov't Level of Involvement - Representative's rank	Decision-makers/civil servants	Decision-makers/civil servants
Technical Expertise of Committee	Varied	Varied
<b><i>Outcomes</i></b>		
Recommendations - Developed	Developed	Developed
Recommendations - Level of Advice	Tactical	Tactical and operational
Timeliness of Deliverable(s)	6 months to draft, 24 months to publish	6 months
Degree of Policy Change	Plan implemented	Plan implemented
Other Outcomes	None	Increased watershed protection awareness, spin-off initiatives and programs

<b>Variable</b>	<b>Case Studies</b>	
	Nanaimo Stewardship Committee	National Harbour Authority Advisory Council
Committee Success Assessment	Successful	Not Successful
Committee Mandate	Develop	Advise
<b><i>Biophysical World</i></b>		
<b><i>Community Attributes</i></b>		
Legislative Basis for Committee	Not required	Required
Previous Awareness	Watershed protection formally recognized as regional priority, Vancouver Island-wide Watershed Steering Committee	Regional Harbour Authority Advisory Committees
<b><i>Rules-In-Use</i></b>		
Terms of Reference Availability	Provided	Provided
Drafting Process	Developed by RDN	Developed collaboratively between Small Craft Harbours and committee
Participant Proxy Rules	Not provided	Permitted as required
Appointment Process - To positions	Chair appointed by RDN Board	Chairperson - ex officio
Participation Incentives	Out of pocket expenses reimbursed	None
Committee Structure	Single committee	Single committee
Collective Decision Process	Consensus if possible, by vote if not (minority opinions can also be submitted to Board in that case)	None (provides advice rather than makes decisions)
Meeting Frequency	Minimum 12 per year	1-2 per year
Deadlines	~12 months	None
Reporting Structure - How	Via Chairperson	Via regional Contact Group members
<b><i>Action Situation</i></b>		
Participant Positions	Chairperson, members	Chair, members

<b>Variable</b>	<b>Case Studies</b>	
	Nanaimo Stewardship Committee	National Harbour Authority Advisory Council
<b><i>Action Situation</i></b>		
Position Responsibilities	Chairperson – report to RDN Board, all members –vote and speak	Chair – set agenda, distribute relevant information to members, assist in administration of committee, Members – participate in advice discussions, liaise between regional and national committees
Information Available	Access to experts	Regional updates, expert presentations
<b><i>Interactions</i></b>		
Government Level of Involvement – Presence on committee	Present	Present at plenary meetings
Gov't Level of Involvement – Over time	Constant	Constant
Gov't Level of Involvement – Representative's rank	Decision-makers/civil servants	Decision-makers (regional and national)
Technical Expertise of Committee	Low (used consultants for expertise)	High
<b><i>Outcomes</i></b>		
Recommendations - Developed	Developed	Not developed
Recommendations - Level of Advice	Strategic and tactical	Not developed
Timeliness of Deliverable(s)	19 months	42 months
Degree of Policy Change	Plan implemented	None
Other Outcomes	Increased watershed protection awareness, website developed, community initiatives and studies initiated, Technical Advisory Committee created	Reports and investigations commissioned



## **Chapter 6: Discussion**

The IAD framework was used to examine many of the factors that organize and describe the procedures within an advisory committee. Of these factors, some were linked only to successful committees, while others were considered to be universal in nature.

### **6.1 Successful Committees**

Of the four successful committees, the NB Marine Resource and Nanaimo Stewardship committees were expected to develop a plan while Pockwock Lake and Nanaimo Technical committees advised on the implementation of previously existing plans. Several factors appear to have contributed to each committee's influence. The NB Department of Agriculture, Aquaculture and Fisheries and DFO voluntarily convened New Brunswick's Marine Resource committee. Neither government agency was legally obligated to convene or request the advice provided by this committee. Consequently, these departments took several steps to guide or clarify their expectations for the committee. First, while the phase one committee initially wrote the Terms of Reference, the provincial and federal decision-makers approved them before the committee commenced its work. Second, the chairperson was government-appointed, and this individual was expected to communicate the committee's recommendations to the decision-makers.

Similarly, Nanaimo's Regional Board (RDN) was not obligated to form the Stewardship committee, or adhere to any of its advice. The RDN also provided the committee with government-drafted Terms of Reference, and appointed the chairperson.

The Terms of Reference required that the chair also relay the committee's proposed plan to the RDN.

In the case of Halifax's Pockwock Lake and Nanaimo's Technical committee, there were other factors that appeared to contribute to their success. Both committees had members who had the authority to make decisions for the government.

Consequently, while these committees drafted their own Terms of Reference, appointed their own chairperson and indirectly communicated their recommendations to the government agencies responsible for the decisions, they were still able to influence policy.

All of the successful committees had two elements in common; 1) they had political support and, 2) effective lines of communication. The NB Marine Resource and Nanaimo Stewardship committees were voluntarily convened by government. Next, in order to ensure the committees addressed the governments' questions, the government agencies drafted or approved the committee's Terms of Reference, appointed a chairperson to guide the committee, and expected the chairperson to act as communication liaison between the government and committee. The Pockwock Lake and the Nanaimo Technical committees demonstrated political support in a different way. These two committees each had at least one member who not only represented government interests but who also had decision-making authority. With a decision-maker on the committee, it was possible for the committee to draft its own Terms of Reference, appoint its own chairperson and still accomplish the tasks expected by the government. In addition, while these latter two committees formally communicated their recommendations indirectly (i.e. not through a committee member or the chairperson),

the decision-making members could communicate, not only the recommendations, but also the broader context of each committee's deliberations.

Within the literature, political support and clear communication have repeatedly been identified as factors that can contribute to committee success. For instance, Busenberg (2000) found that committees that could mobilize interest group or political support were more likely to have their recommendations implemented. High political awareness of the issues addressed by the committee contributed to the likelihood of policy change for both land-use regulations and hypoxia management (Koontz, 2005; Sanger et al., 2010). Similarly, strong political will increased committee success rate of both MPA establishment efforts, and ecosystem-based management efforts in the United States (Gerlak & Heikkila, 2006; Gleason et al., 2010).

