

TOWARDS AN UNDERSTANDING OF  
THE ROLE OF CORE VALUES AND POLICY NETWORKS TO INFLUENCE  
DECISION-MAKING IN AN EVOLVING OCEAN GOVERNANCE ERA:  
A MARITIMES CANADA STUDY

by

Lucia M. Fanning

Submitted in partial fulfilment of the requirements  
for the degree of Doctor of Philosophy

at

Dalhousie University  
Halifax, Nova Scotia  
March, 2003

© Copyright by Lucia M. Fanning, 2003



National Library  
of Canada

Acquisitions and  
Bibliographic Services

395 Wellington Street  
Ottawa ON K1A 0N4  
Canada

Bibliothèque nationale  
du Canada

Acquisitions et  
services bibliographiques

395, rue Wellington  
Ottawa ON K1A 0N4  
Canada

*Your file Votre référence*

*Our file Notre référence*

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-79402-4

Canada

DALHOUSIE UNIVERSITY  
FACULTY OF GRADUATE STUDIES

The undersigned hereby certify that they have read and recommend to the Faculty of Graduate Studies for acceptance a thesis entitled "Influencing Decision-Making in an Evolving Ocean Governance Era: A Maritimes Canada Study" by Lucia Fanning in partial fulfillment for the degree of Doctor of Philosophy.

Dated: March 3, 2003

External Examiner:

Research Supervisor:

Examining Committee:

Dept. Rep :



DALHOUSIE UNIVERSITY

DATE: March 3, 2003


AUTHOR: Lucia M. Fanning

TITLE: Towards an Understanding of the Role of Core Values and Policy  
Networks to Influence Decision-Making in an Evolving Ocean  
Governance Era: A Maritimes Canada Study

DEPARTMENT OR SCHOOL: Faculty of Graduate Studies

DEGREE: Ph.D. CONVOCATION: Spring YEAR: 2003

Permission is herewith granted to Dalhousie University to circulate and to have copied for non-commercial purposes, at its discretion, the above title upon the request of individuals or institutions.

  
Signature of Author

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

The author attests that permission has been obtained for the use of any copyrighted material appearing in the thesis (other than the brief excerpts requiring only proper acknowledgement in scholarly writing), and that all such use is clearly acknowledged.



for  
***Reginald William Devers***  
and  
***Lloyd Paul Fanning***

# TABLE OF CONTENTS

<b>LIST OF FIGURES AND TABLES</b>	x
<b>ABSTRACT</b>	xiii
<b>LIST OF ABBREVIATIONS</b>	xiv
<b>ACKNOWLEDGEMENTS</b>	xvi
<b>CHAPTER ONE          INTRODUCTION</b>	
1.1      Background	1
1.2      Purpose	1
1.3      Theoretical Propositions	4
1.4      The Interdisciplinary Approach	5
1.5      Thesis Format	9
<b>CHAPTER TWO          SETTING THE SCENE</b>	
2.1      Canada's Approach to Governance - 1984 to 1999	10
2.1.1      Rise of Governance	10
2.1.2      Theory of Governance	16
2.1.3      Risks of Governance Failure	18
2.1.4      Canadian Governance during the Study Period	19
2.2      Canada's Efforts at Ocean Governance - 1984 to 1999	23
2.2.1      International Factors	28
2.2.2      Domestic Factors	33
2.3      The Maritimes Oceans Policy Domain - 1984 to 1999	42
2.3.1      Heterogeneity Issues	43
2.3.2      Major Actors	48
2.3.3      Decision-Making Factors	50
<b>CHAPTER THREE          RESEARCH METHODOLOGY</b>	
3.1      Scope of the Research Project	53
3.1.1      Terminology	54

3.2	The Research Approach	57
3.2.1	Research Design	58
3.2.1.1	Existing Theories	58
3.2.1.2	Theoretical Propositions and Research Questions	61
3.2.1.3	Selection of Case Studies	63
3.2.2	Data Collection	65
3.2.3	Data Analysis	66
3.2.3.1	Qualitative Analysis	67
3.2.3.2	Quantitative Analysis	68
3.2.3.3	Policy Implications	69
3.2.3.4	Issues of Validity Associated with Research Findings	70
<b>CHAPTER FOUR THE FIXED LINK CASE STUDY</b>		
4.1	Case study Overview	72
4.1.1	Background	74
4.1.2	Chapter Overview	75
4.2	Decision-Making Process and Outcome	79
4.3	Case Study Context	93
4.3.1	Existing Policy Environment	93
4.3.2	Major Areas of Concern	95
4.3.3	The Fixed Link Policy Network	103
4.4	Identifying the Influence in the Policy Network	105
4.4.1	Characterization of Actors	105
4.4.1.1	Structural Analysis of Policy Actors	106
4.4.1.2	Analysis of Core Values	116
4.4.2	Behaviour of Actors in the Fixed Link Policy Network	124
4.4.2.1	Purpose of Policy Debate	125
4.4.2.2	Significant Areas of Concerns	129

4.4.2.3	Preferred Solution	134
4.5	Explaining the Influence of Actors on the Decision	137
4.5.1	Identification of Advocacy Coalitions	140
4.5.2	Advocacy Coalitions and Decision-Making	143
4.5.3	Policy Implications	145
4.5.4	Summary	154
<b>CHAPTER FIVE GEORGES BANK MORATORIUM CASE STUDY</b>		
5.1	Case study Overview	158
5.1.1	Background	159
5.1.2	Chapter Overview	164
5.2	Decision-Making Process and Outcome	167
5.3	Case Study Context	173
5.3.1	Existing Policy Environment	173
5.3.2	Major Areas of Concern	177
5.3.3	The Georges Bank Moratorium Policy Network	185
5.4	Identifying the Influence of Actors in the Policy Network	186
5.4.1	Characterization of Actors	189
5.4.1.1	Structural Analysis of Policy Actors	189
5.4.1.2	Analysis of Core Values	201
5.4.2	Behaviour of Actors in the Georges Bank Policy Network	214
5.4.2.1	Purpose of Policy Debate	214
5.4.2.2	Significant Areas of Concerns	222
5.4.2.3	Preferred Solution	231
5.5	Explaining the Influence of Actors in the Policy Network	233
5.5.1	Identification of Advocacy Coalitions	237
5.5.2	Advocacy Coalitions and Decision-Making	240
5.5.3	Policy Implications	242

5.5.4	Summary	253
<b>CHAPTER SIX</b>		
<b>COMPARATIVE ANALYSIS OF CASE STUDIES</b>		
6.1	Identification of Cross-Case Factors	258
6.2	Comparison of Substantive Elements	259
6.2.1	Type of Policy Problem	259
6.2.2	Nature of the Policy Problem	260
6.2.3	Areas of Concern	261
6.2.4	Locus of Significance	262
6.2.5	Policy Implications of Substantive Factors	263
6.3	Comparison of Contextual Elements	265
6.3.1	Policy Habitat	265
6.3.2	Values, Objectives and Preferences	268
6.3.3	Broader Policy Issues	271
6.3.4	Advances in Information Technologies	274
6.3.5	Policy Implications of Contextual Factors	275
6.4	Comparison of Procedural Elements	284
6.4.1	Structure of the Policy Network	285
6.4.2	Review Process	292
6.4.3	Review Panel	295
6.4.4	Recommendations of the Public Review Panel	298
6.4.5	Policy Implications of Procedural Factors	299
6.5	Theoretical Considerations	304
6.5.1	Policy Predictability and Policy-Oriented Learning	305
6.5.2	Guidelines for Decision-Making	308
6.5.3	Role of the Public Review Panel	309
6.5.4	Public Review Process	311

## **CHAPTER SEVEN      CONCLUSION**

7.1	Thesis Overview	313
7.2	Summary of Research Findings	314
7.3	Assessment of Theoretical Propositions	317
7.4	Critical Assessment of Methodological Tool	331
	7.4.1 Limitations and Areas for Improvement	331
7.5	Concluding Statement	335

## **APPENDICES**

Appendix 1	Influence Analysis Interview Guide	338
Appendix 2	Fixed Link Case Study Issues – Major Areas of Concern by Disciplinary Attributes	342
Appendix 3	Fixed Link Case Study - Weighted Rankings of Disciplinary Attributes by Category of Actors	352
Appendix 4	Fixed Link Case Study - Weighted Rankings of Areas of Concern By Category of Actors	354
Appendix 5	Georges Bank Moratorium Case Study Issues – Major Areas of Concern By Disciplinary Attributes	356
Appendix 6	Georges Bank Moratorium Case Study - Weighted Rankings of Disciplinary Attributes by Category of Actors	361
Appendix 7	Georges Bank Moratorium Case Study - Weighted Rankings of Areas of Concern by Category of Actors	364

<b>BIBLIOGRAPHY</b>		367
---------------------	--	-----

## LIST OF FIGURES AND TABLES

### FIGURES

Figure 1.	Geopolitical Map of Canada's Maritime Provinces	3
Figure 2.	Map of Canada showing Terrestrial and Maritime Areas	24
Figure 3.	Essential Elements of the Decision-Making Process	50
Figure 4.	Hierarchical Relationship between the Spatial Elements of a Policy Environment and its Residents	55
Figure 5.	The Research Approach - Using A Case Study Design Strategy	59
Figure 6.	Northumberland Strait Crossing Project	73
Figure 7.	Checkpoints in the Fixed Link Decision-Making Process	80
Figure 8.	Federal Government Decision Rules - Fixed Link Policy Problem	88
Figure 9A..	Priority Ranking Assigned to Same Disciplinary Attribute	117
Figure 9B.	Disciplinary Attributes Ranked by Priority Level	118
Figure 10.	Weighted Ranking of Disciplinary Attributes by Category of Actors	120
Figure 11.	Purpose for Fixed Link Policy Debate - Most Frequently Cited Reasons	126
Figure 12.	Main Reasons Cited for Fixed Link Policy Debate by Category of Actor	127
Figure 13.	Weighted Ranking of Areas of Concern by Category of Actors	130
Figure 14.	Fixed Link Policy Network	155
Figure 15.	Map of Georges Bank and Adjacent Areas	160
Figure 16.	Opportunities to Affect the Georges Bank Decision-Making Process	168
Figure 17A.	Ranking of Disciplinary Areas by Degree of Importance	202
Figure 17B.	Disciplinary Attributes Ranked by Priority Level	203
Figure 18.	Weighted Ranking of Disciplinary Attributes by Category of Actors	205
Figure 19.	Purpose for Soliciting Public Involvement in the Georges Bank Moratorium Debate	216
Figure 20.	Purpose for Soliciting Public Involvement by Category of Actors	219
Figure 20a.	Improve Quality of Decision	219

Figure 20b.	Increase Quantity of Input	219
Figure 20c.	Improve Legitimacy of Decision	220
Figure 20d.	Improve Legitimacy of Process	220
Figure 21.	Weighted Ranking of Areas of Concern by Category of Actors	223
Figure 22.	Importance of Broader Policy Issues by Advocacy Coalition Groupings	251
Figure 23.	Georges Bank Policy Network	254
Figure 24.	Multivariate Model of the Decision-Making Process	315

## TABLES

Table 1.	Alternative Modes of Co-ordinating Arrangements	12
Table 2.	Major Existing Uses for Coastal and Ocean Resources in the Maritimes Region of Canada	45
Table 3.	Partial Global Interaction Matrix – Coastal and Ocean Uses Interaction with Demersal, Pelagic & Aquaculture Fishing	47
Table 4.	Major Categories of Actors in the Maritimes Ocean Policy Domain	49
Table 5.	Competing Hypotheses in Policy Network Formation Based on Level of Organization of Government and Societal Interests	60
Table 6.	Summary of Research Approach	71
Table 7A.	Chronology of a Policy Problem - The Need for a Reliable Transportation Route to the Mainland (Spanning Pre-Case Study Period: 1775 – 1982)	76
Table 7B.	Chronology of a Policy Problem - The Need for a Reliable Transportation Route to the Mainland (Spanning Case Study Period: 1984 – 1994)	77
Table 8.	Policy Network – the Fixed Link Decision-Making Process	104
Table 9.	Characterization of Actors in the Fixed Link Policy Network	107
Table 10.	Preferred Solution by Policy Actors during Decision-Making Process	136
Table 11A.	Comparison of Analytical Elements by Policy Actors - Grouping #1	138



Table 11B.	Comparison of Analytical Elements by Policy Actors - Grouping #2	138
Table 11C.	Comparison of Analytical Elements by Policy Actors - Grouping #3	139
Table 11D.	Comparison of Analytical Elements by Policy Actors - Grouping #4	139
Table 12.	Policy Implications Arising from the Decision-Making Process	147
Table 13.	Chronology of a Policy Problem - The 1999 Canadian Decision to Extend the Georges Bank Moratorium	165
Table 14.	Listing of Actors in the Georges Bank Moratorium Policy Network	187
Table 15.	Characterization of Actors in the Georges Bank Policy Network	190
Table 16.	Preferred Solution by Policy Actors during Decision-Making Process	232
Table 17A.	Comparison of Analytical Elements by Policy Actors - Grouping #1	235
Table 17B.	Comparison of Analytical Elements by Policy Actors - Grouping #2	235
Table 17C.	Comparison of Analytical Elements by Policy Actors - Grouping #3	236
Table 17D.	Comparison of Analytical Elements by Policy Actors - Grouping #4	236
Table 17E.	Comparison of Analytical Elements by Policy Actors - Grouping #5	236
Table 18A.	Comparison of Analytical Elements in Dominant Advocacy Coalition – Fixed Link Case Study	286
Table 18B.	Comparison of Analytical Elements in Dominant Advocacy Coalition – Georges Bank Case Study	286
Table 19A.	Comparison of Analytical Elements in Contending Advocacy Coalition – Fixed Link Case Study	288
Table 19B.	Comparison of Analytical Elements in Contending Advocacy Coalition – Georges Bank Case Study	288
Table 20A.	Comparison of Analytical Elements in Non-Aligned Advocacy Coalition – Fixed Link Case Study	290
Table 20B.	Comparison of Analytical Elements in Non-Aligned Advocacy Coalition – Georges Bank Case Study	290

## **ABSTRACT**

This dissertation examines decision-making in an evolving ocean governance era, spanning the period 1984 to 1999. It addresses the process by which public policy decisions were reached by analyzing the behaviour of actors in policy networks associated with two decisions affecting coastal and ocean use in Canada's Maritime provinces. The research examined the 1993 decision to construct a bridge connecting Prince Edward Island to New Brunswick and the 1999 decision to extend a petroleum moratorium on Georges Bank, offshore of Nova Scotia.

The underlying premise of the thesis is that decisions affecting Canada's coastal and ocean policy domain are determined by the multivariate interactions between the substance of the policy problem, the environment within which it is being debated and the affected policy stakeholders who participate in its resolution. The analytical framework suggested that where and when the problem arises, who is affected by it and why it is deemed important by some actors, will combine to influence how the problem is resolved. Using a case study approach, the research developed a methodology to test the hypothesis that success in influencing decisions is determined by the aggregation of members in the policy network sharing similar core values and their collective analytical and resource capacities.

The results suggest that a methodology that identifies shared core values among policy actors can be used to determine the composition of advocacy coalitions within the network. However, the formation of these coalitions and their role in collectively influencing the decision-making process depend on the existing governance regime. Furthermore, the results from the two case studies suggest that these substructures in the network, based on shared belief systems, could play an important role in enhancing the opportunities available to policy actors to successfully influence the decision-making process.

## LIST OF ABBREVIATIONS

APEC	Atlantic Provinces Economic Council
APTC	Atlantic Provinces Transportation Commission
BCA	Bridge Concept Assessment
CAPP	Canadian Association of Petroleum Producers
CNOPB	Canada-Newfoundland Offshore Petroleum Board
CNSOPB	Canada-Nova Scotia Offshore Petroleum Board
DFO	Department of Fisheries and Oceans
EAC	Ecology Action Centre
EARP	Environmental Assessment Review Process
EEZ	Exclusive Economic Zone
EFZ	Exclusive Fishing Zone
FEARO	Federal Environmental Assessment Review Office
FTA	Free Trade Agreement
GDP	Gross Domestic Product
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection
GFWA	Gloucester Fishermen's Wives Association
GIEE	Generic Initial Environmental Evaluation
IBT	Islanders for a Better Tomorrow
ICJ	International Court of Justice
IMO	International Maritime Organization
LOSC	Law of the Sea Convention
MFP	Massachusetts Fishermen's Partnership
NABST	National Advisory Board on Science and Technology
NAFTA	North American Free Trade Agreement
NMFS	National Marine Fisheries Service

NB	New Brunswick
NF	Newfoundland and Labrador
NGO	Non-Governmental Organization
NRC	National Research Council
NRCan	Natural Resources Canada
NS	Nova Scotia
NSFP	Nova Scotia Fish Packers
OTANS	Offshore Technology Association of Nova Scotia
PEI	Prince Edward Island
PEITIA	Prince Edward Island Tourism Industry Association
PWC	Public Works Canada
PWGSC	Public Works and Government Services Canada
SCI	Strait Crossing Inc.
SEE	Strategic Environmental Evaluation
SGIC	Sable Gas Intervention Coalition
SPANS	Seafood Producers Association of Nova Scotia
UKDOE	United Kingdom Department of Environment
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNEP	United Nations Environment Programme

## ACKNOWLEDGEMENTS

I would like to acknowledge the guidance and advice provided to me by the members of my Supervisory Committee over the course of my doctoral studies.

My thanks go to Richard Apostle for introducing the social implications of the fisheries in the Maritimes to me during a year-long Reading Course under his guidance and for his comments and advice throughout my studies. My appreciation also goes to Tony Charles (St. Mary's University), Larry Hildebrand and Peter Wells (Environment Canada), Tim Shaw and David VanderZwaag, who gave their time and expertise willingly. Their insights have collectively enhanced my understanding of the complexity of interacting issues affecting sound decision-making in the marine environment

I would especially like to thank my Supervisor and Chair of my Advisory Committee, Professor Aldo Chircop, for exposing graduate students in general, and me in particular, to the challenges and rewards associated with the pursuit of an interdisciplinary approach to scholarship. I would also like to publicly acknowledge his encouragement and support during the course of my studies at Dalhousie University.

Finally, I would like to acknowledge the financial support provided to me from Petroleum Research Atlantic Canada, the Faculty of Graduate Studies, Dalhousie University, and the Social Sciences and Humanities Research Council of Canada for awarding me a three-year Doctoral Fellowship.

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background

There is a growing body of evidence to suggest that the environment within which Canadian public policy decisions are made is changing (Aucoin, 1995; Pal, 1999a; Paquet, 1999). This is particularly true for issues affecting coastal and ocean governance during the latter half of the 20<sup>th</sup> century (Soares, 1998) and has become even more pronounced over the last decade, a period now being described as the maturity phase of post-modern society (Inglehart, 1997; Vallega, 2001). Trends documented as occurring in Canada (Pollitt, 1995) include:

- sustained pressure on public sector actors to find alternative ways to meet policy objectives and deliver programmes in an environment of reduced resources and fiscal restraint;
- growing reliance on non-public sector expertise in developing and implementing policy;
- growing expectation/demand that public sector actors must encourage collaboration with and empower groups from outside government to deal with pressing policy challenges;
- increasing trend among public policy decision makers to have less time to fully appreciate the technical and political intricacies of the specific issues requiring attention; and,
- widespread accessibility of new or rapidly changing communications-based technologies with its potential to significantly affect the decision-making process -- in terms of quantity, quality and sources of information.

### 1.2. Purpose

This study develops an analytical framework that recognizes and examines the above-mentioned trends. It examines the influence exerted by actors in policy networks, defined as a

coalescing of actors around one or more specific policy issues, on decisions affecting coastal and ocean use in the Canada's Maritimes region (Figure 1).<sup>1</sup>

Using a case study research approach (Yin, 1989), its aim is two-fold:

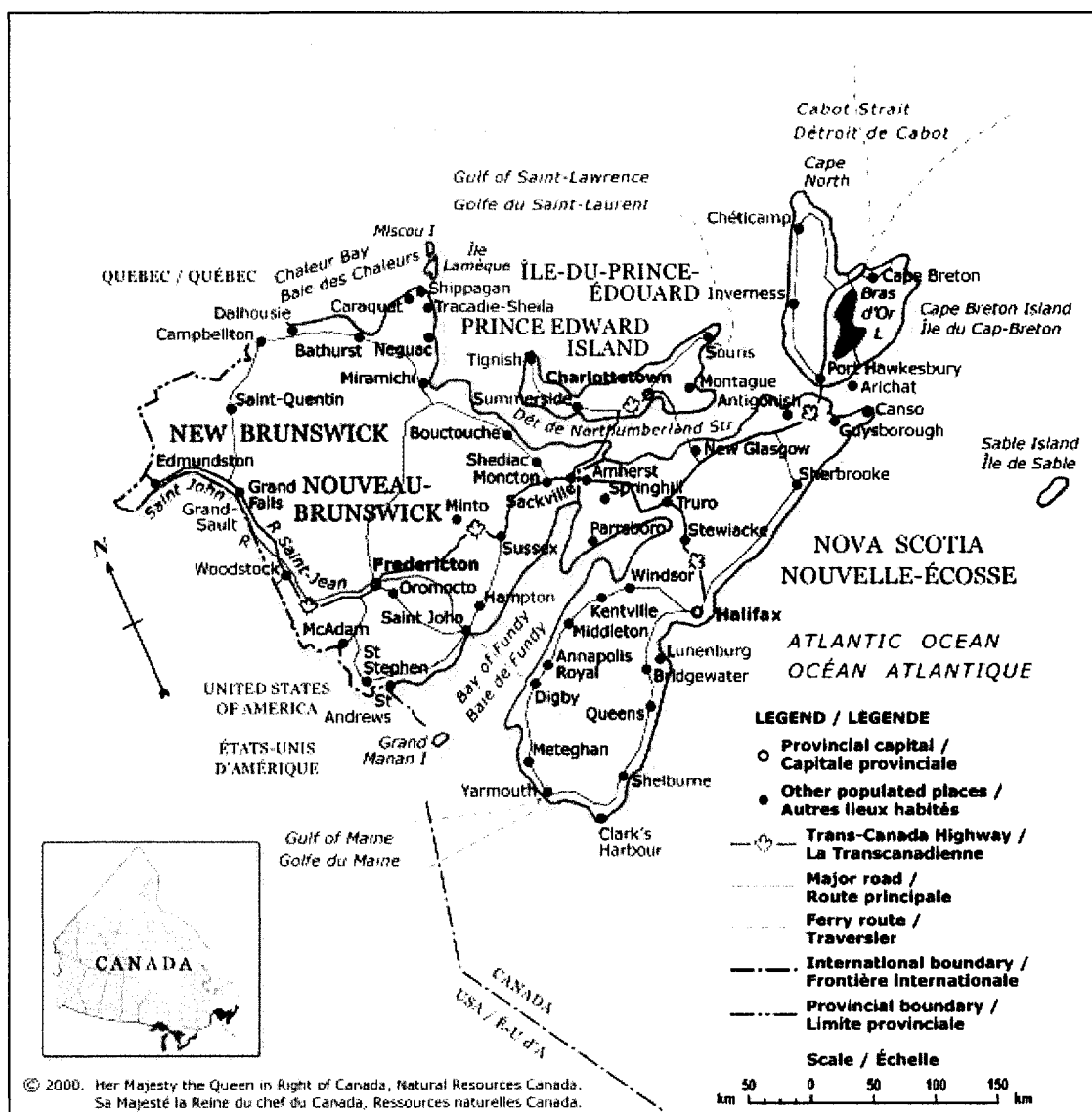
- (i) to examine the extent to which the above-mentioned changes in the policy environment have influenced the process of decision-making; and,
- (ii) to provide a methodological tool that will help members in coastal and ocean policy communities to:
  - diagnose and map the spectrum of players associated with a given policy issue - habitat mapping;
  - recognize and understand the inherent tensions and dynamics pertaining to policy development and consensus-building among members of a policy network; and,
  - develop new process strategies for addressing the challenges faced by members of a policy network as a result of conflicting values and beliefs.

The process by which public policy decisions are reached is addressed by examining the influence of actors in policy networks associated with two decisions affecting coastal and ocean use in Canada's Maritime provinces. The case studies relate to the 1993 decision to build a 'fixed link', i.e., a bridge or tunnel, connecting Prince Edward Island (PEI) to New Brunswick (NB) and the 1999 decision to extend an oil and gas moratorium on Georges Bank, offshore of Nova Scotia (NS).

---

<sup>1</sup> A reference to Canada's 'Maritime region' or 'the Maritimes' is specific to the land component and offshore areas of the provinces of New Brunswick, Nova Scotia and Prince Edward Island. This differs from a reference to 'Atlantic Canada', which includes the previously mentioned Maritime provinces as well as the province of Newfoundland and Labrador.

Figure 1. Geopolitical Map of Canada's Maritime Provinces



Source: Natural Resources Canada, 2000.



### 1.3. Theoretical Propositions

The influence exerted by actors within the selected policy networks is examined within the context of three overarching propositions. These provide the theoretical underpinning for understanding the changing public policy environment within which the selected Canadian examples of coastal and ocean policy decisions were being made. The propositions reflect the adoption of the "New Public Management" strategy by the federal and provincial public service sector in Canada over the period covered in the study (Aucoin, 1995; Pollitt, 1995). The underlying administrative theory of this approach supports mechanisms such as disaggregation, decentralization and contracting out, which may further exacerbate efforts aimed at policy integration, co-ordination and coherence (Matland, 1995). As such, the propositions acknowledge the tensions inherent in current administrative theory and are listed as follows:

- (i) a political administrative system advocating disaggregation, decentralization and broad-based input in decision-making leads to an expanding array of heterogeneous actors actively participating in the coastal and ocean policy domain;
- (ii) heterogeneity among actors participating in the decision-making process increases the potential for conflicting core values to compete for expression in the form of the decision reached; and,
- (iii) decision-making within an environment that pursues the goal of policy integration, co-ordination and coherence promotes interdependencies among actors that tend to minimize individual opportunistic behaviour.

Specifically, the question of how public policy decisions in the Maritimes are reached is addressed by analyzing the behaviour between the expanding number of players in the form of policy networks, each of whom seeks to influence decision-making. These include public sector actors, private sector and civil society actors (Wapner, 1995; Scholte, 1999), all of whom have coalesced around a particular issue because they share a common interest in the outcome. In the coastal and ocean policy domain, the impact of this expansion is likely to be found at the

'sub-government' component of a policy community,<sup>2</sup> consisting of very small groups of people (Pross, 1986).

By understanding the relationships among policy actors and the tools (including mass communication and information technologies) available to members of a network to affect the decision-making process and its outcome, the validity of the assumptions underlying the above three propositions is tested. In addition, five propositions, relating specifically to the theory of governance, will be posited in the research approach and examined for their consistency with the analytical findings of the two selected case studies.

#### **1.4. The Interdisciplinary Approach**

With respect to the specific nature of this study, it has been recognized that the activities that impact on the ocean environment are diverse in scope and cover an extensive range of disciplines -- from the physical and biological to the sociological, economic, political and legal (Friedheim, 1999; Miles, 1999; Vallega, 2001). However, until the rise of the post-modern society in the last quarter of the 20<sup>th</sup> century, each of these elements was sectorally-focused, with its aspects and processes examined in line with the dominant Cartesian reductionist model (Vallega, 2001). While this has led to much analysis being conducted by disciplinary specialists, there is a growing recognition that conceptual reductionism, i.e., defining a problem by prior commitment to a particular disciplinary paradigm, has often oversimplified complex and problematic questions into technical 'how-to-fix-it' answers (Caldwell, 1998). This has resulted in a slow but growing appreciation for interdisciplinary analysis of complex societal problems, as well as the recognition that discipline-based research could itself benefit from the introduction of

---

<sup>2</sup> Pross (1986) advocates the concept of the *policy community* to describe the growing constellation of actors involved in public policy decision-making, arising from the increased interdependence between state and society, the diffusion of expertise and the fragmentation of authority. According to Pross, a policy community is comprised of the "sub-government" (constellation of actors in lead and other government agencies and societal actors who have a role in formulating and implementing the policy) and the "attentive public" (having less influence but possessing considerable expertise to affect the policy agenda).

cross-disciplinary methodologies and perspectives (Nissani, 1997).

As the categories of coastal and ocean use have grown and their linkages recognized, the need to shift from a disciplinary focus to one that attempts to explain the ocean as a complex interactive system with a multiplicity of users has become evident (UNCED, 1992; Chircop, 2000). Such an approach demands a view of the ocean that is holistic, without the need to focus on any one element exhaustively. It also requires viewing the ocean from a cross-disciplinary economic, ecological and cultural perspective, instead of primarily as an unlimited reservoir meant to supply humanity with food, energy and mineral resources or as a disposal system. This economic perspective is no longer considered appropriate, given the growing global acceptance of the principle of sustainable development, with its joint objectives of ecological integrity, economic efficiency and social equity.

To meaningfully address the implications of the diverse elements inherent in the issues being examined, this dissertation pursues an interdisciplinary approach to understanding the major influences affecting policy-making. Such an approach allows the reality of conflicting uses, overlapping jurisdictions and competing values to be taken into account. As such, it is argued that effective action can only occur following an integration of the political, social, economic, legal and technical elements associated with any decisions affecting ocean use and space (Soares, 1998). The research conducted for this thesis attempts to address these diverse elements in the manner outlined below.

First, it requires and incorporates an appreciation and understanding of the public policy and legal development processes in the arena of coastal and ocean policy decision-making in Canada. It has been argued that the hierarchical approach of "command and control" is condemned to failure, if one accepts that an orthodox sectoral approach to decisions affecting the oceans is no longer sufficient (Friedheim, 1999; Miles, 1999). Furthermore, since law is defined as a complicated set of social and institutional arrangements which are developed in response to general or special social needs (Johnston, 1984), a working knowledge of the sociological and political factors driving the legal process is critical to understanding decision-

making. This is applicable to decisions being made in the ocean policy domain in general and in the case studies examined in this dissertation in particular.

Second, there is a recognition that even when an interest in the principles of sustainable development and citizen participation in ocean-related decision-making is declared, capital needs, modernization and access to global markets are assumed to be necessary for determining the best use of the ocean resource (Kirby, 1982). While such assumptions may be valid, it is important not to side-step issues of political power and social justice and overlook the key role local politics and knowledge may play in the management of the resource (Ostrom, 1990; Matthews, 1993). To overcome such deficiencies, it has been argued that understanding life in a community in Atlantic Canada requires knowledge of the moralities governing everyday life (Millar and Winder, 1999). While this is no easy task, many argue that it should not be side-stepped (Finlayson, 1994; Apostle *et al.*, 1997; Loucks *et al.*, 1998), a warning the analytical framework of the study attempts to heed.

Third, factors affecting the biogeophysical characteristics of the environment itself, its carrying capacity and limitations must be addressed when assessing decisions affecting coastal and ocean use and space. Reliable scientific knowledge is critical for establishing priorities and evaluating options and is essential in formulating environmental policy (Wells *et al.*, 2002). Furthermore, the authority given to knowledge acquired as a result of the scientific method is still unparalleled to any other sources of knowledge and purveyors of such knowledge wield tremendous influence over decision-making. However, as is now generally acknowledged, coastal and ocean problems in post-modern society are multifaceted. As a result, they demand solutions that are based on a synthesis of apparently disparate elements into propositions or alternatives capable of being acted upon by decision-makers. Unfortunately, it is in reductionist analysis, not in synthesis, that science excels. As such, scientific knowledge is but one of the many required inputs necessary to reach a well-informed decision that affects ocean use and space.

The above discussion on the importance of an interdisciplinary approach to understanding the factors influencing decision-making in the coastal and ocean policy domain is not meant to detract from the importance of disciplinary efforts in the advancement of human knowledge. Rather, its purpose is to accentuate the cross-disciplinary dialectic of analysis and synthesis which valid policy research requires. In a post-modern world faced with complex problems such as population ageing, sustainable economic development, food security and global pollution, the ability to understand and meaningfully address these issues through the lens of single disciplines is not a viable option (Renaud *et al.*, 2002). Rather, it seems more likely that the collaborative effort of diverse disciplinary skills, applied in a manner that requires reciprocity across the specializations, will be a key requirement for success.

Arguments supporting the synthesis approach are not new and have been repeatedly made over the latter half of the twentieth century (Sears 1954; Bradley 1973; Wilson 1998). The approach implies an awareness that prevents any particular discipline, methodology or paradigm from arbitrarily distorting problem definition and the research process (Caldwell, 1998). It also requires the breadth of knowledge and skills in synthesis that have long been recognized but seldom pursued in any kind of policy level decision-making. As cautioned by E. O. Wilson (1998),

We are drowning in information, while starving for wisdom. The world henceforth will be run by synthesizers, people able to put together the right information at the right time, think critically about it, and make important choices wisely.

(Wilson, 1998, p. 294)

Writing specifically on the topic of ocean governance, the above sentiments of Wilson were echoed by Vallega (2001) in his identification of the remarkable gulf between the concept and practice of integration. Recognizing that the means used to pursue goals and the resulting effectiveness of policies depend on how the ocean is perceived, this author calls for a concerted effort to address the integration challenge confronting optimal and rational ocean governance.

In reference to the need for the synthesis of critical elements at the level of decision-making, Vallega cautions that ocean governance,

...will conform to the sustainability principle only where an effective organic linkage between human communities and the ocean ecosystem is achieved, and where humanistic and ethically sound visions of the oceans are adopted.

(Vallega, 2001, p. 246)

### **1.5. Thesis Format**

Chapter Two of the thesis provides an overview of the broader policy context within which the selected decisions were made. It discusses the evolving nature of governance<sup>3</sup> in Canada over the period covered by the case studies, presenting corresponding challenges and opportunities for coastal and ocean policy decision-making in Canada's Maritime region. Chapter Three describes the research approach and provides additional details on the research questions and propositions posited in the study. It also discusses the criteria for selecting case studies, the research methodology and the analytical framework developed to examine the process of decision-making in the complex Canadian coastal and ocean policy domain. Chapters Four and Five present the analysis of the two case studies. Drawing on the research findings of the case studies, Chapter Six provides a comparative analysis of the behaviour of actors in the policy networks as they attempt to influence the decisions being made, explicitly recognizing both similarities and differences between these decision-making processes. Chapter Seven evaluates the consistency of the theoretical framework with the research findings and provides the concluding statement of the thesis.

---

<sup>3</sup> Governance, as defined by Czempiel (1992), is the capacity to get things done without necessarily having the legal competence to command that they be done. This is distinguished from 'government', which distributes values authoritatively (Easton, 1953).

## CHAPTER TWO

### SETTING THE SCENE

#### 2.1 Canada's Approach to Governance – 1984 to 1999

The decision-making processes for the two case studies analyzed in this dissertation cover the period from 1984 to 1999. During this period, governance in Canada was influenced by global factors over which the country had little control (Scholte, 1999). Compounding these external pressures were a range of domestic factors, many of which were themselves a reflection of the rapidly changing world order that characterized the last two decades of the millennium.

To understand and appreciate the drivers behind these changes in Canada, it is necessary to elaborate on the rise of the governance paradigm globally and the current theory underpinning the concept. Additionally, as with any construct developed by social scientists to describe and explain the 'real world', a discussion on the strengths and weaknesses of the governance paradigm as an alternative to the previously offered dichotomous approaches seems appropriate.<sup>1</sup> It is only after a review of the rise, theory and risk of failure of governance that the Canadian governance structure during the study period may be adequately understood.

##### 2.1.1 Rise of Governance

Over the past decade, governance has enjoyed a revival in its attractiveness as a topic for scholarship in the social sciences as well as in the lexicon of everyday usage. Some scholars trace its renewed awareness to the 1989 World Bank report on Sub-Saharan Africa in which the then-current situation was described as a 'crisis in governance' (Pagden, 1998; Stoker, 1998). Others attribute its rise in popularity to dissatisfaction within the social sciences by the late 1980s

---

<sup>1</sup> Paradigms to explain the 'real world' in the social sciences traditionally focused on dichotomies such as market vs hierarchy in economics; private vs public in political studies; anarchy vs sovereignty in international relations and market vs plan in public administration (Jessop, 1998). However, other scholars have criticized these dichotomous views as over-simplified typologies (R. Apostle, Professor of Sociology and Social Anthropology, Dalhousie University, Halifax, Nova Scotia, personal communication, November 5, 2002).

to adequately explain empirically observed behaviour at the international, national and sub-national levels with the existing paradigms (Carlsson and Ramphal, 1995; Wapner, 1995; Jessop, 1998). Yet others have claimed its revival has been due to the need to distinguish between the formal institutions of the state, with their monopoly of coercive power and the new distributed method by which society appeared to be governed (Rosenau, 1995; Rhodes, 1996).

Regardless of the source, this attention has led to significant advances in knowledge due to research conducted in distinct disciplinary areas such as Political Science and International Relations, Sociology, Management Science, Law and History, to name just a few. However, the ubiquitous use of the term *governance* in various lay circles has been such that it has been criticized as a 'buzzword', meaning anything and nothing (Jessop, 1998), lacking a universally shared frame of reference as to its exact meaning. To counter any confusion with its use here, *governance* is used throughout this thesis to refer to the development of governing styles in which the boundaries between and within the public, private and civil sectors of society have become blurred (Rosenau, 1992; Kooiman and Van Vliet, 1993; Stoker, 1998). This is in stark contrast to *government*, which is used to describe the formal institutional processes operating at the national and sub-national levels of a state to maintain public order.

Thus governance refers to a mode of social co-ordination in which patterns of relationships emerge, rather than being crafted, and which provide the opportunity for affected parties to share information and participate collectively in the process of steering and learning. Alternative modes of governance in which public authorities and forms of control play a diminishing role are illustrated in Table 1. It should thus be clear that, for the purposes of this discussion, governance is not synonymous with government.



**Table 1. Alternative Modes of Co-ordinating Arrangements**

<b>Modes of governance</b>	<b>Role of the 'governor'</b>	<b>Role of the citizens</b>	<b>Forms of control</b>	<b>Normative bases for rule setting</b>
<b>Hierarchical</b>	Implementation	Subject	Rules	Will of the people
<b>Autonomous</b>	Safeguarding of rights and values	Protected	Peer group control	Standards
<b>Negotiated</b>	Mediator	Member of interest group	Negotiation	Consensus
<b>Responsive</b>	Listening	Client	Dialogue	Service
<b>Self-governing</b>	Setting framework	Co-producer	Self-regulation	Self-development

Source: Adapted from Paquet, 1999.

For most of the past 350 years, the need to draw a clear distinction between the practices associated with governing and the institutions of governing appeared to have been unnecessary, due to the dominance of the hierarchical mode in the western world during this period. The development of the European state system in the mid-17th century as a result of the Peace of Westphalia gave sovereignty to territorial states on the basis of 'primacy of great powers'.<sup>2</sup> Since that time, the sovereignty of territorial states and their right to self-determination have become accepted universal norms. These have been reinforced in the outputs of multilateral initiatives such as the 1919 Versailles Peace Conference, the formation of the League of Nations and the 1945 conference leading to the formation of the United Nations. The principle that the state has supreme authority over all matters falling within its territory has been described as the cornerstone of the modern interstate system (Carlsson and Ramphal, 1995). Associated with this

---

<sup>2</sup> With such rights being vested in the territorial state, government as an institution that co-ordinated and shaped public life by virtue of its authority became synonymous with the state. Such a merger was decried by Machiavelli as a 'lowering of the sights of politics' since the limited capacities of state apparati were such as to remove matters of morality from the domain of political life (Machiavelli, 1997).

principle are the norms that all states have equal rights; the territorial integrity and political independence of all states are inviolable; and, intervention in domestic affairs is not permissible. As such, any system developed to create the conditions necessary for effective ordered rule and collective action under such accepted norms would more than likely reflect the centralized, hierarchical authority of the state.

This has been the case for both developed and developing countries over the past 350 years until a changing world order in the past two decades led to an apparent mismatch between the legal sovereignty granted to nations and political sovereignty. Numerous factors spanning the micro-, meso- and macro-levels of social organization have been identified to account for the loss of the state's monopoly on establishing and enforcing the system of rules by which the society within its borders is governed.

First, the rise in democratic principles as an increasingly accepted global norm over the past two decades has favoured governance. This is because the democratic system of rule is explicit about the distribution of all politically relevant values. These include security, property rights and opportunities for economic wellbeing and the civil rights and responsibilities for participation through elections and co-determination (Czempiel, 1992).

Second, the rapid and extensive changes on a global level, characteristics of the present phase of the post-modern age, have resulted in an undermining of national governments by extra-territorial concerns (Rosenau, 1992). Factors cited as critical drivers in this regard have included:

- the globalization<sup>3</sup> of economies and the rise in multi-national corporations;
- the advent of broad social movements;

---

<sup>3</sup> *Globalization* is used to describe a technological and economic process driven by revolutionary advances in telecommunication, economic production and investment. This is distinct from *internationalization* which refers to degree in which domestic policy-making is influenced by extra territorial factors (Doern *et al.*, 1996).

- the shrinking of political distances;
- the demands and greater coherency of various ethnic and sub-national groups; and,
- the 'mushrooming' of global interdependencies and porosity of state borders as a result of trans-national environmental problems in all three media (air, land and water), terrorism, the drug trade, monetary crises and overwhelming health concerns such as AIDS.