Clear and effective communication has also been attributed to committee success in previous studies. For example, Andersson (2006) found that decentralized forest governance improved when the institutional structure allowed for two-way communication between the government and the public, and between government agencies. Gleason et al. (2010) reiterated this finding for committees attempting to establish MPAs – success increased when there was more communication between stakeholders, committee members, and the government. Additionally, this study noted that clearly defined roles, responsibilities, and goals, as well as a transparent decision-making process contributed to committee influence and satisfaction with the process. Finally, several reviews found that when the government clarified their goals and objectives of public participation, both within the government and to the public, they

tended to yield better results than when this was not done (e.g. Chess & Purcell, 1999; Reed, 2008).

## **6.2 Partially Successful Committees**

Two of the eight committees analyzed were found to be partially successful: ESSIM Stakeholder, and the Gully. Nova Scotia's Stakeholder committee was tasked with completing and gaining ministerial approval for a marine resources management plan, in conjunction with another committee. Even though the plan was completed, and several projects were initiated, the plan never received ministerial endorsement. Nova Scotia's Gully committee also was expected to develop a Gully MPA management plan. Unlike the ESSIM effort, the completed plan received federal approval. However, the committee had an exceedingly poor attendance record that suggested much of the management plan was produced without committee contributions. For both committees, these limiting factors were offset by others that contributed to their success.

In contrast to the successful NB Marine Resource or the Nanaimo Stewardship committees, the ESSIM Stakeholder committee was expected to draft its own Terms of Reference. Consequently, there was a perceived lack of clarity in the mandate of the Stakeholder committee by the members (Fisheries and Oceans Canada, in press). In addition, when the ESSIM management plan failed to gain ministerial approval, even following several requests, committee member frustration increased (Fisheries and Oceans Canada, in press). Clearly, this committee failed to gain political support throughout the process, starting with minimal government guidance framing the government's goals and objectives in the Terms of Reference, and ending with the refusal to endorse the proposed management plan.

However, the ESSIM Stakeholder committee was able to begin implementing some of the initiatives and programs contained in the management plan without ministerial approval. This partial success was likely due to the presence and rank of some of the committee members. The stakeholder committee had several DFO employees as members, some of who had sufficient authority to appropriate resources and begin to initiate several management measures. This access to resources (financial or otherwise) has been noted repeatedly in the literature as an influential factor contributing to advisory committee success. For instance, Busenberg (2007) found that although political support was needed to implement marine oil initiatives in Alaska, the scope and effectiveness of advisory committee recommendations was limited by access to funding. Similarly, Sanger et al. (2010) found that a successful hypoxia management collaboration benefited from the commitment of resources for research, while Gleason et al. (2010) observed that advisory groups advocating the establishment of MPAs were successful, in part, due to their access to a public-private partnership of funding and administrative resources. In fact, a review of watershed partnership literature showed that 62% of all articles cited access to funding and resources as important to the success of an advisory committee (Leach & Pelkey, 2004). This factor was found to be the most common, in a list of 210 distinct factors (Leach & Pelkey, 2004).

Similarly, the Gully committee's limited success appears to have been due to several factors, among which was poor communication between the government and the committee. Even though the Gully's Terms of Reference were jointly written by DFO and the interim committee – a factor that appeared to contribute to the success of the NB Marine Resource and Nanaimo Stewardship committees – committee members cited

dissatisfaction with the purely advisory role of the Gully committee (Management Review of the Gully MPA 2007-2010, in press). In addition, while a MPA management plan was prepared in part by the committee and approved by DFO, the committee experienced very poor levels of member attendance – calling into question the committee’s level of contribution to the management plan (Management Review of the Gully MPA 2007-2010, in press). Poor attendance was possibly linked to disillusionment of the committee members. This disenfranchisement of committee members suggests that there was unclear or ineffective communication between DFO and the committee, which failed to manage committee member expectations.

As mentioned previously, the literature has identified the need for clear and effective communication between the government and the committee (e.g. Andersson, 2006; Chess & Purcell, 1999; Gleason et al., 2010; Reed, 2008). Although the government wrote the Terms of Reference, and the chairperson on the committee was government-appointed, the disenfranchisement of the Gully committee suggests that the goals and expectations of government and members were insufficiently clarified at the commencement of committee activities. It has also been noted in the literature that advisory committee success increases with committee member commitment. For example, Leach and Pelkey (2004) found that active participation by committee members typically increased watershed council influence. Similarly, in three different marine management studies, committee member dedication contributed to the committee’s success (Chadsey, Trainer & Leschine, 2012; Gleason et al., 2010; Sanger et al., 2010). It is unclear from this analysis whether the clarity of communication and the commitment

of committee members were independent of one another. It is possible that unclear objectives may ultimately lead to dissatisfaction and reduced member commitment.

### **6.3 Unsuccessful Committees**

The remaining two committees – Race Rocks and National Harbour – were unsuccessful in their attempts to influence marine policy. In the case of the National Harbour committee, its *de facto* role was to facilitate communication between DFO jurisdictions in Canada, rather than develop or implement national plans for harbour management. Consequently, no plans or recommendations were developed during the period analyzed, and this committee could not be considered successful relative to the criteria used in this study. It should be noted that there were no formal processes for arriving at decisions within this committee, unlike every other committee studied. Given the role of the committee however, this distinguishing factor is unsurprising.

Conversely, the Race Rocks committee was expected to develop a MPA designation proposal. While the committee met this expectation, the federal government did not accept the proposal, and none of the recommendations were implemented. Several factors appear to have contributed to this lack of success. First, unlike the NB Marine Resource or the Nanaimo Stewardship Committees, Race Rocks drafted its own Terms of Reference, even though BC Parks and DFO voluntarily convened it. As there were no individuals with decision-making authority on the committee, this lack of guidance with respect to the Terms of Reference suggests that there may have been reduced political support or investment into the committee. This lack of effort to both support the committee and clarify expectations was reiterated when the proposal for MPA designation was altered by DFO without notifying the committee, following submission.