In Canada, as in other states, globalization has led to a reduction in the effectiveness of domestic macro-economic policies to deal with major issues and the perception by the public that 'governments cannot do anything right' (Paquet, 1999).

Third, as a result of the erosion of state and governmental power, the roles individuals can play through collective action have increased. Access to advances in information and communication technology, television, travel and educational institutions has enhanced the analytical skills of individuals. It has also allowed them to 'see' the aggregation of micro-level actions into macro-level outcomes. This new-found capacity of individuals to express their potential has reduced the extent to which organizations and leaders are factors in mobilizing the publics, particularly since the issues to be dealt with on the global agenda can directly affect public welfare and spending power (Rosenau, 1995; Scholte, 1999). Thus individuals in civil society are now capable of setting and assessing performance criteria which then can be used to evaluate the degree of legitimacy that they intend to grant macro-level institutions. The degree of compliance with authoritative rules will reflect the level of legitimacy granted them by the public, often resulting in the re-allocation of authority away from the political realm to the social and economic realms and vice versa. In Canada, the evidence suggests that Canadians want to see a shift from paternalistic modes of authoritative control to partnerships in the setting of goals and means, with clear accountability for targets and results (Graves, 1999).

Despite growing empirical evidence from a number of countries around the world suggesting a fundamental shift in the dominant mode of co-ordination for collective action, the question

remains of whether the visible emerging order is in fact a genuine paradigmatic shift or whether it is simply a 'within system' change. There are numerous precursors of the current interest in various disciplines and many practices now subsumed under *governance* have been examined under other rubrics. It has been suggested that the answer given to a posed question will depend on how the system itself is perceived by the respondent (Czempiel, 1992). If, for example, the respondent argues for a continuance of state dominance (Osborne and Gaebler, 1992), the rearranged relationships and new patterns of interaction are explained in terms of the existing state system with a new set of managerial tools, including contracting out, franchising and new forms of regulations. If emphasis by the respondent is on the diminished competence of the state, then the emergent order is likely to be viewed as systemic change, with states still as active participants but with different, less dominating roles to play.

Despite the current lack of consensus, existing evidence seems to be supportive of systemic change. First, as discussed earlier, governance as a concept has become widely discussed in lay discourses, leading to a significant increase in the attention paid to it as a subject for social science scholarship. Second, governance mechanisms have been shown to be persistent over time. Subsequent disenchantment with the state in the 1970s and with markets in the 1990s have led to the search for the missing third link to explain patterns of behaviour which could not be explained by market-dominated or state-dominated modes of co-ordination (Jessop, 1998). Third, governance provides for a more robust-form of decision-making by promoting arrangements that support flexibility, learning and responsiveness, variables identified as necessary to successfully respond to dynamic global challenges and opportunities. Fourth, there is an increasing acceptance that new economic and social conditions with their attendant problems cannot be resolved by either top-down state planning or market-mediated anarchy. This acceptance is seen as signalling a 'shift in the fundamental structures of the real world and a corresponding shift in the centre of gravity around which policy cycles move' (Jessop, 1998).

### 2.1.2 Theory of Governance

The current theory of governance has five propositions that attempt to provide an organizing framework for understanding the changing processes of governing discussed above (Stoker, 1998). Each of these propositions serve to challenge the assumptions of traditional public administration, particularly as they relate to the decision rules for managing coastal and ocean use and space in Canada. The five propositions are:

- (i) governance refers to a set of institutions and actors that are drawn from the governmental and non-governmental sectors;
- (ii) governance blurs the boundaries and responsibilities for tackling social and economic issues;
- (iii) governance identifies the power dependence involved in the relationships between institutions engaged in collective action;
- (iv) governance leads towards autonomous self-governing networks of actors; and,
- (v) governance recognizes the capacity to get things done in a manner which does not rest on the power of the government to command or use its authority.

Proposition (i), which broadens the institutions of governance to include those outside of government, challenges the Canadian notion of the 'Westminster' model, which characterizes the political system as a 'stand-alone' centralized institution buffered from wider societal forces. A cursory examination of the federal and provincial structures of government for managing the marine and coastal environment in Canada confirms that government is indeed sectoral and fragmented. As of 1997, there were 23 federal departments having some degree of responsibility for the oceans, along with an additional array of approximately 39 provincial agencies (Government of Canada, 1997a; Government of Canada, 1997b).<sup>4</sup> The dilemma associated with proposition (i) for Canada is the clear divorce between the normative codes used to explain and

---

<sup>4</sup> With the creation of Nunavut as Canada's newest territory since the publication of the DFO documents, it is reasonable to assume that the situation has become further complicated.

justify government and the reality of decision-making in the system. Thus, while the public recognizes that governments no longer have the exclusive moral authority or technical ability to deal with major issues (Paquet, 1999), an alternate accepted framework for implementing a more distributed form of governance has not yet evolved.

In addition to recognizing the complexity of government alluded to in proposition (i), proposition (ii) acknowledges the shifts in responsibility of governing to include the key actors in society. This proposition addresses changes in the long-standing balance between the state, the private sector and civil society. It emphasizes the notion that actors outside of government are not just seeking to influence government but have taken over some of the traditional functions of government. The dilemma with this proposition is the associated ambiguity and uncertainty in the minds of both policy-makers and the public as to whom responsibility should be attributed, particularly during times of difficulties and failures. In short, in the absence of a clearly defined structure for sharing accountability, the characteristic blurring of responsibilities inherent in a distributed governance framework can lead to a weakening of accountability, further eroding the public's confidence in the existing institutions of governance.

Proposition (iii) suggests that organizations involved in collective action are dependent on each other since no one actor has the knowledge and resources to address the problem unilaterally (Kooiman, 1993). It follows that goals and objectives then can only be achieved by sharing resources and negotiating common purposes. In addition, the rules for interaction and the context within which exchange occurs significantly affect the outcome. The dilemma facing interdependent actors is the recognition that intentions may not always match outcomes and that opportunistic behaviour by individual actors may exacerbate institutional uncertainties relating to the outcomes (Charles, 1998).

With proposition (iv), governance networks evolve not only to influence decision-making, but also to assume some of the business of government. By combining resources, abilities and sharing a common purpose, actors form a long-term coalition capable of making governing

decisions. The dilemma arising as a result of such self-governing networks centres around accountability, both at the level of the actors within the network and concerning those excluded from the network. Because of the benefits obtained by all members of the network, it may prove difficult for groups dissatisfied with network arrangements to voice their concerns. Of greater concern is the fact that actors coalesce into networks largely in pursuit of their self-interest and as such, do not necessarily represent the concerns of the wider public or those excluded from the network.

Proposition (v) attempts to outline the appropriate role for government in the evolving distributed governance scenario. Specifically, the tasks assigned to government involve problem definition, stakeholder identification and facilitating linkages between the relevant parties to achieve desired outcomes. Additionally, government has a role to play in ensuring the unwanted consequences of decision-making are minimized. The dilemma presented here is that even when government operates in a flexible way to steer collective action, governance failure may occur due to a host of variables including differences in time scale and horizons among key partners, lack of leadership and the depth of social conflict (Stoker, 1998). Considerable attention has been paid in the literature on governance theory on the need to address these constraints, through ensuring appropriate design parameters of institutions (Goodin, 1996). However, these do little to address the reality that while institutions may shape policy outcomes, they are limited in their ability to determine them (Stoker, 1998).

### **2.1.3 Risks of Governance Failure**

There is a growing sense of optimism among some proponents of governance that it has the potential to be the panacea to effectively organize structures for successful collective action (Capello, 1996). However, as already alluded to above, there are numerous pitfalls associated with the shift from the prior regime characterized as centralized and hierarchical to one that has been described as distributed and decentralized (Paquet, 1999). In somewhat fatalistic terms, Jessop (1998) writes that failure has been a central feature of all social relations to date. Given

the growing structural complexity and opacity of the social world, he contends that it is more than likely that attempts to govern it will result in failure. This is especially the case when multiple objectives over extended spatial and temporal scales are being sought for complex issues, as is the situation in attempting to achieve sustainable ocean governance.

This failed outcome is likely, irrespective of the approach selected to govern social relations, i.e., through the use of markets, states, partnerships or some other mechanism. However, while there are clear indicators to evaluate the success or failure of markets (through achievement of profit maximization) and state planning (through achievement of policy goals), indicators for assessing governance failures are less obvious. One measure that has been suggested is to evaluate the failure of members of the network to redefine goals in light of continuing disagreement about whether they are still valid for the members of the network.

Nonetheless, despite the expectation of failure, the attraction of governance is that it can supplement efforts at market exchange and government hierarchy with a form of institutionalized negotiations that mobilizes consensus and builds mutual understanding. Thus the benefit of governance is its potential, when successful, to permit longer-term strategic guidance which is lacking in markets, whilst retaining the flexibility lacking in hierarchical systems.

#### **2.1.4 Canadian Governance during the Study Period**

Consistent with the trends discussed above, Canadian decision-making structures appeared to have shifted from a strictly hierarchical governmental regime towards a more distributed form of governance during the period covered by the examined case studies (1984 – 1999). Scholars have documented evidence over this time period of a growing reliance on innovation and intellect, in addition to authoritative control, due in part to the gradual influence of the 1982 *Canadian Charter of Rights and Freedoms* in reshaping Canadian society (Pal, 1999a; Paquet, 1999). Nonetheless, examples of federal government dominance were also evident in decision-making relating to Canadian sovereignty issues, particularly over challenges in the Canadian Arctic and maritime boundary disputes with the United States, including the Gulf of Maine



dispute. However, it is important to note that while the balance of power still lies with the defenders of governmental regimes, forces are evident which appear to be slowly tilting the balance the other way.

In addition to the global factors favouring a shift towards more private sector and civil society involvement, domestic pressures have increased the weakening of the dominant hierarchical regime over the time period under review. These weaknesses arose from the growing demands of a burgeoning population for public goods in the 1960s; the pressure on markets and regulatory efforts in response to market failures; a fiscal crisis that emerged in the 1970s; and, a recognition of the social limits of growth (Duncan, 1985). By 1984, the combination of a recession, high interest rates and a large deficit led the then recently-elected federal Progressive Conservative government to focus not only on reducing the size of government, but also to redefine the role government played in the economy (Prince, 1987).

Over its four-year term spanning 1984 to 1988, the federal government's policies and programs were aimed at deficit reduction, decentralization and free trade. In evaluating the government's performance, national priorities showed a reliance on the private sector for job creation and a belief in giving the private sector more room in which to operate. This approach was coupled with a strong emphasis for deficit and fiscal reduction and a preference for downsizing and streamlining the federal public sector (Prince, 1988). It was during this time period that the Fixed Link proposal was being discussed. As will be discussed in Chapter Four, private sector solutions were being sought at this time as a way to cap the federal government's expenditure, including those relating to a year-round linkage of Prince Edward Island to the mainland.

The 1988-1992 period began with a re-elected federal Progressive Conservative government following the tumultuous 'free trade' election of 1988. Deficit reduction and fiscal responsibility, while emphasizing globalization and international competitiveness, remained the official policy of the government. However, by 1991 new elements of the altered context of governance were

influencing government policy-making. Elements such as the erosion of national sovereignty, especially in the capacity to regulate high levels of unemployment, pressure on the welfare state and the growth of a permanently poor underclass prompted a rethinking in the neo-conservative enthusiasm of the 1980s (Pal, 1999a). By 1993, a combination of constitutional failures (primarily from forces opposing a decline in the federal government's role with respect to the provinces),<sup>5</sup> years of program cuts and expenditure reductions, recession, the introduction of the Goods and Services Tax and an assortment of scandals, led to the resignation of the Progressive Conservative Prime Minister. The subsequent election later that year resulted in an overwhelming majority Liberal government.

Over the next five years, the Liberal government continued the policies of the previous nine years, focusing on reducing the growing deficit and accepting the Free Trade Agreement as well as its successor, the North American Free Trade Agreement (NAFTA). In 1995, the government conducted a program review exercise aimed at evaluating the programs currently in place and leading to substantial expenditure reductions. By 1998, the federal government brought down a balanced budget for the first time in 20 years and promised surpluses in ensuing years (Pal, 1999a). Due to the increasingly turbulent global economy and Canada's vulnerability to international currency speculation, the government was able to avoid announcing tax cuts or new investments in social programs, even with a budget surplus.

In summary, the following themes characterized the dramatically shifting pattern of government and governance in Canada over the period 1984 to 1999 (Pal, 1999a):

- a gradual emergence of a political and social consensus on the importance of tackling the deficit;

---

<sup>5</sup> Two rounds of constitutional negotiations attempted in the early 1990s failed. In June 1990, the proposed Meech Lake Accord, failed due to a lack of provincial consent. A subsequent attempt in October 1992, the Charlottetown Accord responded to the public call for involvement in the process. However, it also failed due to disagreement over the sharing of powers. (Rocher and Smith, 1995).

- an emerging sense that more decentralization and partnerships among federal and provincial governments were needed to address the growing complexity of governing in a global environment;
- a change in the nature of government, specifically in terms of size, scope and activities of the federal government;<sup>6</sup>
- a gradual emergence of globalization as the primary context of Canadian policy-making, such that it was termed the “El Niño” of public policy, with all policy changes somehow arising as a result of this phenomenon (Doern *et al.*, 1996);
- the impacts of policy changes on community cohesion and democratic practices, particularly with respect to Aboriginal peoples;<sup>7</sup> and,
- an increased concentration by both levels of government on social and economic union, which suggested that from the perspective of the federal government, the characteristics of small, lean, decentralized, partnered and prudent were not only endorsed but actively pursued.

The patterns of governance described above necessarily affected the environment within which coastal and ocean policies were made in Canada. It also affected who participated in the decision-making process and played an important role in determining the degree of power and influence exerted by these actors.

From the perspective of decision-making in the ocean policy domain, both state structures

---

<sup>6</sup> As a percentage of the GDP, federal expenditure in 1999 was comparable to the 1950s. Many programs and services to the public were cut and those that were still in existence were redesigned with some being offered through partnerships with the private sector or other organizations (Pal, 1999a).

<sup>7</sup> The growing consensus among governance and legal scholars was that in the ensuing decade, First Nations and Metis governments will result in fundamental changes in Canadian federalism. Similarly, local communities were predicted to play an increasing role in decision-making particularly in the cases of ‘international cities’ such as Toronto, Vancouver and Montreal. These cities have identities that were recognized globally, large populations and the increasing affiliation of their citizens to these communities, as compared to the province or country (Courchene, 1995; Gibbins, 1998; 1999b).

and non-state actors were recognized as being important actors in policy level decision-making. Using the selected case studies identified earlier, the contribution of these actors towards decision-making is analyzed in this thesis. Furthermore, the fact that one of the decisions examined had significant implications for Canada's smallest island province provided an opportunity to examine what role, if any, island governance, as influenced by the particular characteristics and vulnerabilities of such communities (Shaw, 1998), played in understanding the decision-making process. However, it should be noted that any conclusions offered had to acknowledge the constitutional commitment of the federal government to Prince Edward Island to provide for a link to the mainland, as a condition of the 1873 *Prince Edward Island Terms of Union*. Thus, issues of island governance potentially affected decision-making on what form the link would have taken, not whether there should have been a link.

## **2.2 Canada's Efforts at Ocean Governance – 1984 to 1999**

As a maritime nation, Canada boasts rather impressive statistics. It is bordered by the Atlantic, Arctic and Pacific Oceans and possesses the longest coastline and inland waterway of any country (Figure 2). It also has one of the world's largest archipelagos and has the second largest continental shelf of any country (NABST, 1994), with an area beyond the 200nm EEZ equivalent in area to the three Prairie provinces of Alberta, Saskatchewan and Manitoba (Macnab, 1994).

As legislated for in Part 1 of the *Oceans Act*, Canada has claimed maritime zones consistent with the *UN Convention on the Law of the Sea*, which Canada has signed but not yet ratified. With respect to its internal waters and the 12 nautical mile (nm) territorial sea, Canada has claimed full rights and responsibilities, equivalent to those exercised on land, with allowances for the right of innocent passage as required under international law.<sup>8</sup>

---

<sup>8</sup> *Oceans Act*, S.C. 1996, c. 31, ss. 4 and 7.

**Figure 2. Map of Canada showing Terrestrial and Maritime Areas**



Source: Natural Resources Canada, 2001.

Canada has also claimed a contiguous zone with a seaward boundary of 24nm in which it can enforce federal customs, fiscal, immigration and sanitary laws.<sup>9</sup> The *Oceans Act* also identifies Canada's claim for a 200nm exclusive economic zone (EEZ) and specifies the sovereign rights and jurisdiction that Canada has over this maritime zone.<sup>10</sup>

Canada's EEZ is estimated to be almost five million square kilometres, representing close to 40 percent of the Canadian landmass (NABST, 1994). Over this maritime area, Canada has sovereign rights for the purposes of exploring and exploiting, conserving and managing the natural resources in the waters, seabed and subsoil. It also has jurisdiction over the establishment and use of artificial islands, installations and structures, marine scientific research and the protection and preservation of the marine environment in the EEZ. Canada has also claimed its sovereign right to a continental shelf for the purpose of exploring and exploiting the mineral and other non-living natural resources of the seabed and subsoil, together with living organisms belonging to the sedentary species.<sup>11</sup> It is worth noting that Canada has not determined the extent of its continental shelf beyond the 200nm boundary, although the submerged prolongation of the landmass is expected to be considerable for both the Atlantic and Arctic offshore areas.

Unlike current trends globally, where an estimated 60% of the world's population live within 100 kilometres of the sea, less than one-quarter of Canada's total population of approximately 32 million live in communities which border ocean waters. This results in a comparatively small oceans constituency among the Canadian population. It is estimated that \$135 billion (Canadian dollars) of ocean-related economic activity occurs in these coastal communities, contributing about 6% of Canada's current Gross Domestic Product (GDP) (Government of Canada, 1997a). A more recent estimate of \$20 billion (Canadian dollars) is provided in *Canada's Ocean Strategy*

---

<sup>9</sup> Ibid., ss. 10 and 11.

<sup>10</sup> Ibid., ss. 13, 14 and 15.

<sup>11</sup> Ibid., ss. 17 and 18.

(Government of Canada, 2002a) as the value assigned to ocean-related economic activity, although no justification is provided to account for the almost seven-fold decline between this value and that cited five years earlier. Since it is highly unlikely that such a decline has in fact occurred, this discrepancy suggests that a consistent understanding of the value of the ocean resources to Canadian economic activity is lacking at the federal level. This lack of understanding can have potentially serious repercussions, particularly for coastal provinces, if policies are based on inaccurate estimates of the importance of the sector to provinces and to the country.

For example, the contribution of the ocean sector to the GDP of the Atlantic provinces is significantly higher than the 1997 national average cited by the federal government. The province of Newfoundland and Labrador estimates the direct economic impact of ocean-related activity as being 14% while the total impact is estimated at 26.5% of the provincial GDP, 1997-99 Average (Government of Newfoundland and Labrador, 2002). In the provinces of Nova Scotia and Prince Edward Island, the direct economic impact of ocean-related activity is estimated at 10% while the total impact is estimated at 17% of each province's GDP (CanMac Economics *et al.*, 2002; Mandale Consulting *et al.*, 1998). For New Brunswick, estimates of the contribution of the ocean sector to the provincial economy is the lowest in Atlantic Canada, with total impacts accounting for 7.2% of GDP (Mandale, 2000), but this is still higher than the 1997 national average.

As with most coastal nations, sectoral ocean uses in Canada usually have developed in isolation from each other, with different needs and technologies, separate networks, communications and practices (Coffen-Smout, 1996). This has resulted in autonomous sectors, having minimal or no links between them. As previously mentioned, to manage its coastal and ocean activities, 23 federal departments and agencies have direct oceans-related programs with a suite of associated laws and statutes. At the provincial and territorial level, some 39 departments, with authority under 89 pieces of legislation, expend approximately \$189 million

(Canadian dollars) in ocean-related programs and activities (Government of Canada, 1997b). Such a fragmentary approach may have been adequate early in the 20<sup>th</sup> century. However, it has proven to be highly dysfunctional in the last quarter, an era of rapid technological change, many ocean uses and an increasing display of multiple-use conflicts, particularly in the resource-rich waters overlying the continental shelf. Further complicating efforts at ocean governance has been the fluid, three-dimensional nature of the medium, the complexity of the interactive ecosystems, mobility and opacity of resources and activities and, the mismatch between administrative boundaries and jurisdictional authorities and the natural environment (Couper, 1992).

To address the sectoral shortcoming to policy formulation, the past decade has seen an increasing call for coastal states to adopt an integrated approach to policy, programme and planning development (Hildebrand, 1997). There is a clear need to develop a process by which the socio-economic and environmental consequences of these considerations can be effectively incorporated in the decision-making process. As defined by the Brundtland Commission (WCED, 1987), sustainable development requires a systems approach that balances environmental, economic and social objectives and criteria. How this is accomplished requires addressing the challenge of integrating economic, social and environmental considerations when planning or guiding future development. Governments must thus ensure that policies fit together in a coherent manner in every sector and that policies are based on complementary principles rather than what is expedient to implement (UKDOE, 1991).

The need to increase policy coordination and coherence horizontally amongst responsible government agencies and vertically amongst responsible jurisdictions has been recognized in Canada's *Oceans Act*. However, this challenge of integrating policies emanating from different levels of governments and sectoral agencies has met with limited success (Levy, 1993). In



Canada, the 1996 *Oceans Act* and a number of agreements<sup>12</sup> signed between aboriginal groups and governments in the management of Canada's Arctic provide examples of a legal status for the participatory process and are reflective of Canadian constitutional considerations (Berkes *et al.*, 2001).

As with the broader evolving governance regime discussed above, Canada's efforts at managing its ocean environment and associated resources have been significantly influenced by changing expectations (Mitchell, 1998). These have arisen at the international and domestic levels over the past three decades and in particular, during the fifteen-year period covered by the case studies.

### **2.2.1 International Factors**

The most significant event associated with ocean governance at the international level in the 1980s was the conclusion of the Third United Nations Conference on the Law of the Sea (UNCLOS III) in 1982. The conference began in 1973 with the principal aim of designing and adopting a global approach to the regime of national seas and international waters. However, for the most part, it became apparent that the legal process was being obliged to react to political events of the time, rather than shaping them (Birnie, 1993). Underlying the discussions over the period it took to negotiate the Law of the Sea Convention (LOSC) was the philosophy of 'enclosure'. This led to the promotion of greater appropriation of marine space by nation states as a means of avoiding the 'tragedy of the commons', said to be associated with unfettered open-access (Hardin, 1968).

It has recently been argued that the apparent philosophical debate between the principle of the freedom of the seas and legal appropriation by states, as allowed for in the LOSC, may only be an illusion. This is because subscribing to the former philosophy provided the political and

---

<sup>12</sup> Examples of such agreements include the 1975 James Bay and Northern Quebec Agreement, the 1984 Inuvialuit Final Agreement, the 1992 Gwich'in Comprehensive Land Claim Agreement, the 1993 Sahtu Dene and Metis Comprehensive Land Claim Agreement and the 1993 Nunavut Land Claims Agreement.

legal basis for countries with the economic, technical and military power to appropriate *de facto* areas of the high seas (Pureza, 1999). Thus, the argument that there was a fundamental shift in philosophy may in fact only be a specious one. Nonetheless, all states, especially the growing number of newly-independent nations, agreed to the proposed enlargement of their jurisdictional zones,<sup>13</sup> addressing for the most part who had the authority to make decisions affecting ocean use and space. However, questions surrounding the actual management of the newly acquired space and resources, specifically those pertaining to what was to be done and how it was to be done, were generally left unanswered in the LOSC (Friedheim, 1999; 2000).

Canada's efforts during the negotiation phase of the convention were significant, resulting in the inclusion of several articles which addressed major concerns raised by the country's negotiators. Two of these concerns centred around the potential exploitation of Pacific salmon by foreign fishing fleets on Canada's west coast and its ability to protect the Arctic environment.

Specifically, article 66(1) provided a regime for anadromous species, giving states, in whose waters salmon originate, a primary interest in, and responsibility, for such stocks.<sup>14</sup> Similarly, article 234 within Part XII of the Convention included special provisions for the protection of Arctic waters from marine pollution. In 1970, growing concerns over the ability to protect the Arctic environment from pollution led Canada to enact the *Arctic Waters Pollution Prevention Act*. This also allowed Canada to protect its Arctic sovereignty from potential US threats of encroachment following the 1969 test voyage of the *S.S. Manhattan*, (an US-owned Humble Oil

---

<sup>13</sup> The LOSC allowed states to extend their territorial seas up to 12 nautical miles; their contiguous zones to up to 24 nautical miles and provided for the establishment of a 200 nautical mile exclusive economic zone, along with a re-designation of the area a state may claim as its continental shelf.

<sup>14</sup> With the inclusion of article 66(1) in the LOSC, Canada and the United States entered into negotiations aimed at a re-examination of the 1930 Fraser River Treaty, ultimately resulting in the signing of the Pacific Salmon Treaty in 1985. McDorman (1995) described the Treaty as an "ambitious and comprehensive attempt to jointly manage North America's northwest regional salmon resources".

Company ship) through the Northwest Passage, without first obtaining Canadian approval (Griffiths, 1987; 1999).

Similarly, in response to growing external pressures from foreign fleets on its fish stocks in the Atlantic, Canada established an exclusive fishing zone (EFZ) in 1977, extending its jurisdictional authority over the living resources of the sea to the 200 nautical mile limit.<sup>15</sup>

In 1985, the United States again challenged Canada's sovereignty in the Arctic by sending the US Coast Guard icebreaker *Polar Sea* into the Northwest Passage. As one of 119 countries signing the LOSC in 1982, Canada was well aware of the provisions in the Convention and responded with the delimitation of straight baselines around the Arctic archipelago, once again attempting to consolidate its sovereign rights over the area,<sup>16</sup> despite not having ratified the Convention.

It was also during this period that Canada attempted to resolve its maritime boundary with the United States in the Gulf of Maine. Other areas under dispute included boundaries in the Strait of Juan de Fuca and the Dixon Entrance in the northeast Pacific Ocean, and the northern boundary in the Beaufort Sea. The Gulf of Maine dispute was resolved by the International Court of Justice with the establishment of a single maritime boundary known as the Hague line (ICJ, 1984). The International Court of Arbitration was called upon to resolve Canada's maritime boundary dispute with France in the area bordering the St. Pierre and Miquelon Islands. A decision was made in June 1992.

There is widespread agreement that the 1982 LOSC still serves as the 'hub' of the contemporary law of the sea (Joyner, 2000). Prior to its adoption, ocean space and use were dealt with either by invoking the centuries' old customary law of 'freedoms of the seas' or by national appropriation (Mann-Borgese, 1995). However, since 1982, it has become evident that

---

<sup>15</sup> The US also declared an EFZ in 1977, which overlapped Canada's claim in some areas.

<sup>16</sup> Notes for a Statement in the House of Commons by Secretary of State for External Affairs, the Right Honourable Joe Clark, P.C., M.P., on Canadian Sovereignty, 10 September 1986.

the problems of the world's ocean were neither limited in scope nor manageable under the existing legal framework (Soares, 1998). Factors contributing to the inadequacy of the existing structure included rapid advances in technological innovation, population growth, changes in the patterns of human use of the oceans and altered needs, values, perceptions and expectations for the oceans (Juda, 1996; Miles, 1999).

Since traditional treaty-making only addresses states as equal actors, the utility of the Convention is further challenged in the evolving governance regime of the 21<sup>st</sup> century, which espouses participation of non-state actors as one of the core principles of sustainable ocean governance (Soares, 1998; Costanza *et al.*, 1999). Additionally, it may be argued that a treaty-making approach to ocean governance ignores distributional fairness, especially among states having real world disparities with respect to each other, resulting in limited credibility and legitimacy among the broad range of affected stakeholders (Johnston and Sirivivatnanon, 1999). Equally important, it ignores the current shift in governance from the centralized, hierarchic mode in which the state served as the 'governor' to the more distributed form of network governance. In the latter form, actors from the private sector and civil sector play an increasingly shared role in decision-making and the successful implementation of decisions at the national and sub-national levels.

By the early 1990s, the insufficiency in the LOSC and other legal instruments to adequately respond to the challenges facing the ocean environment was one of the key factors driving the discussion at the 1992 United Nations Conference on Environment and Development in Rio de Janeiro (UNCED, 1992). The Rio Conference<sup>17</sup> re-focused world attention on the linkages between environmental concerns and development which were first highlighted in 1972 in

---

<sup>17</sup> *Agenda 21, the Rio Declaration on Environment and Development and the Statement of Principles for the Sustainable Management of Forests* were adopted by more than 178 governments at the United Nations Conference on Environment and Development, held in Rio de Janeiro, Brazil, June 3-14, 1992, <http://www.un.org/esa/sustdev/agenda21.htm> (accessed December 19, 2002).

Stockholm at the UN Conference on the Human Environment and subsequently by the World Commission on Environment and Development in 1987. The Rio Conference further emphasized the important role of the oceans and coastal environment to development and devoted the longest chapter in its Report of the Conference, *Agenda 21*, to this subject. As a result of Chapter 17, co-management, as a meeting point between governments' concerns for resource utilization and protection and users' concerns for opportunities, control and self-determination, was increasingly being discussed as an appropriate tool to promote the sustainable use of marine resources (Fanning, 2000). In keeping with the evolving nature of global concerns, the Conference produced the *Framework Convention on Climate Change* and the *Convention on Biological Diversity*. In these and other various 'soft' law instruments being adopted at this time, the evolving principles guiding the development of coastal and ocean governance were being elaborated.<sup>18</sup> Thus, principles such as pollution prevention, precaution, integration, public participation, community-based management, subsidiarity, 'polluter-pays' and indigenous rights were beginning to influence environmental law reform at both the international and domestic level (VanderZwaag *et al.*, 1996).

In the midst of efforts promoting an integrated approach to environmental management and participatory approaches to deal with the major land-based sources of problems affecting the oceans (GESAMP, 1990; Wells *et al.*, 2002), the LOSC came into force on November 16, 1994. The Convention served to strengthen national autonomy by establishing new and refurbished legal and jurisdictional regimes, precisely at a time when international regimes, based on multi-state co-operation were being formed to address issues of ocean governance in general, and marine environmental protection in particular (Young, 1989).

---

<sup>18</sup> Examples include Conventions associated with UNEP's Regional Seas Programme (UNEP 1995a) and the Washington Declaration on the Protection of the Marine Environment from Land-Based Activities (UNEP, 1995b). Other documents, such as the World Bank's *Noordwijk Guidelines for Integrated Coastal Zone Management*, distributed at the World Coast Conference in November 1993, provided coastal states with operational guidance on how to implement the policy statements associated with integrated coastal zone management in Agenda 21.

### 2.2.2 Domestic Factors

The challenge of responding effectively to the new LOSC rights and responsibilities remained a daunting task for most of the world's coastal states, including Canada. While most states readily declared their authority over the EEZ, few countries complemented this additional responsibility with the appropriate policies and plans necessary to ensure effective management of the newly acquired ocean territory (Jacobson and Boledovich, 1994).

In Canada, guidance on the assignment of rights and responsibilities between the federal and provincial levels of government is provided in the 1867 and 1982 *Constitution Acts*. These powers serve to balance the dual goals of protecting regional diversity while promoting national integration in the federal state (Gibbins, 1999a).<sup>19</sup> In matters relating to protection, conservation, enhancement and policing of the freshwater and tidal fisheries (section 91 (12) of the Act), the Courts have ruled in favour of the federal government.<sup>20</sup> Challenges have also been made over which level of government has the right and responsibilities for the exploration and exploitation of the seabed and subsoil. As with the ruling in favour of the Parliament of Canada over issues relating to seacoast fisheries, the Court has ruled *intra vires* of the Parliament of Canada on matters relating to the offshore seabed and subsoil.

In an example pertinent to the period examined in this study, the Court was asked to determine whether Canada or Newfoundland had the right to explore and exploit minerals and other natural resources in the seabed and subsoil offshore Newfoundland.<sup>21</sup> The Court was also

---

<sup>19</sup> In general, the powers sketched out in section 91 to 93 of the 1867 *Constitution Act* appeared to have worked well from Confederation until the end of the Second World War. After that time, the federal government began to use its spending powers in areas of provincial jurisdiction, thereby blurring the constitutional division of powers and encroaching on the legislative authority of the provinces. This led to the ramping up of the never-ending struggle for power within the Canadian federation (Gibbins, 1999a).

<sup>20</sup> Of particular relevance is the *B.C. Fisheries Reference* in which the Court denied the competence of the province to create a private right to fish in tidal waters (*A.-G. BC v A.-G. Canada et al.*, [1914] A.C. 153 (P.C.)).

<sup>21</sup> *Reference: Re Seabed and Subsoil of the Continental Shelf Offshore Newfoundland*. [1984] 1 S.C.R. 86.

asked to determine which level of government held legislative jurisdiction to make laws in relation to exploration and exploitation. In 1984, the Court ruled in favour of Canada to both parts of the question placed before it, stating that continental subsea and subsoil rights are granted by international law to coastal states, not to its sub-national components. Furthermore, the Court observed that at the time Newfoundland joined Canada in 1949, international law had not as yet conferred such rights to coastal states and if it had, those rights would have belonged to the United Kingdom, as a sovereign state, not Newfoundland.

The constitutional challenge made by the Attorney General of Newfoundland in 1984 over the right to explore and exploit mineral resources in the subsea and subsoil was supported by six other provinces, including British Columbia and the three Maritime provinces. It is of interest to note that British Columbia had issued a challenge in 1967 against the federal government regarding offshore mineral rights and that the Court had unanimously answered in favour of Canada then as well.<sup>22</sup> This ruling however did not discourage the province from claiming its rights to property over the waters, seabed and subsoil of the area enclosed between Vancouver Island and the mainland in 1984.<sup>23</sup>

While these and other decisions of the Supreme Court attempted to clarify the effects of the legal powers of the governments, it also resulted in political consequences that influenced federal-provincial relations. For example, from a legal perspective, an examination of decisions of the Supreme Court of Canada assessing whether challenges over constitutional division of powers had benefited one level of government or the other showed no overall bias to either level of government (Russell, 1985; Hogg, 1997). In fact, the record revealed an uncanny balance of decisions between the two levels of government. However, in examining the political effects of the decisions, these were found to have significant bearing on the bargaining strength of the

---

<sup>22</sup> *Reference Re Ownership of Offshore Mineral Rights of British Columbia*, [1967] S.C.R. 792.

<sup>23</sup> *Reference Re Ownership of the Bed of the Strait of Georgia and Related Areas*, [1984] 1 S.C.R. 388.

respective parties. Russell (1985) suggests that the degree to which governments use constitutional gains or seek to overcome losses depend on the political will and skills.

For example, with respect to the *Offshore Mineral References*, although the powers of the federal government were upheld, the political strength of provincialism in Canada was such that federal politicians determined it would be politically unwise to exercise total control over offshore rights. However, the decision increased the political bargaining strength of the federal government in subsequent negotiations with the provinces. In fact, following the 1984 *Newfoundland Offshore Reference* decision, the federal government entered into negotiations with the provinces of Newfoundland and Nova Scotia to share both the making of laws governing the exploration and exploitation of the subsea and subsoil and the sharing of revenues resulting from such activities. While this may have been viewed by the provinces as a politically wise course of action for the recently-elected Progressive Conservative federal government to take, nonetheless, the decision of the Supreme Court reaffirming the exclusive rights of the federal government over offshore resources, placed it in an attractive bargaining position.

Thus, as what might be perceived as an astute political decision, the federal government and provinces enacted the 1987 *Canada-Newfoundland Atlantic Accord Implementation Act* and the 1988 *Canada-Nova Scotia Offshore Petroleum Resource Accord Implementation Act* to assist in offshore oil and gas developments on Canada's East Coast. These Acts allowed for the establishment of a joint federal-provincial Board with authority to issue licences for exploration, development, production and storage of petroleum products.<sup>24</sup> In the case of Nova Scotia, the Act also identified the moratorium area on Georges Bank in which petroleum exploratory activity was prohibited for a period of 12 years. It is the legislated public review process associated with

---

<sup>24</sup> The Canada-Nova Scotia Offshore Petroleum Board's mandate terminates seaward of the edge of the continental shelf and landward at lines 10 kilometres long, closing off bays along the coast (Nichols *et al.*, 2000). The similar Accord Implementation Act with the province of Newfoundland (now Newfoundland and Labrador) includes bays in the authority of the Board.



the ending of the moratorium in 2000, as specified for in the 1988 Accord Implementation Act, that is analyzed as the second case study for this dissertation.

In the midst of negotiating the Newfoundland and Nova Scotia Accords, the federal Cabinet also approved a DFO-promulgated oceans policy in 1987 entitled *Oceans Policy for Canada: A Strategy to Meet the Challenges on the Oceans Frontier*. The policy was based on extensive public consultation that addressed economic development, science and technology, environment (managing the ocean resource) and sovereignty. Policy instruments for implementation included a public awareness oceans campaign, a legal framework for the strategy and emphasis on enhancing science and technology knowledge and capabilities. Attention to the implementation of the proposed *Oceans Act* was diverted as a result of other issues confronting the federal government, such as the decision to call on the International Court of Arbitration to resolve the maritime boundary dispute on Canada's East Coast with France.

With the collapse of the Atlantic groundfish fishery at the beginning of the 1990s (Cashin, 1993; Finlayson, 1994; Kurlansky, 1997), and the growing need to diversify the economy to include other ocean industries, there were increasing calls for a more comprehensive approach to ocean management in Canada. In 1994, the National Advisory Board on Science and Technology (NABST, 1994) called on the federal government to address and meet the growing expectations of Canada's ocean community. Such concerns centred around Canada's lack of success with respect to the management of ocean resources in an economically sustainable and environmentally acceptable manner. Failure to consolidate an oceans mandate was seen as impairing Canada's ability to realize the economic benefits presented by these resources and a continuation of Canada's limited ability to manage its ocean territories. Thus Canadians were seeking not only a formal recognition in domestic law of Canada's sovereign rights, jurisdiction and responsibilities over its ocean areas but the development and implementation of an effective ocean strategy to manage its ocean space and use. Ocean stakeholders further informed the NABST Task Force of the need to minimize overlap and duplication in the management of

Canada's oceans by assigning a lead federal agency with the responsibility for oceans management, but working in close collaboration with other responsible federal departments. Additionally, the report recommended the involvement of coastal communities, local regional and provincial governments and the subsequent devolution of authority where appropriate, in keeping with the evolving distributed governance approach of the time.

As of 1994, when the National Advisory Board of Science and Technology, chaired by the Prime Minister of Canada, presented its report entitled *Opportunities from our Oceans* to the Government of Canada, few of the previous efforts and recommendations calling for a national oceans policy had been implemented. The conclusion of the NABST report is summed up in the following statement:

As a result of the issues that have driven Canadian oceans policy development, and the current organization at the federal level, the ocean and marine-related policy environment is fragmented. Legislation, programs and initiatives are scattered among different departments. There has been no champion to pursue the opportunities that the ocean frontier represents nor to respond to challenges of sustainable resource management.

(NABST, 1994)

Building on the recommendations provided by NABST (1994) and the growing public awareness of sectoral inadequacies in managing Canada's coastal and ocean resources, the Minister of Fisheries and Oceans of the day, the Honourable Brian Tobin, issued a vision statement for ocean management (Government of Canada, 1994). This served as the initiation of the process that led to the development and steering of proposed legislation through Parliament, entitled *An Act respecting the oceans of Canada*, aimed at promoting the integrated management of marine resources.

In addition to the strong public, provincial and territorial support for action with respect to Canada's ocean use, a number of other factors lent support for the formulation of the *Oceans Act* in 1994 and its subsequent coming into force in 1997, as compared to earlier abortive

attempts.

First, the previously mentioned program review exercise provided the opportunity to consolidate federal ocean responsibilities and to rationalize programmes and resources associated with oceans, although the extent to which this actually occurred may be questioned. Second, the public policy factors of the period centred on the evolving nature of government/public partnerships with an increasing demand for community involvement and collaborative effort in addressing coastal and marine-related challenges and opportunities. Third, concurrent initiatives within government, such as the tabling of an amendment to the *Auditor General Act*,<sup>25</sup> as well as Canada's ratification of the Biodiversity Convention in December 1992, provided additional support to the expanding rationale for an *Oceans Act*. It was argued that the called-for ocean strategy would provide the sustainability policy guidelines for agencies with ocean responsibilities and, by ratifying the Biodiversity Convention, Canada had indicated its commitment to implement sound oceans policy. Fourth, and perhaps most importantly, Canada's Minister of Fisheries and Oceans possessed the political strength and personal desire to champion an oceans agenda, both domestically and internationally.<sup>26</sup>

The *Oceans Act* responds to two important trends in ocean governance in the 1990s:

- (i) the formalization in domestic legislation of rights and responsibilities assigned to coastal nations with respect to their maritime zones under customary international law and the LOSC; and,

---

<sup>25</sup> The amendment to the *Auditor General Act* would require federal departments to implement sustainable development strategies within two years of coming into force.