Ultimately, neither the original or altered plans were accepted, nor was the MPA designation approved or any additional conservation measures implemented.

In this case study, the lack of political will and clear communication appear to have contributed to the committee failure. Although voluntarily convened by government, the committee was left to define its role without decision-maker input. Perhaps most importantly, the wording change of the committee's recommendations by the government, without consulting the committee, suggests that there was little inclination to embrace the committee's efforts. It appears that the committee was figurative, a token effort to include the public, rather than being viewed by the decision-makers as a legitimate tool. Needless to say, advisory committee literature repeatedly concludes that political will and clear, two-way lines of communication are necessary for committees to be successful (e.g. Andersson, 2006; Busenberg, 2000; Busenberg, 2007; Chess & Purcell, 1999; Gerlak & Heikkila, 2006; Gleason et al., 2010; Koontz, 2005; Reed, 2008; Sanger et al., 2010).

#### **6.4 Common Factors**

In addition to the factors that contributed to advisory committee success, there were several factors judged to be universal to the eight committees studied. Interestingly, many of these factors have been identified in previous studies as variables with the potential to influence the probability of committee success. For instance, all eight committees had some degree of previous awareness or concern for the issues under consideration. New Brunswick's Marine Resource and ESSIM's Stakeholder committees had established communication fora prior to convening the committees. Conservation concerns were identified decades before either MPA committee was established, and



concerns over watershed management led to the creation of the three watershed committees. Although an important precursor to committee deliberations, prior awareness of the issues did not appear to influence committee success greatly in this study, even though Koontz (2005) found that communities with previous land-use planning regulations were far more likely to accept advisory committee recommendations for zoning than those with no previous zoning or planning awareness.

Similarly, consensus-based decision-making and defined member responsibilities have previously been cited as keys to advisory committee success (Gleason et al., 2010; Leach & Pelkey, 2004). In this study however, both factors were present for all committees, regardless of influence. Interestingly, the definition of consensus (usually provided in each committee's Terms of Reference) varied. Some committees (i.e. Gully) defined consensus as the general or majority opinion, while others (i.e. ESSIM Stakeholder, Nanaimo Stewardship and Technical, and Pockwock Lake) expected unanimity (and provided alternative strategies for dealing with entrenched disagreement). The remaining two committees (NB Marine Stewardship and Race Rocks) did not define consensus in the Terms of Reference. Leach, Pelkey, and Sabatier (2002) also determined that the definition of consensus differed in a review of watershed committees. Even though the definition of consensus did not appear to affect the likelihood of committee success in the current study, it was previously in a study of Great Lake restoration committees found that consensus (defined as general agreement) was particularly successful when a plan was being developed, but could be used opportunistically during implementation discussions (Sproule-Jones, 1999). Finally, while access to technical knowledge has been considered an important component of

advisory committee success in a variety of papers, it did not correlate to success in the current analysis (e.g. Gleason et al., 2010; Leach & Pelkey, 2004; Lynn & Busenberg, 1995; Reed, 2008).

Terms of Reference were available to all committees (although the authors varied) and single committee structure was also found to be universal among the studied committees. However, unlike previous awareness, consensus-based decision-making or access to technical knowledge, neither factor has to the author's knowledge been directly attributed to advisory committee success in the literature. However, the necessity of having clearly defined goals and objectives for public or stakeholder engagement has been repeatedly recommended (e.g. Chess & Purcell, 1999; Gleason et al., 2010; Leach & Pelkey, 2004; Reed, 2008). Although not directly referenced in the literature, Terms of Reference are one formal mechanism for defining the purpose and expectations of an advisory committee.

Even though this study did not find a direct correlation between these common factors and committee success, it would be presumptuous to assume that they are completely unrelated. It is possible that the presence of these factors increased a committee's influence, likely in combination with other organizational or local factors. For instance, Nanaimo's Stewardship committee was successful in establishing a watershed protection program. It is unlikely that this success would have occurred without the previous acknowledgement by the Regional Board that watershed management was a priority concern. Conversely, the Race Rocks committee would not have been established if Race Rocks was not already an area of conservation interest. However, the recognition that it needed to be protected was insufficient to ensure that the

committee's proposal was approved. Thus, it may be that some of these common factors are required but inadequate on their own to guarantee success. Combined with other relevant factors – possibly determined by local conditions – these common variables potentially enable committee success. Further research would be useful to identify whether this is indeed the case.

## **6.5 Summary**

In general, advisory committee success appears to be related to the amount of political support and clarity of communications between the decision-makers and the committee. Typically, Terms of Reference drafted with the guidance or approval of the government tended to result in influential committees. Two-way lines of communication between the committee and the decision-makers also increased committee success. Previous awareness of issues preceded the creation of the committees, while access to technical knowledge was necessary to inform committee recommendations, but insufficient to guarantee success.

## **Chapter 7: Recommendations**

The IAD framework analysis of the eight Canadian committees has revealed certain trends in the organization and structure of advisory committees that may increase the likelihood of (but not guarantee) success. Five general recommendations have been made, followed by a brief explanation, or further suggestions.

***1. Clear goals, visions or objectives should be clearly communicated and agreed upon by both the committee and the decision-makers, at the outset of the advisory process.***

When decision-makers and committee members clarify the expectations of the advisory process early on, it is far more likely that both parties will be engaged and committed to the process. Additionally, it is far more likely that the committee will produce recommendations suitable to the original issue. Terms of Reference are one mechanism for managing expectations, particularly if they are drafted or approved by the decision-makers. Efforts should be made to ensure that the committee members and government fully understand and agree to the goals defined in the Terms of Reference.