<sup>26</sup> Minister Brian Tobin, had utilized measured unilateral action on the high seas by exercising enforcement jurisdiction for fisheries protection and conservation against the Spanish fishing vessel, the *Estaj*, on March 9, 1995. The Minister's actions challenged existing international law and for all intents and purposes, he emerged a winner on the basis of moral high ground. Spain subsequently filed its case against Canada with the International Court of Justice, ICJ Fisheries Jurisdiction Case (Spain v Canada), 4 December 1998, General List No. 96. Available on the internet at <http://www.lawschool.cornell.edu/library/cijwww/icjwww/idocket/iec/iecframe.htm> (accessed December 19, 2002).

- (ii) the increasing need to manage ocean use and space in a holistic, ecosystems-based manner, utilizing the principles of integration, sustainable development and the precautionary approach.

As with a number of Canadian statutes, the Act contains a preamble which provides the context and intent of the legislation. The statements in the preamble are not legally binding but serve to indicate the emphasis Canada places on the principles of sustainable development, the precautionary approach and integration in its policy setting with regards to its oceans. The preamble also alerts readers to the collaborative approach adopted by the Minister of Fisheries and Oceans in encouraging the development and implementation of a national strategy for the management of estuarine, coastal and marine ecosystems, including opportunities for economic diversification.

Part I of the Act comprehensively states Canada's position to assume its rights and responsibilities, as granted to coastal states under customary international law and codified in the LOSC. It serves a preparatory role for ratification of the LOSC (Chircop *et al.*, 1995). It is this section of the Act that codifies, for the first time in domestic legislation, Canada's claim to an EEZ with full rights and responsibilities, including a clear statement of general jurisdiction for the protection and preservation of the marine environment and marine scientific research within the zone. This declaration of an EEZ replaces the jurisdictionally-limited EFZ which was claimed in 1977. Other maritime zones, including the territorial sea, the contiguous zone, and the continental shelf are also defined in this section of the Act.

Part II of the *Oceans Act* deals exclusively with the development and implementation of an ocean management strategy. The principles of sustainable development, integrated management and the precautionary approach, which are to be used in guiding the development of the strategy, are articulated. As well, the legal responsibility for its development and implementation are clearly assigned to the Minister of Fisheries and Oceans, in collaboration with other ministers, boards and agencies of the Government of Canada. In addition, provincial

and territorial governments, affected aboriginal organizations, coastal communities and other persons and bodies, including those bodies established under land claims agreements are specifically mentioned.<sup>27</sup>

The basic authorities and instruments to be used to define the parameters of the ocean management strategy are included in Part II. These include:

- (i) the establishment of marine protected areas;
- (ii) the establishment and enforcement of marine environmental quality guidelines, criteria and standards designed to conserve and protect ecosystem health; and,
- (iii) the development of management plans, including integrated coastal zone management plans.

Part III of the Act names the Minister of Fisheries and Oceans as the lead federal authority responsible for oceans. The powers, duties and functions of this role are detailed, including new responsibilities for appropriate sections of the *Canada Shipping Act (1985)*,<sup>28</sup> the provision of hydrographic and coast guard services and fee structure, as well as marine scientific research supporting ocean management responsibilities. The section terminates with the repeal of the 1990 *Canadian Laws Offshore Application Act* and the 1985 *Territorial Seas and Fishing Zones Act* and amendments to some 27 existing pieces of federal legislation. Key among these are the 1992 *Canadian Environmental Assessment Act* and the 1985 *Canadian Environmental Protection Act*, which was revised in 1999.

As stated above, the enactment of enabling legislation for the management of Canada's oceans in the form of its 1996 *Oceans Act* followed many earlier attempts by Canada to address

---

<sup>27</sup> *Oceans Act 1996*, s.31, note above at 8.

<sup>28</sup> In April 1995, the Canadian Coast Guard (CCG) was merged with the Department of Fisheries and Oceans. CCG previously was the responsibility of the Minister of Transportation, operating principally under the *Canada Shipping Act*. With an expansion of the Minister of Fisheries and Oceans' responsibilities over the CCG, it became necessary to transfer some of the responsibilities for pertinent sections of the *Canada Shipping Act* to this Minister.

its coastal and marine responsibilities (McRae and Munro, 1989; Hildebrand, 1989). To understand and appreciate the factors influencing Canada's efforts to date in this area, three essential points need to be stressed.

First, given Canada's system of co-operative federalism as prescribed under the *Constitution Act*, federal and provincial governments have broadly prescribed 'heads of power' which bear directly on matters relating to the integrated management of the coastal and marine environment. Examples challenging the constitutionality of the actions of both the federal and provincial governments have previously been discussed (Hogg, 1997). Land claim settlements between the federal government and Canada's Aboriginal people have added yet another level of complexity to what has been described as a "jurisdictional maze" (Fraser, 1996). As a general rule, the federal government has jurisdictional authority over navigable waterways and all marine waters beyond the low water mark while provinces maintain authority over the land area and limited authority over internal waters. Thus, in addition to consistency and harmonization of policy both vertically and horizontally within the federal system, the jurisdictional authority of provinces, territories and First Nations significantly affect the development of shared goals with respect to coastal and ocean management.

Second, although well-endowed as a maritime nation, federal initiatives have traditionally reflected the overwhelming priority given to continental issues. With few exceptions, marine-related issues have not maintained prominence on the federal agenda for a variety of reasons. These include the relatively small population of Canadians living in coastal provinces and the perception, true until recently, that Canadian coasts and marine environment were not seriously jeopardized by pollution, declining resources and poor development planning (Government of Canada, 2000). Furthermore, although a significant source of employment for Canada's Maritime provinces, coastal and ocean-related activities have contributed a small fraction to Canada's economy in recent decades, as compared to the contributions now being made by the wealthier and larger provinces in central Canada.

Third, the diverse nature of Canada's three coasts and offshore marine environment presents a formidable challenge for the meaningful incorporation of regional issues and concerns in any attempt at developing and implementing a national oceans policy. Currently, in the harsh archipelagic environment of Canada's Arctic, issues include environmental concerns resulting from trans-boundary persistent organic pollutants, petroleum and mineral extraction, challenges to Canada's sovereignty over the Northwest Passage and the preservation of a traditional way of life. On the broad continental shelf area of the Atlantic coast, the collapse of the Atlantic Groundfish fishery (Cashin, 1993), a small yet growing offshore oil and gas industry, land-based sources of marine pollution and increasing calls for the preservation of a uniquely maritime way of life are issues demanding attention. On Canada's rugged and indented Pacific coast, conservation of anadromous fish stocks and their habitat are high on the regional agenda as are the issues of marine transportation, coastal tourism and pollution (Government of Canada, 2000).

### **2.3 The Maritimes Ocean Policy Domain – 1984 to 1999**

The ocean policy domain encompasses that subset of existing public policies and competing values that seek to gain legitimacy in the form of decisions affecting ocean use and space. For the purposes of discussion and analysis in this dissertation, the ocean policy domain includes coastal and marine-related issues that require decision-making that may or may not result in an alteration to *status quo* values. For the Maritimes region, these decisions are necessarily influenced by the broad national and international factors affecting ocean governance. However, equally as important, decisions are affected by factors that are unique to the region. These include the population size and distribution, the physical, climatic and human settlement characteristics, specific aspects of federal-provincial relations and the influence arising from shared maritime boundaries, particularly with the United States.

These factors are discussed in detail in Chapters Four and Five relating to the specific case studies and are only briefly mentioned here to provide a general overview of the issues confronting the region.

The geographic distribution of the population in the Maritime provinces, comprised of approximately 8% of Canada's population, is split equally between rural and urban communities. This is in stark contrast to the Canadian average, which is 77% urban (Government of Canada, 2000).

The physical, climatic and human settlement characteristics of the area are strongly influenced by the marine environment, which encircles much of the landmass of the region (Figure 1). As such, direct and indirect dependence on the resources of the ocean for the area's economic wellbeing and as a source of employment, exceed the Canadian average by a factor of three (Statistics Canada 1994). The biogeophysical characteristics of the region provide a clear indication that decision-making affecting coastal and ocean use is of significant importance to the region's governments, private sector and citizens. Key features include the extensive coastline of 22,500 kilometres, a shallow, productive continental shelf extending some 600,000 square kilometres offshore and the important coastal and marine ecosystems of the Bay of Fundy, Scotian Shelf and Gulf of St. Lawrence (Government of Canada, 2000).

Additionally, decision-making in the Maritimes ocean policy domain is dominated by issues surrounding the constitutional division of powers between the federal and provincial levels of government (and more increasingly, the rights of Canada's aboriginal people). Furthermore, decisions relating specifically to the Maritimes offshore often include a need to consider the impacts arising from a shared maritime boundary with the United States.

### **2.3.1 Heterogeneity Issues**

The principal issues demanding attention within the ocean policy domain of the Maritimes region are closely aligned with the existing and potential uses to which the coastal and ocean resources may be put. These uses are thus necessarily affected by the heterogeneous, multi-



use, multi-user nature of the Maritimes coastal and marine environment.

In terms of multiple ocean use, the various roles assigned for the coastal and ocean environment<sup>29</sup> included that of food reservoir, energy and mineral reservoir, use of its space for movement of goods and people, communication, settlement and associated issues, recreation, research, conservation, culture and geopolitical issues (Table 2). This results in proponents having different value sets competing with each other to influence decisions in a manner that would authoritatively allocate values in their favour. Cross-cutting each of these uses have been the requirement for decisions pertaining to human and ecosystem health, safety, compliance and enforcement and jurisdictional and institutional arrangements.

The growing expansion in the number of players attempting to influence the outcome of any given decision affecting ocean use and space increases the potential for conflict associated with differences in deep-core beliefs. As such, it may be argued that the perceived efficiency gains associated with the pursuit of integration, coherence and co-ordination might be compromised by the potential efficiency losses associated with irreconcilable value sets held by an increasingly heterogeneous grouping of government decision-makers and stakeholders.

Given this expanding and potentially conflicting array of actors whose influence might be brought to bear on decisions affecting coastal and ocean use in the Maritimes, understanding who these players are is seen as an essential first step in describing the region's ocean policy domain. The analysis of two case studies selected for this study focuses on identifying these players, examining the factors affecting their interactions with each other and assessing their influence over each of the decision-making processes.

---

<sup>29</sup> The area under consideration includes the coastline and coastal zone up to 100km landward from the coastline, inshore and near-shore waters and the offshore areas to the edge of the continental shelf.

**Table 2. Major Existing Uses for Coastal and Ocean Resources  
in the Maritimes Region of Canada**

MAJOR USES	JURISDICTIONAL AUTHORITY	PROVINCE IN WHICH USE IS A MAJOR ISSUE
<b>1. Food source</b> · Fishing · Aquaculture · Farming	Federal Provincial, Federal Provincial	NB;NS;PE NB;NS;PE NB;NS;PE
<b>2. Energy and mineral source</b> · Oil and Gas · Sand and gravel	Provincial, Federal Provincial	NS NB;NS;PE
<b>3. Coastal and ocean space</b> · Navigation and transportation · Recreation, tourism & culture · Communication	Provincial, Federal Provincial, Federal Provincial, Federal	NB;NS;PE NB;NS;PE NB;NS;PE
<b>4. Settlements &amp; urban structure</b> · Residential · Commercial, including seaports · Heavy industrial · Recreational	Provincial Provincial, Federal Provincial Provincial	NB;NS;PE NB;NS;PE NB;NS NB;NS;PE
<b>5. Waste disposal from both land-based and marine sources</b>	Provincial, Federal	NB;NS;PE
<b>6. Research and conservation</b> · Ecosystem protection · Research · Moratoria on selected activities · Natural areas and parks	Provincial, Federal Provincial, Federal Provincial, Federal Provincial, Federal	NB;NS NB;NS NS NB;NS;PE
<b>7. Geopolitical use</b> · Defence · Illegal immigration · Drug trafficking; piracy	Federal Federal Federal	NS NB;NS NS
<b>8. Cultural heritage</b>	Provincial, Federal	NB;NS;PE

\* NB:New Brunswick;NS:Nova Scotia;PE:Prince Edward Island

Despite the broad array of issues addressed in the ocean policy arena, there is no question that fisheries activities have dominated discussion in the Maritimes. This is primarily due to their importance as a source of employment, as an arena for inter-sectoral conflict and intra-sectoral competition and because of their contribution as one of the most valuable economic activities in the region. In the Atlantic region, during the period covered by the research, 75% of all communities take part in commercial fishing and of these, some 20% have no other form of livelihood (Pross and McCorquodale, 1990).

Additionally, the geographical dispersion of the industry contributes to the political significance of the sector since many electoral ridings have a large number of their constituents dependent on the fishery. This is especially true in southwestern Nova Scotia where the power of segments within the fishing constituency has been documented (Apostle and Barrett, 1992). Thus, most issues of concern within the ocean policy domain in the Maritimes are generally debated from the perspective of whether they have a direct (negative) impact on the fisheries, or not.

Exceptions to this are issues relating to defence and national security and compliance with internationally signed Conventions of the International Maritime Organisation. However, although shipping lane designations and other marine transportation issues may be typically addressed sectorally, some issues can generate input from a wide array of non-sectoral actors within the policy community. One such example was the proposal by government to privatize marine emergency response capabilities on Canada's East Coast (Gold *et al.*, 1996).

With respect to fishing issues, a partial Global Interaction Matrix showing some of the major uses for coastal and ocean resources in the region provides a clear indication of the potential for the debate within the ocean policy domain to be contentious (Table 3). As is evident from the matrix, both demersal and pelagic fishing can be potentially mutually conflicting with a large number of legitimate uses of the ocean, although less so with aquaculture.

**Table 3. Partial Global Interaction Matrix – Coastal and Ocean Uses Interaction with Demersal, Pelagic & Aquaculture Fishing**

Uses	Biological Resources		
	Demersal Fishing	Pelagic Fishing	Aquaculture
Biological resources	▲	▲	
Mineral resources	▲ ○ ▲	○ ▲	
Navigation & communication	▲ ■ ‡ ▲ ▲	■ ‡ ▲ ▲	
Recreation	▲ ▲ ▲ ▲	▲ ▲ ▲ ▲	
Waste disposal	▲ ▲ ▲ ▲	▲ ▲ ▲ ▲	▲ ▲ ▲ ▲
Research & protection	▲ ▲ ‡	▲ ▲ ‡	‡ ‡ ‡
Defence	▲	▲	▲

**Relation to Fishing Activity:**

▲ - conflicting  
‡ - beneficial to fishing  
■ - reciprocally beneficial  
○ - hazardous to fishing  
‡ - beneficial to interacting activity

Aquaculture  
Pelagic fishing  
Demersal fishing

Pipelines  
Coastal plant  
Production platform  
Exploratory drilling

Cables  
Ports  
Navigation aids  
Separation lanes  
Shipping

Fishing  
Yachting  
Sailing  
Marine cruising

Riverine discharge  
Industrial outfalls  
Urban sewage  
Oil pollution

Protected Areas  
Parks  
Scientific research

Exercise area

Conflicting activities with fishing include shipping, separation lanes, subsea cables, exploration drilling, pipelines, pelagic fishing, non-point and point sources of pollution, defence exercises, recreational fishing, yachting, sailing, cruising, reserves and marine parks. This suggests that approaches for managing these conflicts need to be explicitly elaborated. However, this task becomes particularly challenging if existing decision-making processes within the policy domain limit input into the discussion addressing these concerns to strictly sectoral matters. In such situations, the range of consequences associated with any given alternative may not be taken into account, resulting in policies with potentially detrimental outcomes.

### **2.3.2 Major Actors**

Reflecting the mix of issues arising in the Maritimes ocean policy domain, key policy actors that generally coalesce around a broad range of these policy problems are provided in Table 4. In the two case studies analyzed for the dissertation, the composition of the specific policy networks is identified in subsequent chapters, based on categories listed in Table 4.<sup>30</sup> They include representatives from:

- the federal public sector departments, institutions and agencies;
- the provincial public sector departments, institutions and agencies;
- federal-provincial partnerships;
- politicians from the federal, provincial and municipal levels;
- private sector industries;
- research and development institutions;
- environmental non-governmental organizations;
- labour unions;
- professional associations;

---

<sup>30</sup> For the two cases examined, First Nations as a group was not identified as being a key policy actor, although this actor has since assumed an important role in the Maritimes ocean policy domain.

- technical experts; and,
- others.

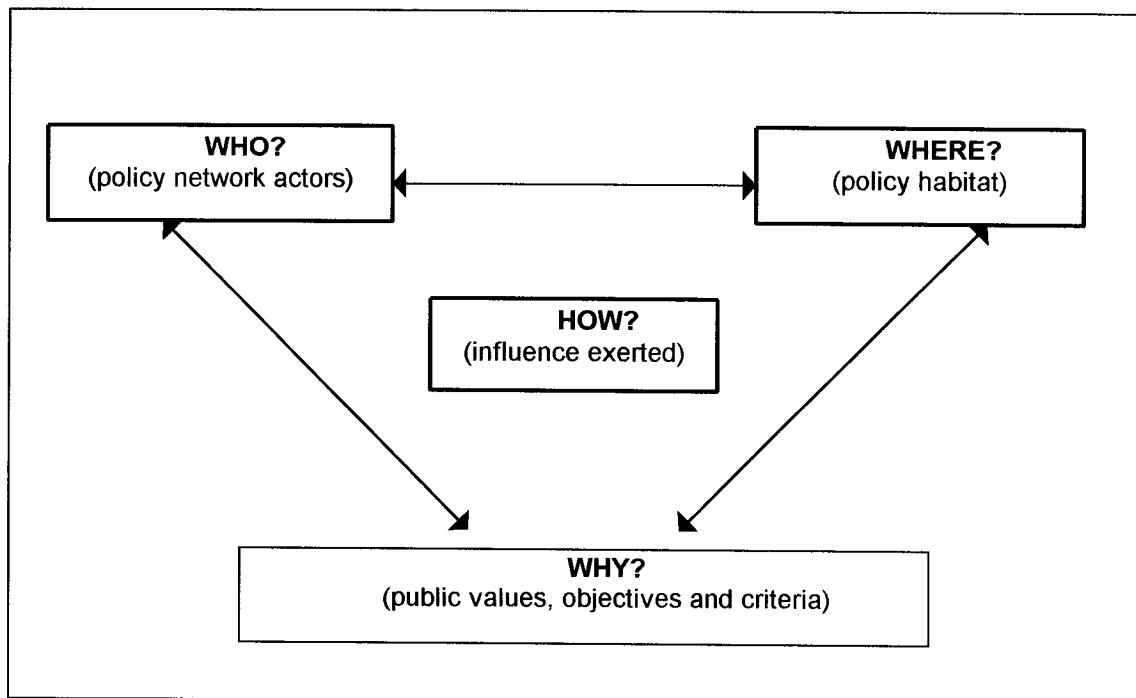
**Table 4. Major Categories of Actors in the Maritime Ocean Policy Domain**

<b>Category of Policy Actor</b>	<b>Listing of key players</b>
<b>Federal departments, institutions and agencies</b>	Atlantic Canada Opportunities Agency, Canadian Environmental Assessment Agency, Canadian Food Inspection Agency, Canadian Heritage – Parks Canada, Department of Foreign Affairs and International Trade, Department of National Defence, Environment Canada, Fisheries and Oceans Canada, Human Resources Development Canada, Industry Canada, Justice Canada, Natural Resources Canada; National Research Council; Public Works and Government Services, Royal Canadian Mounted Police, Transport Canada
<b>Provincial departments, institutions and agencies</b>	Departments responsible for Environment; Fisheries and Agriculture; Human Resources and Employment; Industry, Trade and Development; Labour, Natural Resources; Post-Secondary Education; Tourism, Culture and Recreation; Transportation
<b>Federal-provincial partnerships</b>	Canada-Nova Scotia Offshore petroleum Board
<b>Politicians</b>	At the federal, provincial and municipal levels
<b>Private sector industries</b>	Aquaculture; Fishery; Marine Transportation and Infrastructure; Ocean Technologies; Oil & Gas; Ship Building and Repair; Tourism & Recreation
<b>Research and development institutions</b>	Bedford Institute of Oceanography; provincial universities and associated research centres
<b>Environmental non-governmental organizations</b>	World Wildlife Fund; Sierra Club; Green Peace; provincial conservation councils; Ecology Action Centre; Clean Nova Scotia Foundation
<b>Labour unions and associations</b>	Maritime Fishermens Union; Railway and Railroad
<b>Professional associations</b>	Aquaculture; Fisheries; Oil & Gas; Shipping; Transportation; Tourism
<b>Experts</b>	Technical advisors
<b>Others</b>	First Nations, US actors in the government and non-governmental sectors

### 2.3.3 Decision-Making Factors

The major factors affecting the decision-making process in the ocean policy environment in the Maritimes region centre around an identification of who the policy stakeholders are, the policy environment within which the policy is being debated and the current suite of existing public policies (Figure 3). In effect, these factors reflect the degree of politicization of the issues as it may be argued that *where* the problem arises, *who* is affected by it and *why* it is deemed important by some actors will all influence *how* the problem will be resolved. Thus the resulting policy system contains the essential elements of the decision-making process in which the objective rational aspects of policy analysis become inseparable from the emotional subjective dimensions, which are shaped by political, organizational, social and psychological factors.

**Figure 3: Essential Elements of the Decision-Making Process**



Depending on the composition and pattern of involvement of particular policy stakeholders who coalesce around a given policy issue, and the existing policies and policy environment, premises that are raised and which influence decision-making may be either limited or comprehensive. Thus, the structure of the policy system will be critical in minimizing the number of inconsistent or conflicting linkages with existing policies. This serves to reinforce the attainment of existing policy objectives, as well as contributing to its own successful implementation.

*(i) WHO?*

The factors associated with this element clarify who is a member of the policy network and as such, an essential member of the decision-making process. Network members are characterised by sharing a common interest in the policy issue and may be further characterised by any one of the following criteria:

- mandate and responsibility, i.e., policy-making may not necessarily be limited to the public domain;
- sources of policy-relevant knowledge; and,
- ability to affect the outcome of the decision.

The structure, role and functions assumed by each actor in a policy network are also important factors in affecting the decision-making process, particularly attributes such as constituencies, organisational forms, capacity levels (ideational, financial, technical) and tactics.

*ii) WHERE?*

The factors associated with this element address the role of ecological, sociological, cultural, ethical, technological, economic, political, legislative and institutional arrangement attributes in affecting decision-making process and the outcome of the decisions made, both in terms of substance and modality. For any public policy decision-making process, the potential for each of these attributes to affect the process is significant.



(iii) WHY?

The factors associated with this element identify the triggers that are responsible for moving the issue under examination onto the public agenda, recognizing that the ocean has provided for man's well-being as a food source, a source of income, climate controller, transportation medium, recreational facility, source of spiritual and cultural sustenance and garbage disposal system, to name just a few. It is an assumption of this research that different compositions of stakeholders in society will have differing views on what is determined to be acceptable and unacceptable human-induced changes to the ocean environment. These values, preferences and criteria for ocean use and space by members of each policy network serve as key factors in understanding the influences exerted on the decision-making process.

(iv) HOW?

The factors associated with this element clarify the key attributes which can shape a policy problem (problem framing) and the appropriateness of the resulting response in resolving the problem (Dovers, 1995). Critical to an assessment of how decisions are made is the recognition of uncertainty or incomplete knowledge in the decision-making process.

Having provided the overview of the macro-level context surrounding Canadian governance in general, and ocean governance in particular, as background in this Chapter, a detailed examination on the factors affecting decision-making in the two selected case studies in the Maritimes ocean policy domain can proceed.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 The Scope of the Research Project

In its broadest sense, the goal of this thesis is understanding how decision-making processes have been affected and decisions been made, in an evolving ocean governance era spanning the period 1984 to 1999. This goal is pursued by studying the way influence is exerted by actors who have coalesced into policy networks around two specific policy problems in Canada's Maritime provinces. By analyzing the characteristics and behaviour of actors who are present in each network at various stages throughout the decision-making process, the manner in which influence is exerted is assessed. As such, the study is not about the totality of interests that are brought to bear (or ought to be borne) when making a decision (Bogetoft and Pruzan, 1991). Furthermore, its focus is on providing insights into the process of decision-making, i.e., how decisions are made, as opposed to a detailed examination of the content and effects of any specific decision.<sup>1</sup>

The research aims to provide an increased understanding of how relationships among actors in the policy network are shaped as well as provide insights into when and why these actors might co-operate, clash or modify positions on specific issues. It is argued that such an understanding is particularly pertinent to improving policy-level decision-making in Canada's ocean environment, given the growing demands on public sector decision-makers to involve an ever-increasing number of actors in the policy process.

Using two examples of decision-making processes from the Maritimes region, those surrounding the 1993 Prince Edward Island – New Brunswick (PEI-NB) Fixed Link decision and the 1999 Georges Bank Moratorium on petroleum exploration activities, the research examines

---

<sup>1</sup> The importance of understanding the decision-making process stems from empirical evidence that the quality of a decision repeatedly reflects the quality of the process from which it is made (Shindler and Cheek, 1999).

each case within the context of the governance structure of the time.

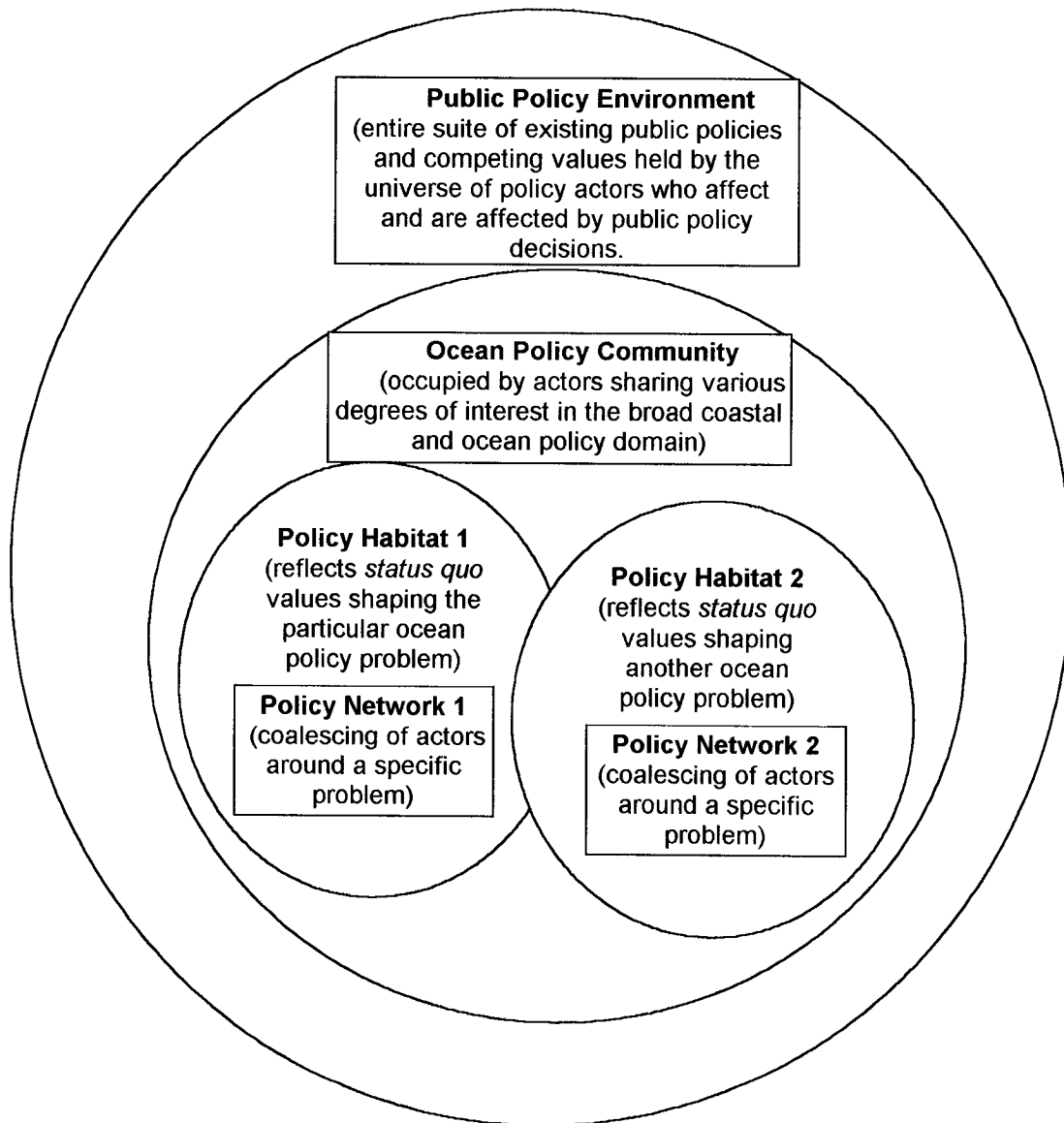
The remainder of this chapter describes the research approach in detail. To ensure a common understanding of concepts repeatedly used in the thesis, the following section on terminology is provided.

### **3.1.1 Terminology**

The meaning of the policy terms used in the thesis is drawn either directly from a review of selected policy literature (Easton, 1953; Pross, 1986; Sabatier, 1987; Miles, 1989; Coleman and Skogstad, 1990; Jenkins-Smith, 1990; Jordan, 1990; Dunn, 1994), or developed as a result of the author's interpretation of the concepts. Regarding the latter, it seemed appropriate to use an analogy from the field of ecology to describe the hierarchical relationship between the spatial elements of a policy environment, community, and habitat and the actors/species who inhabit each of these 'spaces', at any given time (Figure 4). It is thus important to recognise the temporal context of a given policy issue since this will significantly affect the structure of both the policy environment and the diversity, in terms of both numbers of actors and abundance of a given type of actor, residing within that habitat. To the best of my knowledge, this is the first time that the specific term "policy habitat" is introduced in a discussion relating to policy.

For any given policy community, there may be a number of distinct policy habitats, each shaping the definition and resolution of specific policy problems around which distinct policy networks may form. Accordingly, different networks of actors coalesce around different policy issues. However, it is equally likely for members of one network to also belong to a second network. This is especially true for an area such as Canada's Maritimes region, where the number of actors dealing with the entire array of ocean-related problems is comparatively small. For simplicity, Figure 4 illustrates only two policy networks with its associated policy habitats.

**Figure 4: Hierarchical Relationship between the Spatial Elements of a Policy Environment and its Residents**



## **Glossary**

**Policy** – “a purposive course of action” in response to a perceived problem or opportunity (Miles, 1989). In the case of public policy, such action results in the authoritative allocation of some values over others (Easton, 1953). An example is the 1976 Policy for Canada’s Commercial Fisheries, developed by the federal Government of Canada.

**Policy Actor** - an identifiable member of a policy community, network or advocacy coalition. An example is the federal Department of Fisheries and Oceans.

**Policy Advocacy Coalition** - a unique grouping of actors within a policy network who share a set of normative and causal beliefs, i.e., members of an advocacy coalition share both a common interest in the problem as well as share underlying values. Members often act in concert and are committed to a course of action that reflects their beliefs and the secondary aspects of their belief systems in the resulting policy decision (Sabatier, 1987). An example from the Georges Bank Case Study is the Seafood Producers Association of Nova Scotia.

**Policy Community** - the constellation of actors who share clusters of interests in broad policy domains. Each policy community deals with many issues, some of which interest or demand the attention of some members more than others (Coleman and Skogstad, 1990). An example consists of all the actors having an interest in decisions pertaining to offshore areas such as Georges Bank.

**Policy Environment** - the entire suite of existing public policies from all domains which reflect the dominant values of societal actors as well as the competing values that seek legitimacy in the form of new public policy.

**Policy Habitat** - a unique region within a policy domain that defines the *status quo* values shaping a particular policy issue. Policy habitats are modified whenever competing values gain legitimacy. The policy habitat that provided for a ferry service between New Brunswick with Prince Edward Island was subsequently modified with the decision to build a fixed link between the two provinces.

**Policy Network** – the subset of some members of a policy community who coalesce around a particular policy problem in order to influence its resolution (Pross, 1986; Jordan, 1990). Policy networks are dynamic, with a heterogeneous array of actors freely moving into and out of the network at any given time during the decision-making process. With varying degrees, members of a policy network have the resources, authority, expertise and organization to influence and shape decision-making processes and outcomes. An example of a policy network is the collection of actors who coalesced around the Georges Bank moratorium debate.

**Policy-Oriented Learning** - the process of actors attempting to better understand and achieve core values and objectives until confronted with new constraints or opportunities, at which point attempts are made to adjust to the new situation in a manner that is consistent with the core values (Sabatier, 1987). An example would be non-native actors within the policy community attempting to deal with the introduction of significant numbers of native fishers as a result of the legal recognition of treaty rights in the commercial fishery.

### **3.2 The Research Approach**

There are a number of research strategies available in the social sciences literature to guide studies that seek answers to questions pertaining to 'how' and 'why' a decision is made, as is the case in this thesis. Among the available choices are experimentation, history and case study strategies. Each of these has advantages over the other (Yin, 1989).

Based on a review of strategies appropriate for given situations, the case study approach was deemed most advantageous for pursuing an analysis of the type considered necessary for this thesis. Case study is similar to experimentation, but unlike history, in that it allows for a focus on contemporary events. However, unlike experimentation, case study research is appropriate for situations in which the researcher is either unable, or considers it undesirable for ethical reasons, to manipulate the behaviours associated with the event being studied (Eisenhart, 1989). Additionally, its unique strength is its ability to incorporate a variety of data sources to study the

event, including existing documentation, archival data and interview data. As defined by Yin (1989), a case study is an empirical inquiry that:

- investigates a contemporary phenomenon within its real-life context; when,
- the boundaries between phenomenon and context are not clearly evident; and in which,
- multiple sources of evidence are used.

The research approach, based on the case study design strategy and adopted for this thesis, is illustrated in Figure 5.

### **3.2.1 Research Design**

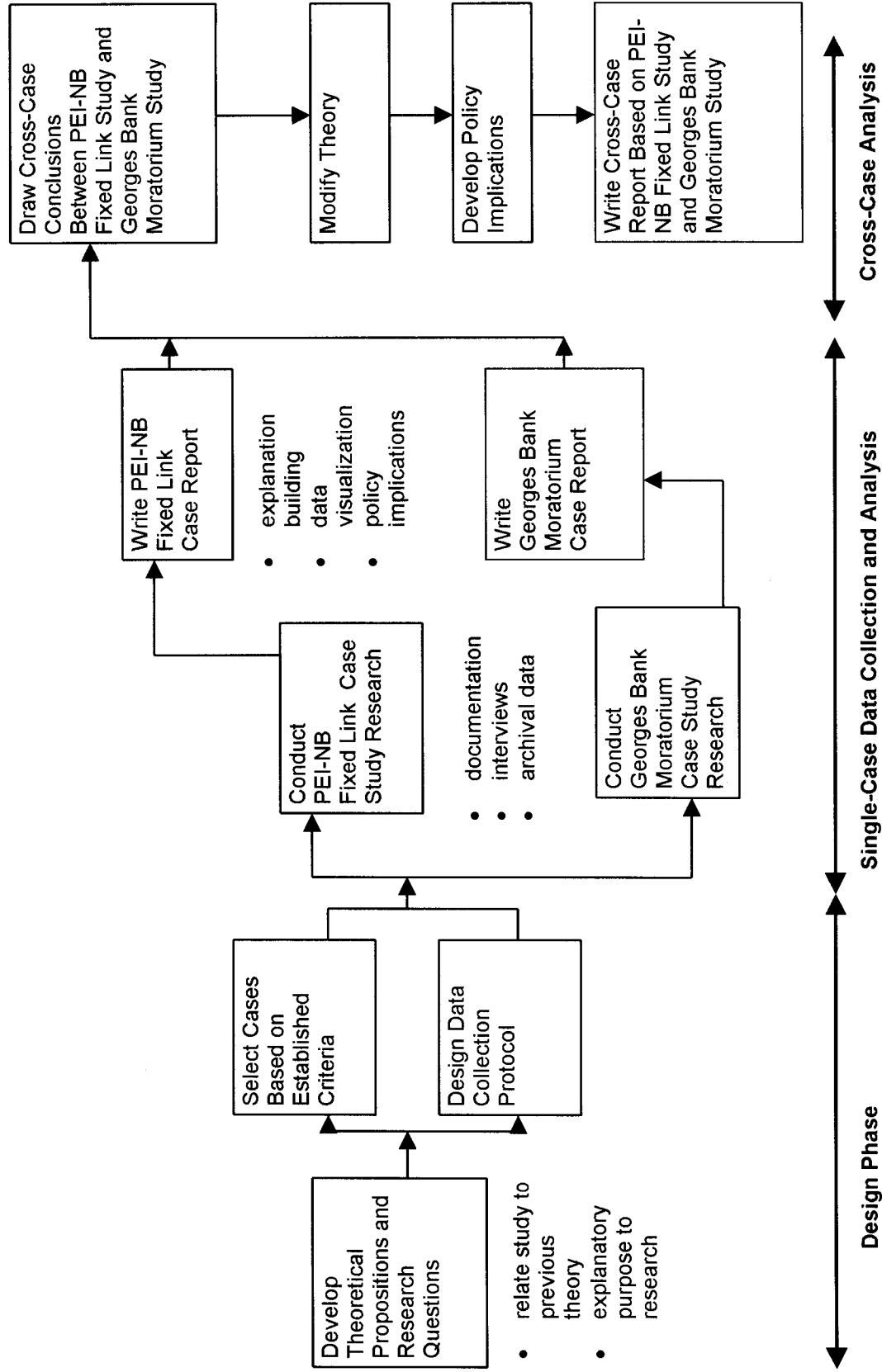
The design phase of the research strategy involves an assessment of the existing theories relevant to the research focus and the identification of the research questions to be addressed. The purpose of the research is then clarified in terms of theoretical propositions that seek to test the robustness of the existing theories and provide explanations in support of or contradictory to the expected patterns predicted by the theories. The research design is thus intended to provide the logic linking the data collected with the conclusions to be drawn.

#### **3.2.1.1 Existing Theories**

Given the focus of the research and in addition to the propositions on governance discussed in Chapter 2, existing theoretical frameworks relating to the structure, form and function of policy network are considered critical for understanding the interactions of actors within such networks. This theoretical framework focuses on classifying different types of policy networks based on the resources available to the lead public sector agency and non-public sector members of the policy network (Table 5).

Five distinct types of networks are hypothesized, with each network characterized by differences in analytic capacity and the power of government and societal interests. It is important to note that policy networks are dynamic and as such, shift from one form to another, depending on the organizational strength and capacity of new members or changes in the abilities of existing members.

Figure 5. The Research Approach - Using A Case Study Design Strategy





**Table 5. Competing Hypotheses in Policy Network Formation Based on Level of Organization of Government and Societal Interests**

		Government Organization	
		Low	High
Organization of Interests	Low	Pressure Pluralist Hypothesis	State-Directed Hypothesis
	High	Clientele Pluralist Hypothesis	Concertation Hypothesis Corporatist Hypothesis

Source: Adapted from Linquist, 1992.

In situations where both government organization and the organization of societal interests are low, a pressure pluralist network results. This network is best characterized by the phrase “the war of all against all” (Lindquist, 1992) since no one actor is pre-eminent. Thus, introducing new members into the network would have little impact on its overall disjointed structure, assuming these members have an equally low level of organization and policy-level capability.

In situations where government organization remains low relative to the organization of societal interests, a clientele pluralist network results. In this case, groups outside of government develop consensus positions and mobilize resources collectively to bring pressure to bear on government. Government tends to rely on these members of the network for information and expertise while the latter is primarily concerned with maintaining the *status quo* which they have helped design. An increase in the number and heterogeneity of societal actors in this type of a network could increase the pressure being exerted on government. However, it could alternatively result in a dilution of the overall level of societal organization, leading to the formation of a pressure pluralist network.

State-directed networks are said to occur when government organization is high relative to other societal interests who have coalesced around the policy problem along with the government actor. In this case, government has the technical and policy expertise that can be

co-ordinated and brought to bear in a concerted effort to launch unilateral initiatives. Depending on the goal of government, it may either adopt a paternalistic posture with respect to societal actors, consulting on a selective basis for limited pieces of information or neutralize and undermine societal action, using a 'divide and conquer' strategy (Coleman and Skogstad, 1990). The addition of new actors to the network generally has little effect on the power of the state to dominate this policy network since new members would generally have limited capacity to challenge that of the state. In situations such as the introduction of a new actor with the potential to acquire organizational and policy-level expertise, this policy network can evolve into a concertation network quite rapidly (Table 5). An example of this is the introduction of the First Nations as an actor in the federally-dominated domain associated with managing the natural resources of Canada's north (Berkes *et al.*, 2001).

Finally, in situations where the organization of both government and societal interests is high, either a corporatist or concertation network may result. The corporatist network occurs when there is a balance between two competing and policy-capable societal actors. Government, although strong, does not have the ability or instruments to outflank or move unilaterally among these competing interests. This results in government serving as the arbitrator between these two interests for the public good. In the case of the concertation network, both government and a single societal interest are strong resulting in a closed policy-making process between these two players. In both of these types of networks, the introduction of additional actors would have little immediate impact to the overall form and function of the network.