***2. Committees should use a consensus-based decision-making model, which has been clearly defined at the start of the process.***

Consensus will tend to ensure that most opinions or viewpoints are considered within the committee and will likely resolve conflicts between stakeholders before a recommendation is produced. This may result in a higher degree of legitimacy in both the process and in any resulting policies. Given that the authority to act typically lies outside of the committee, it may be beneficial to also include minority opinions in committee recommendations, to fully inform the decision-makers. It is recommended

that unanimity be avoided. The difficulty of arriving at unanimous consent may slow or stall the production of recommendations within the committee.

**3. *Clear lines of communication should be maintained throughout the advisory process, including: to and from the advisory committee and the decision-makers, as well as between the public and/or stakeholders, the committee and the government.***

Clear lines of communication are related to both maintaining political will and committee dedication. There should be a continual feedback of information, guidance and clarification between all involved parties. Ideally this will foster engagement and increase accountability as well as legitimacy in the advisory process.

**4. *Committees should have timely access to relevant technical data.***

Access to relevant information is necessary to ensure the committee does not make recommendations in ignorance. Timely access enables a more efficient advisory process.

**5. *Committees should seek to gain political and/or stakeholder support for their recommendations.***

Advisory committees in Canada generally sit on the placation rung of Arnstein's (1969) ladder of participation; in other words, they can advise, but not decide. Any influence a committee has on policy will be due to the amount the political support its recommendations garner. Consequently, continuous efforts should be made to maintain or increase political support for an advisory committee. Gaining stakeholder or public endorsement has been noted as an effective tool for acquiring political support (Busenberg, 2000; Busenberg, 2007).

While the above recommendations will not guarantee advisory committee influence, it is hoped that they may increase the likelihood of it. Further research should be conducted into the more intangible aspects of advisory committees (e.g. group dynamics, political motivation etc.) as well as the relationships between organizing and local factors. However, it is hoped that this study has provided a starting point for decision-makers or advisory committees seeking to maximize the probability of marine advisory committee success.

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## Appendix A

Table 1: Complete IAD framework matrix (i.e. complete data set for all eight case studies). Table continues for next 13 pages.

Variable	Case Studies	
	NB Marine Resource Planning Committee	ESSIM Stakeholder Advisory Committee
<b><i>Biophysical World</i></b>		
Environment	Marine – Inshore (Marine Resource Committee, 2009)	Marine - Inshore to offshore (Fisheries and Oceans Canada, 2007a)
Size of Area	5600 km <sup>2</sup> (Marine Resource Committee, 2009)	325,000 km <sup>2</sup> (Fisheries and Oceans Canada, 2007a)
Industries Present	Commercial and recreational fisheries, aquaculture, tourism, shipping, recreation (Parker, 2008)	Commercial fisheries, oil and gas, shipping, conservation, research, tourism, recreation (Fisheries and Oceans Canada, 2007a)
<b><i>Community Attributes</i></b>		
Legislative Basis for Committee	Not required (Marine Resource Committee, 2005)	Required (Fisheries and Oceans Canada, 2011b)
Level of Education	High school (Statistics Canada, 2006a)	University (Statistics Canada, 2006b)
Median Income	\$28,500 (Statistics Canada, 2006a)	\$22,800 (Statistics Canada, 2006b)
Mean Income	\$32,700 (Statistics Canada, 2006a)	\$30,200 (Statistics Canada, 2006b)
Population Size	27,300 (Statistics Canada, 2006a)	913,500 (Statistics Canada, 2006b)
Population Rate of Change	-1.70% (Statistics Canada, 2006a)	0.60% (Statistics Canada, 2006b)
Previous Awareness	Forum for information sharing, localized marine resource planning efforts, Phase 1 committee (Marine Resource Committee, 2005)	Gully MPA Advisory Committee, ESSIM Forum (Fisheries and Oceans Canada, 2011b)
<b><i>Rules-In-Use</i></b>		
Terms of Reference Availability	Provided (Marine Resource Committee, 2006)	Provided (ESSIM SAC, 2011)
Drafting Process	Developed by Phase 1 committee, approved by government (Marine Resource Committee, 2005)	Developed by committee (ESSIM SAC, 2011)
Purpose or Mandate	"To guide the development of a Marine Resources Plan for the Southwestern New Brunswick Bay of Fundy" (Marine Resource Committee, 2006, p.1)	Responsible for "leadership and guidance in meeting the vision for the ESSIM Initiative" (Fisheries and Oceans Canada, 2011b)

Variable	Case Studies	
	NB Marine Resource Planning Committee	ESSIM Stakeholder Advisory Committee
<b><i>Rules-In-Use</i></b>		
Deliverables	Develop operational framework and work plan associated with development of marine resource plan, ensure public consultation (Marine Resource Committee, 2006)	Develop Terms of Reference, gain plan approval, monitor and evaluate marine resources plan (ESSIM SAC, 2011)
Participant Proxy Rules	Not provided (Marine Resource Committee, 2006)	Proxy must be fully briefed on content, principles and process (ESSIM SAC, 2011)
Appointment Process - To committee	Government appointed in consultation to existing committee members (Marine Resource Committee, 2006)	Sector representation identified by DFO, representatives within each sector appointed by the sector (G. Herbert, personal communication, June 26, 2012)
Appointment Process - To positions	Chairperson appointed by government (Marine Resource Committee, 2006)	Co-chair - DFO position is ex-officio, second chair is nomination and secret ballot (50%+1 wins) (ESSIM SAC, 2011)
Participation Incentives	Per diem and expenses (Marine Resource Committee, 2006)	None (ESSIM SAC, 2011)
Committee Structure	Single committee (Marine Resource Committee, 2006)	Single Committee with sub-committees/working groups as needed (Fisheries and Oceans Canada, 2011b)
Collective Decision Process	Consensus (R. Henry, personal communication, June 21, 2012)	Consensus (among all members) for Plan and planning process, for administration, consensus or majority vote (Fisheries and Oceans Canada, 2011b)
Meeting Frequency	~ 12 per year (R. Henry, personal communication, June 21, 2012)	4-8 per year (G. Herbert, personal communication, June 26, 2012)
Deadlines	None (Marine Resource Committee, 2005)	None
Reporting Structure - To whom	NB Dept. of Agriculture, Aquaculture, and Fisheries, DFO (Marine Resource Committee, 2009)	Minister of Fisheries and Oceans (ESSIM SAC, 2011)
Reporting Structure - How	Via Chair, with committee present (R. Henry, personal communication, June 21, 2012)	In conjunction with the RCOM (ESSIM SAC, 2011)