### **3.2.1.2 Theoretical Propositions and Research Questions**

Based on an awareness of the above theories, the theoretical propositions underlying the study reflect the fact that the policy environment for making decisions has changed over the study period. Propositions developed for this research as a result of existing governance and policy network theory are as follows:

- (i) Disaggregation, decentralization and broad-based input in decision-making lead to more actors in the ocean policy domain;

- (ii) Heterogeneity increases the potential for conflicting core values to compete for expression in the form of the decision reached;
- (iii) Distributed governance promotes interdependencies among actors that tend to minimize individual opportunistic behaviour.

Based on the above propositions, the analytical elements of the research are guided by the following hypothesis:

**Hypothesis** – The success of policy actors in exerting influence on a specific public policy decision is determined by the aggregation of members (possessing shared core values) in the policy network and their collective analytical and resource capacity to ensure these values are reflected in the resulting policy decision.

As such, the study question centres around an examination of the ability of state and non-state actors to successfully influence decision-making processes, given the evolving trend towards a more distributed form of governance in Canada's oceans policy domain. To study this, the influence of actors in selected policy networks is analyzed retrospectively, taking into account the following five assumptions:

- (i) The outcome of a decision-making process involving a heterogeneous array of policy actors can be described and characterised;
- (ii) The influence exerted by actors within a given policy network on a public policy decision process can be measured;
- (iii) The perception of actors within a given policy network of their influence on a public policy decision process can be explained;
- (iv) the policy habitat surrounding a public policy decision-making process shapes the initial intent of the decision-maker but not necessarily the actual outcome of the decision; and,
- (v) The actual outcome of a public policy decision, relative to the initial intent of the decision-maker, can be compared and evaluated.

Specifically, the following questions are used to guide the development of the data collection protocol and analytical framework, within the governance context of the time.

- What are the dominant *status quo* values that are reflected in the existing policies that describe the policy environment within which the decision is being made?
- What are the major areas of concern of individual members coalescing around the policy problem?
- What are the policy analytical and resource capacities of member in the policy network?
- What are the underlying core values, preferences and criteria of members in the policy network?
- How do these characteristics (relating to power and values) affect the behaviour of actors in the policy network?
- What factors determine how members in the policy network exert influence?
- When does influence occur? At agenda setting, consultation, hearings and/or time of decision-making?
- Are there trends and recurrent themes that describe how actors perceive their influence on decisions in the ocean policy domain?

#### **3.2.1.3 Selection of Case Studies**

The selection of case studies for analysis was guided by the following criteria:

- the case study must be of importance to the Atlantic Region, at the provincial or cross-provincial level;
- the case study must be drawn from the coastal and ocean policy domain;
- the case studies must be suitable for analysis using the proposed methodology;
- the case study must allow for the identification of key actors within the policy habitat;
- a clearly identifiable decision must have been made;
- the decision must have been made within a recent time-frame (no more than 15 years ago) to allow for key actors to be interviewed;

- the case study must have an identifiable or structured decision-making process associated with the outcome of the decision;
- the scale of the decision pertaining to the case study must be such as to have resulted in policies of a strategic (i.e., consequences of decision are relatively irreversible) or secondary nature (i.e., defines priorities, target groups and beneficiaries), as opposed to functional or operational policies where the consequences of decisions are relatively reversible.

Using existing public information sources, a preliminary listing of the key actors who had coalesced into policy networks around a selection of coastal and ocean policy decisions in Atlantic Canada was made. Based on an assessment of the availability of key actors within each of the networks and on the ability of the selected examples to meet the previously stated criteria, decision-making processes associated with the following two case studies were selected for detailed study:

- the 1993 decision approving the Fixed Link Project between Prince Edward Island and New Brunswick; and,
- the 1999 Georges Bank Moratorium extension on offshore oil and gas exploration.

Each of the two examples possessed characteristics, in addition to the criteria above, that made them even more attractive cases for analysis. In the case of the Georges Bank Moratorium decision, the fact that this issue will resurface in time<sup>2</sup> makes it a particularly pertinent choice for examination. This allows for the knowledge gained from an analysis of the actors in this policy network to directly contribute to policy-oriented learning when the issue resurfaces for review, in view of a decision in 2012. Additionally, the case study involves actors from two well-established ocean user groups in the form of the fishing sector and the offshore petroleum sector. These users have a history of mutually conflicting interaction (Barker and Soyez, 1994), thereby providing for the potential to apply the research findings to other geographical locations. Finally,

---

<sup>2</sup> The period for the moratorium, as agreed to by both the Government of Canada and the Province of Nova Scotia was 13 years, commencing January 1, 2000.

the case involved an array of heterogeneous actors, including some from the United States, thereby introducing a bilateral component to the interpretation of the analytical results.

The issue of the PEI-NB Fixed Link provides the additional characteristic of including cross-provincial relationships not only between the two principal provinces, but also with Nova Scotia, albeit to a lesser extent. Additionally, this case study focuses on a decision affecting coastal use and space, although the impact of the project on the marine environment was also a critical component of the policy debate. Finally, the Fixed Link project focused on a transportation-related policy problem with irreversible consequences for an entire province. This allowed for public examination of an important activity within the Maritimes coastal and marine environment that is more often than not overshadowed by the dominance of the fishing sector in the region.<sup>3</sup>

### **3.2.2 Data Collection**

Given the focus of the study on an analysis of the influence exerted by actors on decision-making processes, the fieldwork involved the integrated collection of both qualitative and quantitative data, as needed to understand each of the cases at hand. These two types of data were seen as complementary components for analysis since together they have the potential to enhance the validity, interpretation and clarification of the research findings, enhance identification of patterns and strengthen conclusions reached (Miles and Huberman, 1994).

To obtain the data, a variety of sources were employed. These included archival data such as newspaper and other media accounts of the cases, interviews with key actors in which they served as informants rather than respondents,<sup>4</sup> and public documents generated as part of the decision-making process. To acquire the interview data, focused and open-ended interviews were conducted with representatives of identified categories of actors within each policy network. The interview guide is provided in Appendix 1. In addition to note-taking by the researcher,

---

<sup>3</sup> While the focus of the policy problem was on transportation, fishery-related concerns were still significant among the actors in the Fixed Link policy network.

<sup>4</sup> In a survey-type methodology, interviewees may be viewed as generally providing a response to specific questions, while in a case study approach interviewees may be viewed as providing their own insights to the questions being posed.

whenever agreed to by the interviewee, interviews were taped using a digital recorder and stored as electronic sound files for subsequent analysis.<sup>5</sup> In the event in-person interviews were not possible, telephone interviews and mailed submissions were considered suitable alternatives for the in-person interview. Actors were identified based on their participation in the public review process surrounding each case study (as identified in the public record) or a declared interest with respect to the policy issue. Since this study is an attempt to assess the influence exerted by actors in the policy network on the decision-making process, it focused on analyzing the behaviour of those actors who explicitly attempted to do so.<sup>6</sup>

An estimated 40 interviews per case study were recommended as being appropriate to conduct the type and level of analysis being proposed at the doctoral level. This approximates the point beyond which incremental learning tends to be minimal (Apostle, personal communication). To identify actors to be interviewed, a complete listing of participants in the formal public review process for each of the selected case studies was first itemized, using publicly available records. The list was then divided into categories of policy actors, based on a breakdown among public sector, private sector and civil society members (Scholte, 1999) and the major categories of actors in the oceans policy domain for the Maritimes region (see Table 4, Chapter 2). Requests for interviews were sent to all participants (approximately 150 participants) in each of the two decision-making processes. Interviews were then conducted with no less than 40 individuals from each case study, representing the entire spectrum of categories previously identified. Archival and document data were also collected from a variety of readily available public sources and, in some cases, were provided by the actors themselves.

### **3.2.3 Data Analysis**

The analysis of the data focuses on the related processes of describing the phenomenon

---

<sup>5</sup> Less than 5% of interviewees asked not to be recorded.

<sup>6</sup> Actors who had the potential to influence but did not do so are obviously not of interest to this study. Similarly, the efforts of actors whose attempts at influence were protected by levels of secrecy (such as Cabinet-level discussions), were not included in the analysis although interview data obtained from key Cabinet Ministers were used in the analysis.

being studied, classifying it, then following up with an examination to determine how the concepts interconnect. While this benefits from both qualitative and quantitative analytical techniques, the goal of the analysis remains the linking of the data to the underlying theoretical propositions so as to allow for the building of explanations for each of the cases.

### **3.2.3.1 Qualitative analysis**

As a stand-alone technique in case study research, qualitative data analysis includes a comprehensive description of the context of the case and the intentions of the actors who participated in it. To assist with a meaningful comparison between the different lists of data collected, the data is funnelled into relevant categories based on the conceptual foundations upon which subsequent interpretations and explanations are to be framed, guided by the overall research objective. This conceptual framework, which was developed to assist in understanding how decision-making processes have been affected as a result of changing governance patterns over the period of the study (1984 to 1999), was illustrated earlier in Figure 3, Chapter 2.

The model depicts the expected interdependence between policy stakeholders, the policy environment and the existing array of public policies, representing the *status quo* authoritative allocation of public values affecting decision-making processes, i.e., the policy habitat. It also illustrates the theoretical expectations that a given governance structure will tend to affect decision-making processes based on the principles espoused by the said structure. For example, one could predict that a centralized, 'top-down' governance structure would show a definite 'one way' flow in terms of decision-making principles guiding the process. However, the potential for a disconnect between these principles and the actual practices invoked during decision-making at sub-national levels remains significant. Alternately, a more distributed form of governance could be predicted to have feedback loops among the various decision-making bodies and all members of a given policy network. As such, it could be predicted that the actual practices involved with decision-making, even at sub-national levels, would then be reflected in the principles guiding the process. The proposed conceptual framework is thus essential for allowing an explanatory linkage between the data collected, the set of causal links developed as a result



of the analysis and the theoretical propositions posited for the study.

Qualitative data analysis was conducted to characterize the policy actors in terms of their power within the network. The analysis was based on a determination of each actor's mandate, goals, organizational culture, major constituency and resource capacity. Actors were asked to select a response appropriate to their organization from pre-determined options provided by the researcher.<sup>7</sup> For example, under the category 'organizational culture', actors were asked to select either 'horizontal' or 'hierarchical'. Similarly, under the category 'authority for mandate', actors selected from a list including the following options: elected; legislated; appointed; voluntary; technical expertise; private ownership; or membership. Where appropriate, the responses provided by actors were checked against publicly available information and adjusted accordingly. In addition, qualitative data analysis, using pattern identification techniques such as grouping interview data using key phrases, was used extensively in the study to build explanations for analytical findings and test theoretical concepts.

### **3.2.3.2 Quantitative analysis**

In addition to the 'richness' inherent in qualitative data which allows for interpretation and explanations to questions relating to 'how' and 'why' (Silverman, 2000), quantitative data analysis was included in the research methodology to support the qualitatively-derived explanatory aspects of actors' behaviour in the policy network.

The quantitative data analysis used for this study modifies an approach in the literature which was designed to assess the health of fisheries (Pitcher, 1999). This approach ranked and compared the scores for specific 'disciplinary' sets of attributes related to different fisheries under investigation, using the statistical technique of multivariate analysis.<sup>8</sup> For the analysis used in this study, interviewees ranked the degree of importance of 'disciplinary' attributes relating to

---

<sup>7</sup> Additional details on the criteria used in the qualitative analysis are provided in the subsequent chapters describing the specific case studies.

<sup>8</sup> As used in the methodology developed by Pitcher (1999), scores are obtained for questions relating to specific 'disciplines' or fields of interest that can then be used to assess the status of a fishery. Representative 'disciplines' include those relating to ecological, technological, economic, social and ethical issues.

environmental, economic, social, ethical, legal, political and institutional issues as a means of indirectly measuring the values, preferences and criteria of policy actors in the network. Thus the term 'discipline' in this form refers to a broad area or field of interest to a policy actor.

Two major sets of quantitative data were analyzed in the study. The first set related to the ranking of disciplinary attributes in terms of the importance actors assigned to these as a means of pursuing core values and objectives. The scores obtained for each actor were used as an indicator of the values held by these actors. Actors who scored the same pair of attributes as having the highest priorities were grouped together. The second data set was based on areas of concern shared by policy actors and was analyzed in a similar manner as the data on disciplinary attributes.

The results of the quantitative analysis allowed for similarities and differences between actors to be objectively assessed and identified, recognizing that the rankings on degree of importance were based on a subjective ranking by the policy actors. The results were then used to add validity to the qualitative findings, enhancing the overall interpretation of the data as analyzed.

### **3.2.3.3 Policy implications**

Following the data analysis phase of the research, the results were interpreted and the findings of the study presented for each case, paying particular attention to policy implications. The analysis provided insights on:

- the decision-making process itself;
- the characteristics of actors within each network;
- the potential for actors to shape decision outcomes;
- the potential for policy coalitions or other clusters to be identified among diverse groups of actors;
- trends and regularities characteristic of specific policy network actors in different policy issue networks;
- the potential for knowledge gained as a result of the interpretation of the findings to be

used in shaping subsequent policy decisions; and,

- efforts to support policy clarity and predictability in the coastal and ocean policy domain.

#### **3.2.3.4. Issues of validity associated with research findings**

The use of a case study approach in this dissertation requires a note of caution, in terms of the degree of confidence associated with extrapolating the research findings to other decision-making processes in the coastal and ocean policy domain. The research framework allows for two types of findings to be described. The first of these relate to specific substantive findings relevant to the case studies while the second allows for a more generic methodological interpretation of the approach developed for the dissertation, recognizing the limited number of cases analyzed.

By analyzing the data collected for the two case studies, an evaluation of the way influence is exerted in these specific Maritime Canada examples is accomplished. This examination allows for an increased understanding of the behaviour of actors in the region's coastal and ocean policy domain during two specific decision-making processes. As such, lessons learned may contribute substantially to the success of each actor's continuing ability to affect decision-making. Given the expectation of revisiting the Georges Bank moratorium decision by 2012, the substantive findings identified in the analysis have particular application for this policy network. Additionally, case-specific results and the findings from the comparative analysis of the two examples test the validity of the theoretical propositions posited in this dissertation. However, cautioned is urged in extrapolating broad-based claims on their validity (or lack thereof), due to the limited number of cases examining these propositions to date.

As identified above, the analysis of the two case studies may also allow for generic methodological statements to be offered, based on the value of the approach to other decision-making processes. While these findings contribute to advances in knowledge, tests of their validity are required from a broader base of case studies that might benefit from this methodological approach.

Table 6 provides a summary of the research approach used in this dissertation.

**Table 6. Summary of Research Approach**

<b>Premise</b>	The public policy environment is changing, reflecting a shift from a hierarchical governance regime to one involving an increasing number of societal actors in decision-making.
<b>Overall goal</b>	To understand how actors exert influence over decision-making in an evolving ocean governance era.
<b>Study focus</b>	A retrospective analysis of how actors in two Maritimes region case studies, occurring during identifiably different time periods, exerted influence.
<b>Existing theories and propositions</b>	Governance theory and Policy Network theory <u>Governance:</u> Governance refers to a set of institutions and actors drawn from, but also outside of, government; Governance identifies the blurring of boundaries and responsibilities for tackling social and economic issues; Governance identifies the power dependence involved in the relationships between institutions involved in collective action; Governance is about working towards autonomous networks; Governance recognizes the capacity to get things done in the absence of government command or authority. <u>Policy networks:</u> Interdependencies among network members depend on organizational capacities leading to pressure pluralist; clientele pluralist; statist; concertationist; or corporatist types of networks
<b>Study propositions and assumptions</b>	<u>Propositions</u> Disaggregation and decentralization lead to an increase in numbers of actors participating in ocean policy decision-making processes. Heterogeneity increases the potential for conflicting core values to compete for expression in the form of the decision reached. Distributed governance promotes interdependencies among actors that tend to minimize opportunistic behaviour. <u>Assumptions</u> Policy-level decision outcomes can be characterised and described. Actors' influence on a policy decision-process can be assessed. The perception of influence can be assessed. The policy habitat shapes the initial intent of the decision-maker. The actual outcome of a decision can be assessed.
<b>Study hypothesis</b>	The success of policy actors in exerting influence on a specific public policy decision is determined by the aggregation of members (possessing shared core values) in the policy network and their collective analytical and resource capacity to ensure these values are reflected in the resulting policy decision.
<b>Conceptual model</b>	The 'when', 'who', 'where' and 'why' of a policy process determine how the issue gets resolved.
<b>Data collected</b>	Qualitative – archival, documentation and interview sources Quantitative – interview sources
<b>Data analysis</b>	Qualitative – description of case study; data classification; pattern identification; explanation building. Quantitative – data visualization; measurement of influence. Cross-case comparisons; theory modification; policy implications.

## CHAPTER FOUR

### THE FIXED LINK CASE STUDY

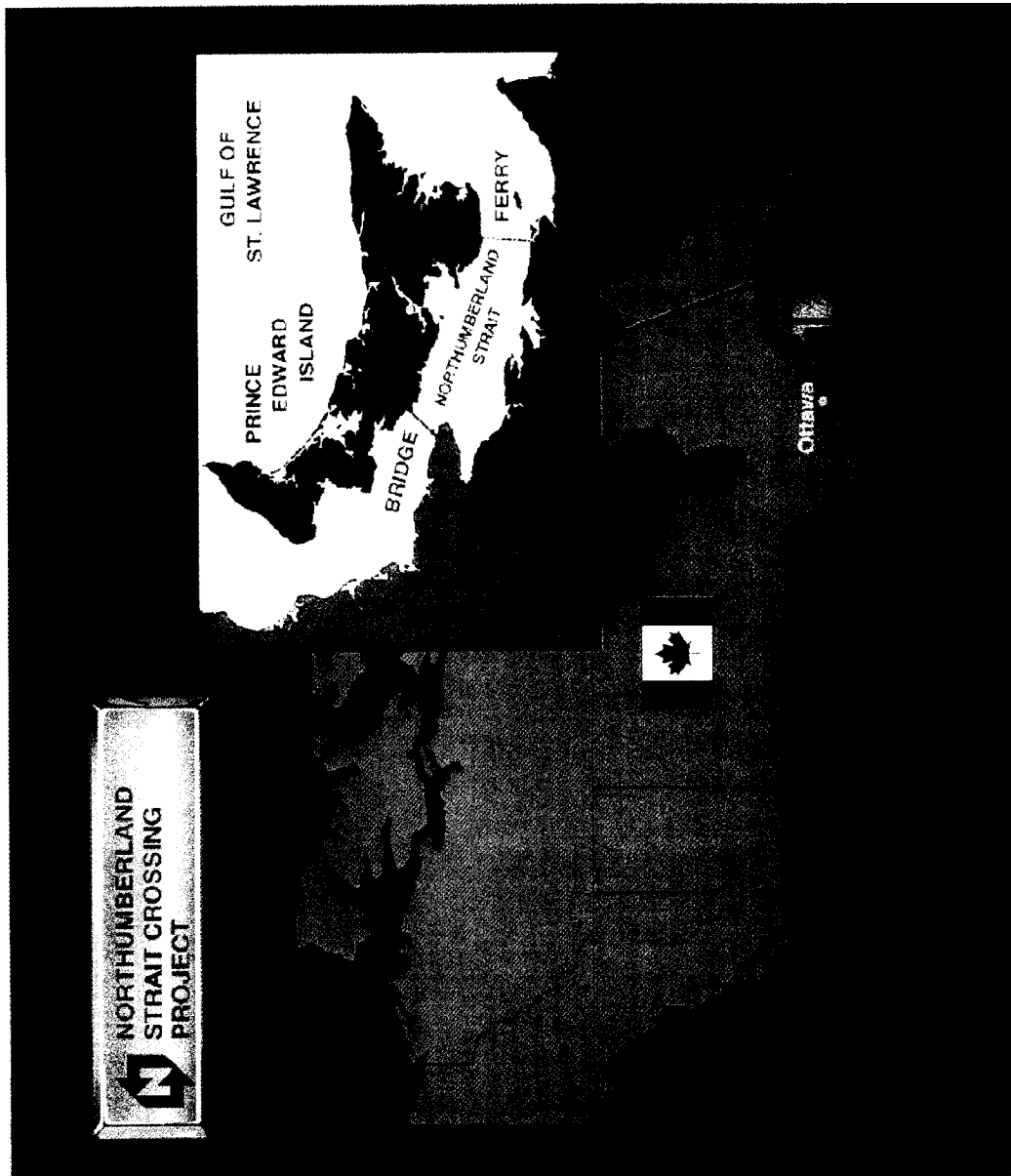
#### 4.1 Case Study Overview

This case study provides a retrospective analysis of the eight-year decision-making process leading to the 1993 coastal-related policy decision to construct a fixed link structure across the Northumberland Strait, joining the Canadian Maritime provinces of Prince Edward Island (PEI) and New Brunswick (NB) (Figure 6).

The decision-making process surrounding the PEI-NB Fixed Link was selected for analysis for the following reasons based on the criteria identified in Chapter 3.

- The issue of deciding how to resolve a problem that had been tabled repeatedly on the federal-provincial agenda since Confederation was clearly one of long-standing significance to PEI in particular and to the Maritime provinces in general, and as such, met the criterion of importance to the region.
- The problem of providing a reliable transportation route between an island and the mainland across a 13 kilometre ice-bound Strait and the options available for resolving the problem placed the issues of concern in the oceans policy domain.
- The decision-making process centred around a structured public review process with the subsequent public announcement of the decision reached by the responsible Minister. Participation in the public review was used to identify key actors in the decision-making process.
- The decision-making process occurred during the period 1985 to 1993, allowing key actors to be interviewed. This allowed for interview data, as well as written documents and archival data, to be used in the case study methodology described in Chapter 3. The three sources provided for consistency and validity checks in assessing the influence exerted by these actors on the process, within the policy context of the time.

**Figure 6. Northumberland Strait Crossing Project  
(showing location of Fixed Link between PEI and NB)**



Source: Public Works and Government Services Canada, 1997

- The decision-making process led to a strategic policy decision, the implementation of which resulted in consequences for the region that could not be easily reversed.

#### 4.1.1 Background

In February 1775, the desire for year-round mail service led to the first authorized trip across the heavily ice-covered waters of the Northumberland Strait by the Colonial government on the Island. Using a canoe and leaving from Wood Islands (then called St. John's Island), the 37 kilometre journey was considered a success after the occupants arrived safely in Pictou, Nova Scotia, an estimated three to four days later (Macdonald, 1997). Over the next century, iceboats<sup>1</sup> crossed the Strait between Carleton, PEI and Cape Tormentine, NB, resulting in considerable hardship and risk of personal danger to both crew and passengers. This route followed a shorter 14-kilometre distance favoured by the Mi'kmaq, with the one-way trip generally being completed in one day when weather conditions permitted. The unreliability of the iceboats as a transportation mode and the absolute dependence on weather as to the frequency and security of a crossing were such that a more favourable solution to the problem was required. As such, when Parliament petitioned the Queen to admit PEI into the Dominion of Canada on May 20, 1873, it cited the following as a condition for the terms of the union:

The Dominion Government shall assume and defray all the charges for the following services, viz.:--

Efficient Steam service for the conveyance of mails and passengers, to be established and maintained between the Island and the mainland of the Dominion, Winter and Summer, thus placing the Island in continuous communication with the Intercolonial Railway and the railway system of the Dominion;

*(Prince Edward Island Terms of Union, May 20, 1873)*

By agreeing to the above-stated condition, the federal government assumed a constitutional commitment to provide PEI with a year-round transportation service, allowing for "continuous

---

<sup>1</sup> By 1864, legislation required iceboats to be a minimum 16 feet in length with 4 passengers and a crew of 4, making the trip once a week.

communication” with the mainland. Living up to the commitment has proven to be a burdensome challenge to the federal government, both in terms of ability to guarantee the reliability implied in the agreement as well as the costs associated with meeting the commitment. At the same time, ensuring that the federal government lives up to its commitment has been the assumed task of the provincial government since 1873, leading to its recurring placement as a key issue for discussion on the federal-provincial relations agenda.

Tables 7A highlights note-worthy events occurring over the past two centuries, covering the period between 1775 and 1982, prior to the period analyzed in this thesis. Table 7B highlights significant events occurring during the period included in the temporal boundaries of the case study analysis.

#### **4.1.2 Chapter Overview**

The remaining sections of this chapter provide evidence supporting the policy network model as a concept for explaining why the outcome favouring the construction of the fixed link was possible.

Section 4.2 describes the decision-making process and subsequent policy outcome. It identifies key decision-making checkpoints in the process and provides insight into the decision rules used by the principal decision-maker, the federal government, in reaching its decision.

Section 4.3 examines the policy environment within which the decision was made and the major issues of concern surrounding the policy problem. As a result of these two factors, the actors who coalesced around the policy problem, i.e., the policy network, are identified.

Section 4.4 provides an analysis of the fixed link policy network, in terms of the actors' resource capacities and declared preferences and criteria for pursuing core values and objectives. The analysis focuses on the relationship and behavior of actors in the network, as determined by their understanding of the purpose for the debate, their principal areas of concern and preferred outcome.



Section 4.5 discusses the key factors identified in the analysis to explain the success of actors in the policy network to affect the outcome. The policy implications of the fixed link network in decision-making are also discussed in this section along with a summary of the research findings.

**Table 7A. Chronology of a Policy Problem  
The Need for a Reliable Transportation Route to the Mainland  
(Spanning Pre-Case Study Period: 1775 – 1982)**

<b>Period</b>	<b>Note-Worthy Events</b>
<b>1775</b>	Desiring year-round mail service, Governor Walter Patterson authorized the first winter trip between Wood Islands, PEI and Pictou, NS
<b>1864</b>	In an effort to improve safety, provincial legislation required ice boats to be a minimum 16 feet in length.
<b>1873</b>	May 20 – Petition to admit PEI into the Dominion of Canada; June 26 – Dominion Government assumed constitutional commitment to provide year-round stream service between PEI and mainland.
<b>1876 to 1884</b>	Wooden-hulled ferry <i>Northern Light</i> began winter run between Georgetown, PEI and Pictou, NS. The ferry provided neither efficient nor continuous service, becoming ice-bound regularly, sometimes for over 3 weeks at a time.
<b>1885</b>	PEI Senator Howlan lobbied for a subway between PEI and NB, comparable to those spanning the Thames. Engineers surveyed the bottom of Strait between Cape Traverse, PEI and Cape Tormentine, NB but no action taken.
<b>1888 to 1911</b>	<i>Stanley</i> , a steel-hulled ice-breaking ferry replaced <i>Northern Light</i> , making 79 round trips as compared to 21 made the year before by the older ferry. Iceboats continued service, as <i>Stanley</i> was also unable to deal effectively with ice.
<b>1912</b>	Prime Minister Robert Borden announced decision to build a railcar ferry service between Carleton, PEI and Cape Tormentine, NB. Federal annual subsidy to meet its constitutional commitment to PEI increased from \$20,000 in 1887 to \$120,000 in 1912, a 6X increase over a 25-year period.
<b>1917</b>	<i>Prince Edward Island</i> brought into service with a capacity for 750 passengers and 9 railcars; the ferry made 506 round trip crossings its first year; iceboats permanently discontinued and the <i>Stanley</i> was retired.
<b>1928</b>	Federal Dept. of Railways examined technical and financial feasibility of building a tunnel and causeway. Both deemed infeasible due to price tag of approx. \$40 million, with ice still presenting an unsolved technical problem.
<b>1955</b>	Canso Causeway completed between Cape Breton and mainland NS. PEI Premier Matheson asked for a cost estimate of a causeway across the Strait.
<b>1962</b>	Lobbying by PEI politicians led Progressive Conservative Prime Minister Diefenbaker to announce that a bridge-tunnel-causeway project was both technically and economically feasible at a cost of \$105 million.
<b>1963</b>	Federal elections called; both political parties supported the project during the campaign; Liberal Government elected under Prime Minister Lester Pearson.
<b>1965</b>	Prime Minister Pearson announced fixed link project would move forward; first contracts awarded on PEI side of Strait; federal elections held and won by Liberals but Islanders elected all Progressive Conservative candidates.

Period	Note-Worthy Events
1968	Costs on NB side led federal government to re-examine the feasibility of the agreed-upon fixed crossing; \$15 million already spent. Federal election held; newly-elected Liberal Prime Minister Pierre Trudeau cut expenditures on the project, focusing instead on new government initiatives.
1969	Fixed crossing project cancelled; to compensate, federal government committed \$225 million over 15 years towards a Comprehensive Development Plan for PEI. Federal constitutional commitment continued in the form of a ferry service.
1970-1982	Improvements in ferry service with new state-of-the-art ferry <i>Abegweit</i> brought into service; federal government's subsidy for the ferry service and tolls continue to increase.
1982	Federal government received unsolicited fixed link proposal, requiring federal funds to pay for the project.

**Table 7B. Chronology of a Policy Problem  
The Need for a Reliable Transportation Route to the Mainland  
(Spanning Case Study Period: 1984 – 1994)**

Period	Note-Worthy Events
1984	Federal Progressive Conservative government elected; government agenda focused on public-private partnership, fiscal restraint and deficit reduction.
1985	Public Works Canada (PWC) received 3 unsolicited proposals for a privately-financed fixed crossing (bridge, causeway/tunnel/bridge and tunnel)
1986	PWC authorized to examine feasibility of alternative options for spanning the Strait; studies commissioned by PWC to assess feasibility of options.
1987	<u>May</u> – Studies confirm feasibility; request issued for Expressions of Interest; 12 companies responded; Generic Initial Environmental Evaluation (GIEE) study commissioned by PWC, for generic tunnel and bridge design concepts; <u>November</u> – GIEE report issued, public information sessions held by PWC on PEI, NB and NS; 7 of 12 companies deemed capable to proceed to Stage II Call for Proposals, if PEI supported the project; PEI Premier provided PWC Minister with 10 conditions for PEI government support of the project. <u>December</u> – PEI Premier announced plebiscite on issue; 12 public meetings, sponsored by the Institute of Island Studies held throughout the Island; Friends of the Island, a coalition of actors opposed to the project, is formed.
1988	<u>January</u> – Islanders voted 59.4% positively to the question: "Are you in favour of a fixed link crossing between PEI and NB?" Premier indicated PEI was prepared to proceed with the project; Premier retained academic environmental impacts advisors. <u>June</u> – PWC Stage II Call for Proposal; 6 companies submitted 7 bridge proposals and 1 tunnel proposal. <u>September</u> – 3 bridge proposals passed PWC evaluation criteria. <u>October</u> – Federal elections held; environmental issues high on public agenda in PEI; Progressive Conservative government re-elected but both Ministers of PWC and Environment failed to be re-elected.

Period	Note-Worthy Events
1989	<p><u>February</u> – PWC Minister referred project to Minister of Environment for Environmental Assessment and Review Process (EARP) review.</p> <p><u>June</u> – 12 preliminary public hearings held in PEI, NB and NS on environmental and socio-economic impacts of a hypothetical Bridge Concept Assessment (BCA) document provided by PWC; company confidentiality cited by PWC for not being able to provide actual proposals.</p> <p><u>August</u> – Panel requested additional information from PWC before holding final hearings; received Supplement to BCA document.</p> <p><u>December</u> – 21 Final public hearings held; 150 presentations made.</p>
1990	<p><u>August</u> – Panel issued report, citing concerns to be addressed before project should proceed, including maximum delayed ice-out criterion.</p> <p><u>November</u> – Minister of PWC appointed an Ice Committee to examine concerns of Panel regarding delayed ice-out issue.</p>
1991	<p><u>April</u> – Ice Committee deemed proposals met Panel's criterion for delayed ice-out.</p> <p><u>May</u> – 3 developers invited to re-submit proposals, demonstrating the environmental requirements of public review panel could be met.</p>
1992	<p><u>January</u> – Multi-departmental committee concluded resubmitted proposals addressed environmental concerns of the public review panel.</p> <p><u>May</u> – Financial bids assessed; none complied with terms specified by PWC.</p> <p><u>July</u> – Due to flexibility in formulae used to assessed financial viability of project, PWC entered into negotiation with lowest bidder, Strait Crossing Inc. (SCI).</p> <p><u>December</u> – Finance Minister announced to Parliament that SCI had been selected to proceed with drawing up detailed specifications for the project; Tripartite PEI/NB/Federal government agreement signed; Friends of the Island brought 2 court actions against the federal government claiming failure to request an environmental assessment of the SCI proposal and contravention of the 1873 Terms of Union which specified "efficient steam service".</p> <p>SCI released Environmental Management Plan (EMP) for public review.</p>
1993	<p><u>March</u> – Ruling by Court ordered PWC to make a decision about the need for an environmental assessment of SCI proposal; also ruled a constitutional amendment was required to avoid a breach in the 1873 Terms of Union.</p> <p><u>April</u> – Specific Environmental Evaluation (SEE) of bridge proposal sent to PWC Minister by SCI; 4 public meetings held to discuss report findings.</p> <p><u>May</u> – PWC Minister determined environmental impacts of project could be mitigated or were insignificant; 30-day period to decide on need for a public review.</p> <p><u>June</u> – Friends of the Island sought a motion in federal court requiring a public review and a declaration that it was unconstitutional for the federal government to enter into an agreement with SCI.</p> <p>PWC Minister declared public review of the SCI proposal was unnecessary as environmental issues raised throughout the process had not changed.</p> <p>1993 <i>Northumberland Strait Crossing Act</i> passed, allowing the Minister of PWC to build a fixed link, collect tolls and pay an annual subsidy to SCI.</p> <p><u>August</u> – Court denied Friends of the Island's motion but ruled amendment to the Terms of Union was needed before ferry service could be discontinued.</p> <p><u>October 8</u> – Final documents signed in Charlottetown for SCI to design, build, operate, maintain and subsequently transfer the fixed crossing to the federal government after a period of 35 years. In return, SCI would receive the equivalent of the annual subsidy to operate the ferry in 1992 dollars of \$42 million for a period of 35 years and be allowed to collect tolls.</p>
1994	<p><u>April</u> – <i>Constitution Amendment Proclamation, 1993</i> (Prince Edward Island) completed, substituting a fixed link crossing for steam service.</p>

## 4.2 The Decision-Making Process and Outcome

For the purposes of this analysis, the decision-making process is defined as the steps steering the Government of Canada towards a decision as to whether or not a fixed link structure would be built across the Northumberland Strait in the 1990s. The process commenced in 1985, with the receipt of three unsolicited proposals from developers to construct a fixed crossing (using privately-financed loans), followed by an evaluation of the feasibility of a fixed link. Eight years later, it terminated with the signing of a contract between Strait Crossing Inc. (SCI), a private sector consortium, and the Government of Canada on October 8, 1993 to construct a bridge across the Northumberland Strait.

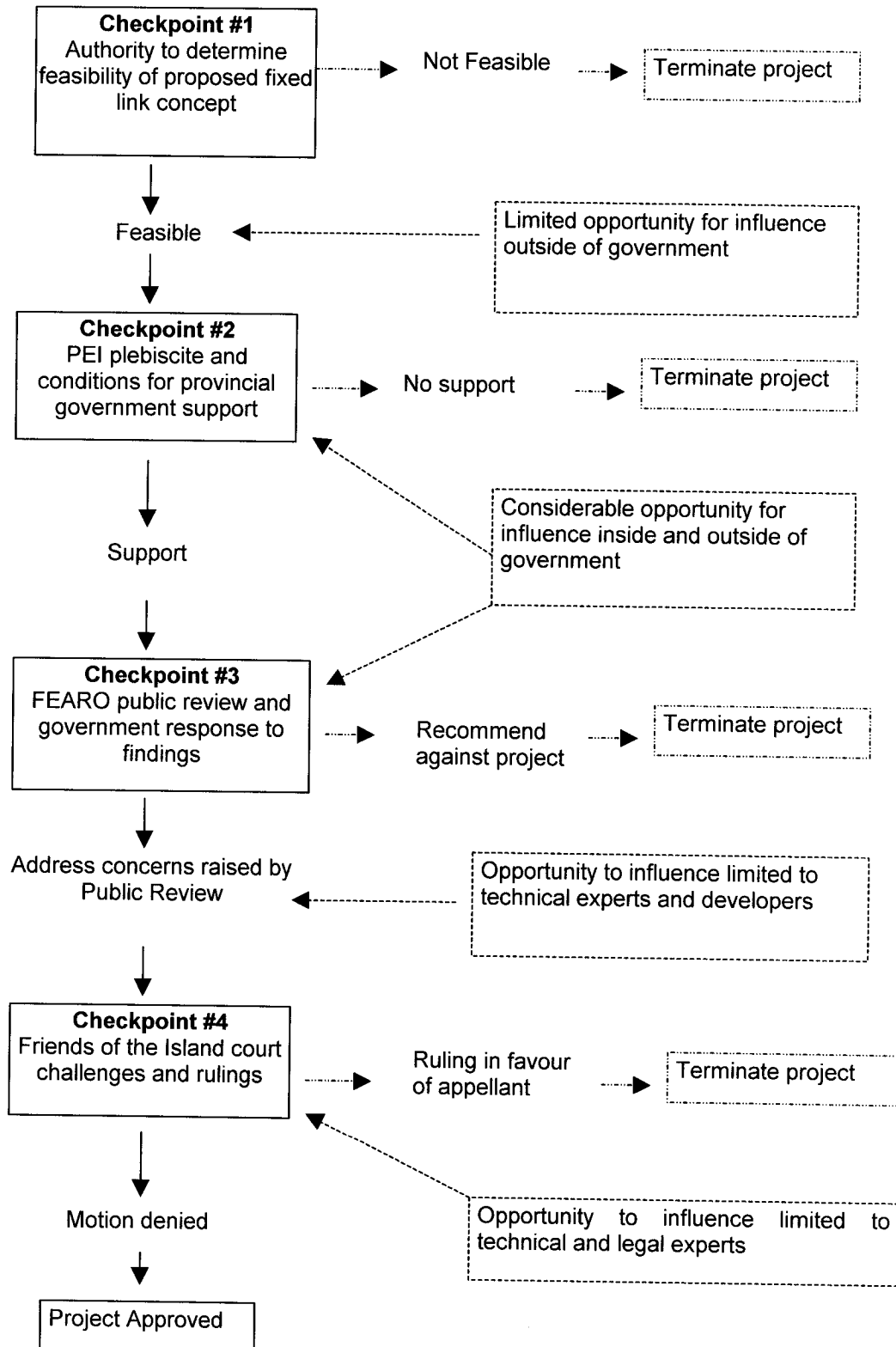
The outcome of the policy process reflected the totality of influence exerted by policy actors on the decision. These included those who were capable of affecting the decision and those who could potentially be affected by the decision. As was evident from the outcome, the federal government, as the principal decision-maker, decided to approve the construction of the fixed link between PEI and NB.

Figure 7 illustrates the 'go/no-go' alternative, from the perspective of the federal government, with respect to the decision. It also identifies potential opportunities for affected actors to influence the process. Four events in the process are identified in this research as critical decision-making checkpoints with the potential to either have terminated the project or allowed it to move to the next phase in the process. These are discussed below and are itemized as: (i) the proposition stages, i.e., determining the feasibility of the project; (ii) the plebiscite and PEI conditions for support; (iii) the public review hearings; and (iv) the court challenges and rulings.<sup>2</sup>

---

<sup>2</sup> Given its relative unpredictability, a legal challenge cannot be considered a planned element in a public policy decision-making process. However, when it does occur, it has important legal and political consequences which can significantly affect subsequent decision-making, regardless of the decision rendered by the Court (Russell, 1985).

**Figure 7. Checkpoints in the Fixed Link Decision-Making Process**



(i) Proposition stage - The first 'checkpoint' is identified at the onset of the process, with the authority being given by the federal government to its department responsible for infrastructure projects, Public Works Canada (PWC), to assess the feasibility of the proposed fixed link alternatives in December 1986. A determination that it was technically, financially, environmentally, socially and economically feasible to construct a fixed link across the Northumberland Strait between Borden, PEI and Cape Tormentine, NB allowed the process to advance to the second checkpoint.

The decision to proceed followed considerable federal Cabinet-level debate and the receipt of ten studies commissioned by PWC, using local technical expertise from both the private and public sector wherever possible. Consultants were asked to report on questions relating to the physical oceanography of the Strait, the biological resources, the socio-economic impacts, vessel traffic and safety and the economic feasibility of the project. At this stage in the decision-making process, there was limited potential opportunity to influence the outcome as only in-house PWC staff assessed the information provided in the commissioned studies. While it is to be expected that the consultants' findings influenced PWC's assessment, any deliberate attempt on the part of the consultants to steer the decision in a particular direction is dismissed in the subsequent analysis on influence. This is because of the technical nature of the questions being reported on and recognition of the consultants' professional integrity.<sup>3</sup>

(ii) The plebiscite - The second critical step in the decision-making process focused on the announcement of a plebiscite vote by the Premier of PEI and the events leading up to vote. The decision to hold a plebiscite followed the November 1987 announcement by Stewart McInnes, federal Minister of PWC, that a proposal call would proceed if Prince Edward Island supported the

---

<sup>3</sup> Some challenges were made regarding the accuracy of some of the studies during the subsequent stages of the decision-making process. The allegations were made, not to suggest attempts at influence, but rather failure to comprehensively examine the issues (Begley, 1993).

project. The Premier of PEI, Joe Ghiz, provided the terms of his government's support in the form of 10 conditions<sup>4</sup> to the Minister of PWC while an indication as to the support of the people of PEI was rendered in the January 18, 1988 plebiscite vote. The result of the vote was 59.4% of Islanders indicating that they were in favour of a fixed link. With the support of the majority of Islanders and agreement, in principle, to meet the Premier's conditions for support of the project, the federal government authorized PWC to issue a call for proposals in June 1988.