<b>Variable</b>	<b>Case Studies</b>	
	NB Marine Resource Planning Committee	ESSIM Stakeholder Advisory Committee
<b><i>Action Situation</i></b>		
Number of Participants	14 (Marine Resources Planning, n.d.a)	30 ( $\pm 2$ ) (Fisheries and Oceans Canada, 2011b)
Participant Positions	Chairperson, Members, Ex-officio Members (Marine Resource Committee, 2006)	Co-chairs, members (Fisheries and Oceans Canada, 2011b)
Position Responsibilities	Chair - draft recommendations, communicate with high-ranking community members and deputy ministers, coordinate meetings, Members - participate in discussions, vote, Ex-Officio members - observe and provide administrative support (R. Henry, personal communication, June 21, 2012)	Co-chairs - chair meetings, ensure that processes/principles followed, develop agenda, Members - vote, participate in discussion (ESSIM SAC, 2011)
Information Available	Background Report, preliminary & expanded public consultation reports, description of marine resource plan elements, vision statement & guiding principles (Marine Resources Planning, n.d.b)	Reports on ecosystem, socio-economics, management philosophies, teamwork, public and stakeholder consultations (Fisheries and Oceans Canada, 2011b)
<b><i>Interactions</i></b>		
Government Level of Involvement - Presence on committee	Observers only (R. Henry, personal communication, June 21, 2012)	Present (Fisheries and Oceans Canada, 2011b)
Gov't Level of Involvement - Over time	Variable (R. Henry, personal communication, June 21, 2012)	Constant (Fisheries and Oceans Canada, 2011b)
Gov't Level of Involvement - Representative's rank	Civil servant (R. Henry, personal communication, June 21, 2012)	High to mid-level civil servant (Fisheries and Oceans Canada, 2011b)
Diversity of Interests on Committee	10 (R. Henry, personal communication, June 21, 2012)	15 (Fisheries and Oceans Canada, 2011b)
Technical Expertise of Committee	High (R. Henry, personal communication, June 21, 2012)	Varied (Fisheries and Oceans Canada, 2011b)

<b>Variable</b>	<b>Case Studies</b>	
	NB Marine Resource Planning Committee	ESSIM Stakeholder Advisory Committee
<b><i>Outcomes</i></b>		
Recommendations - Developed	Developed (Marine Resource Committee, 2009)	Developed (Fisheries and Oceans Canada, 2007b)
Recommendations - Level of Advice	Strategic and tactical (Marine Resource Committee, 2009)	Strategic (Fisheries and Oceans Canada, 2007b)
Timeliness of Deliverable(s)	42 months (Marine Resource Committee, 2005; 2009)	24 months (Fisheries and Oceans Canada, in press)
Degree of Policy Change	High priority recommendation co-selected by government and committee and implemented (R. Henry, personal communication, June 21, 2012)	Not formally endorsed, some initiatives implemented (Fisheries and Oceans Canada, in press)
Other Outcomes	Greater public awareness of issues (R. Henry, personal communication, June 21, 2012)	Governance infrastructure developed, comprehensive research conducted, improved understanding of ICOM (Fisheries and Oceans Canada, in press)
<b><i>Committee Success Assessment</i></b>	Successful	Partially Successful

Variable	Case Studies	
	Race Rocks Advisory Board	Gully Advisory Committee
<b><i>Biophysical World</i></b>		
Environment	Marine - Inshore with island (Race Rocks Advisory Board, n.d.a)	Marine - Offshore (Fisheries and Oceans Canada, 2011a)
Size of Area	2 km <sup>2</sup> (Race Rocks Advisory Board, n.d.a)	2364 km <sup>2</sup> (Fisheries and Oceans Canada, 2007c)
Industries Present	Eco-tourism, recreational fishing, recreational boating, First Nations cultural value (e.g. fishing, education), lighthouse (Race Rocks Advisory Board, n.d.a)	Commercial fisheries, research (Fisheries and Oceans Canada, 2007c)
<b><i>Community Attributes</i></b>		
Legislative Basis for Committee	Not required (Department of Justice, 2012)	Not required (Department of Justice, 2012)
Level of Education	University (Statistics Canada, 2006c)	University (Statistics Canada, 2006d)
Median Income	\$28,300 (Statistics Canada, 2006c)	\$27,200 (Statistics Canada, 2006d)
Mean Income	\$36,900 (Statistics Canada, 2006c)	\$35,000 (Statistics Canada, 2006d)
Population Size	345,200 (Statistics Canada, 2006c)	372,900 (Statistics Canada, 2006d)
Population Rate of Change	6.00% (Statistics Canada, 2006c)	3.80% (Statistics Canada, 2006d)
Previous Awareness	Provincial Ecological Reserve since 1980 (Race Rocks Advisory Board, n.d.a)	Area of conservation interest since early 1990's, Area of Interest in 1998 (Fisheries and Oceans Canada, 2007c)
<b><i>Rules-In-Use</i></b>		
Terms of Reference Availability	Provided (Race Rocks Advisory Board, 2000a)	Provided (Gully Advisory Committee, 2006)
Drafting Process	Developed by committee (Race Rocks Advisory Board, 1999)	Developed between DFO and interim committee
Purpose or Mandate	"The Race Rocks Advisory Board has been established to enable a Marine Protected Area designation under the Oceans Act at Race Rocks" (Race Rocks Advisory Board, 2000a, p. 1)	"To provide advice to Fisheries and Oceans Canada with respect to the protection and management of the Gully MPA. The Committee serves as the primary consultative body" (Gully Advisory Committee, 2006, p. 1)