Selection of acceptable projects was based on each developer's ability to manage the design, building, operation and maintenance of the structure; technical expertise; environmental aspects of the proposal; economic benefits to the region and to Canada; and financial soundness. Three proposals (all to build bridges) passed the evaluation criteria established by PWC and moved the decision-making process onto the third checkpoint. At this second stage in the decision-making process, the potential to influence the outcome of the plebiscite was substantial. As a result, policy actors, in addition to those from the federal and provincial governments, began to coalesce around the problem and mobilized an array of tactics to influence voters' decision. The public debate was focused on issues bearing directly on PEI and as such, was contained to actors with a direct interest and responsibility for PEI. Intergovernmental relations between the federal government and the government of PEI, played a critical role at this stage in the process and was also instrumental in moving the debate onto the next decision-making checkpoint.

(iii) The public review hearings – Although not identified as a critical checkpoint in the decision-making process, the federal election in October 1988 was an important and note-worthy event. Firstly, it allowed non-state actors in the policy network to use the elections as an opportunity to influence the fixed link decision-making process and secondly, it led to a change in

---

<sup>4</sup> The 10 'commandments' as they became known on the Island (Macdonald, 1997) included: financial support for highways; continuation of Wood Islands ferry; compensation for ferry workers and fishers; economic development assistance for the Town of Borden; regional benefits; mitigation of negative environmental impacts; reasonable tolls; a utility corridor within the fixed link; and, transfer agreements for lands that the structure would occupy under the Strait.

Ministers for both PWC and Environment Canada. The consequences of both of these actions led directly to the third decision-making checkpoint in the process – the Federal Environmental Assessment and Review Office (FEARO) Public Review. The public review of the environmental impacts of federal projects was a requirement under the annexed Guidelines of the *Government Organization Act 1979*, entitled the *Environmental Assessment and Review Process (EARP) Guidelines Order*, (June 1984).

During the fixed link decision-making process, the federal government considered the *EARP Guidelines Order* to be non-enforceable, providing only guidance and ministerial discretion as to its use.<sup>5</sup> According to the *EARP Guidelines Order*, a project, such as the fixed link proposal, was to be screened to determine whether it should be referred to the Minister of Environment for public review, either because of significant adverse environmental effects or major public concerns. The previous Minister of PWC had earlier assessed the environmental impacts of the proposed project as being able to be mitigated with proper design and construction procedures and as such, not subject to public review (*EARP Guidelines Order*, Section 12c). Given the concerns for the environment as the rallying point around which opponents to the fixed link congregated during the election's campaign,<sup>6</sup> and demands from the government of PEI, the (new) Minister of PWC referred the project to the (new) Minister of Environment for an environmental review. Under section 13 of the *EARP Guidelines Order*, projects may proceed to public review as a result of public concerns, regardless of the significance of the negative environmental impacts.

---

<sup>5</sup> In fact, its subsequent discretionary use by the Minister of Environment over the Rafferty-Alameda and Oldman River dam projects led to the ruling by Federal Court that the Guidelines were a legally-enforceable law of general application that imposed added duties on the part of the federal government (*Friends of the Oldman River Society v Canada (Minister of Transport)* [1992] 88 D.L.R. (4<sup>th</sup>) 42.). This ruling influenced the replacement of the *EARP Guidelines Order* with the *Canadian Environmental Assessment Act* that received royal assent in June 1992 and came into force in January 1995. This Act specifies federal projects for which an environmental assessment is required.

<sup>6</sup> Tom McMillan, Minister of Environment, lost his bid for re-election in the 1988 federal elections while running against an opponent whose platform focused primarily on the fixed link policy issue.



The six-member FEARO Public review panel was appointed by the Minister of Environment based on recommendations from both the federal and PEI provincial governments. The Panel's mandate was to review the effects and risks of a hypothetical fixed link project, having certain generic design specifications, on the biophysical and socio-economic environment of the study area. After reviewing documentation provided by PWC (PWC, 1989a; 1989b), the Panel conducted two sets of public hearings over a seven-month period commencing in June 1989.<sup>7</sup> The report of the Panel was made public on August 15, 1990, listing a number of unresolved issues and concerns relating to the impact of the project on the biophysical and socio-economic environment (FEARO, 1990). Additionally, the findings of the Review Panel and the subsequent response of the federal government to address the issue of delayed ice-out raised by the Panel (PWC, 1990), led to the formation of an ice committee, composed of technical experts. The findings and approval of the 4-member ice committee (Barry *et al.*, 1991) resulted in a decision at the third checkpoint to proceed with a call for financial bids. The call was restricted to the three developers whose proposals had passed the earlier technical evaluation.

The evaluation of the financial proposals, and the subsequent December 1992 announcement to Parliament by the Minister of Finance that SCI had been selected for the project, suggested the decision-making process was in its final stages, if not completed. However, it was this decision to enter into negotiations with SCI that led to the extension of the process into its fourth and final checkpoint.

(iv) Court challenges and rulings – Legal challenges brought against the federal government by the Friends of the Island questioned the constitutionality of a fixed link service since the 1873 Terms of Union specified a commitment to provide “Steam Service”. Additionally, the Friends of the Island argued that the Minister of PWC had not complied with the procedures established

---

<sup>7</sup> Between June 19-29, 1989, 12 preliminary public meetings were held in PEI, NB and NS at which 51 presentations were made to the Panel. Following receipt by the Panel of additional information supplementing the Bridge Concept Assessment document from PWC, final hearings, resulting in 150 presentations being made at 21 sessions, were held in March 1990.

under section 12 of the *EARP Guidelines Order* to assess the effects of the SCI bridge proposal. In March 1993, the Court ordered the Minister of PWC to make a section 12 decision regarding the significance of environmental impacts of the specific SCI proposal, leaving the decision for a public review up to the Minister. The Court also ruled that a constitutional amendment would be required to avoid a breach in the 1873 Terms of Union.<sup>8</sup>

Following the assessment by the Minister that a public review was unnecessary because the SCI proposal had met all of the environmental conditions specified by the earlier FEARO public review panel, Friends of the Island sought a motion in federal Court to overturn the Minister's decision. A motion was also sought to declare it unconstitutional for the government to enter into a contract with SCI. The Court denied the motions sought by the Friends of the Island but stated that ferry service could not be discontinued without an amendment to the *PEI Terms of Union*. This final checkpoint in the decision-making process allowed the federal government to sign a contract with SCI on October 8, 1993 to build, operate and maintain a fixed link for a period of 35 years, after which it would be transferred to the federal government. In return, the government agreed to pay an annual inflation-indexed subsidy of up to \$42 million (1992 dollars) to SCI as well as allow the consortium to collect tolls.

In 1993, Premier Calbeck of PEI negotiated an agreement with the federal government specifying tolls were to be limited to  $\frac{3}{4}$  of 1% of the annual rise of the Consumer Price Index over the 35-year period. She also negotiated tolls were to be based only on the operation and maintenance costs of the bridge after it was transferred to the federal government, not on the cost of replacing it. This negotiating stance was in keeping with the province's earlier requirement, as specified by Premier Ghiz to the federal government, for 'reasonable' tolls to be one of ten conditions to be met if PEI were to support the project.

---

<sup>8</sup> *Friends of the Island (Inc.) v Canada (Minister of Public Works) (T.D.)* [1993] 2.F.C. 299 (T.D.).

Summarizing the decision-making process, opportunities to affect the outcome were restricted primarily to other members of the federal government at the proposition stage, identified in Figure 7 as checkpoint #1. At checkpoint #2, support from the PEI government was critical to moving the process forward since the policy environment was such that the federal government was incapable of proceeding with the project without the support of PEI. However, by this stage in the process, all obstacles internal to the federal government had been overcome. Outstanding issues remained the clarification of avoiding irreparable damage as a result of pursuing the project and the identification of mitigatory measures to minimize the negative impacts arising from the implementation of the decision. From the federal government's perspective, these tasks were the responsibility of the lead department, PWC, drawing on the technical expertise of its staff, other government departments (federal and provincial) and consultants.

Reflecting the hierarchical decision-making regime of the time, in which government at both federal and provincial levels exercised policy analytic dominance over other policy actors, Checkpoint #3 proved to have limited influence over the decision. Nonetheless, the introduction of public hearings into the fixed link decision-making process was a novel approach in Canadian marine public policy decision-making. Its lack of precedence led to conflicting expectations on the part of members of the policy network as to its value. In the case of the federal government, the process was considered premature given the lack of a selected proponent and project for public review. Responding to public and provincial government pressure on PEI was the principal reason for undertaking the review. Non-state actors, supportive and opposed to the proposed project, viewed the process as a newly acquired, additional opportunity to influence decision-making. For non-governmental organizations, the hearings presented an opportunity for extended exposure, aimed at promoting the achievement of core values. As such, all actors in the policy network expended varying degrees of effort to influence the decision of the Public review panel.

The success of non-state actors, who were opposed to the fixed link project, in influencing the advice provided by the public review panel, suggested the receptivity of the Panel to arguments

presented by these actors and a similarity in core values and objectives. However, their failure in affecting the final outcome, as determined by the federal government, reflected the relative independence of the government actors in the decision-making process.

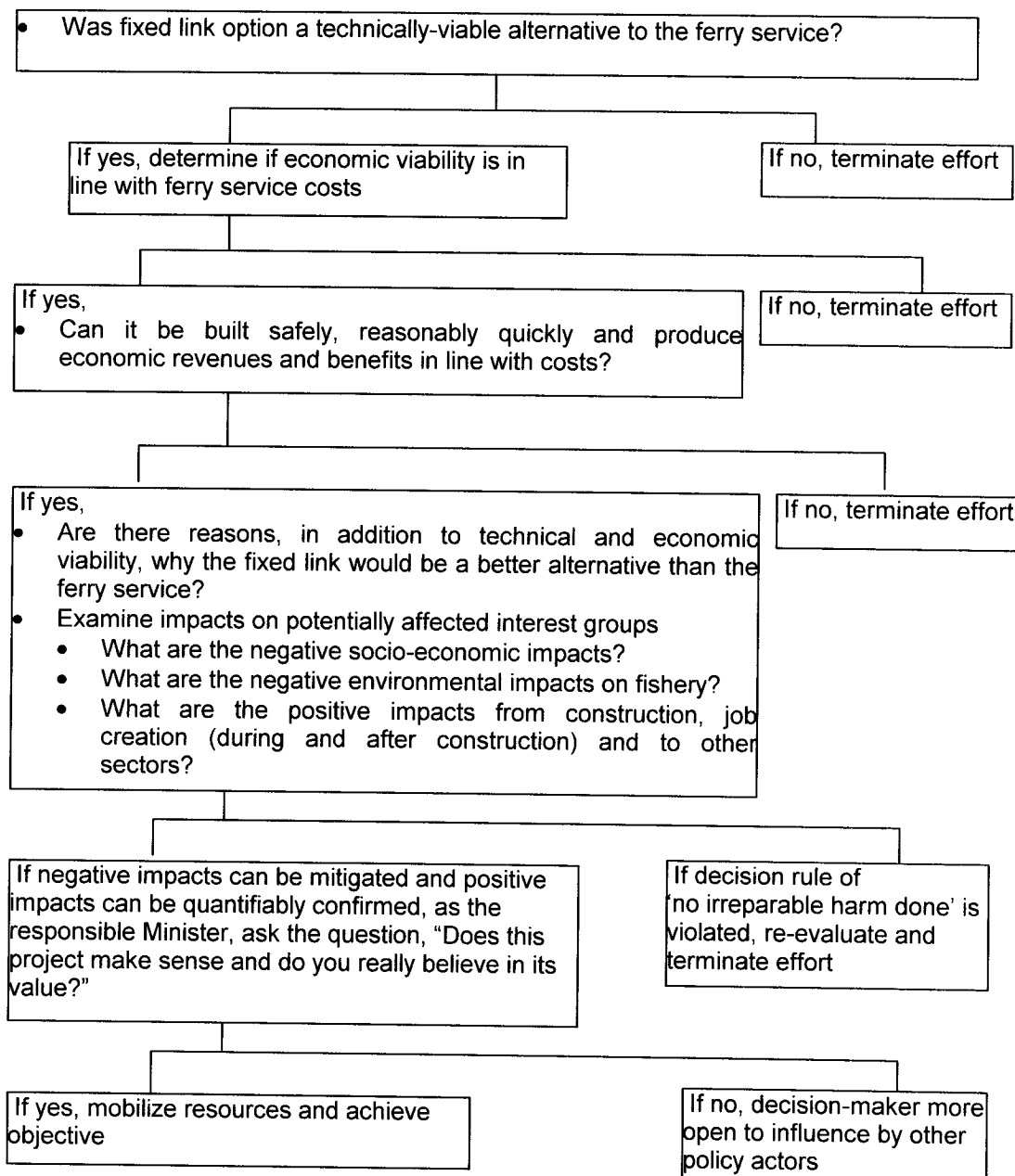
Checkpoint #4 was possible because of the inchoate and evolving governance and legal regimes coming into effect in the 1980's. As provided for in the 1982 *Canadian Charter of Rights and Freedoms* and in the 1984 *EARP Guidelines Order*, non-state actors were assuming legal rights, which allowed for challenges to be made to decisions of the federal government. These rights legitimized the growing expectation among non-state actors to be involved in public policy decisions.<sup>9</sup> By challenging the decision of the Minister of PWC and moving the debate into the juridical system, the potential for the Courts to usurp the decision-making process and to affect the decision outcome was significant. As such, the significance of this checkpoint to the final decision cannot be underestimated.

Complementing Figure 7 and, from the perspective of a retrospective analysis, running in parallel to it, Figure 8 illustrates a composite of the decision rules used by the federal government in moving the process forward to its completion. As is evident from this illustration, the rationale behind the federal government's support for the project followed a logical process of decision-making that was, for the most part, independent of other policy actors.

---

<sup>9</sup> Nonetheless, the lawyers for SCI argued against the appropriateness of the Friends of the Island to legally challenge the actions of the federal government. The Court dismissed the arguments put forward by SCI. Ibid.

**Figure 8. Federal Government Decision Rules - Fixed Link Policy Problem**



As the initiator and principal decision-maker with respect to the fixed link policy debate, the federal government played a unique role in the decision-making process, participating at each of the four decision-making checkpoints.<sup>10</sup> It is thus important to understand the policy problem from the perspective of this actor, before any attempts can be made at predicting the influence of other actors in the policy network. This is because the resulting behaviour and exertion of influence by all other actors in the policy network will be dependent upon their support of, or opposition to, the initial intent of the federal government regarding a possible solution. Similarly, the receptivity of the federal government, to efforts aimed at changing its initial intent, will be determined by its criteria for evaluating the policy problem and the relative strengths of other members of the policy network to influence the federal government's position.

(i) Problem definition - Two disciplinary attributes, economics and politics, were overwhelmingly evident in the federal government's definition of the policy problem at the onset and throughout the policy process. At the province-wide level, Tom McMillan, (the Minister of State responsible for Tourism and subsequently Minister responsible for PEI and of the Environment), was doubly aware of the fact that transportation and the high cost of electricity were two reasons cited repeatedly as impediments to economic development in the province. In a province dependent on farming and tourism as its major economic activities, the lack of an efficient and reliable transportation route was viewed as the major impediment to economic self-sufficiency (McMillan, 1988). The efficiency and reliability of the existing ferry route was questioned from the perspective of increasing costs due to ongoing maintenance of the ferry service and delays to users from over-demand, inclement weather and periodic strikes, by the unionized ferry workers. These labour disputes tended to coincide with periods most likely to

---

<sup>10</sup> While there were changes at the political level in terms of the actual representatives serving as Cabinet Ministers responsible for the decision, representatives from the bureaucracy provided continuous involvement in the process.

affect tourism and farming-related activities on the Island. Thus a focus on transportation, coupled with concerns related to the feasibility of the fixed link as an alternative transportation route, were accountably the major areas of concern for this policy actor.

At the national level, the federal Cabinet and central policy structures of the government promulgated policies aimed at fiscal restraint, deficit reduction and minimizing direct government involvement in the economy (Prince, 1988). In such a policy environment, predicted rising costs associated with meeting its constitutional commitment to PEI by means of a ferry service was in conflict with efforts to reduce the federal debt.<sup>11</sup> Thus, the timing was serendipitous for a formal examination of the feasibility of an alternative option to the ferry service, especially since it appeared to satisfy the economic policies that were driving the political agenda of the federal government.

From a political perspective, decreases in federal expenditures in the Atlantic region in the mid-1980s exacerbated the impacts of an already recessed economy. Disenchantment in the region with the ruling federal Progressive Conservative government, in which three of the four provincial governments were Liberal, was thus a likely outcome. Cabinet Ministers from the Maritime Region, including the Minister of Public Works from Nova Scotia, reminded the Prime Minister of outstanding debts owed by the federal Progressive Conservative party to the Maritime Provinces, including his electoral success as a Member of Parliament from Nova Scotia. Finally, with the receipt by PWC of three unsolicited proposals from the private sector to construct a fixed link, the sector's willingness to undertake and fund the project had been explicitly declared. These factors collectively provided the economic and political rationale for the federal government to explore the feasibility of the fixed link. As argued by the Minister responsible for PEI and as presented by the Minister of Public Works to the Prime Minister, Minister of Finance and other

---

<sup>11</sup> The federal government was aware that the ferry service would require scheduled replacements of existing ferries and was examining the predicted costs associated with replacing the *John Hamilton Gray*.

members of Cabinet, a fixed link provided a potentially cost-effective mechanism for addressing the government's legal commitment to provide a transportation route to PEI. It also provided an opportunity for the federal government to demonstrate its commitment to Atlantic Canada.<sup>12</sup>

(ii) Evaluation Criteria - In addition to the federal government's requirement for consistency with its policy of deficit reduction and fiscal restraint, the criteria used by the lead federal agency (PWC, 1987) to evaluate the feasibility of addressing the problem with a fixed link included:

- must be environmentally-sound;
- must be technically-possible;
- must address socio-economic impacts on PEI; and,
- must provide positive benefits to the Atlantic Region.

To facilitate the Minister of PWC in reaching a decision with respect to the feasibility of the project, contracts were awarded to private sector consultants for studies aimed at providing answers to the above-listed criteria. For local consultants on PEI, this provided an opportunity to be part of a decision-making process, the outcome of which had the potential to affect the long-term wellbeing of Island residents. The effect of this approach by PWC, to award contracts to locally-based consultants, was to instil a self-imposed standard among the participating consultants to ensure that their study findings would pass, not only the expected scrutiny of professional evaluation, but that of personal evaluation. Having satisfied themselves that the fixed link was feasible, local consultants who participated at this stage in the process became assured advocates of the project (Coles Associates Ltd. *et al*, 1987).

(iii) Preferred Solution - From the perspective of the federal Cabinet, the preferred solution had to be capable of addressing the rising costs associated with providing the ferry service, including the projected costs of ship replacements, and do so in a manner that did not increase

---

<sup>12</sup> An argument used by federal Progressive Conservative caucus members from the Maritimes Region was the analogy of the region as a founding shareholder of a company who rarely benefited from its profits or expansion. A case was made to the Prime Minister, who subsequently agreed, that it was an appropriate time to 'settle some accounts'.



the federal debt. This latter expectation suggested support for private sector involvement in the kind of public/private partnership being advocated by governments of the day as theoretical notions of contracting-out and privatization were being tested in practice.<sup>13</sup> Additionally, given the feasibility assessment of a bridge as the most cost-effective alternative and the receipt of a financially acceptable proposal from the private sector to construct a bridge, it was to be expected that the government would favour a bridge as the preferred alternative.

At the political level, the preferred solution had to demonstrate the support of the majority of the federal Cabinet, affected provinces and public at large. Lead federal supporters of the project (Cabinet Ministers and other federal caucus members from the Maritime Provinces), recognized the requirement to convince the federal Cabinet and Prime Minister as to the appropriateness of the project. Additionally, given the actuarial concerns of the Department of Finance, a number of projects having the support of key Cabinet Ministers from outside of the Maritimes had been cut, leading to an even closer scrutiny of the arguments in support of the fixed link by these Ministers. Furthermore, caucus members from Newfoundland, including that of the Senior Cabinet Minister, John Crosbie, did not support the project due to the greater perceived need for federal attention within that province. Thus, the preferred solution had to be one that did not additionally take away from the needs expressed by Cabinet Ministers for other projects, while addressing the concerns specifically related to the project by other lead departments.<sup>14</sup> Finally, any political gains that might accrue to the federal Progressive Conservative government, given the predominantly Liberal provincial governments in Atlantic Canada, was to be sought in the preferred solution, and balanced against the likelihood of any political damage.

---

<sup>13</sup> Primarily conservative governments in the United Kingdom, United States and Canada were testing such approaches (Savoie, 1994).

<sup>14</sup> Concerns specifically relating to the fixed link project included: the feasibility and mandated responsibility associated with physically linking two provinces by the Department of Transport; constitutional concern by the Department of Justice; and, actuarial concerns of the Department of Finance.

### **4.3 Case Study Context**

An understanding of the major factors affecting decision-making in the coastal and ocean policy domain in the Maritimes requires an understanding of the context within which any given policy problem in this domain is defined, structured and resolved. By examining the existing suite of *status quo* policies (i.e., the policy habitat) and the policy environment in which competing values jostle for legitimacy, it is possible to understand why the problem has arisen and who will be involved in influencing its resolution. Of equal (if not greater) interest, is the question of how the problem will be resolved. It is a key proposition of this thesis that the resulting composition and pattern of involvement among members of the policy network who coalesce around a particular policy issue, are critical elements to answering this question.

#### **4.3.1 Existing Policy Environment**

At the onset of the decision-making process in 1985, the newly elected Conservative government of Prime Minister Brian Mulroney focused its attention on deficit reduction, decentralization and free trade with the United States (Prince, 1988). In keeping with its emphasis on relying on the private sector for job creation, it was not surprising for the government to be receptive to initiatives that would stimulate economic development while limiting government expenditure.

At the national and regional domestic level, the economic recession in the late 1980's and early 1990s resulted in a policy environment of high and increasing unemployment while economic output continued to decline. Among factors cited for exacerbating economic recovery at the national level were the imposition of the Goods and Services Tax (GST), the strength of the Canadian dollar, low levels of consumer and business confidence and the weakness of the US economic recovery (Abele, 1992). In the Maritimes region, cuts in federal transfer payments and spending and the closure of the Canadian Forces Base in Summerside, PEI increased the fragility of the already strained economy. As such, the province could be expected to be firm in any

bilateral negotiations with the federal government during this period, given that 75% of the provincial economy was dependent on federal spending (Savoie, 1992).

At the onset of the debate in 1985, PEI had a 13.5% unemployment rate, equating to one in six residents on some form of publicly funded support. Annual unemployment insurance payments totaled approximately \$125,000,000 and was second only to farm earnings as a source of revenue to the province, almost twice that received from the tourism sector (Statistics Canada, 1989). As the debate progressed, problems in the resource sector were also being felt, particularly in the fishing sector, and the significance of the problem on the economy was evident throughout the Atlantic region. Continuing declines in the major groundfish stocks during the late 1980's eventually led to the policy decision to declare the 1992 northern cod moratorium off the coast of Newfoundland, thereby attaining national significance. This decision, and subsequent closures off the coast of Nova Scotia aimed at protecting fish stocks, resulted in severe socio-economic consequences to the entire region.

At the provincial, political level, Prince Edward Islanders had elected a majority Liberal government in 1986, under the leadership of Premier Joe Ghiz. The Liberal party was also dominating provincial politics in New Brunswick in the latter half of the 1980s with the electioneering success of Premier Frank McKenna in 1987. Although both provinces had elected Liberal governments, the relationship of each with the federal government and support for national policies differed considerably.<sup>15</sup> Likewise, the vision of these leaders for their province was notably different, with Premier McKenna outwardly supportive of a corporate agenda while Premier Ghiz appeared to favour a more public sector directed approach. Added to these provincial personalities was Tom McMillan, the Progressive Conservative Member of Parliament from PEI,

---

<sup>15</sup> Premier Ghiz was the only Premier among Canada's 10 provincial government leaders who did not support the Free Trade Agreement between Canada and the United States. The Agreement was being negotiated during the period of the case study by the federal Progressive Conservative government. Text available at [http://www.agr.gc.ca/itpd-dpci/english/trade\\_agr/fta.htm](http://www.agr.gc.ca/itpd-dpci/english/trade_agr/fta.htm), (accessed December 19, 2002).

appointed as Minister of State for Tourism, the Minister responsible for PEI in Cabinet and subsequently the federal Minister of Environment. Given the mandated responsibilities of the federal and provincial decision makers from PEI, and their explicit differences in terms of political ideology and vision for the province, the potential for these traits to affect federal-provincial relations and decisions at the highest levels on Canada's smallest province was significant.

At the international level, the economy-environment nexus was gaining prominence with the release of the 1987 report by the World Commission on Environment and Development (WCED, 1987). In it, the principle of sustainable development, defined as development that meet the needs of the present generations, without compromising the ability of future generations to meet their needs, was promulgated. This doctrine, along with the growing expectation by non-state actors to be involved in public policy decision-making that affected their well-being, had the direct result of raising the awareness among civil society of the complexity associated with coastal and ocean policy decision-making. This complexity was reflected in the concerns identified with the fixed link policy problem.

#### **4.3.2 Major Areas of Concern**

Based on a review of government documents, consultants reports, public submissions, panel recommendations and committee reports covering the period of the case study, a total of 275 individual concerns surrounding the proposed fixed link project were identified. Key documents in which these concerns were raised included: the Generic Initial Environmental Evaluation (P. Lane and Associates *et al.*, 1988); the Federal Environmental Assessment Review Office Panel report (FEARO, 1990); the draft Environmental Management Plan provided by Strait Crossing Inc. (SCI, 1992) and the Specific Environmental Evaluation of the SCI proposal (Jacques Whitford Environment, 1993). While the large number of individual concerns appeared overwhelming from an analytical perspective, it became evident that these could be categorized into seven major issue areas. For analytical purposes, these were identified to be: (i) the ferry service; (ii) the

fishery; (iii) the 'island way of life'; (iv) transportation; (v) tourism and recreation; (vi) bridge design, construction and operation; and (vii) the process surrounding decision-making.

Appendix 2 provides a listing of the major concerns raised during the decision-making process, categorized into these seven major issue areas. The concerns under each of these categories were further subdivided in terms of their relevance to seven major fields of interest (also described as 'disciplines' or 'components of sustainability' by Pitcher (1999)). These were identified as environmental issues, social impacts, ethical issues, economic issues, political considerations, legal issues and institutional arrangements.<sup>16</sup> This subdivision, by field or disciplinary area, was deemed essential from an analytical perspective since it allowed for particular disciplines that cross-cut the major areas of concern to be discerned and vice versa. For example, technical experts retained by the PEI Premier's Office were only interested in environmental issues, regardless of whether these affected the fishery or tourism. Alternately, some actors, such as the PEI Fishermen's Association, were interested in multi-disciplinary areas covering a single major area of concern, i.e., not just the environmental issues per se, but the economic and social consequences arising from these impacts on fishing activities.

(i) The closure of the ferry service - The first and most immediately obvious area of concern was the loss of 656 Marine Atlantic ferry jobs. This was primarily due to the socio-economic impact of the ferry closure at both a local level in Borden, PEI and Cape Tormentine, NB and at the province-wide level on PEI. Of the 656 workers employed by Marine Atlantic, 558 resided on PEI while the remaining 98 lived in New Brunswick. In 1989, the total labour force in the town of Borden consisted of 200 persons (Statistics Canada, 1989). Marine Atlantic, the Crown corporation charged with running the ferry service, employed 123 persons in the town while approximately 50 persons were cited by Statistics Canada as being unemployed. The earnings of

---

<sup>16</sup> In the analysis relating to the rapid and multi-disciplinary appraisal of the status of a fishery, Pitcher assesses the sustainability of the fishery based on the scores assigned to pre-defined attributes in ecological, technological, economic, social and ethical 'disciplinary areas' or fields (Pitcher, 1999).

ferry employees in 1991 totalled \$19,540,000 with permanent employees averaging \$33,170 per year while seasonal workers averaged \$17,570 (Marine Atlantic, 1992). Additional economic benefits associated with the ferry service included operational and maintenance contracts to local businesses as well as services associated with the ferries, such as food concessions on the boats and at terminals on both sides of the crossing route. It could thus be expected that Marine Atlantic, the ferry workers and the union representing them would be active participants in the policy network, opposing any project that attempted to replace the ferry service.

(ii) Impacts on the fishing industry – Concerns relating to the impact of the proposed fixed link on the marine environment, and specifically on the fishery in the Northumberland Strait, were based on a variety of sources. These included scientific knowledge (Rice *et al.*, 1989), anecdotal evidence (Ferguson, 1993), expert judgement (Dadswell, 1993) and personal opinion (McGheoghegan, 1990).

As a contributor to the regional economy, fisheries played an important role and any alteration to the *status quo* was examined as an initial threat to the livelihood of fishers. In 1987, the Northumberland Strait fishery was valued at \$11,000,000 (Porter Dillon, 1987). An estimated 496 fishers using boats less than 45 feet in length operated from 11 ports bordering the Strait, where the most valuable commercial species included lobster, scallop and herring. In the area of the proposed fixed link, 78 lobster fishers from Borden, PEI and Cape Tormentine and Murray Corner in New Brunswick landed \$2,500,000 worth of lobster over the two-month lobster season in 1987. This accounted for 28% of the value of the lobster fishery in the Strait. Scallops from the Strait provided an overall landed value of \$1,500,000 in 1987 while the herring fishery was valued at \$400,000 (Porter Dillon, 1987).

Concerns for the fishery focused primarily on changes in the physical environment as a result of delayed ice-out. It was hypothesized that a reduction in the cross-section of the Strait could inhibit ice-out during the Spring thaw. The impacts of these changes were thought to have a negative potential effect on the life cycle of commercial species, particularly lobster. Thus any

structure introduced into the Strait with the potential to impact the marine environment was considered reason for concern to the fishery. However the impacts from a bridge were viewed as being more significant than those from a tunnel by this sector. Associated with delayed ice-out conditions and its impacts on the fishery, was a concern that the micro-climate in the area could be affected in a way that would negatively impact fruit and vegetable farming in the vicinity of the proposed fixed link (Hertzman, 1993).

(iii) Changes to the 'island way of life' – Amongst the most subjective of the areas of concern expressed during the decision-making process, was the fear that the 'island way of life' would be negatively and irrevocably altered by any form of fixed link to the mainland. Concerns for ferry workers, the fishery or farming could potentially be objectively evaluated, with mitigatory measures analyzed as to their appropriateness to offset and minimize exposure to risk. However, the threat of a diminished sense of 'islandness' was equated to a psychological violation for which no compromise was acceptable (Weale, 1990). It was, in effect, a philosophical opposition that reflected the need to protect a core value which some felt would be compromised by a physical link to the mainland. The lack of support by PEI for the Free Trade Agreement between Canada and the United States at this time is also consistent with this view, as advocated by those expressing a concern over the loss of 'islandness'.

Citing concerns about quality of life issues, some Islanders expressed additional fears arising from the potential consequences of a fixed link such as uncontrolled development due to easy access to the Island. Such fears included economic concerns over a rising tax base due to increases in property values and a social element over increases in foreign ownership and 'absentee' land owners and the potential for increases in crime as the rural nature of the Island became threatened. Yet other Islanders feared that a greater threat to the island way of life cherished by all was the lack of opportunities that the absence of a reliable and easily accessible transportation route implied (Dowling *et al.*, 1990). Responding to issues categorized under this

heading proved a challenge throughout the decision-making process due to the highly emotional and subjective nature of the concerns being raised under this category of issues.

(iv) Issues surrounding transportation-related impacts – As an island province, the importance attributed to an efficient and reliable transportation route for getting people and goods onto and off of Prince Edward Island has been a subject of ongoing discussion for over two centuries. By 1985, when the subject of a fixed link was again brought onto the public policy agenda, two ferry routes provided service to the Island. Year-round access between Cape Tormentine, NB and Borden, PEI was provided by Marine Atlantic, a federal Crown corporation under contract with Transport Canada.<sup>17</sup> No less than 12 scheduled crossings were made each day during the fall and winter months, increasing to 18 crossings per day during spring and summer. The average time for crossing the 13-kilometre distance by ferry was 40 minutes. Additional time spent queuing to get on the ferry was reported to range from a minimum of one hour to six hours for commercial traffic (APTC, 1990).

In 1989, Marine Atlantic ferries made 12,371 crossings, carrying 1,900,000 passengers, 686,500 passenger cars and 153,000 commercial vehicles (Marine Atlantic, 1990). During the non-winter months, additional ferry service was provided between Wood Islands, PEI and Caribou, NS by Cumberland Ferries Ltd., a privately owned and operated business. The crossing time for this service was approximately 1½ hours, with queuing times in excess of those cited for the Marine Atlantic service. As a result, usage was reported to have declined from 562,100 passengers in 1985 to 263,293 in 1991 (Jacques Whitford Environmental, 1993).

Coupled with concerns raised over the efficiency of the existing marine transportation issue, were the impacts of the potential for increased vehicular traffic on the Island's system of

---

<sup>17</sup> Marine Atlantic operated two ferries during the Fall and Winter, capable of carrying a total of 415 passenger cars, 60 tractor trailers and 41 rail cars. Both of these ferries, the MV *Abegweit* and MV *John Hamilton Gray* possessed ice-breaking capabilities. During the Spring and Summer, two additional ferries without ice-breaking capabilities were brought into service. These were the MV *Vacationland* and MV *Holiday Island*, capable of carrying a total of 310 passenger cars and 32 tractor trailers.



highways. Due to the closure of the railway on PEI in 1984, land-based transportation was entirely dependent on the network of roads. As such, adequate maintenance of the highway system played a crucial role in the well-being of the provincial economy. It was thus considered vital to address the potential consequences arising from any additional stress on the province's highways due to the increased accessibility which a fixed link might provide. This was an obvious concern for the Government of PEI, but was also a major issue requiring attention for the Government of NB.

(v) Tourism and recreation issues – Tourism and recreation was vital to the island's economy, second only to agriculture in terms of contribution to the provincial GDP in 1989. As such, the potential benefits and costs associated with easy access to the province were areas of interest for Islanders. In 1989, tourism contributed \$108,300,000 to the provincial economy with visitors typically exceeding the local population of approximately 130,000 by a factor of 6 during the period mid-May to mid-October (PEI Tourism Industry Association, 1990). On the plus side, an anticipated increase in 25% of visitors to the Island was predicted in the first year after completion of a fixed link, followed by 2% increases in subsequent years. This was seen as a means of fostering the growth of the tourism industry on the Island and contributing to a reduction in the 16.6% regionally averaged unemployment rate (APEC, 1992).

In recognition of the carrying capacity of the island and to minimize the negative impacts of the increase in visitorship, it was important for development to encourage a wider distribution of visitors across the province, both in time and space. Additional issues of concern included ground water availability, sewage discharge, damages to the system of dunes and beaches and loss of natural habitat to provide the space for infrastructural upgrades (including roads) and increased accommodation.

(vi) Bridge design, construction and operation – Questions relating to the type of fixed link designed to span the Strait were also extensively raised and debated during the early stages of

the decision-making process.<sup>18</sup> Design concerns centred around the precedent-setting nature of the project due to the fact that structures of the magnitude envisaged had not previously been constructed in locations exhibiting similar ice, wind and marine environmental conditions. Due to a lack of suitable geo-technical data, the additional cost estimates involved in obtaining such information<sup>19</sup> and failure to meet prescribed technical specifications, the tunnel solution was rejected by PWC in September 1988. With regards to a bridge, there were no existing building codes to guide engineers on how to meet the safety and longevity requirements specified by PWC. Vehicle loads, wind loads, ice loads, ship collision loads and seismic loads all had to be calculated from first principles, using the laws of physics, known strengths of materials selected and estimates of the forces to which the structure would be subjected (Ghali *et al.*, 1996). As such, the challenges to be resolved before a decision should be made included careful consideration of the impacts of the surrounding environment on the structure as well as the impacts of the structure on the biophysical and socio-economic environment of the area.

Based on the concerns documented, the actors in the policy network coalescing around the fixed link debate focused their attention primarily around the impacts (positive and negative) of the structure on the environment. For the most part, there appeared to be a reliance and faith placed on engineering expertise in both the private sector and PWC to ensure the impacts of the environment on the structure as designed would be appropriately addressed.

Construction and operational concerns included potential impacts on the terrestrial and marine related ecosystem components in the study area. A total of 15 biophysical components were identified as 'valued' in the environmental assessment scoping document prepared for the

---

<sup>18</sup> In its 1987 call for expressions of interest, PWC defined two acceptable structural forms and specified the length of the main structure, the approach roads as well as a requirement for the useful life of 100 year for the span. Interested developers were told that either a high-level bridge structure from shore to shore across the Northumberland Strait (with provision for a navigation channel) or a tunnel for vehicular traffic would be considered. The closure of the railway on PEI precluded a railcar tunnel option.

<sup>19</sup> According to PWC, an estimated \$50 million would have been required to carry out necessary geotechnical baseline work in order to finalize the engineering specifications of a tunnel.

project. These included rare plants, birds, ground and marine water quality and marine organisms such as bivalves, crustaceans, fish and marine mammals (P. Lane and Associates *et al.*, 1988). Construction and operation-related concerns also focused on how many and who would have preference for jobs, compensation packages for fish and ferry workers should the project proceed and the issue of financing, particularly how tolls would be set.

With respect to assessing the impacts of construction and operation of the fixed link on the socio-economic environment, 26 valued components were identified in the above-referenced scoping document. These included aspects of transportation, commercial activities, quality of life parameters, infrastructural demands, government services, local community and land use.

(vii) Concerns over the decision-making process – Consistent with the policy context of the time, public policy decision-making occurred primarily within government departments, with the responsibility for decisions resting with the elected federal and provincial officials of government, namely the respective Cabinets. Furthermore, the environmental assessment of projects requiring governmental approval was subject to an interpretation of the significance of the impacts by the responsible Minister. Guidelines pertaining to matters over which the federal government had jurisdiction were outlined in the 1984 *Environmental Assessment and Review Process (EARP) Guidelines Order*. Thus, the concerns raised during the decision-making process were related to the expectation for the process to be one in which politicians and bureaucrats looked after public interests ahead of developers and special interest groups (Brown, 1993).

An apparent flaw that was detected early in the process was the perceived conflict of interest relating to the dual role of PWC as guardian of the process and proponent of the project. An equivalent conflict was perceived on the part of the Minister of Environment, who, in his capacity as Minister responsible for PEI, was an open supporter of the fixed link project.<sup>20</sup> Actors in the

---

<sup>20</sup> Recognizing the perception of conflict, Tom McMillan requested to be devolved of his environmental responsibilities. The request was denied by the Prime Minister due to its potential to set a precedent.

policy network also expressed concerns over the timing and mandate of the Public review panel. The process was viewed by many as too late to evaluate all available options and too early to address the impacts of a specific project. Lack of access to full versions of the PWC-commissioned reports was also criticized as concern grew over the absence of objective review of claims and counter-claims brought forward by opponents and proponents of the fixed link.<sup>21</sup> Similarly, the perceived role of the media (local, regional and national) by some network actors as biased or at best, unquestioning recorder of events, as opposed to purveyor of the truth, did little to allay concerns over accuracy, fairness and transparency.

The role of the PEI provincial government in the process, particularly that played by its Premier, was also an issue for some members of the policy network. Some actors viewed the Premier's apparent public neutrality prior to the plebiscite as an abdication of his responsibilities while others viewed the adopted strategies of the PEI government as self-serving and politically motivated. Finally, the ability of some members of the review panel to meet the conditions specified in the *EARP Guidelines Order* as to their objectivity was also a significant concern relating to the process. This concern was raised by representatives from a cross-section of policy actors interviewed for this study, including politicians, bureaucrats and members of the review panel itself.

#### **4.3.3 The Fixed Link Policy Network**

Having identified the major areas of concern surrounding the fixed link policy problem, an identification of the policy actors with sufficient interest to commit time and resources (human, financial and ideational) to affect the decision-making process can be undertaken. The clusters of policy actors sharing a diverse range of interests in the Maritime's coastal and ocean policy domain were previously identified in Table 4, Chapter 2.

---

<sup>21</sup> In her ruling in the case, *Friends of the Island v Canada (Minister of Public Works)*, Madame Justice Barbara Reed expressed concern over the lack of transparency on the part of PWC with respect to the public sharing of documents in its possession. Note above at 8.

Table 8 provides the listing of policy actors from each of the identified categories comprising the fixed link policy network. It also indicates representatives from these categories who participated in the decision-making process and from whom data for the case study analysis was collected.