Variable	Case Studies	
	Race Rocks Advisory Board	Gully Advisory Committee
<b><i>Rules-In-Use</i></b>		
Deliverables	Deliver recommendations on levels of protection, goals and objectives of a Race Rocks MPA (Race Rocks Advisory Board, 2000a)	Advise on implementation, development and improvement in MPA management, assess and assist in directing further and available research, review activity plans and advise on appropriateness (Gully Advisory Committee, 2006)
Participant Proxy Rules	Permitted as required (Race Rocks Advisory Board, 2000a)	Alternates permitted if well informed and can represent sector. Regular member to notify DFO in advance (Gully Advisory Committee, 2006)
Appointment Process - To committee	Selected by DFO in consultation with BC Parks (K. Francis, personal communication, June 21, 2012)	Government seats - internally appointed, other seats - sectors nominate members (Gully Advisory Committee, 2006)
Appointment Process - To positions	DFO appoints chair (K. Francis, personal communication, June 21, 2012)	Chairperson - ex officio to DFO, non-government co-chair - appointed by committee (Gully Advisory Committee, 2006)
Participation Incentives	None (Race Rocks Advisory Board, 2000a)	None (Gully Advisory Committee, 2006)
Committee Structure	Single committee (Race Rocks Advisory Board, 2000a)	Single committee with working groups as needed (Gully Advisory Committee, 2006)
Collective Decision Process	Consensus (Race Rocks Advisory Board, 2000a)	Consensus (defined as general agreement or majority), dissenting opinions also noted (Gully Advisory Committee, 2006)
Meeting Frequency	10 per year (Race Rocks Advisory Board, 2000a)	2 per year (Gully Advisory Committee, 2006)
Deadlines	4 months (Race Rocks Advisory Board, 2000a)	None (Gully Advisory Committee, 2006)
Reporting Structure - To whom	BC Parks and DFO (Race Rocks Advisory Board, 2000a)	Oceans and Coastal Management Division (Gully Advisory Committee, 2006)
Reporting Structure - How	Recommendations submitted to DFO and BC Parks (Race Rocks Advisory Board, 2000b)	DFO Chair acts as liaison between committee and DFO senior management (Gully Advisory Committee, 2006)
<b><i>Action Situation</i></b>		
Number of Participants	19 (Race Rocks Advisory Board, 1999)	25 (Gully Advisory Committee, 2006)
Participant Positions	Chair, members (Race Rocks Advisory Board, 2000a)	Chair, members (Fisheries and Oceans Canada, 2007c)

<b>Variable</b>	<b>Case Studies</b>	
	Race Rocks Advisory Board	Gully Advisory Committee
<b><i>Action Situation</i></b>		
Position Responsibilities	Chair - facilitator, media spokesperson (Race Rocks Advisory Board, 2000a)	Co-chair - chair meetings, act as spokesperson, DFO Chair -communicate recommendations, Members - liaise with their organizations, participate in discussions (Gully Advisory Committee, 2006)
Information Available	Public consultation, First Nations cultural importance, socio-economics report, feasibility study (Race Rocks Advisory Board, n.d.b)	Sector expertise, presentations by experts, scientific literature (Gully Advisory Committee, 2006)
<b><i>Interactions</i></b>		
Government Level of Involvement - Presence on committee	Present (Race Rocks Advisory Board, 1999)	Present (Fisheries and Oceans Canada, 2007c)
Gov't Level of Involvement - Over time	Constant (Race Rocks Advisory Board, n.d.b)	Constant (Fisheries and Oceans Canada, 2007c)
Gov't Level of Involvement - Representative's rank	Civil servants (Race Rocks Advisory Board, n.d.b)	Civil servants (Gully Advisory Committee, 2006)
Diversity of Interests on Committee	13 (Race Rocks Advisory Board, 2000)	10 (Gully Advisory Committee, 2006)
Technical Expertise of Committee	Varied (Race Rocks Advisory Board, 1999)	High (Gully Advisory Committee, 2006)
<b><i>Outcomes</i></b>		
Recommendations - Developed	Developed (Race Rocks Advisory Board, n.d.a)	Developed (Fisheries and Oceans Canada, 2007c)
Recommendations - Level of Advice	Strategic and tactical (Race Rocks Advisory Board, n.d.a)	Strategic and tactical (Fisheries and Oceans Canada, 2007c)
Timeliness of Deliverable(s)	10 months (Race Rocks Advisory Board, n.d.)	48 months (Fisheries and Oceans Canada, 2007c)
Degree of Policy Change	Plan altered without informing committee, never approved (Fisheries and Oceans Canada, 2009)	Assisted in development of Gully Management Plan (Fisheries and Oceans Canada, 2007c)
Other Outcomes	Second advisory committee established in 2009 (Fisheries and Oceans Canada, 2009)	Poor attendance by committee members, some disenfranchisement (Management Review of the Gully MPA 2007-2010, in press)
<b><i>Committee Success</i></b>	Not Successful	Partially Successful