**Table 8. Policy Network – the Fixed Link Decision-Making Process**

<b>Category of Actors</b>	<b>Actors</b>	<b>Number of Representatives from whom data were collected (* = written data only)</b>
<b>Politicians</b>	<ul style="list-style-type: none"> <li>• Federal</li> <li>• Provincial</li> </ul>	3 Cabinet Ministers 1 Advisor to Cabinet Minister 3 Members of Parliament 2 Premiers 1 Advisor to Premier 3 Cabinet Ministers
<b>Federal bureaucracy</b>	<ul style="list-style-type: none"> <li>• Public Works Canada</li> <li>• FEARO</li> <li>• ACOA</li> </ul>	2 Senior Bureaucrats 2 Senior Bureaucrats 1 Senior Bureaucrat
<b>FEARO review panel</b>	<ul style="list-style-type: none"> <li>• Panel Members</li> </ul>	2 NB Representatives 2 PEI Representatives 1 FEARO Representative
<b>Non-governmental organizations</b>	<ul style="list-style-type: none"> <li>• Friend of the Island</li> <li>• Islanders for a Better Tomorrow</li> </ul>	4 Representatives 3 Representatives
<b>Labour organizations</b>	<ul style="list-style-type: none"> <li>• Canadian Brotherhood of Railway Transport and General Workers</li> <li>• Maritimes Fishermen's Union</li> <li>• National Farmers' Union</li> <li>• PEI Federation of Labour</li> </ul>	1 Representative*  1 Representative*  1 Representative 2 Representatives
<b>Technical experts</b>	<ul style="list-style-type: none"> <li>• Advisors to Panel</li> <li>• Advisor to PEI Premier</li> <li>• Advisor to NGO</li> <li>• Ice Committee</li> </ul>	3 advisors from academia 1 advisor from academia 1 advisor from academia 1 advisor from federal government
<b>Business associations</b>	<ul style="list-style-type: none"> <li>• PEI Tourism Industry Association</li> <li>• Atlantic Provinces Transportation Commission</li> <li>• PEI Fishermen's Association</li> </ul>	1 Representative  1 Representative*  1 Representative
<b>Private sector companies</b>	<ul style="list-style-type: none"> <li>• Strait Crossing Inc.</li> <li>• Marine Atlantic</li> <li>• Cavendish Farms</li> </ul>	1 Representative* 1 Representative* 1 Representative
<b>No. of categories = 8</b>	No. of actors = 22	No. of representatives = 47

In the case of the fixed link decision-making process, given the existing policy environment and the major areas of concern, the eight categories of policy actors who coalesced to form the fixed link policy network can be explained. These included: politicians (at the federal and provincial levels of government); the federal bureaucracy, particularly PWC as the lead department; the FEARO review panel; civil society in the form of two non-governmental organizations; labour organizations; technical experts; business organizations; and companies, including the operator of the Marine Atlantic ferry service. These actors were identified based on their mandated responsibilities, potential to affect or be affected by the decision outcome and/or their involvement at one or more of the four decision-making checkpoints associated with the process.

#### **4.4 Identifying Influence in the Policy Network**

Policy networks are characterized by the policy analytical capacity and the power of their actors, who are attempting to influence public policy in a manner that translates deep core normative beliefs into secondary, operational-level decisions. By examining the characteristics and relationship among the actors identified the fixed link decision-making process, the analysis focuses on increasing the level of understanding surrounding each actor's ability to ultimately influence the decision. To achieve the objectives of the study, in terms of assessing, by whom, why and how the decision-making process was affected, the analysis was divided as follow:

- (i) Generic characterization of actors in the policy network, in terms of resources, policy analytic capacity and core values; and,
- (ii) Behaviour of actors in the policy network during the fixed link policy process.

##### **4.4.1 Characterization of Actors**

The characterization of actors in the fixed link policy network followed both a structuralist (Coleman and Skogstad, 1990) and a learning approach (Lindquist, 1992). Following the

structuralist model, the relative strength and power of each actor in the network were assessed, in terms of its resources and analytical capacity to shape policy outcomes. Using the learning approach, actors were characterized based on an identification of ideas and values circulating within the policy network. The alignment of actors within the network with certain ideas and values provided insights into each actor's behaviour and allowed for a determination as to when and why actors might clash or coalesce.

#### **4.4.1.1 Structural Analysis of Policy Actors**

In the first subset of data collected, actors were described based on their mandated authority, goals, organizational culture, constituencies and resource capacity (Table 9). As described in Chapter 3, the data for Table 9 was provided by actors identifying their authority on the basis of seven alternatives, i.e., elected by the public; legislated; appointed by government; voluntary; solicited or unsolicited technical expertise; derived from its members; or, derived from its shareholders/owners. Attributes relating to the goals of the actors were identified as public welfare; job security; conservation; economic *raison d'être*; or cultural preservation. Organizational culture was limited to a choice from two options, hierarchical or horizontal. In reporting on whom their major constituency was, actors selected from government (federal or provincial); the public; shareholders; members; the review panel; or 'other'. In assessing resource capacity, actors selected from a choice of low, medium or high, where low represented a volunteer group with 0-4 paid staff; medium represented a small staff but able to draw on resources of a larger organization; and high represented a large organization with multiple resources, such as a government department.

Table 9. Characterization of Actors in the Fixed Link Policy Network

Policy Actors	Authority for Mandate	Goals	Organization Culture	Major Constituency	Resource Capacity
Politicians					
· Federal (Cabinet)	Elected	Public Welfare	Hierarchical	Government	High
· Federal (Members of Parliament)	Elected	Public Welfare	Hierarchical	Public	Low/Medium
· Provincial (Cabinet)	Elected	Public Welfare	Hierarchical	Government	Medium/High
Federal bureaucracy	Legislated	Public Welfare	Hierarchical	Government	High
FEARO Review Panel	Appointed	Public Welfare	Horizontal	Federal Government	Medium
NGOs					
· Friends of the Island	Voluntary	Conservation	Horizontal	Public	Low
· Islanders for a Better Tomorrow	Voluntary	Economic	Horizontal	Public	Low/Medium
Labour Organizations	Membership	Job Security	Horizontal	Members	Low/Medium
Technical Experts					
· To panel	Technical	Economic	Horizontal	FEARO Panel	Medium
· To Premier	Technical	Economic	Horizontal	Premier	Medium
· To NGO	Technical	Conservation	Horizontal	NGO/Public	Medium
· To PWC	Technical	Economic	Horizontal	Government	High
Business Associations	Membership	Economic	Horizontal	Members	Low/Medium
Companies					
· Private sector	Ownership	Economic	Hierarchical	Shareholders	Medium
· Crown Corporation	Legislated	Public Welfare	Hierarchical	Government	Medium



Politicians and Bureaucrats - Federal and provincial government actors from the political and bureaucratic level participated in public policy decision-making due to their elected and legislative authorities to serve the public. The *Constitution Act, 1867*, provides the authority for the Parliament of Canada to make laws ensuring peace, order and good government<sup>22</sup> as well as specifies the exclusive powers of provincial legislatures.<sup>23</sup>

In a highly hierarchical organizational culture, federal departments and their Ministers work to ensure the authorities granted under federal laws are exercised. Due to the centralized authority given to the federal Cabinet in Canada, Ministers possessed a high resource capacity to make decisions and influence policy-level decision-making (Gibbins, 1999b). Additionally, the financial, technical and human resource capacity available to federal bureaucracies serve to support the decision-making capacity of Ministers responsible for making policy-level decisions.

Federal Members of Parliament from New Brunswick and Nova Scotia, whose ridings covered areas potentially-affected by the fixed link decision, had considerably less resources available to influence the process than members of the federal Cabinet. Members of Parliament representing NB ridings in the policy network were members of the official Opposition. The Member of Parliament from Nova Scotia, although a member of the ruling Progressive Conservative government, was not a member of the federal Cabinet. Despite these limitations, federal Members of Parliament played an identifiable role in the policy network and were direct, active participants during the public review process. In the case of New Brunswick, Liberal Members of Parliament were also able to influence their provincial Liberal colleagues, who formed the Government of NB.

Provincial politicians who participated as a policy actor in the fixed link decision-making process were drawn from those forming the governments of Prince Edward Island and New Brunswick. These Cabinet-level politicians shared resource capacities that were ranked lower

---

<sup>22</sup> *Constitution Act, 1867*, s. 91.

<sup>23</sup> *Ibid.*, s. 92.

than their federal counterparts because the level of decision-making authority with respect to the fixed link ultimately rested with the federal government. However, even with an acknowledged lower level of resource capacity, provincial Premiers and Ministers possessed significant abilities to affect the outcome of the decision-making process. One of the principal reasons for this is the constitutional division of powers between the federal government and the provinces, as specified in sections 91 and 92 respectively of the *Constitution Act, 1867*. Associated with the administrative implementation of the Act, is the expectation by provinces to exert considerable political influence over domestic federal decisions that directly affect the provinces, due to Canada's subscription to co-operative federalism (Russell, 1985; Hogg, 1997).

As policy actors, federal departments played an important role in the policy network, providing financial, technical and human resource capabilities to shape the decision outcome. The lead agency for the proposed project, PWC, played the most significant role among federal bureaucracies and possessed a high level of resource capacity. Other departments such as Environment Canada, Department of Fisheries and Oceans, the Atlantic Canada Opportunities Agency and the Federal Environmental Assessment and Review Office possessed varying degrees of policy analytical capacity and participated in the process as a result of their specific mandates. Provincial departments were not significant actors in the policy network. However, they were available as participants on a number of committees established by the federal government, to shepherd the process to completion. In all cases, bureaucracies were characterized as having a legislated mandate with a principal goal to serve the public. The major constituency for departments was identified as the government.

FEARO public review panel - As a policy actor, the six-member FEARO public review panel participated in the policy network principally during the public review decision-making checkpoint. The Panel received its mandate from, and was appointed by, the federal Minister of Environment, as specified in the 1984 *EARP Guidelines Order*. The Panel was comprised of two members of the public from PEI, two from NB, one from Nova Scotia (NS). As specified in section 23 (1) of the

Guidelines Order, its sixth member chaired the panel - a senior level employee of the federal Office responsible for facilitating federally requested environmental assessments. Apart from the Chair of the panel, the members were privately contracted by the federal government to serve on the panel. According to the *EARP Guidelines Order* (section 22), panel members were drawn from the public based on their special knowledge and experience with respect to the proposal, a lack of bias and absence of any potential conflict of interest relative to the proposal, and freedom from any political influence. For the fixed link panel, appointments were such that the panel members provided regional representation, engineering, fisheries, oceanography and marine ecology-related expertise and experiential Island knowledge. Potential members were recommended to the federal Minister of Environment and their appointments were dependent on agreement from both levels of government.

While the panel's deliberations and their criteria for decision-making were secretive, the public input provided to it during the hearings and the panel's final report to the Minister of PWC were available for public examination. The resource capacity of the Panel was substantial due to the expertise of its members, its ability to contract independent technical experts, as well as draw on a fixed amount of financial, human and technical resources of the federal government. As an advisory body to the federal Minister responsible for making the decision on whether or not to proceed with the fixed link, the panel lacked decision-making authority but possessed the potential to influence the process.

**Non-Governmental Organizations** - Two non-governmental organizations played a significant role in the fixed link policy network, particularly due to their opposing views with respect to the decision to be made. In both cases, these policy actors were most active following the call for a plebiscite in January 1988 by the Premier of PEI and sought to motivate public opinion in support of their goals, which they each felt would be beneficial to the public welfare.

Friends of the Island consisted of members who were against the loss of the ferry service although the reason for holding that view differed considerably among its membership. For some,

the construction of a fixed link presented unacceptable levels of environmental risks as well as too great an economic burden for certain sectors to bear, should these risks prove to be unmanageable. Supporters of this view included environmental scientists, representatives from the fishing sector and small-scale farming interests. For others, membership in Friends of the Island was solely to protect jobs provided to ferry workers. As such, the union representing these workers proved to be an active member of the organization, providing a large share of its limited financial resources. Other members of the Friends of the Island were concerned with losing the ferry service because of the social and cultural changes which alternative service options might cause, including the loss of a cherished way of life for both themselves and their children.

As a newly created policy actor comprised of a diverse array of interests, the Friends of the Island possessed minimal financial and policy analytical resource capacity. Nonetheless, with the exception of the first decision-making checkpoint (where limited scope was available for those outside of government to influence the process), the group's potential to affect the decision-making process was evident at all subsequent decision-making checkpoints. In fact, it was directly as a result of the activities of Friends of the Island that the decision-making process was extended to include the fourth and final decision-making checkpoint, identified earlier as the court challenges and rulings.

To counter the perception that only those who were opposed to the loss of the ferry service were "friends of the island", a second collective of interests was formed to provide a unified voice for those who supported the fixed link (personal communication, Islanders for a Better Tomorrow). Calling itself the 'Islanders for a Better Tomorrow', this group consisted of representatives interested in improving access to and from the Island. Reasons for doing so focused primarily on the direct and indirect economic advantages that a more reliable and efficient transportation alternative was argued to provide for Islanders. Due to its economic focus, members in the group included Chambers of Commerce, trucking businesses, large-scale farming and food-processing interests and a significant component of the tourism sector. However, supporters also included

the demographic in the population at large who equated the fixed link as a more reliable transportation route that could provide current and future opportunities for increased employment for their children.

As a counter-balance to the opposition voiced by the Friends of the Island, Islanders for a Better Tomorrow possessed considerable potential to influence the decision-making process. Additionally, given the economic focus of the group, its supporters were able to provide it with a level of financial and technical resources that exceeded those available to the Friends of the Island. However, in contrast to this latter organization, the Islanders for a Better Tomorrow limited its active participation in the process to the decision-making checkpoints associated with the plebiscite and the public review. It is however important to note that at least one of its members was involved in providing technical advice to PWC at the feasibility stage (first checkpoint) in the decision-making process. The strategic value of being involved at this early checkpoint will be discussed subsequently.

Labour Organizations - Labour organizations proved to be an active member of the fixed link policy network. This was not a surprise, given the potential for a decision to go ahead with the fixed link to result in a loss of jobs considered significant to the local economy of Borden, PEI and Cape Tormentine, NB and the province of PEI as a whole. However, a situation that proved unusual for this policy actor arose due to the lack of solidarity among labour organizations representing the different skills of its members. This occurred because a decision to build a fixed link would lead to increased employment for the members of some labour groups while job losses were a given for the union representing the ferry workers, the Canadian Brotherhood of Railway Transport and General Workers.

Complicating the ability of the policy actor to act in a unified manner was the fact that groups on both sides of the employment issue were members of the umbrella labour organization, the PEI Federation of Labour. In part, this lack of solidarity accounted for unions on each side of the policy debate forming alliances with either the Friends of the Island or Islanders for a Better

Tomorrow so as to achieve their respective objective. As such, the active involvement of labour in the decision-making process was principally as a component of other policy actors whose objectives supported that of the unions.

As was mentioned earlier, members of the Canadian Brotherhood of Railway Transport and General Workers were the main financial contributors to the Friends of the Island, as well as being one of the major fund-raising members for this policy actor. However, despite the affiliation with the non-governmental organization, union representatives for the ferry workers did unilaterally act on their members' behalf at the plebiscite and public review stages of the decision-making checkpoint.

Technical Experts - Technical experts served as an important policy actor in the fixed link policy network. These individuals possessed considerable potential to influence the decision-making process based on their knowledge and expert judgement. Six technical experts were contracted to assist the Public review panel in appreciating the significance of the different aspects of the information being considered by the panel. In addition, the Premier of PEI contracted two experts from academia to provide technical advice on the environmental (biophysical) impacts of a fixed link. Groups such as the Friends of the Island and the PEI Fishermen's Association also sought technical advice from scientists supportive of their conservation goal at both the public review and court challenges decision-making checkpoints. Finally, the federal government looked to technical experts from both inside and outside of government to assess delayed ice-out issues in response to the concerns raised by the Public review panel.

The majority of technical experts participating during the public review decision-making checkpoint were affiliated with academia while private sector consultants were generally used to provide technical input during the feasibility phase of the decision-making process. Technical experts from academia were considered by politicians to be more objective and have less of a perceived bias or conflict of interest. This perception is significant in terms of soliciting advice to

assist in public policy decision-making, as opposed to contracting for a technical service, as was the case in the feasibility studies. With one exception, the immediate goal of the representatives was identified as economic, given the contractual nature of the advice provided. The exception noted related to technical experts who provided their services to the Friends of the Island, out of a declared sense of protecting the environment and as such, the public welfare. However, even those technical experts who recognized the financial benefits associated with their involvement, cited the sharing of their knowledge in the hopes of leading to a more informed decision as an important element affecting their participation in the process.

**Corporate Membership (Business) Associations** - Similar to labour organizations, corporate membership or business associations representing the interest of their private sector members, possessed the potential to influence the decision-making process. Given the profit-making goal of this policy actor, influence exerted was generally aimed at supporting the decision to construct a fixed link. As with the majority of other non-government actors in the network, participation in the process was focused on the decision-making checkpoints associated with the plebiscite and public review. The financial, technical and human resource capacity of the actor was identified as low to medium although the resources available to some individual business members were deemed to be significantly greater than the umbrella organization.

**Companies** - The final category of policy actors in the network was the business sector. Two major actors were active in this category in the fixed link decision-making process, namely individual private sector companies and Marine Atlantic, a Crown corporation providing ferry service between Borden, PEI and Cape Tormentine, NB. Due to the constitutional commitment of the federal government to provide transportation service between PEI and the mainland, Marine Atlantic was guaranteed an operating subsidy that covered the difference between revenues generated from tolls and its operating costs. As such, the goal of the Corporation was to provide a scheduled ferry service, as stipulated by the federal government. Given the fact that the employees of Marine Atlantic would become redundant if a fixed link were to be constructed,

senior management of the Corporation argued against the fixed link during the public review process (Marine Atlantic, 1990). However, due to its publicly owned status as a Crown corporation, the ability of the corporation's management to significantly affect the process or its outcome might be questioned.

Of the private sector companies in this category of policy actors, a number expressed a vested interest in supporting a fixed link. Key among these were the major trucking companies serving PEI and the commercial farming and food processing enterprises, such as Midland Transport and Cavendish Farms, both owned by the Irving business empire of New Brunswick. The company's frozen food plant on PEI had been expanded just prior to the fixed link policy debate to process approximately 100 million pounds of potatoes. Thus, the requirement of an economically-efficient and reliable transportation route was considered essential by Irving to move the product in a cost-effective manner to both national and international markets. The support of the business sector, particularly companies such as those owned by Irving, was important to the policy debate, given the economic impact of this business owner in the region and on PEI in particular.

To illustrate the significance of company's arguments, one of its facilities, the New Annan PEI frozen food plant processing peas and potatoes, was used as an example. This plant employed approximately the same number of workers as the Marine Atlantic PEI ferry service and contributed in excess of \$40 million annually to the provincial economy. In its submission to the FEARO review panel, the company detailed additional operating costs of one million dollars annually, as a result of not having ready access to the mainland (Mayer, 1990). These costs related to higher freight costs, higher costs for supplies and finished goods inventory requirements, higher materials cost, especially for construction, higher labour costs from mainland contractors, higher farm supplies costs and missed opportunities leading to customer service problems. In general, companies located on PEI, specifically those manufacturing products for



export, argued that the fixed link was vital to the future competitiveness of businesses on the Island and was a significant factor affecting profitability (FEARO, 1990).

#### **4.4.1.2 Analysis of Core Values**

The second subset of data characterizing policy actors focused on gaining insight into the core values and preferences held by the actors in the network. Using a learning approach,<sup>24</sup> this was accomplished by ascertaining the degree of importance each actor assigned to key disciplinary attributes. These attributes measured the degree of importance policy actors assigned to areas they considered critical for pursuing their core values and objectives. The categories of disciplinary attributes ranked were the same as those used to further subdivide the issues of concern in Appendix 2, and included environmental, social, economic, ethical, political, legal and institutional indicators.

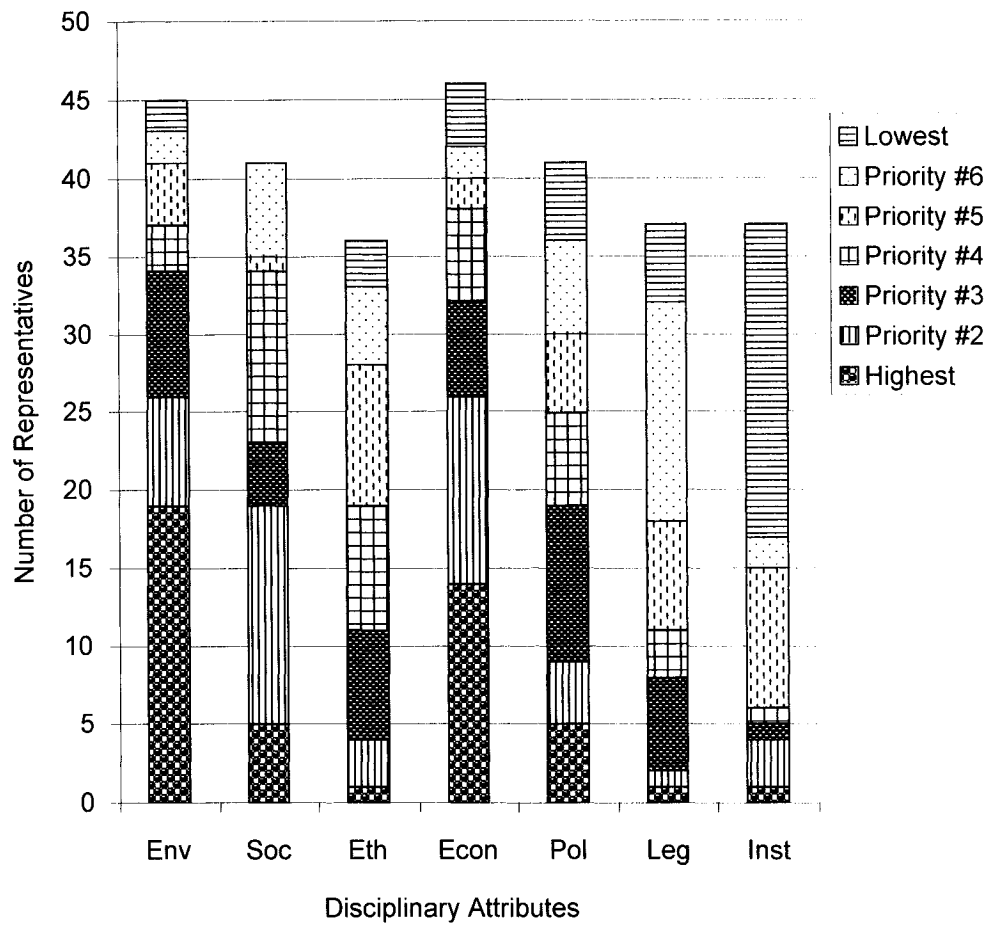
For each of the disciplinary areas, actors were asked to identify and elaborate on the areas of interest they would focus on if they were in a hypothetical policy debate in which a decision affecting coastal and ocean use was to be made. Actors were further asked to provide an overall assessment of the degree of importance they would assign to each of the attributes with respect to policy decisions affecting coastal and ocean use, as prompted for in the interview guide provided in Appendix 1.

Figures 9A and 9B illustrate the degree of importance, in terms of pursuing their core values, which were assigned by the policy actors to each disciplinary attribute. In Figure 9A, the rankings provided for each disciplinary attribute by the representatives are shown. As can be seen in this illustration, the priority levels assigned to the same attribute by the different representatives ranged from the highest (Priority #1) to the lowest (Priority #7), for all attributes except the social attribute, for which no actor ranked it as having the lowest priority.

---

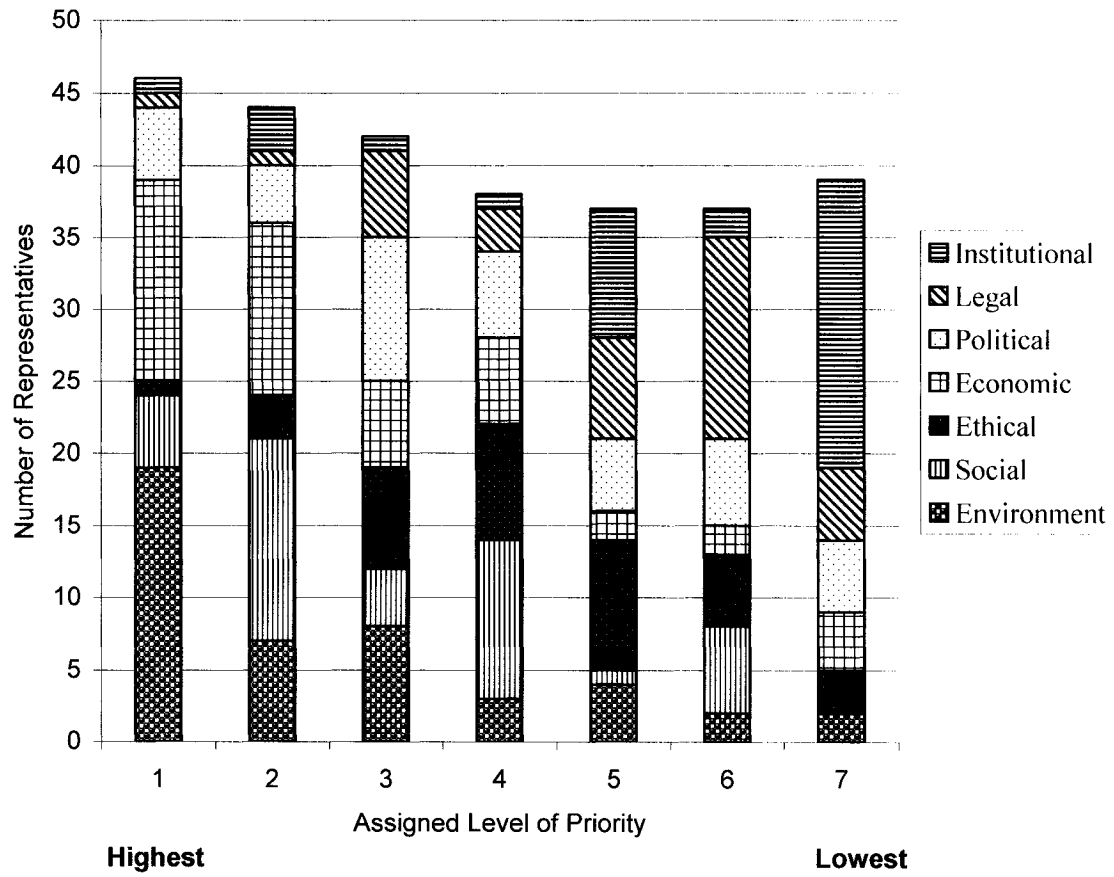
<sup>24</sup> This approach focused on assessing the values and ideas circulating within a policy network, followed by a determination as to which actors subscribed to them (Lindquist, 1992).

**Figure 9A. Priority Ranking Assigned to Same Disciplinary Attribute**



<b>Env</b> = Environment	<b>Soc</b> = Social	<b>Eth</b> = Ethical	<b>Econ</b> = Economic
<b>Pol</b> = Political	<b>Leg</b> = Legal	<b>Inst</b> = Institutional	

Figure 9B. Disciplinary Attributes Ranked by Priority Level



In Figure 9A, the broad range in degree of importance for the same attribute indicated the significant difference in core values among the different actors, as measured by the degree of importance assigned to the disciplinary attributes.

Figure 9B presents the same data analyzed in terms of the full spectrum of disciplinary attributes receiving the same priority level by the representatives who were interviewed for the study. As shown in the diagram, the environmental disciplinary attribute received the highest level of importance from 42 percent of all participants interviewed, followed by the economic attribute, which was ranked highest by 30 percent of the respondents. In contrast, the majority of respondents (54 percent) ranked the institutional disciplinary attribute as having the lowest priority, regardless of the category of policy actor to which they belonged. Consistent with Figure 9A, the data shown in Figure 9B also illustrates graphically the diversity among policy actors in terms of the degree of importance assigned to the seven disciplinary attributes which were used to gauge underlying core values.

To obtain a comparison of the degree of importance each category of policy actors attached to each of the disciplinary attributes, the rankings provided by the representatives in each category were weighted across the disciplines. The results of this analysis is presented in Appendix 3 in tabular form while Figure 10 provides graphic illustrations, characterizing the category of actors with respect to the ability of each attribute to realize their core values.

As illustrated in Figures 10a and 10b, federal and provincial politicians identified political and economic attributes among the top two attributes essential to achieving their core values, with social impacts ranking third. Federal departments (Figure 10c), the FEARO panel (Figure 10d) and technical experts (Figure 10h) ranked the environment as having the highest degree of importance. The non-governmental organization, Islanders for a Better Tomorrow (Figure 10f), private companies (Figure 10j) and business associations (Figure 10i) ranked economic issues as the primary attribute for achieving their core values. Labour organizations (Figure 10g) ranked both economic and social attributes as equivalent in terms of having the highest degree of

importance. In contrast, Friends of the Island (Figure 10e) considered ethical issues of primary importance to achieving its core values.

**Figure 10. Weighted Ranking of Disciplinary Attributes by Category of Actors (Kite Diagram Visualization)**

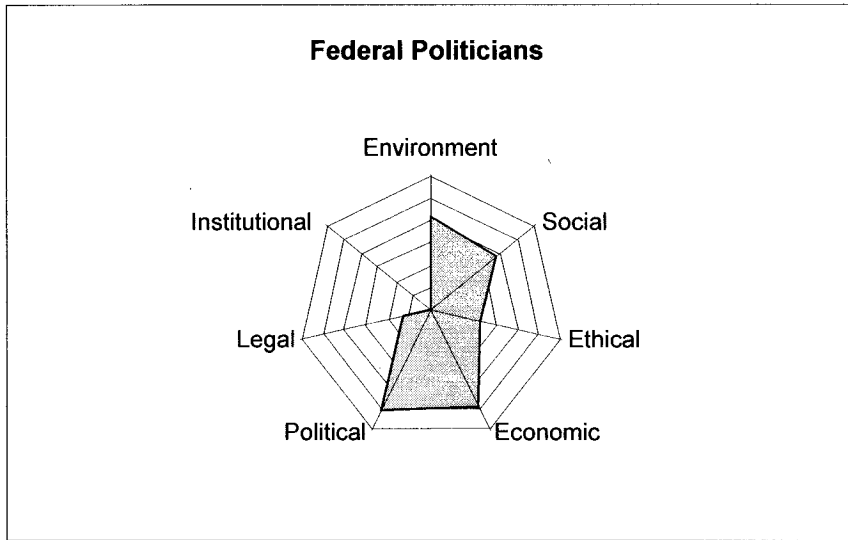


Figure 10a

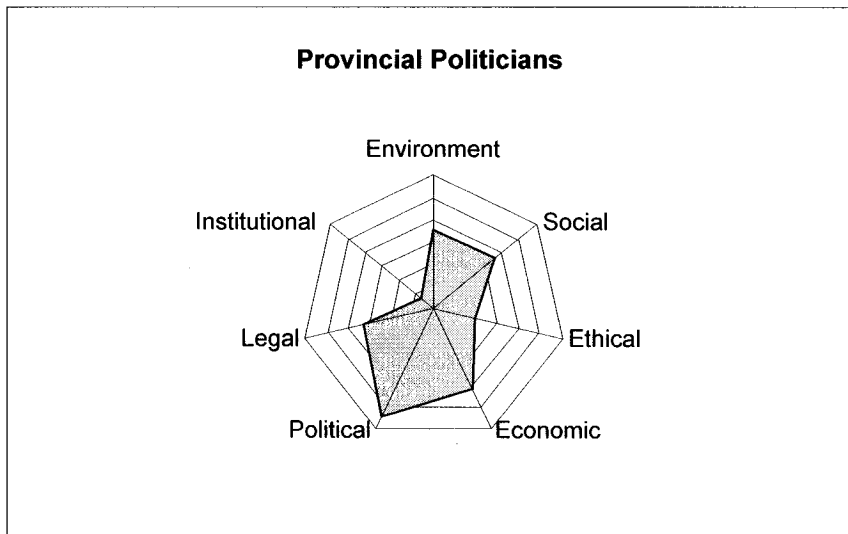


Figure 10b

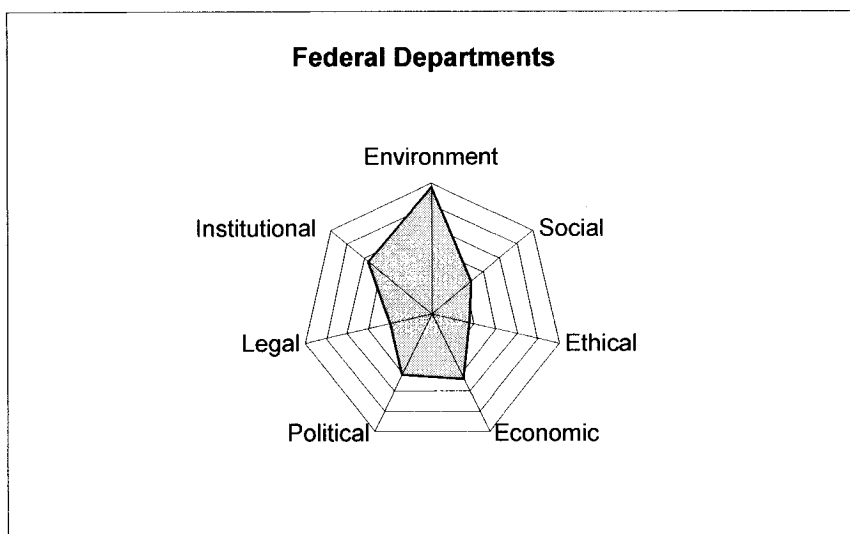


Figure 10c

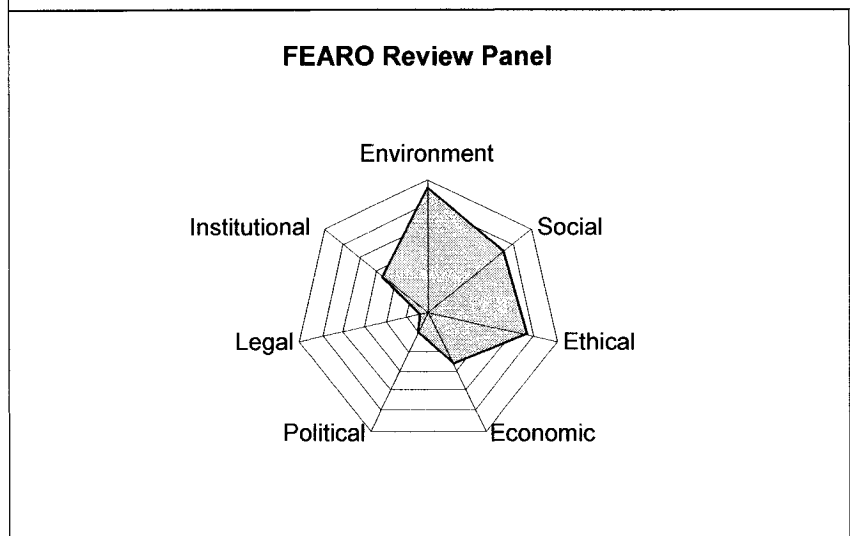


Figure 10d

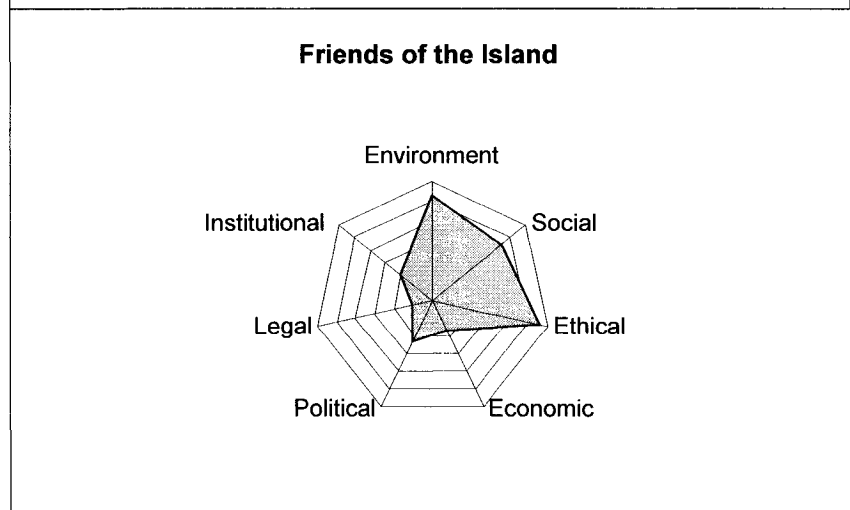
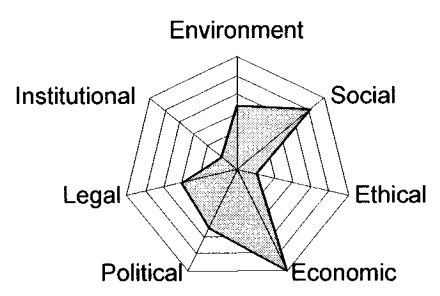


Figure 10e

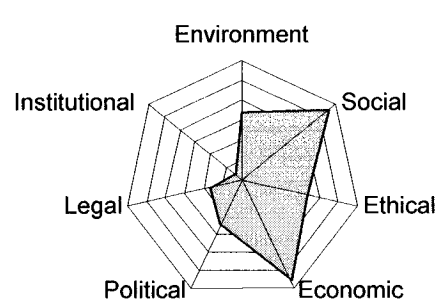
**Islanders for a Better Tomorrow**

Figure 10f



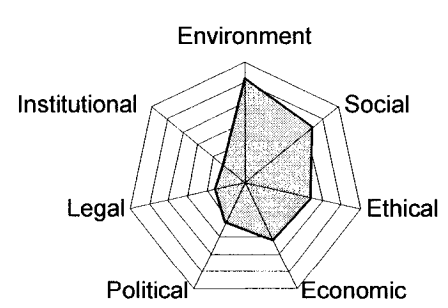
**Labour Organizations**

Figure 10g



**Technical Experts**

Figure 10h



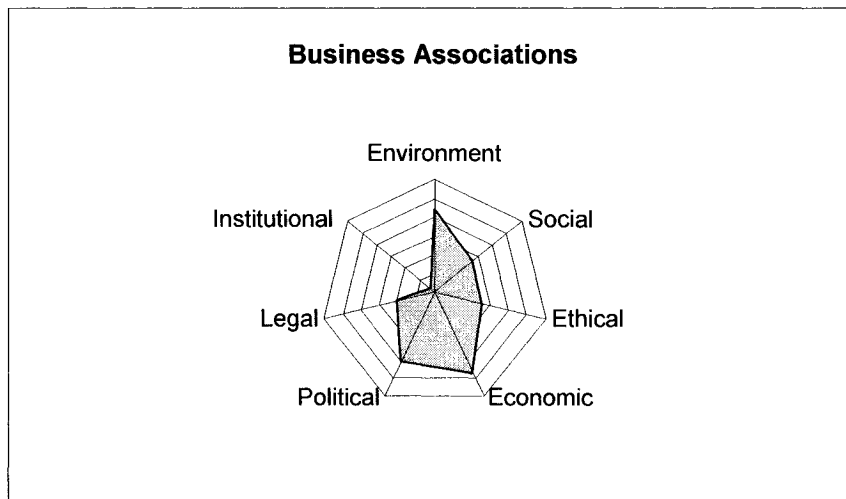


Figure 10i

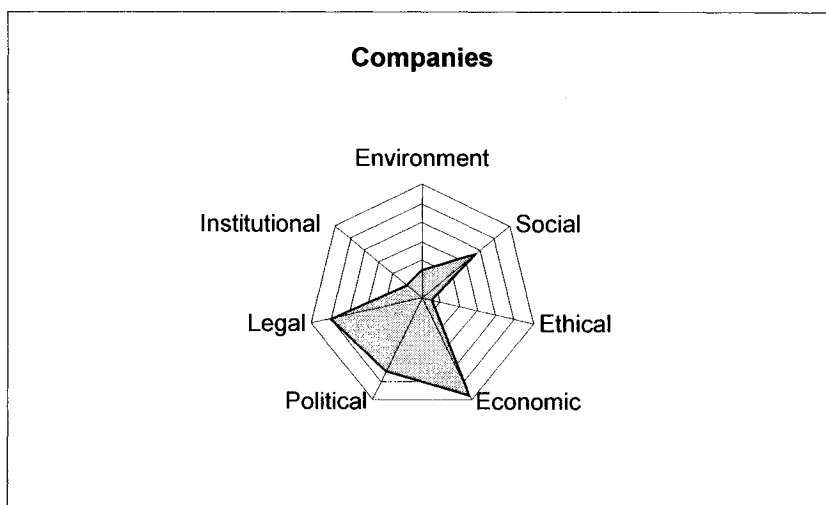


Figure 10j

All actors, with the exception of the FEARO panel, Friends of the Island and federal departments, ranked institutional arrangements as least important. Friends of the Island and the FEARO panel both ranked legal issues as least important, while federal departments gave ethical issues the lowest score.

The analysis on core values, as measured by the priority assigned to disciplinary attributes, revealed considerable similarity among the federal and provincial politicians, Islanders for a



Better Tomorrow, private sector businesses and labour organizations. These actors focused on the economic and political attributes as being essential for achieving core values, which is consistent with their mandate and motivation for participating in the policy network. The ranking of disciplinary attributes by this grouping of actors is in stark contrast to actors with a more technical mandate such as federal agencies, FEARO review panel and technical experts.