Variable	Case Studies	
	Pockwock Lake Watershed Management Committee	Nanaimo Technical Advisory Committee
<b><i>Biophysical World</i></b>		
Environment	Terrestrial – Watershed (HRM, 2012)	Terrestrial – Watershed (RDN, 2012a)
Size of Area	71 km <sup>2</sup> (HRM, 2012)	2034 km <sup>2</sup> (RDN, 2012a)
Industries Present	Forestry, recreation (hiking, minimal off-roading), water treatment (Halifax Water, 2009)	All industries that operate in Regional District of Nanaimo (RDN) (DWWPSC, 2007)
<b><i>Community Attributes</i></b>		
Legislative Basis for Committee	Required (Halifax Water, 2009)	Not required (DWWPSC, 2007)
Level of Education	University (Statistics Canada, 2006d)	High school (Statistics Canada, 2006e)
Median Income	\$27,200 (Statistics Canada, 2006d)	\$23,600 (Statistics Canada, 2006e)
Mean Income	\$35,000 (Statistics Canada, 2006d)	\$31,000 (Statistics Canada, 2006e)
Population Size	372,900 (Statistics Canada, 2006d)	138,600 (Statistics Canada, 2006e)
Population Rate of Change	3.80% (Statistics Canada, 2006d)	9.10% (Statistics Canada, 2006e)
Previous Awareness	Watershed advisory committees existing since 1975, current committee in existence since 1994 (Halifax Water, 2009)	Vancouver Island-wide Watershed Steering Committee, Drinking Water-Watershed Protection Steering Committee (DWWPSC, 2007)
<b><i>Rules-In-Use</i></b>		
Terms of Reference Availability	Provided (Pockwock Lake Committee, 2009)	Provided (RDN, 2012b)
Drafting Process	Developed by committee (Pockwock Lake Committee, 2009)	Developed by committee (RDN, 2012c)
Purpose or Mandate	"Advisory group to the Halifax Regional Water Commission, the Province of NS, and the stakeholders in the management of Pockwock Watershed" (Pockwock Lake Committee, 2009, p. 1)	"To advise the Board on the review and implementation of the Drinking Water and Watershed Protection Service" (RDN, 2012b, p. 1)
Deliverables	Review and make recommendations on all activities or policy issues affecting water quality, flows, levels, storm water, development, and forest management & develop information and education programs for the public (Pockwock Lake Committee, 2009)	Make recommendations re: activities relating to DWWP program, improvements to program (RDN, 2012b)

Variable	Case Studies	
	Pockwock Lake Watershed Management Committee	Nanaimo Technical Advisory Committee
<b><i>Rules-In-Use</i></b>		
Participant Proxy Rules	Alternates can be appointed and attend meetings as observers, voting only when primary member is absent (Pockwock Lake Committee, 2009)	No proxies permitted (RDN, 2012b)
Appointment Process - To committee	Nomination by organization if organization is recognized (appointment by Halifax Water if no nomination provided), Non-organization positions are by ballot from among volunteers (Pockwock Lake Committee, 2009)	Appointed by Regional District of Nanaimo (RDN) Board; By application and approval by committee (for at large members) (RDN, 2012b)
Appointment Process - To positions	Appointed by members annually (Pockwock Lake Committee, 2009)	Chair position - ex officio (RDN, 2012b)
Participation Incentives	None (Pockwock Lake Committee, 2009)	None (RDN, 2012b)
Committee Structure	Single committee (Pockwock Lake Committee, 2009)	Single committee (RDN, 2012b)
Collective Decision Process	Consensus first, if no consensus can be reached then by vote with minimum 5 votes for quorum, if quorum not reached, then more information gathered (Pockwock Lake Committee, 2009)	Consensus if possible, by vote if not (minority opinions can also be submitted to Board in that case) (RDN, 2012b)
Meeting Frequency	Minimum 2 meetings per year (Pockwock Lake Committee, 2009)	Minimum 3 per year (RDN, 2012b)
Deadlines	None (Pockwock Lake Committee, 2009)	None (RDN, 2012b)
Reporting Structure - To whom	Halifax Water, NS Minister of Environment (Pockwock Lake Committee, 2009)	RDN Board (RDN, 2012b)
Reporting Structure - How	Via Waterworks Operator (Pockwock Lake Committee, 2009)	Via Sustainability Select Committee (RDN, 2012b)
<b><i>Action Situation</i></b>		
Number of Participants	8 (Pockwock Lake Committee, 2009)	19 (RDN, 2012b)
Participant Positions	Chair, vice-chair, representative (Pockwock Lake Committee, 2009)	Chairperson, members (RDN, 2012b)
Position Responsibilities	Chair - spokesperson for committee (Pockwock Lake Committee, 2009)	Members - speaking and voting (RDN, 2012b)

<b>Variable</b>	<b>Case Studies</b>	
	Pockwock Lake Watershed Management Committee	Nanaimo Technical Advisory Committee
<b><i>Action Situation</i></b>		
Information Available	Industry actions, public consultation (occasional), day-to-day activities in management area (HRM, 2012)	Expert presentations, various reports, water quality monitoring programs (RDN, 2012c)
<b><i>Interactions</i></b>		
Government Level of Involvement - Presence on committee	Present (Pockwock Lake Committee, 2009)	Present (RDN, 2012c)
Gov't Level of Involvement - Over time	Constant (Pockwock Lake Committee, 2009)	Constant (RDN, 2012b)
Gov't Level of Involvement - Representative's rank	Decision-makers/civil servants (HRM, 2012)	Decision-makers/civil servants (RDN, 2012c)
Diversity of Interests on Committee	5 (Pockwock Lake Committee, 2009)	13 (RDN, 2012b)
Technical Expertise of Committee	Varied (HRM, 2012)	Varied (RDN, 2012c)
<b><i>Outcomes</i></b>		
Recommendations - Developed	Developed (Halifax Water, 2009)	Developed (RDN, 2011)
Recommendations - Level of Advice	Tactical (Halifax Water, 2009)	Tactical and operational (RDN, 2011)
Timeliness of Deliverable(s)	6 months to draft, 24 months to publish (HRM, 2012)	6 months (RDN, 2012c)
Degree of Policy Change	Plan implemented (HRM, 2012)	Plan implemented (RDN, 2012c)
Other Outcomes	None (HRM, 2012)	Increased watershed protection awareness, spin-off initiatives and programs (RDN, 2012a)
<b><i>Committee Success</i></b>	Successful	Successful