Finally, as shown above, the member of the policy network most representative of civil society, Friends of the Island, ranked ethical indicators, such as access to the process of decision-making, transparency and openness, as essential for achieving its core values. The degree of mismatch in terms of core values between this policy actor and the economically motivated actors in the network, particularly the political actors who had the authority for decision-making, allows for an explanation of the observed relationship between these actors in the network.

Additionally, given the closer match in core values between Friends of the Island, the FEARO review panel and the technical experts providing advice to the review panel, the likelihood of the potential for the Friends of the Island to influence the Panel's deliberations could be predicted. Likewise, the mismatch between the core values of the FEARO review panel and those of the political decision-makers suggested that the latter policy actor would be less likely to be receptive to the recommendations of the review panel.

Thus, the analysis of core values allows for predictions to be made and tested as to the behavior of the actors in the network relative to each other and to the degree of influence actors might have on the decision-making process and its subsequent outcome.

#### **4.4.2 Behaviour of Actors**

Having obtained information that characterized the policy actors as general players in the coastal and ocean policy domain in the Maritimes, the analysis of each actor's efforts to specifically influence the fixed link decision-making process was undertaken. The analysis sought to further assess the relationship among actors in the policy network. It also sought to determine

why actors might clash or coalesce, by focusing on the desire for expression of core values as measured by each actor's ranking of the previously analyzed disciplinary attributes. To obtain the information necessary to conduct the analysis, actors were asked to elaborate on the following key areas relating to their direct participation in the decision-making process:

- What was the prime reason for the fixed link issue gaining prominence on the public policy agenda?
- What were the most significant areas of concern?
- What was the preferred solution?

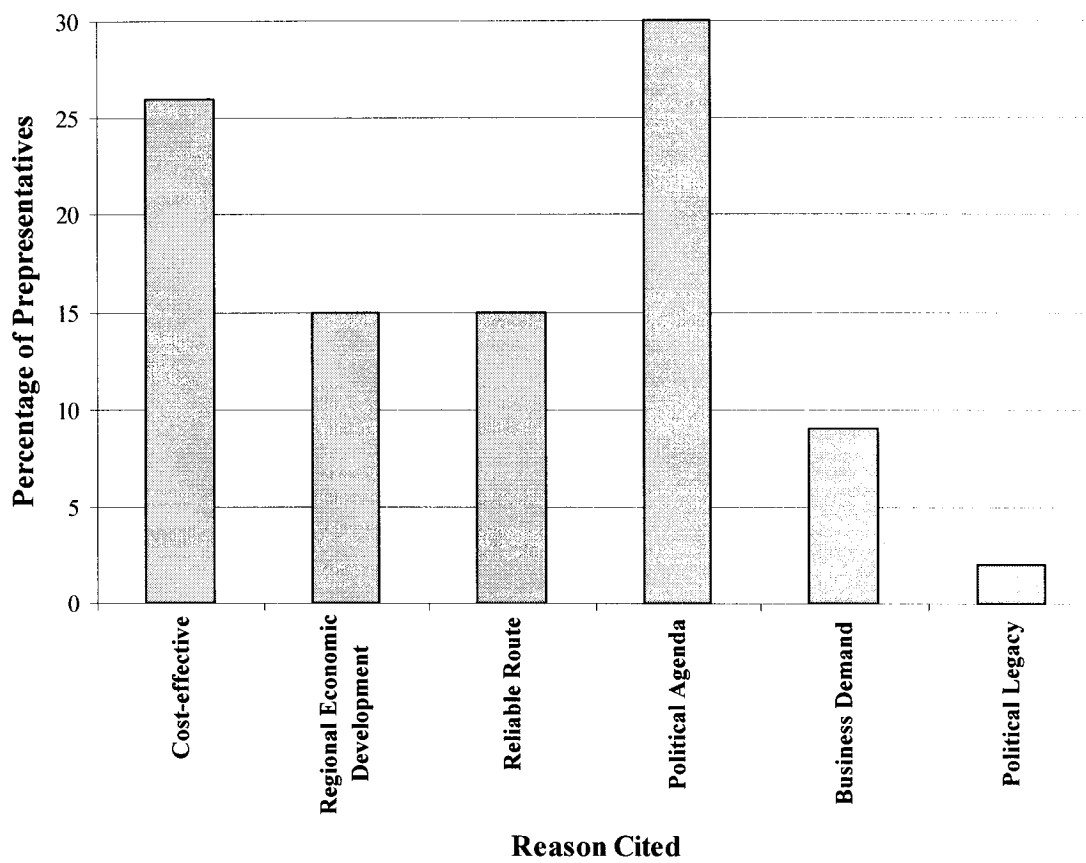
#### **4.4.2.1 Purpose for the Policy Debate**

Among the actors comprising the fixed link policy network, six distinct reasons were identified to explain why the issue of the fixed link between PEI and the mainland gained prominence in the mid-1980s. The reasons cited include: as a stimulus for regional economic development; as a cost-effective alternative to address the federal government's constitutional commitment; as a means to satisfy the federal Progressive Conservative political agenda; to provide Islanders with a reliable transportation route; to meet business demand; and, to leave a political legacy. The breakdown of all responses in terms of the frequency across all categories of actors is provided in Figure 11, while Figure 12 provides the breakdown for the principal reason(s) given by each category of policy actor.

As illustrated in Figure 11, two reasons were cited most often as the primary cause for the fixed link policy debate by all categories of actors. These were, (i) to satisfy a political agenda of the federal Progressive Conservative government (30% of all actors) and (ii) to find a more cost-effective way than the ferry service to meet the constitutional commitment of the federal government to PEI (26% of all actors). Providing Islanders with a more reliable transportation route and stimulating the regional economy were each cited by 15% of the actors as being the main reason for the policy debate. Of the remaining policy actors, 9% identified pressure from business for improved access as the primary reason for the fixed link policy debate. These

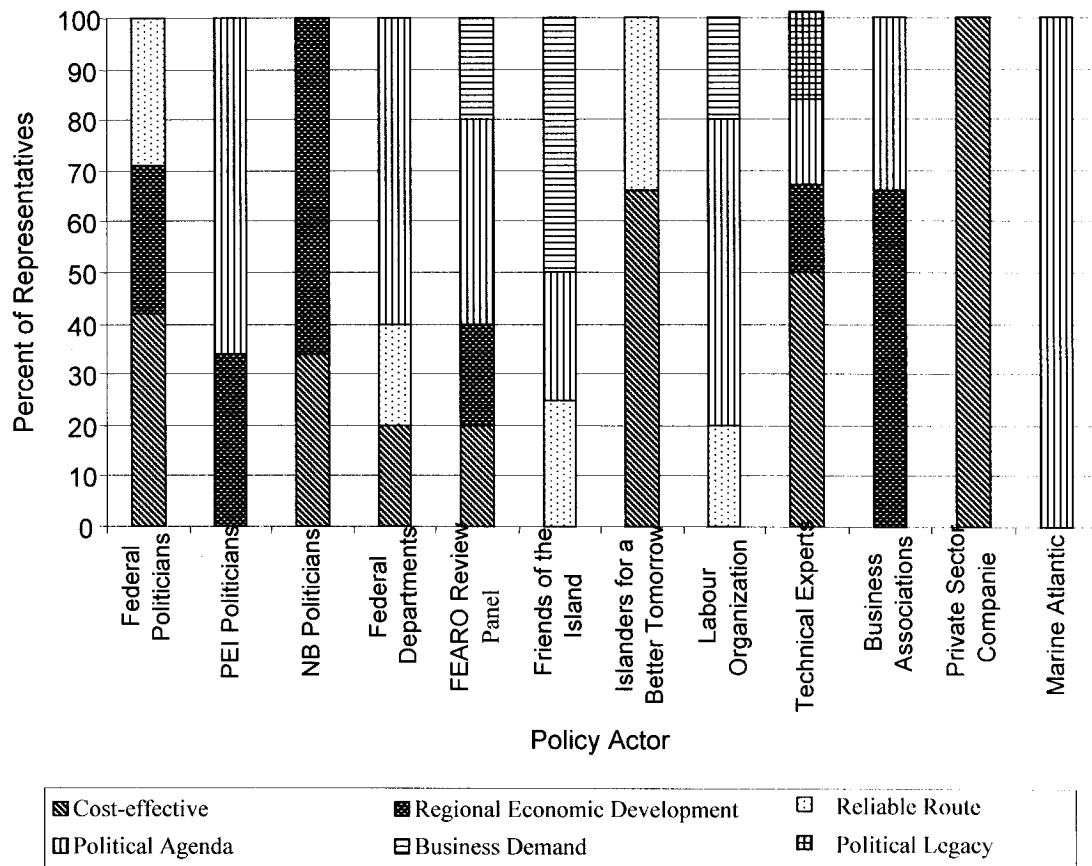
members belonged to the FEARO Review Panel, Friends of the Island and labour organizations. Finally, 2% of actors listed the desire for the Progressive Conservative government to leave a political legacy in the region as the main reason for the fixed link policy debate.

**Figure 11. Purpose for Fixed Link Policy Debate - Most Frequently Cited Reasons**



The analysis of the main reasons given for the fixed link debate by each category of policy actor is illustrated in Figure 12 and shows considerable variation.

**Figure 12. Main Reasons Cited for Fixed Link Policy Debate by Category of Actor**



For federal political actors, the cost-effectiveness of the project was the principal driver while the province of New Brunswick cited regional economic development as the main purpose for the fixed link policy debate. Neither the federal politicians nor the politicians from New Brunswick indicated satisfying a political agenda as the principal reason for initiating the debate. However, the majority of politicians from PEI considered this reason to be the principal one for the issue arising on the public policy agenda, as did Marine Atlantic, federal departments, the FEARO Review Panel and labour organizations.

It is of interest to note that the subject of the fixed link was not raised as an issue during the 1984 federal elections campaign. Given the difficulty encountered by supporters of the project, namely the Ministers of PWC and Environment, in convincing other members of Cabinet as to its merit, it was unlikely that the project was promoted as satisfying a federal Progressive Conservative political agenda. Nonetheless, the economic and fiscal policies introduced by the federal Progressive Conservative government were such that the project did in fact support the policy agenda of the government. It would not have been approved otherwise.

Friends of the Island cited private sector demand and pressure for improved access from the business community, particularly from the trucking and agri-food industries, as the principal reason for the fixed link project. This policy actor was unique in listing this reason ahead of any of the other four more frequently cited reasons. It was also explainable, given the expansion of the Cavendish Farms processing facilities just prior to the fixed link debate and the degree of leverage which the business sector could exercise in assisting the federal government to achieve its policies aimed at increased private sector involvement in stimulating the economy.

Only one policy actor, technical experts, identified the desire for the federal government to leave a political legacy in the region as the primary reason for the fixed link policy debate. This implied a degree of cynicism among this policy actor as to the motivation behind the decision. However, it also demonstrated the lack of understanding for the political risk being assumed by the federal government in promoting the fixed link, given the controversy associated with the

project during its debate phase. Tangible evidence of this risk was the political price paid by one of the principal supporters, namely the Minister of Environment, whose loss in the 1988 federal elections could be linked to his role in the fixed link debate.<sup>25</sup>

#### **4.4.2.2 Significant Areas of Concern**

The concerns raised by policy actors during the fixed link decision-making process were subdivided into seven broad areas of concern. As discussed earlier, these issues pertained to (i) the ferry service; (ii) the fishery; (iii) the 'island way of life'; (iv) transportation; (v) tourism and recreation; (vi) bridge design, construction and operation; and, (vii) process-related issues. Policy actors were asked to identify the most significant areas of concern from their perspective. The weighted scores for each actor are presented in Appendix 4 while Figure 13 provides a visual representation of the analysis of the degree of significance awarded to each area of concern by each policy actor. The analysis showed the pattern among the different categories of actors, in terms of the degree of significance each awarded to the seven major areas of concerns.

As illustrated in Figure 13, federal departments (Figure 13d), the FEARO Review Panel (figure 13e), both non-governmental organizations (Figures 13f and 13g), labour organizations (Figure 13h) and technical experts (Figure 13i) identified concerns with the fishery as having the highest priority. This is consistent with the number one or number two highest ranking these actors assigned to environment or social disciplinary attributes as being necessary to achieve their core values. Labour organizations also ranked the concerns over the ferry service as equivalent to concerns with the fishery, reflecting the high degree of importance this actor assigned to the economic disciplinary attribute, along with socially-related indicators, for achieving its core values.

Federal politicians (Figure 13a) and companies (Figure 13k) ranked transportation concerns as highest, reflecting the emphasis of these policy actors placed on cost-effectiveness as being

---

<sup>25</sup> The Minister of PWC also lost his seat following the 1988 federal elections. However, it was more difficult to attribute this loss to his role as the Minister responsible for promoting the fixed link project, since the project was not a controversial issue in the Minister's riding in Halifax, Nova Scotia.

the main purpose for support of the project and the top ranking assigned to economics and political disciplinary attributes for achieving core values.

**Figure 13. Weighted Ranking of Areas of Concern by Category of Actors (Kite Diagram Visualization)**

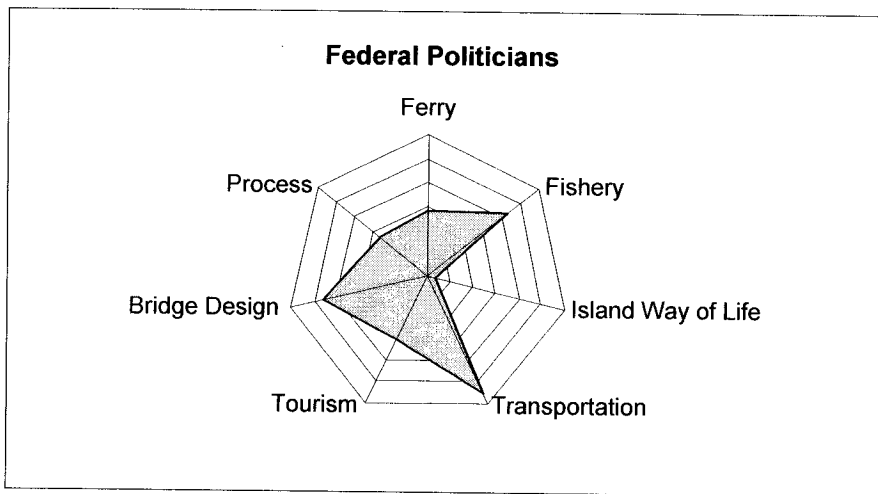


Figure 13a

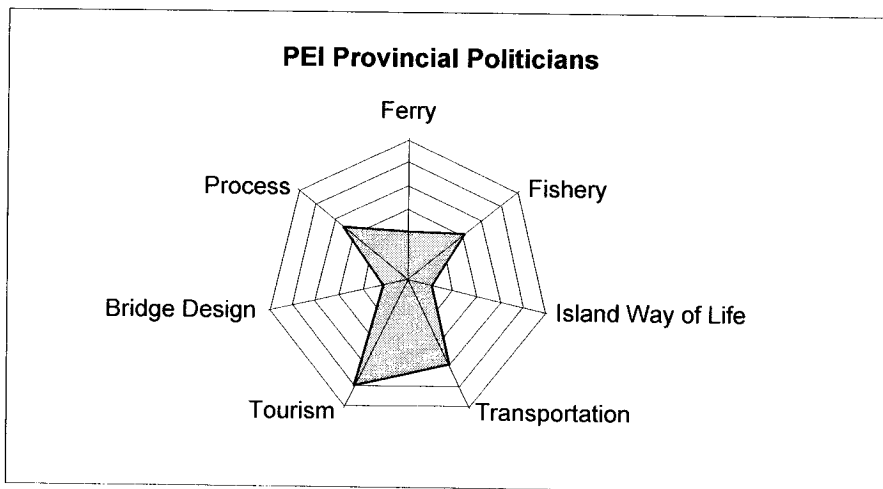


Figure 13b

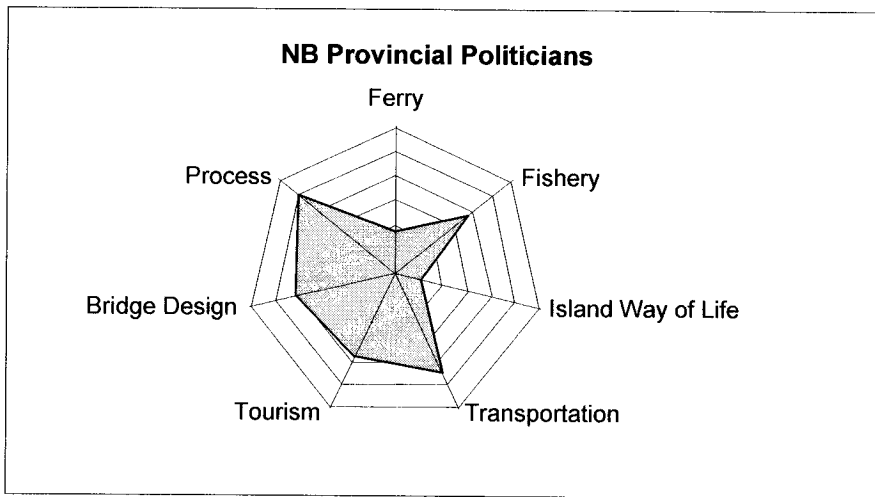


Figure 13c

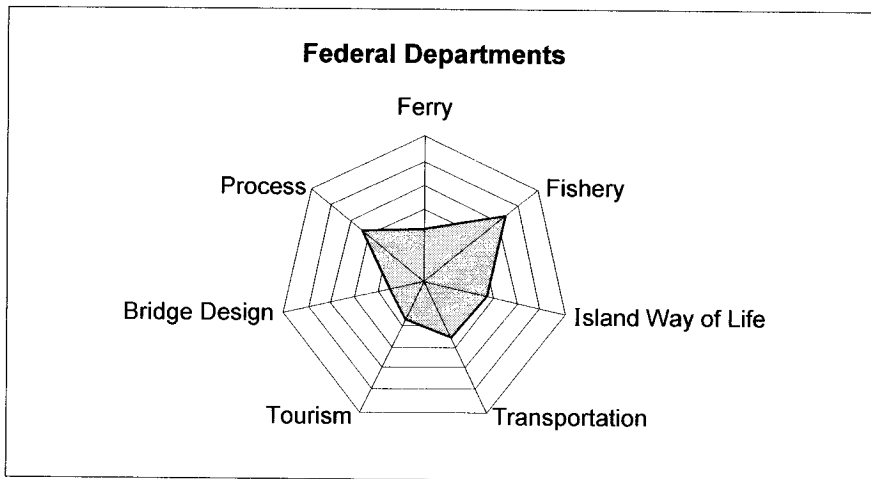


Figure 13d

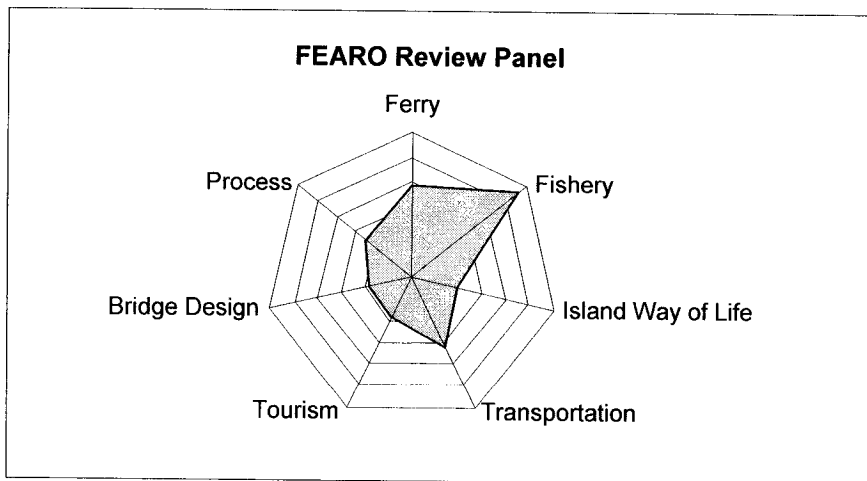


Figure 13e



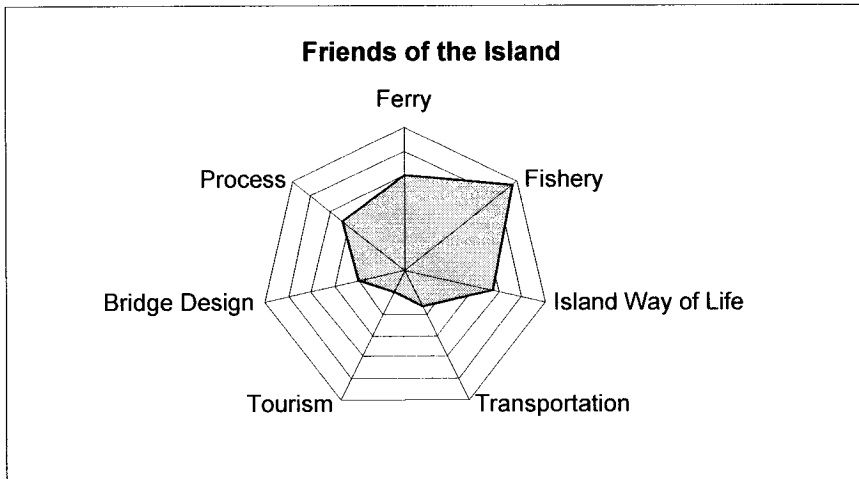


Figure 13f

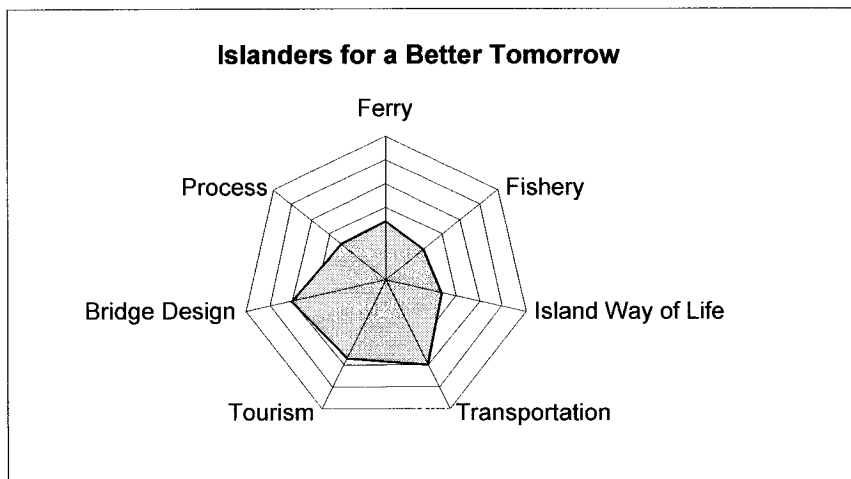


Figure 13g

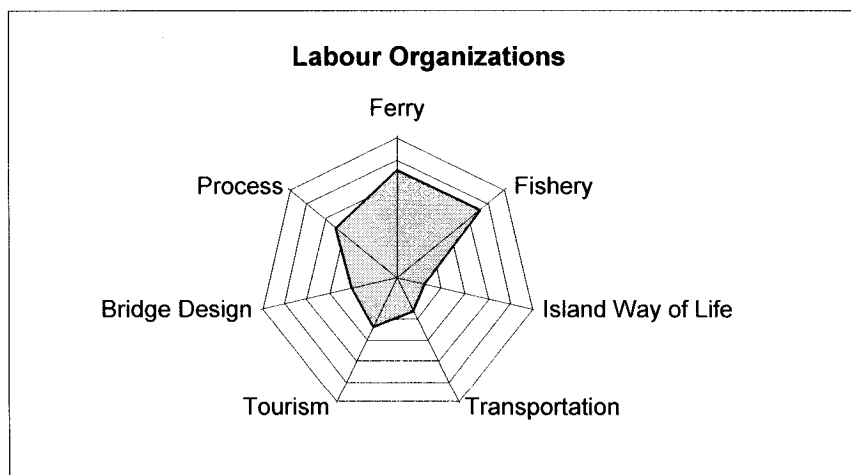


Figure 13h

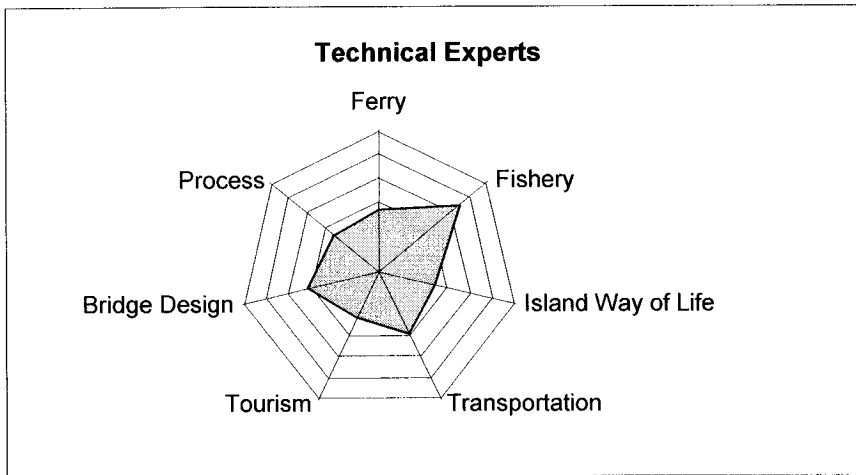


Figure 13i

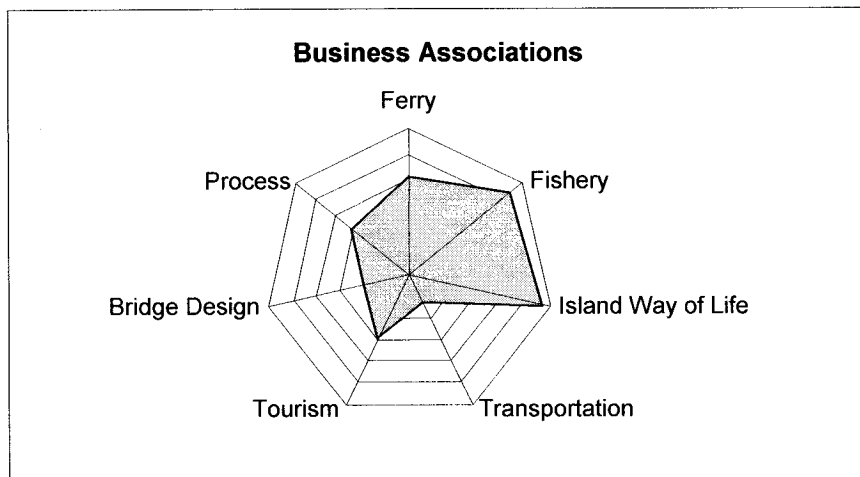


Figure 13j

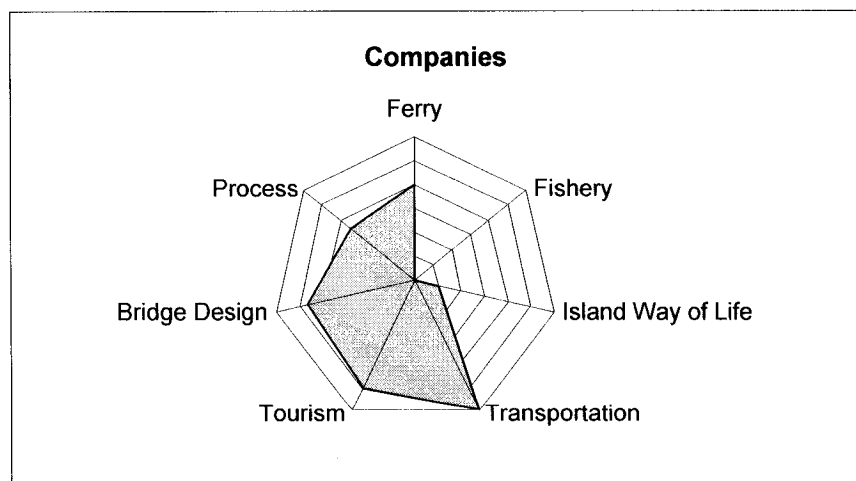


Figure 13k

Provincial politicians on PEI (Figure 13b) ranked tourism-related concerns as primary, consistent with the province's emphasis on focusing on economic and political disciplinary attributes to achieve its core values. In NB, politicians considered the process-related issues as the major area of concern (Figure 13c), reflecting the effort expended by this province to be included as an active participant in the decision-making process. All politicians, including those on PEI, ranked 'island way of life' issues as the least significant area of concern.

Business associations (Figure 13j) ranked 'island way of life' as having a top priority, with fishery and ferry-related concerns also being ranked high. These rankings reflected the local concerns of the membership of these associations who cover a broad cross-section of the economic sectors on PEI, including those in the tourism, fishing and transportation sectors.

#### **4.4.2.3 Preferred Solution**

Since an indicator of success in achieving core values is the degree to which these find expression in public policy decisions, information on the preferred solution was considered essential to explaining the behaviour of actors in the policy network. Table 10 identifies the declared preferred solution by each actor, over the course of the decision-making process.

During the feasibility phase of the process, the form a fixed link would take was dependent on the conclusions being provided in the commissioned studies. As such, the preferred option by the political actors participating in this stage of the process was not declared.

Following the decision by the federal government to proceed with a call for proposals and the announcement of the plebiscite, actors coalescing around the policy problem began to declare positions with respect to preferred options. Given the interests of the ferry workers and the concerns associated with altering the *status quo*, Friends of the Island and the ferry workers' union supported the continuation of the ferry service as the option of choice. The federal government and Islanders for a Better Tomorrow both supported the construction of a fixed link at this stage in the process. The PEI government refrained from publicly declaring a preferred option

at this stage. This stance was attributed to attempts to avoid potential political damage by awaiting the results of the plebiscite.

By the onset of the FEARO public review hearings, preferences were further cemented by the policy actors. By this stage in the process, a fixed link in the form of bridge was the preferred choice for all politicians, business interests and those opting for a more reliable transportation route. Federal departments concerned with environmental issues favoured the ferry service option while PWC supported the bridge solution. Both technical experts and labour organizations, depending on their membership, declared a preference for either enhanced ferry service or an unspecified form of a fixed link. Friends of the Island supported the tunnel option as a plausible alternative to ferry service while the FEARO Review Panel declared the impacts of an enhanced ferry service or a tunnel should be explored in preference to a bridge. Not surprisingly, the operators of the ferry service, Marine Atlantic, declared a preference for enhancing the ferry service.

At the final decision checkpoint, key actors had declared their positions, with the federal government maintaining its preference for a bridge while the Friends of the Island preferred the ferry service as the best outcome for achieving its core values (Friends of the Island, 1992).

Table 10. Preferred Solution by Policy Actors during Decision-Making Process

<b>Decision Checkpoints with Key Players</b>	<b>Preferred Solution</b>
<b>1. Feasibility of the fixed link concept</b> - Federal Cabinet - PWC - Technical Experts	Not Declared Not Declared Not Declared
<b>2. PEI Plebiscite</b> - Federal Ministers - PEI Government - Friends of the Island - Islanders for a Better Tomorrow - Ferry Workers Union	Fixed Link <sup>1</sup> Not Declared Ferry Service Fixed Link <sup>1</sup> Ferry Service
<b>3. FEARO Review</b> - Federal Ministers - Federal MPs - PEI Government - NB Government - Federal Agencies - Review Panel - Friends of the Island - Islanders for a Better Tomorrow - Labour Unions - Technical Experts - Business Groups - Companies - Marine Atlantic	Bridge Bridge Bridge Bridge Bridge/Ferry Service Tunnel/Enhanced Ferry Service Ferry Service /Tunnel Bridge Enhanced Ferry Service /Fixed Link <sup>1</sup> Enhanced Ferry Service /Fixed Link <sup>1</sup> Bridge Bridge Enhanced Ferry Service
<b>4. Court Challenges</b> - Federal Minister - PWC - Friends of the Island	Bridge Bridge Ferry Service

<sup>1</sup> indicates either tunnel or bridge

#### **4.5 Explaining the Influence of Actors on the Decision**

To assist in identifying the effect of the policy network on the ability of each actor to influence the decision, a comparison of the analytical results obtained for each of the policy actors was undertaken.

The criterion selected for grouping actors was based on the rankings for the top pair of disciplinary attributes, regardless of which attribute was placed first and which was placed second. This was chosen as the general criterion for grouping actors since none of the actors had any difficulty in selecting the top pair of attributes that reflected their values, objectives and preferences. The positions of other attributes in the ranking was not considered as critical to the actors, although the majority consistently ranked the institutional disciplinary attribute as the least important attribute for achieving core values and translating objectives into policy-level decisions (see Figure 9B).

Based on the general criterion of similarity in ranking for the top pair of attributes, six groupings of actors were identified. Since policy actors in three of the six groups had consistently ranked the environmental attribute among the top pair of attributes, these actors were combined into a single group to determine whether there was a significant explanatory purpose to their high ranking of the environmental attribute. Similarly, one of the policy actors differed from all others in its top pair of ranking attributes and this actor was placed in a separate grouping to determine if there was a explanatory basis for this difference in ranking. These four resulting groupings of policy actors are provided in Tables 11A, 11B, 11C and 11D. The tables also provide information on the major reason cited by individual actors for the fixed link policy debate and the preferred outcome at the time of the FEARO public review process. This stage in the decision-making process is used as, by then, the actors had clearly established and declared their preferences with respect to a possible solution for the fixed link problem.

**Table 11A. Comparison of Analytical Elements by Policy Actors - Grouping #1**

Category of Policy Actor	Priority Level	Federal Politicians	PEI Provincial Politicians	NB Provincial Politicians	Private sector Companies
<b>Disciplinary Attributes</b>	Highest Second Highest Lowest	Political Economic Institutional	Political Economic Institutional	Economic Political Institutional	Economic Political Ethical
<b>Areas of Concern</b>	Highest Second Highest Lowest	Transportation Bridge-Related Island-Way	Tourism Transportation Island-Way	Process Transportation Island-Way	Transportation Bridge-Related Not Ranked
<b>Preferred Option</b>		Bridge	Bridge	Bridge	Bridge
<b>Main Reason for Fixed Link Debate</b>		Cost-Effectiveness	Political Agenda	Regional Development	Cost-Effectiveness

**Table 11B. Comparison of Analytical Elements by Policy Actors - Grouping #2**

Category of Policy Actor	Priority Level	Federal Departments	FEARO Review Panel	NGOs Friends of the Island	Technical Experts	Business Associations
<b>Disciplinary Attributes</b>	Highest Second Highest Lowest	Environment Economic Ethical	Environment Ethical Legal	Ethical Environment Legal	Environment Social Institutional	Environment Economic Institutional
<b>Areas of Concern</b>	Highest Second Highest Lowest	Bridge-Related Fishery Tourism	Fishery Ferry Service Tourism	Fishery Ferry Service Tourism	Fishery Bridge-Related Tourism	Island-Way Fishery Transportation
<b>Preferred Option</b>		Bridge/Ferry	Ferry/Tunnel	Ferry/Tunnel	Ferry/Bridge/ Tunnel	Bridge
<b>Main Reason for Fixed Link Debate</b>		Political Agenda	Political Agenda	Business Demand	Cost-Effectiveness	Reliable Route

**Table 11C. Comparison of Analytical Elements by Policy Actors - Grouping #3**

Category of Policy Actor	Priority Level	NGOs	Labour Organizations
<b>Disciplinary Attributes</b>	Highest Second Highest Lowest	<b>Islanders for a Better Tomorrow</b> Economic Social Ethical	Social Economic Institutional
<b>Areas of Concern</b>	Highest Second Highest Lowest	Fishery Transportation Ferry Service Bridge	Ferry Service Fishery Transportation Ferry/Bridge/Tunnel
<b>Preferred Option</b>		Cost-Effectiveness	Political Agenda
<b>Main Reason for Fixed Link Debate</b>			

**Table 11D. Comparison of Analytical Elements by Policy Actors - Grouping #4**

Category of Policy Actor	Priority Level	Companies
<b>Disciplinary Attributes</b>	Highest Second Highest Lowest	<b>Marine Atlantic</b> Legal Economic Institutional
<b>Areas of Concern</b>	Highest Second Highest Lowest	Transportation Tourism Fishery
<b>Preferred Option</b>		Ferry
<b>Main Reason for Fixed Link Debate</b>		Political Agenda



#### **4.5.1 Identification of Advocacy Coalitions**

In the first grouping of policy actors (Table 11A), political and economic attributes were assigned the top two highest levels of priority. Members of this group included federal and provincial politicians and private sector companies and all preferred a bridge solution to the problem. These members also shared major areas of concern that reflected an economic focus such as transportation and tourism-related issues. Political issues were reflected in bridge-related concerns surrounding its feasibility, on the part of the federal government, while process-related concerns were particularly relevant to New Brunswick. This concern was indicative of the province's goal to ensure that both the federal and PEI governments acknowledged its role as a key player in the process and that the project was not viewed solely as a 'PEI project'. By ensuring New Brunswick was recognized as a partner in intergovernmental discussions relating to the successful completion of the project, the government was able to negotiate a substantial benefits package. Components of the agreement between the federal government and New Brunswick included monetary benefits for highway upgrades comparable to PEI, redevelopment assistance for the affected Cape Tormentine area and preferential concessions for NB labour and materials during the construction phase of the project. The anticipated loss of jobs in New Brunswick as a result of closing the Marine Atlantic ferry service and any economic loss to the fishery during construction were balanced against compensation packages to affected workers and longer term economic gains to the province.

For PEI, the concerns of the provincial government were explicitly itemized in the list of ten conditions provided to the federal government. However, the analysis suggested that resolving political and economic issues were the main focus of the province. Similarly, areas of prime concern included aspects affecting the economy and politics on the Island with tourism related concerns and ensuring the federal government provided an adequate inter-provincial transportation network being foremost on the list. While the federal and NB governments ranked 'island way of life' concerns as having the lowest priority, it may be viewed as surprising that PEI

did so as well. However, by examining the outcome of the plebiscite, in which the majority of Islanders gave the PEI Government its support for the project, the ranking on 'island way of life' can be explained. Additionally, when one examines the 1988, 1989 and 1990 Throne Speeches of the province, the realities of the economic challenges facing the province and how these might best be met, suggest a reconciliation between maintaining the spirit of 'islandness' with an efficient transportation route.

The degree of similarity between actors in this grouping, in terms of core values as measured by disciplinary attribute rankings, areas of concern and preferred option with the federal government as principal decision-maker, suggested these policy actors would have the greatest potential to affect the decision-making process. In fact, the retrospective analysis of the decision indicated that this grouping of actors coalesced to form the dominant advocacy coalition in the policy network, as confirmed by the decision outcome.

In the second grouping of actors, the environment was identified as one of the top two disciplinary attributes most likely to assist in the achievement of core values. Similarly, the major area of concern, ranked as either the highest or second highest in terms of degree of importance for this grouping, was listed as the fishery. The actors representative of this grouping were identified in the analysis as federal departments, the FEARO Review Panel, Friends of the Island, technical experts and business associations. In terms of a preferred solution, all actors in this grouping, with the exception of business associations, identified the ferry option as one that should be considered for addressing the policy problem. In the case of the exception, a bridge solution was cited as the preferred option reflecting the choices voiced by the PEI Tourism Industry Association and the Atlantic Provinces Transportation Council, both members of this policy actor. Given the fundamental differences in core values and areas of concern identified for policy actors in this grouping with those of the federal government and dominant coalition, the analysis suggested that this grouping would have limited ability to influence the outcome of the decision-making process. As compared with the actors in the previous group, the retrospective

analysis of the decision showed this set of actors forming a contending advocacy coalition that was, in effect, attempting to further its objectives by dislodging the dominant coalition.

The third grouping of actors were comprised of actors who focused on the socio-economic aspects of the policy issue and as such, major areas of concerns for this grouping were the fishery, ferry workers and transportation. Policy actors belonging to this grouping were the Islanders for a Better Tomorrow and labour organizations. In terms of a preferred solution, labour organizations were open to all three possible options, namely a bridge, ferry or tunnel. This reflected the bias of each labour union interviewed, reflecting the available skills of their membership. Islanders for a Better Tomorrow cited the bridge as the preferred option, consistent with its ranking of transportation as one of the major areas of concerns for this actor. Although ranking social issues as being essential to the achievement of its core values, this grouping possessed areas of overlap with the federal government, particularly in terms of its economic focus as a key disciplinary attribute. As such, the analysis suggested that the actors in this grouping had some potential to affect the outcome of the decision-making process. This was reflected in the decision outcome since the socio-economic benefits accruing to the province, and region as a whole, were cited as additional reasons why the project was supported by the federal government.

Finally, Marine Atlantic, as the Crown Corporation running the ferry service, was unique among all policy actors focusing on legal and economic attributes for achievement of its core values and citing transportation and tourism as its major areas of concern. Given the unusual position of this actor as bearing the direct impact of a fixed link decision, it was not unusual to find this actor in a category all by itself. As expected, this policy actor cited the ferry as its preferred option. However, with the declared preference by the federal government for the bridge as the option of choice, based on its cost-effectiveness as compared to the ferry, the analysis suggested that Marine Atlantic would have limited ability to affect the decision-making process, as was in fact shown to be the case.