Variable	Case Studies	
	Nanaimo Stewardship Committee	National Harbour Authority Advisory Council
<b><i>Biophysical World</i></b>		
Environment	Terrestrial – Watershed (RDN, 2012a)	Coastal and inshore marine (Small Craft Harbours, 2009)
Size of Area	2034 km <sup>2</sup> (RDN, 2012a)	N/A (Small Craft Harbours, 2009)
Industries Present	All industries that operate in Regional District of Nanaimo (RDN) (DWWPSC, 2007)	Commercial and recreational fisheries, tourism, other boating activities (Small Craft Harbours, 2009)
<b><i>Community Attributes</i></b>		
Legislative Basis for Committee	Not required (DWWPSC, 2007)	Required (Small Craft Harbours, 2009)
Level of Education	High school (Statistics Canada, 2006e)	N/A
Median Income	\$23,600 (Statistics Canada, 2006e)	N/A
Mean Income	\$31,000 (Statistics Canada, 2006e)	N/A
Population Size	138,600 (Statistics Canada, 2006e)	N/A
Population Rate of Change	9.10% (Statistics Canada, 2006e)	N/A
Previous Awareness	Watershed protection formally recognized as regional priority, Vancouver Island-wide Watershed Steering Committee (DWWPSC, 2007)	Regional Harbour Authority Advisory Committees (Small Craft Harbours, 2009)
<b><i>Rules-In-Use</i></b>		
Terms of Reference Availability	Provided (DWWPSC, 2007)	Provided (Small Craft Harbours, 2012)
Drafting Process	Developed by RDN (RDN, 2005)	Developed collaboratively between Small Craft Harbours and committee (M.C. Robertson, personal communication, June 21, 2012)
Purpose or Mandate	"To identify action items and initiatives that support the protection of surface and groundwater drinking water sources...and to provide recommendations to the Board regarding key drinking water and watershed protection activities" (DWWPSC, 2007, p. 33)	"To provide advice to and share information with Small Craft Harbours on matters of national interest regarding the Harbour Authority (HA) program and SCH Program" (Small Craft Harbours, 2012, p. 1)

<b>Variable</b>	<b>Case Studies</b>	
	Nanaimo Stewardship Committee	National Harbour Authority Advisory Council
<b><i>Rules-In-Use</i></b>		
Deliverables	Determine priority actions and initiatives for protection of water sources and provided recommendations regarding key strategies and initiatives (DWWPSC, 2007)	Communicate and liaise between Harbour Authorities and Small Craft Harbours (Small Craft Harbours, 2012)
Participant Proxy Rules	Not provided (DWWPSC, 2007)	Permitted as required (Small Craft Harbours, 2012)
Appointment Process - To committee	Initially, by RDN Board; subsequently by approval of application by committee (DWWPSC, 2007)	Selected regionally by Small Craft Harbours, with reference to other committee members from that region (Small Craft Harbours, 2012)
Appointment Process - To positions	Chair appointed by RDN Board (DWWPSC, 2007)	Chairperson - ex officio (Small Craft Harbours, 2012)
Participation Incentives	Out of pocket expenses reimbursed (DWWPSC, 2007)	None (Small Craft Harbours, 2012)
Committee Structure	Single committee (DWWPSC, 2007)	Single committee (Small Craft Harbours, 2012)
Collective Decision Process	Consensus if possible, by vote if not (minority opinions can also be submitted to Board in that case) (DWWPSC, 2007)	None (provides advice rather than makes decisions) (M.C. Robertson, personal communication, June 21, 2012)
Meeting Frequency	Minimum 12 per year (DWWPSC, 2007)	1-2 per year (Small Craft Harbours, 2012)
Deadlines	~12 months (DWWPSC, 2007)	None (Small Craft Harbours, 2012)
Reporting Structure - To whom	RDN Board (DWWPSC, 2007)	Small Craft Harbours (DFO) (Small Craft Harbours, 2012)
Reporting Structure - How	Via Chairperson (DWWPSC, 2007)	Via regional Contact Group members (Small Craft Harbours, 2012)
<b><i>Action Situation</i></b>		
Number of Participants	15 (DWWPSC, 2007)	15 plus Chair (Small Craft Harbours, 2012)
Participant Positions	Chairperson, members (DWWPSC, 2007)	Chair, members (Small Craft Harbours, 2012)
Position Responsibilities	Chairperson - report to RDN Board, all members -vote and speak (DWWPSC, 2007)	Chair - set agenda, distribute relevant information to members, assist in administration of committee, Members - participate in discussions, liaise between regional and national committees (M.C. Robertson, personal communication, June 21, 2012)

<b>Variable</b>	<b>Case Studies</b>	
	Nanaimo Stewardship Committee	National Harbour Authority Advisory Council
<b><i>Action Situation</i></b>		
Information Available	Access to experts (DWWPSC, 2007)	Regional updates, expert presentations (Small Craft Harbours, 2011)
<b><i>Interactions</i></b>		
Government Level of Involvement - Presence on committee	Present (DWWPSC, 2007)	Present at plenary meetings (Small Craft Harbours, 2012)
Gov't Level of Involvement - Over time	Constant (DWWPSC, 2007)	Constant (Small Craft Harbours, 2012)
Gov't Level of Involvement - Representative's rank	Decision-makers/civil servants (DWWPSC, 2007)	Decision-makers (regional and national) (Small Craft Harbours, 2012)
Diversity of Interests on Committee	10 (DWWPSC, 2007)	5 (regional interests, not sector) (Small Craft Harbours, 2012)
Technical Expertise of Committee	Low (used consultants for expertise) (DWWPSC, 2007)	High (Small Craft Harbours, 2012)
<b><i>Outcomes</i></b>		
Recommendations - Developed	Developed (DWWPSC, 2007)	Not developed (Small Craft Harbours, 2011)
Recommendations - Level of Advice	Strategic and tactical (DWWPSC, 2007)	Not developed (Small Craft Harbours, 2011)
Timeliness of Deliverable(s)	19 months (DWWPSC, 2007)	42 months (Small Craft Harbours, 2011)
Degree of Policy Change	Plan implemented (DWWPSC, 2007)	None (Small Craft Harbours, 2011)
Other Outcomes	Increased watershed protection awareness, website developed, community initiatives and studies initiated, Technical Advisory Committee created (RDN, 2012a)	Reports and investigations commissioned (Small Craft Harbours, 2011)
<b><i>Committee Success</i></b>	Successful	Not Successful