With respect to the purpose for the fixed link debate, as observed in Tables 11A, 11B, 11C and 11D, there was no readily identifiable pattern that could be discerned among the different groupings of policy actors identified above. Policy actors were just as likely to identify any reason as the purpose behind the fixed link debate, regardless of what their core values, areas of concern or preferred option were. As such, the purpose cited by each policy actor for the project being placed on the public policy agenda was not identified in the analysis as a critical element in predicting the potential for policy actors to influence the decision-making process. Nonetheless, the information obtained from this analysis is consistent with the explanatory basis developed as a result of the study, for the actions of the actors in the policy network.

#### **4.5.2. Advocacy Coalitions and Decision-Making**

The retrospective identification of distinct advocacy coalitions within the fixed link policy network, with members spanning the traditional division of the 'sub-government' and 'attentive public' realms as proposed by Pross (1986), suggests an expanded understanding as to how policy actors exert influence over decision-making. According to Pross, it was the constellation of actors in the 'sub-government' (composed of government decision-makers and agencies, as well as key societal interests, such as specific members of the private sector and/or labour), that formulated and implemented public policy. As such, the relative power structures of actors in the network provided an explanation of the actor's ability to exert influence. Members of the 'attentive public', although possessing considerable expertise and ability to affect the policy agenda, had limited power within the network and as such, limited opportunity to influence the decision outcome. This was because the actors in the sub-government sought to maintain the *status quo* policy habitat, in order to continue to exercise power and influence over the direction of public policies. Thus, members of the 'attentive public' constituted a contending or "shadow" sub-government, awaiting either a change in government or external shock to the policy system to gain access to the levers of power (Pross, 1986).

This research argues in favour of a blurring of the divisions among actors in the 'sub-

government' and 'attentive public' and a reduced emphasis on power relationships as the principal reason for explaining influence over public policy decisions. It provides empirical support for the learning approach, as previously described, as a supplementary mechanism to explain how actors work within a network to influence decisions that will reflect shared core values. In spite of their degree of power, i.e., whether actors comprise the 'sub-government' or 'attentive public' realm, the research suggests that coalitions of actors with shared beliefs are present in the policy network that is formed whenever actors come together to affect decision-making. It further suggests that it is the sharing of common values among the policy actors, which characterizes the policy network, and that membership in coalitions can be drawn from both the 'sub-government' or 'attentive public' realms. However, this is not to minimize the importance of resources available to members of advocacy coalitions. There is no question that their ability to gain the status of a dominant coalition will be dependent on the resources and power available to further their shared objectives.

This research hypothesizes that whether that power resides solely in the 'sub-government' realm or can be found in the 'attentive public' realm as well, will be determined by the governance structure in place during the policy debate. In a hierarchical and centralized governmental structure, it is to be expected that power will reside solely in the 'sub-government' and as such, the dominant coalition will, by default, include members of this realm. However, by broadening the focus to shared values among a more heterogeneous grouping of policy actors, this research suggests that membership in the dominant coalition can be drawn from any 'location' in the network.

Members of the dominant coalition described above for the fixed link decision-making process, did, in fact, include some members of the traditional 'sub-government' actors described by Pross (1986). However, this does not necessarily imply that government as a whole dominated the network. Rather, it may be argued that it is the collective membership in the dominant coalition, (which it is worth noting did not include many of the government agencies participating in

the network), which produces the arguments and strategies, and possesses the resources and power, to further its shared objectives. Membership in a dominant advocacy coalition thus provides opportunities for policy actors, regardless of their location with respect to the 'sub-government', to influence decision-making.

For example, it is conceivable for public policy decision-makers to be more comfortable soliciting support and information from policy actors sharing similar values than from other components of government, thereby providing these actors with a greater voice in the decision-making process. Alternately, even members of the 'sub-government', if they are not actors within the dominant advocacy coalition, can be predicted to have limited ability to influence policy-level decisions, as was evident in the fixed link decision.

Moving from a hierarchical government regime to a more distributed form of governance structure, the learning approach still allows for the prediction of membership in advocacy coalitions in a given policy network, based on the values shared among policy actors. However, an identification of the dominant coalition by looking mainly to the 'sub-government', would prove to be inadequate. In such a governance regime, the power and resources of the dominant coalition is expected to be more widely distributed, blurring the traditional realms of both 'sub-government' and 'attentive public'.

#### **4.5.3 Policy Implications**

The analysis of the fixed link decision suggested that policy actors coalesced around the policy problem at various stages during the decision-making process and as such, not all actors participated at every stage in the process. More importantly, the relationship between actors in the policy network is a dynamic one since the actors themselves are varying the degrees to which they actively participate in the process, at any given point in time. Furthermore, policy-level decision-making generally occurs over a relatively long timeframe, such that the policy environment itself will be subject to change between the time the matter is first raised to the

making of the decision.<sup>26</sup> The fixed link case study examined in this thesis is particularly interesting from an analytical perspective because it spans a period during which the ocean governance regime in Canada was evolving (Fraser, 1996; Paquet, 1999).

During the early stages of the policy process, decision-making reflected the dominance of the government actors. This was seen in the exclusivity of the federal actors at the feasibility stage of the process (see decision checkpoint #1, Figure 7). The dominance of the PEI provincial government, in terms of allowing the process to proceed to checkpoint #2, with the calling of a plebiscite and issuance of the province's conditions for support, is also indicative of the centralized decision-making authority of the time. However, by February 1989, over three years into the process, the decision to proceed was subject of an environmental public review, in which public participation assumed a legitimacy that had not previously been afforded.

As was discussed earlier, checkpoint #3 was a tangible expression of the changing expectations of non-state stakeholders to affect the decision-making process. In addition to self-interest as the motivating driver behind their participation in the process, the increasing legalization of social and political affairs contributed to a growing involvement of non-state actors to affect the decision outcome. Taking its right to participate in the process to its logical outcome, as based primarily on the requirement of procedural fairness in most administrative decision-making bodies (Mullan, 2001), checkpoint #4 allowed one non-state actor to take the federal government to court. The significance of this act was the potential for the courts to usurp the role customarily performed by actors in the policy process.

Table 12 summarizes the key policy-related factors affecting decision-making at each of checkpoints analyzed in this case study. These have been identified as:

- Checkpoint #1 - intragovernmental relations at the federal level;

---

<sup>26</sup> Although not part of the analytical component of this thesis, the time period between reaching a decision and implementing it, may actually be longer than the policy process. It is also further complicated by the fact that different actors, who were not involved in making the decision, may be responsible for its implementation.

- Checkpoint #2 – intergovernmental relations at the federal-provincial level (PEI and NB) and stakeholder participation, under provincial authority;
- Checkpoint #3 – Stakeholder participation, under federal authority; and,
- Checkpoint #4 – Legal challenge, under federal legislation.

**Table 12. Policy Implications Arising from the Decision-Making Process**

<b>Decision-Making Process</b>	<b>Participating Policy Actors</b>	<b>Factors affecting decision-making</b>	<b>Policy Implications</b>
<b>Checkpoint #1</b>	<ul style="list-style-type: none"> <li>• Federal Cabinet</li> <li>• Selected federal agencies</li> </ul>	<ul style="list-style-type: none"> <li>• Intragovernmental relations</li> </ul>	<ul style="list-style-type: none"> <li>• Gaining support of the Prime Minister and Minister of Finance allowed process to advance</li> </ul>
<b>Checkpoint #2</b>	<ul style="list-style-type: none"> <li>• Selected Federal Ministers</li> <li>• Selected Federal Agencies</li> <li>• PEI Government</li> <li>• NB Government</li> <li>• Non-state actors representing interests on PEI</li> </ul>	<ul style="list-style-type: none"> <li>• Intergovernmental relations</li> <li>• Provincially-mandated public participation</li> </ul>	<ul style="list-style-type: none"> <li>• Philosophical differences between PEI Premier and Federal Government</li> <li>• Clashes in political personalities led to breach of trust among key actors</li> <li>• Project support by NB government added to federal government's confidence level</li> <li>• Perceived conflict of interest by PWC and Minister of Environment created distrust among some members of public</li> <li>• Plebiscite used to publicly endorse PEI government's support for project</li> </ul>



Decision-Making Process	Participating Policy Actors	Factors affecting decision-making	Policy Implications
<b>Checkpoint #3</b>	<ul style="list-style-type: none"> <li>• Selected Federal politicians</li> <li>• Selected federal agencies</li> <li>• Selected PEI politicians</li> <li>• Selected NB politicians</li> <li>• Public review panel</li> <li>• Technical experts</li> <li>• Non-state actors representing interests on PEI, NB and NS</li> </ul>	<ul style="list-style-type: none"> <li>• Federally-mandated public participation</li> </ul>	<ul style="list-style-type: none"> <li>• Continued lack of trust between PEI and Federal government</li> <li>• Mandate, timing and perceived lack of objectivity in review panel</li> <li>• Establishment of dominant and contending policy advocacy coalitions to affect decision-making</li> <li>• Potential for policy-oriented learning among coalitions</li> </ul>
<b>Checkpoint #4</b>	<ul style="list-style-type: none"> <li>• Federal Minister of PWC</li> <li>• Federal agency</li> <li>• Friends of the Island</li> </ul>	<ul style="list-style-type: none"> <li>• Federal legislation</li> </ul>	<ul style="list-style-type: none"> <li>• Usurping the decision-making process by the courts</li> <li>• Adding legitimacy to stakeholder concerns</li> </ul>

(i) Checkpoint #1 - During the proposition stage identified as Checkpoint #1, the federal government was the principal actor assessing the feasibility of the proposed alternatives to the ferry service. The major influence exerted on the process was thus intra-governmental, with Cabinet Ministers and the Prime Minister weighing the pros and cons of the project relative to other potential areas for governmental support.

As discussed earlier, at this stage in the process, the major issues driving the process were political and economic in nature. However, the personalities of the principal players were also critical in affecting the outcome collectively agreed to by the federal government to proceed to checkpoint #2 with a formal call for proposals from the private sector. The decision to proceed to

this stage was primarily due to the support of the Prime Minister and Minister of Finance to arguments presented by Maritime Cabinet-level politicians.<sup>27</sup>

(ii) Checkpoint #2 - The policy implications surrounding Checkpoint #2 were numerous and significant. Two factors affected decision-making at this stage in the process, namely the relationship between the federal government and the provincial governments of PEI and NB and the provincially mandated plebiscite. At the political level, both the PEI and NB provincial governments viewed the problem of transportation between PEI and the mainland as a federal responsibility, yet both recognized the federal government's need for provincial support in order for the project to proceed.

In the case of the Liberal government of NB, support for the project was explicit and overt, as the province recognized the benefits it could accrue as a result of constructing a fixed link. Additionally, the vision held by the Premier of NB for his province was built on the provision of a technologically advanced infrastructure that provided a competitive advantage to businesses in the province. As such, the fixed link served to further the goals laid out for NB by its Premier.

This relationship with the federal government was not paralleled on PEI, where the Premier and federal government had entered into an agreement on the process to be followed regarding the fixed link debate. Itemizing the needs of the province, the Premier outlined ten conditions to be met by the federal government before his government would support the project. At the same time, he exercised the province's right to solicit the views of the people of PEI by calling a plebiscite, without informing the federal government in advance of the public announcement. This lack of courtesy flagged the poor personal and professional relationship between the Premier and the Federal Minister responsible for PEI and underscored the ideological difference in the approach to governing, between the Liberal government on PEI and that of the federal

---

<sup>27</sup> Personal ties to the Maritime region, plus the fact that one of his senior policy advisors was both from PEI and the brother of the Minister of Environment, were identified by political respondents as important factors affecting the receptivity of the Prime Minister to arguments in support of the project.

Progressive Conservative government.

The degree of distrust between the two levels of government was further evidenced when, prior to selecting a winning bid for the project and contrary to the federal-provincial agreement on process, the Government of PEI called for a public environmental review of the proposed project. In part, the rationale behind this breach in the agreement could be attributed as an attempt to address the perceived conflict of interest on the part of the Minister of Environment as an ardent supporter of the project. Additionally, in the absence of an announced private-sector proponent, the federal lead agency who had the responsibility for managing the project, was placed in the perceptively awkward position of serving as the project proponent.

Given the perception of a lack of objective review of the project and the political consequences that could arise for the provincial government in the event of public outcry, the actions of the provincial government may be explained. It seemed politically prudent for the provincial government to solicit the opinions of its population and to call for an external review of the impacts of the proposed project, regardless of the previously signed agreement on process. It is beyond the scope of this research to postulate on what might have occurred in the event of an alternative relationship between the principal federal and provincial actors. However, it is significant to note the policy implications arising from the personal traits of these actors.

(iii) Checkpoint #3 - The agreement of the federal government to the provincial government's request for a public review of the environmental and socio-economic impacts of the proposed fixed link concept initiated Checkpoint #3 in decision-making process. Continued distrust between the provincial Premier and the federal government was evident during this stage of the decision-making process. Additionally, the timing and mandate of the Panel, the declared and undeclared biases of its members and the process by which information was provided and used by the Panel are all elements identified as having significant policy implications in the analysis.

Specifically, the appointment of members of the panel with known biases against the project was perceived by the federal government as an attempt by the Premier's Office to thwart the

process. Biases of at least one panel member were declared publicly during their participation as an opponent to the project in the events leading up to the plebiscite. It was further demonstrated after the review process with the submission of a publicly available document to the federal Minister of Finance, calling for the newly elected Liberal government to reverse the decision of the former federal Progressive Conservative government to proceed with the project. Members of the panel interviewed for this research spoke to the lack of objectivity among several panelists. However, given that public review panels are enshrined in legislation, the policy implications of bias among potential panelists require that a resolution be made as to whether bias should be minimized or recognized and managed.<sup>28</sup>

There is considerable theoretical knowledge and practical evidence in the literature on conflict to suggest that it serves a constructive purpose in decision-making, if managed appropriately (Deutsch, 1973). A similar argument might be made with respect to bias, if it is declared and suitably managed.<sup>29</sup> The argument in favour of having panelists who are familiar with the policy issues and who have a personal stake in the decision outcome is that they will expand the discussion on the potential consequences of the panel's advice. However, the associated dilemma is that the core values of the panelists will be such that they are unlikely to retreat from their respective beliefs. As such, these members will be unlikely to alter their respective policy agenda, despite exposure to new knowledge or changing conditions that ought to lead to modifications in their belief systems.

Apart from the appropriateness of invited members to serve on the panel, both the timing of the review and the mandate of the panel presented challenges for the decision outcome. In the

---

<sup>28</sup> For the purposes of this discussion, bias is considered quite distinct from conflict of interest. In the latter case, a direct personal gain is usually achieved while in the former case, no direct or even indirect personal gain, is attributable to the party who displays bias. For this reason, the appointment of private sector consultants to public review panels is cautioned, given the potential for conflict of interest.

<sup>29</sup> Canadian courts have held that as long as a decision-maker is open to persuasion, some bias might be acceptable and expected. The key issue of concern to the courts is determining whether bias undermines procedural fairness or not (Mullan, 2001).

absence of a private sector proponent, the review panel was charged with reviewing a hypothetical concept of what an actual fixed link project might include. Additionally, the panel was mandated to examine the impacts of a bridge concept design and not any and all alternatives to spanning the Strait. The policy implications of both the timing and mandate were such that neither those in favour nor those opposed to the project were satisfied with the information reviewed during the public hearings. Given that the environmental process resulted in a cost of \$15,000,000 to the federal government (PWGSC *et al.*, 1997), the utility and expense to Canadian taxpayers in having the review, prior to the declaration of a private sector proponent, may be questioned.

However, the public hearings did allow for the retrospective delineation of the dominant and contending advocacy coalitions within the fixed link policy network. The policy implication arising from this clash between coalitions was the opportunity for policy-oriented learning by members of the policy network. It has been suggested that members of policy coalitions learn through competitive interactions with each other. In the case of the fixed link, this occurred as both sides, while immovable in terms of core values, adapted the secondary aspects of their belief systems to accommodate the realities of the policy environment and decision-making process. For example, environmental concerns related to delayed ice-out raised by the review panel, led to the inclusion of the more costly inshore approach bridges in shallow water on both the PEI and NB sides of the Strait, as opposed to the cheaper option of a rock fill causeway. Similarly, with the declaration by the review panel that a tunnel was one of its preferred options, it signaled its satisfaction that concerns related specifically to 'island way of life' issues can be appropriately mitigated.

In other matters however, policy actors in opposing coalitions stood firm. For example, during the public hearings, the Government of PEI reminded the Review Panel that their role was to determine if a fixed link could be built within acceptable tolerance of environmental impacts, not to determine whether it was in the best interests of PEI to see the link constructed. That question, it was pointed out by the provincial Minister of Industry, was the constitutional responsibility of the Government of PEI, acting on behalf of its citizens (Government of Prince Edward Island, 1990).

Similarly, the Friends of the Island was determined in its resolve to explore all available avenues in an effort to stop the project, even if it meant taking the federal government to court.

(iv) *Checkpoint #4* – This checkpoint resulted in the Friends of the Island taking the federal government to court over a perceived failure to enact the appropriate sections of the *EARP Guidelines Order* and a contravening of the 1873 *Prince Edward Island Terms of Union*. This challenge presented an additional motivation for members of the opposing advocacy coalitions in the policy network to learn. Such learning is considered essential if coalitions are to maintain their status in the network, as when challenged with external threats, coalitions need to respond, counter-attack and if necessary, adjust to the new realities of the policy network. As such, any challenge to the dominant coalition, including threats to its policy analytical capacity or evidence that contradicts or threatens its claims and belief systems, presents a learning opportunity for members of the coalition, as well as other members in the policy network.

The timing of the legal challenge in December 1992, illustrates the evolution in the expectations of both the public at large and specific non-state actors in their perceived role in public policy decision-making. The legal challenge was made a decade after the enactment of the 1982 *Canadian Charter of Rights and Freedoms* and eight years after the *EARP Guidelines Order* can into effect. Following the 1992 public challenges to the government's actions in the Rafferty-Alemeda and Oldman River dams, Friends of the Island was among a small set of non-state actors in Canada, challenging the legality of the actions of the federal government, with respect to environmental protection. Its timing followed the commencement of efforts, on the part of the federal government, to reform the EARP guidelines in 1987. That same year, the report of the World Commission on Environment and Development called for environmental assessment to be mandatory and entrenched in legislation.<sup>30</sup>

In 1990, the federal Minister of Environment announced a new, environmental assessment

---

<sup>30</sup> Canada played an important role in promoting the efforts of the Commission, as it did in the subsequent 1992 UN Conference on Environment and Development in Rio de Janeiro, Brazil.

reform package. The package included environmental assessment legislation for projects, intervenor funding for public participation and a process to review the environmental impacts of federal policies and programs. In 1992, prior to the launch of the legal challenge, Bill C-13, the *Canadian Environmental Assessment Act* received royal assent and the world witnessed the unprecedented participation of a growing number of non-state actors at the UN Conference on Environment and Development (Clark *et al.*, 1998).

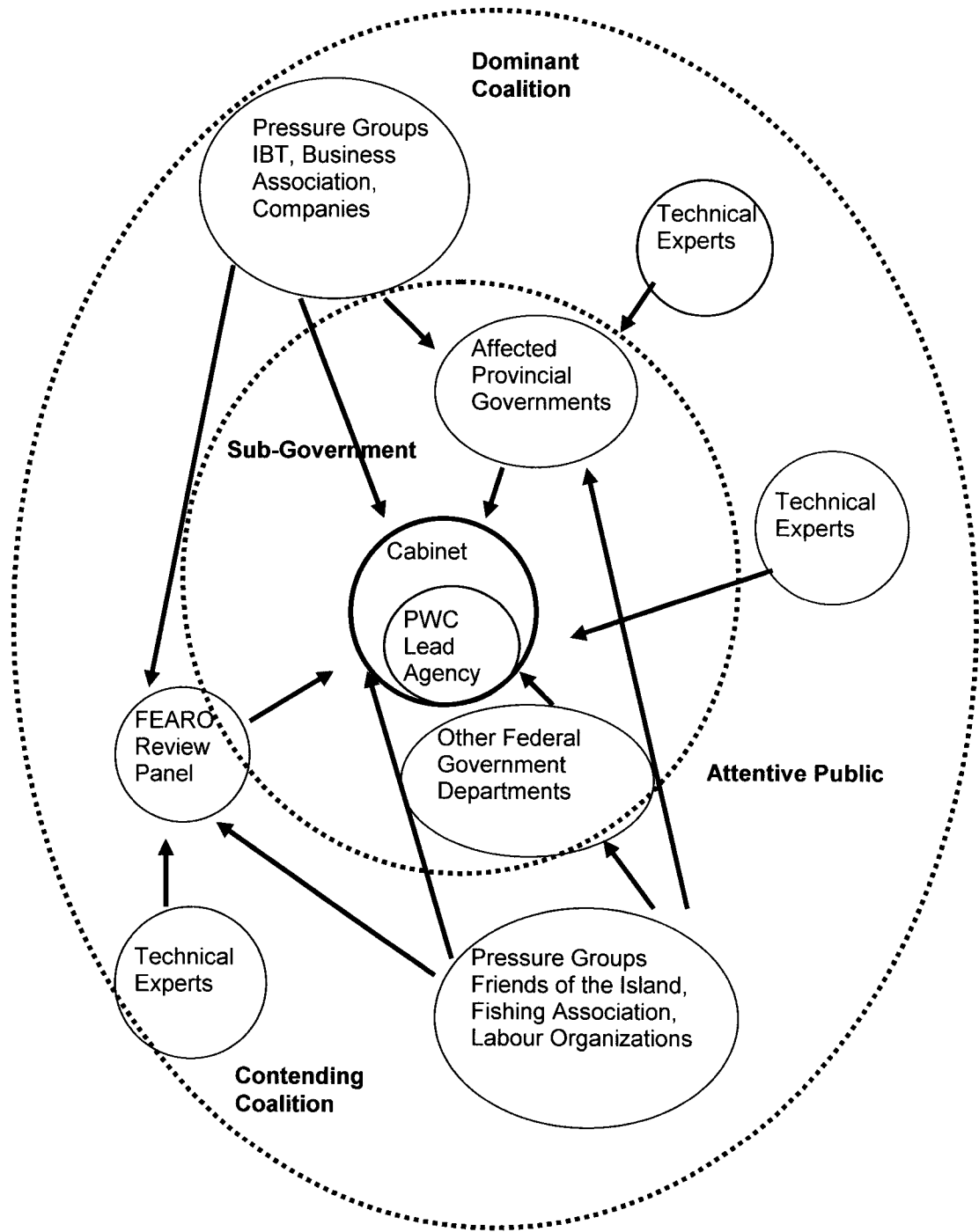
The significance of the legal challenge, in terms of its policy implications, was the 'filing of notice' to both the federal government and all policy actors that the environment surrounding public policy decision making had changed irrevocably. The irony remains that the expectations of the public review process by non-state actors do not match the utility afforded to it by government actors. As such, there is an urgent need to clarify whether or not the public review process can satisfactorily address the expectations placed upon it. At the same time, the public's expectation for fairness and transparency requires the delineation of decision-making rules to be employed by public review panels.

#### **4.5.4 Summary**

Based on the analysis of the relationship between the members of the fixed link policy network, a model of the policy habitat, in existence at the time the decision was made, can be constructed (Figure 14). This model illustrates the location of the actors within the 'sub-government' and 'attentive public realms' (Pross, 1986) but also shows the dominant and contending advocacy coalitions, whose members span both of these realms.

The dominance of the federal government in the network reflects the hierarchical governmental decision-making regime in place at the time and is characteristic of a statist network (see Chapter 3, Table 5) in which the policy analytical capacity for decision-making resides almost exclusively with the federal government.

Figure 14. Fixed Link Policy Network





The presence of the affected provincial government within the dominant coalition and 'sub-government' sphere of influence reflects the dependence by the central government on these actors for the successful implementation of the policy decision, due to the Canadian constitutional division of powers (Hogg, 1997). However, as was determined in this analysis, members of the dominant coalition also included actors who traditionally would not have been members of the 'sub-government'.

Additionally, as described in this research, the involvement of civil society in discussions leading to policy-level decision-making has been an increasing expectation on the part of both the federal government and non-state actors during the time period of the case study. These actors aligned themselves to be members of either, the dominant, or contending advocacy coalition, in order to affect decision-making, depending on the degree of similarity in core values with the coalitions. This expectation for increased participation by non-state actors evolved over the course of this case study. It has arisen as a result of the growing public concerns to be included in decision-making exercises, given the perceived sense of failure by governments to successfully resolve increasingly complex and transnational policy problems.

In Canada, public participation has been formalized in a number of 'soft' and 'hard' legal instruments. Particularly note-worthy to this case study was the introduction of the *EARP Guidelines Order*, implemented in 1984, providing for an expanding role of civil society in decision-making processes.

The analysis of the behaviour of actors in this case study suggests that the policy networks, and more specifically the advocacy coalitions that form within the network, can play an important role in predicting the influence of actors over public policy decisions. By focusing on characteristics relating to the resource capacity as well as the values and objectives of the participating actors, the research suggests that it is possible to identify advocacy coalitions that form within the network. Furthermore, by examining the governance regime and policy environment in place during the decision-making process, predictions can be made as to the

dominance of one coalition over another, in terms of affecting the decision outcome. In the case of the fixed link decision, the research findings suggested that the dominant coalition would be the one that included those actors in positions of authority and those who shared similar core values with these actors. Additionally, the values of these actors in the coalition were made operational by having a similar preferred outcome address the key areas of concern. Stated differently, this research suggests that actors within a policy network that formed a contending advocacy coalition, and whose core values differed significantly from those of the dominant advocacy coalition, would have limited ability to see its core values reflected in the decision.

## CHAPTER FIVE

### GEORGES BANK MORATORIUM CASE STUDY

#### 5.1 Case Study Overview

This case study provides a retrospective analysis of the four-year decision-making process leading to the 1999 ocean policy decision to extend the Canada-imposed moratorium on petroleum exploration and drilling on Georges Bank until 2012.

The decision-making process surrounding the Georges Bank moratorium was selected for analysis for the following reasons, based on the criteria identified in Chapter 3:

- Georges Bank, located approximately 200 kilometres offshore of southwestern Nova Scotia is considered to be a uniquely productive and one of the most prolific fishing grounds in the world, despite being heavily fished by many nations for over a hundred years (DFO, 1998). The area is thus of significant historical, social and economic importance to coastal fishing communities in the Maritimes region of Canada and the northeastern United States (US).
- Given the focus of the policy problem on whether or not a new ocean user should be allowed access to a defined offshore area, the issues of concern clearly belonged in the coastal and ocean policy domain. Furthermore since the case study involved the interactions between two mutually-conflicting user groups (Vallega, 2001), namely the petroleum sector and the fishing sector, the case study provided an opportunity to use the research findings to inform debates with similar user groups in other geographical areas.
- The decision-making process centred around a structured public review process with the subsequent public announcement of the decision reached by the responsible Minister. Participation in the public review was used to identify key actors in the decision-making process.
- The decision-making process occurred during the period 1996 to 1999, allowing key actors to be interviewed. This allowed for interview data, as well as written documents and

archival data, to be used in the case study methodology described in Chapter 3. The three sources provided for consistency and validity checks in assessing the influence exerted by these actors on the process, within the policy context of the time.

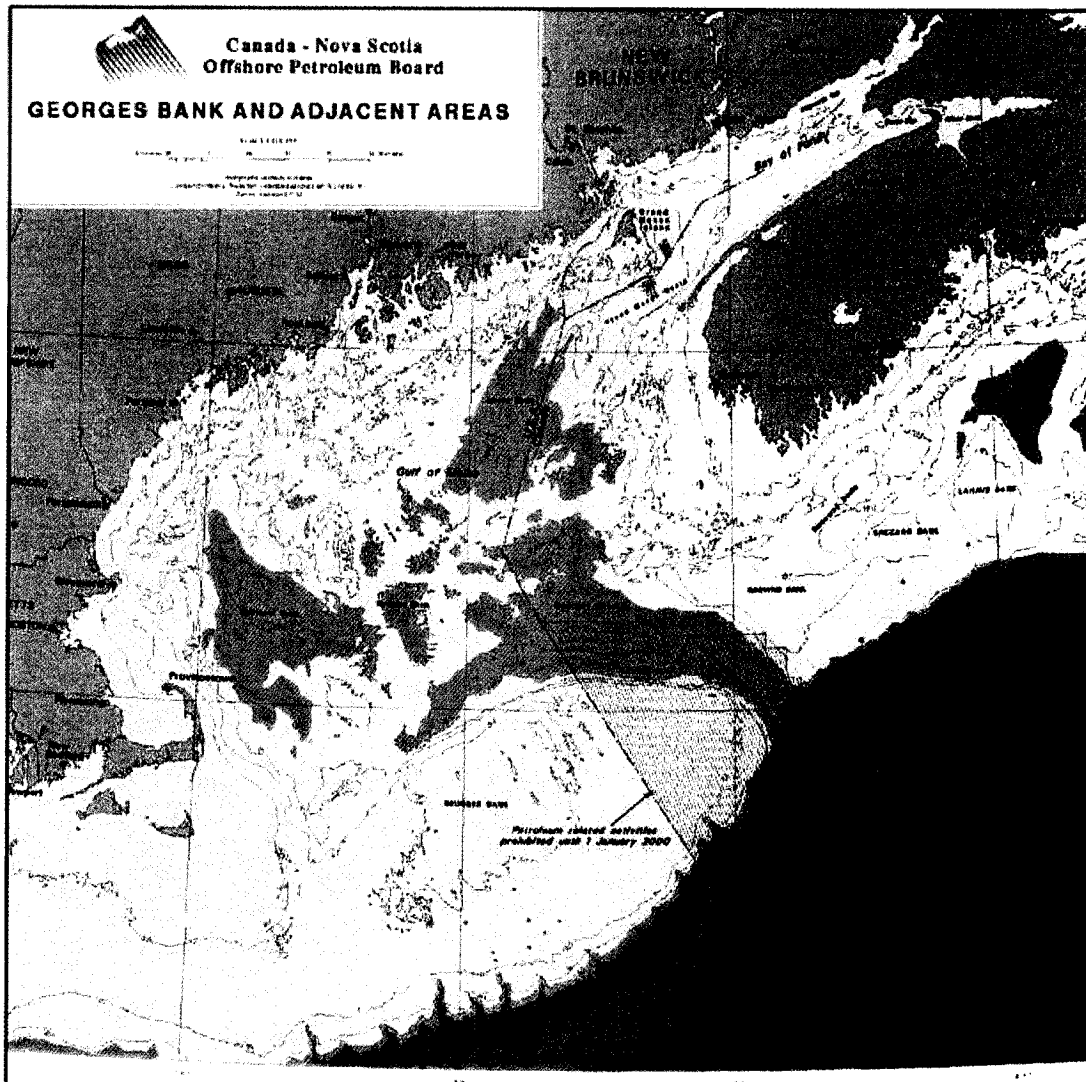
- The decision-making process led to a strategic policy decision, the implementation of which resulted in consequences for the region that could not be easily reversed. Given the jurisdictional sharing of Georges Bank by Canada and the US and the bilateral implications of an equivalent moratorium on the American side of the Bank, consequences of the Canadian decision were not only regional in scope, but also international.

#### **5.1.1. Background**

Georges Bank is a broad, shallow, detached marine area of approximately 45,000 km<sup>2</sup> (300 km x 150 km) located on the continental shelf seaward of the Gulf of Maine, off the coasts of Massachusetts and south-western Nova Scotia (Figure 15). Water depths are less than 100 metres over most of the Bank. The area has been studied by Canadian and American researchers for more than 100 years and the existing scientific knowledge has been well documented and summarized (Backus and Bourne, 1987; Boudreau *et al.*, 1999).

On October 12, 1984, the International Court of Justice (ICJ) ruled on the single maritime boundary dispute between Canada and the United States (US), granting Canada the water column and seabed of the Northeast peak, an area of approximately 7000 km<sup>2</sup>. The decision to refer the dispute to the ICJ for a final and binding decision followed questions of ownership over the seabed that dated back to 1964.

**Figure 15. Map of Georges Bank and Adjacent Areas  
(showing Canada/USA maritime boundary in the Gulf of Maine)**



Source: CNSOPB, 1999.

At that time, Canada issued offshore oil and gas permits on portions of Georges Bank, which the US subsequently claimed for itself in 1975, after attempts to negotiate a settlement failed between the two Parties (Canada, 1982). Georges Bank has also been an important and traditional fishing ground for Canadian and US fishers, due to its uniquely high biological productivity. It has been reported to sustain levels of fish productivity two to three times greater than comparable continental shelf areas, such as the Gulf of Maine, Scotian Shelf and North Sea. (Cohen and Grosslein, 1987; Gardner Pinfold, 1998). However, as with the conflicting claims over the ownership of the seabed, the two countries also claimed 200 nautical miles exclusive fishing zones (EFZ) in 1977 which resulted in overlapping boundaries. In 1978, both countries suspended the implementation of a 1977 Interim Fishing Agreement that allowed access to fishers from both countries to areas in which they had traditionally fished, regardless of the newly-established EFZ boundaries (Canada-USA, 1977). In an attempt to resolve the disputes, a Treaty was signed by both countries in 1979 to submit the delimitation of the maritime boundary and an Agreement on East Coast Fishery Resources to binding dispute settlement (Canada-USA, 1979). The linking of the two issues was subsequently severed by newly-elected President Reagan in 1981, citing massive opposition from the US fishing industry (VanderZwaag, 1983). Canada agreed to proceed with the boundary dispute settlement and memorials from both countries were submitted to the ICJ in 1982 (Canada 1982; USA, 1982).

With the establishment of the ICJ boundary, known as 'the Hague line' in 1984, Canada received approximately one-sixth of the total area of Georges Bank (ICJ, 1984). Both the Canadian government and the fishing industry appeared to be satisfied with the Court's decision since the removal of US fishing effort in Canadian waters was thought to more than compensate for the loss in fishing area Canada unilaterally claimed. Additionally, Canadian fishers were no longer particularly interested in a reciprocal fishing agreement as both groundfish stock and scallops were in severe decline on the US side of the Hague line.

Since then, changing environmental conditions, intense fishing pressure and overfishing of some of the commercially-sought groundfish and pelagic species, have led both Canada and the US to implement fishery management regimes that are aimed at rebuilding these fish stocks (DFO, 1998). On the Canadian side of the Hague line, this has led to reductions in the total allowable catch for some species and a significant restructuring of the number of vessels targeting all species, including those involved with the lucrative scallop fishery (DFO, 1998).

Regarding offshore petroleum resources, 10 exploratory wells were drilled on the undisputed US portion of Georges Bank between 1976 and 1982. This activity was associated with the only successful lease offering by the United States for the Georges Bank area (Edson *et al.*, 2000).<sup>1</sup> None of the wells encountered significant concentrations of petroleum resources. Starting in 1982, the United States Congress enacted a series of one-year leasing moratoria on portions of the Outer Continental Shelf. This eventually led to an executive order by President Clinton in 1998, preventing any leases from being offered for a period of 14 years, in areas that were currently under moratorium. There are no leases currently being held by companies on the US portion of Georges Bank.

In 1964, the Canadian government leased the first parcel of land on Georges Bank to Texaco Canada Inc. By 1986, Chevron, BP-Amoco and Texaco held large exploration permits covering the East Georges Bank Basin. These permits cover the entire Canadian portion of the Bank and in the case of BP-Amoco leases, extend off the Bank into deeper waters. In 1986, efforts by Texaco, aimed at soliciting public support for exploratory activities coincided with the call for a provincial election. This resulted in political pressure being applied by the fishing constituency in

---

<sup>1</sup> Federal Offshore Lease Sale 42 was held on December 18, 1979. It resulted in the leasing of 63 blocks to companies. The total value of the leases was \$816,516,546 (Edson *et al.*, 2000).

the southwestern portion of the province.<sup>2</sup> The power of the fishing constituency led to a political decision by the federal and provincial governments, imposing a 13-year moratorium on petroleum activity on the Canadian portion of Georges Bank. The prohibition was legislatively mandated in the *1987 Canada-Nova Scotia Petroleum Resources Accord Implementation (Nova Scotia) Act* and its federal counterpart, the *1988 Canada-Nova Scotia Petroleum Resources Accord Implementation Act*.

Reflecting the growing recognition for public involvement in decision-making, the legislation also called for a public review to be established prior to the termination date of the moratorium. The review panel was authorized to examine the environmental and socio-economic impacts associated with exploration and drilling on Georges Bank and to make its recommendation to the responsible Ministers by July 1, 1999. The Ministers were charged with making a decision, prior to January 1, 2000, on whether the moratorium would be extended.

In keeping with the legislative requirements in both the federal and provincial Accord Acts, a review process was conducted to examine the issues associated with oil and gas exploration on Georges Bank. Following the review process, the three-member panel recommended the extension of the moratorium. The responsible Ministers accepted the recommendation and extended the moratorium until 2012 (NRCan, 1999a; 1999b; 2000). This decision resulted in both the US and Canadian portions of Georges Bank being subject to a ban on petroleum-related activities. While there are no outstanding leases on the US portion of the Bank, the three leaseholders on the Canadian portion of the Bank continue to hold exclusive exploration rights. However, these are suspended while the moratorium remains in effect.

---

<sup>2</sup> An appreciation for the publicity and tension surrounding the 1987 debate to allow oil and gas exploration on Georges Bank can be gleaned from the following samples of headlines from newspaper articles at the time: *Risking the priceless fishery of Georges Bank to bring up more oil*, Globe and Mail, January 17, 1987; *Opening Georges Bank to firms would lure Americans*, Daily Commercial News, November 11, 1987; and, *Battlelines clearly drawn on Georges Bank dispute*, Atlantic Insight, v10(1), January 1988.



Table 13 provides a summary of significant events pertaining to the policy problem both prior to, and during, the four-year period directly relating to the review process being analyzed for this case study.

### **5.1.2 Chapter Overview**

The remaining sections of this chapter provide objective evidence supporting the policy network model as a concept for explaining why the outcome favouring the extension of the moratorium was possible.

Section 5.2 describes the decision-making process and subsequent policy outcome. It identifies potential opportunities for policy actors to exert influence over the decision-making process and provides insight into the decision rules used by the principal decision-makers in reaching the decision.

Section 5.3 examines the policy environment within which the decision was made and the major issues of concern surrounding the policy problem. As a result of these two factors, the actors who coalesced around the policy problem i.e., the policy network, are identified.

Section 5.4 provides an analysis of the Georges Bank moratorium policy network, in terms of the actors' resource capacities and declared preferences and criteria for pursuing core values and objectives. The analysis focuses on the relationship and behavior of actors in the network, as determined by their understanding of the purpose for the debate, their principal areas of concern and preferred outcome.

Section 5.5 discusses the key factors identified in the analysis to explain the success of actors in the policy network to affect the outcome. The policy implications of the Georges Bank Moratorium network in decision-making are also discussed in this section along with a summary of the research findings.

**Table 13. Chronology of a Policy Problem  
The 1999 Canadian Decision to Extend the Georges Bank Moratorium**

<b>Period</b>	<b>Note-Worthy Events</b>
<b>1964</b>	Government of Canada issued first petroleum exploration permits covering portions of the Georges Bank to Texaco Canada Inc.
<b>1969</b>	US formally protested Canada's national claim to parts of Georges Bank. Bilateral efforts to resolve the dispute failed.
<b>1974 to 1977</b>	Seismic surveys were conducted on the US portion of Georges Bank to assist in assessing its petroleum resource potential. US government permitted 2 exploratory wells to be drilled by an energy company consortium on the undisputed portion of Georges Bank so as to gain geologic information prior to federal offshore exploration leasing sale. Canada declared 200 nautical mile exclusive fishing zone (EFZ) in an attempt to control foreign over-fishing. US also claimed EFZ which overlapped with Canada's boundary.
<b>1979</b>	Special Agreement between Canada and the US respecting the delimitation of the Maritime boundary in the Gulf of Maine and a Fisheries Agreement concluded. US federal government successfully completed offshore lease sale #42, which resulted in 63 blocks being sold on the US undisputed portion of the Bank.
<b>1981 to 1982</b>	Failure of the 1979 East Coast Fisheries Resources Agreement to be concluded. Canada and US submitted their Gulf of Maine Maritime boundary dispute (which included the dispute over Georges Bank) to the International Court of Justice. Canada and US fishers continue to overfish the resources on Georges Bank. Additional seismic surveys and 8 exploratory wells drilled on undisputed US portion of Georges Bank. All wells failed to encounter significant amounts of hydrocarbon resources. US Congress commenced a series of one-year moratoria on new petroleum exploration on the Outer Continental Shelf. Canada and Nova Scotia signed Agreement on Oil and Gas Resource Management and Revenue Sharing.
<b>1984</b>	International Court of Justice ruled on a single maritime boundary dividing the continental shelf and the exclusive fishing zones of Canada and the US. The ruling granted Canada jurisdiction over approximately one-sixth of the Bank, which included the lucrative scallop area known as the Northeast Peak. US Congress imposes one-year moratorium on petroleum activities on areas including the US portion of Georges Bank.
<b>1986</b>	Texaco expressed interest in exploring lease and solicited public input from stakeholders along the southwestern coast of Nova Scotia. Fishing sector registered its opposition to the Texaco proposal, forming a NORIGS coalition to lobby government decision-makers. Political pressure applied by fishing sector to prevent petroleum-related activities on Georges Bank during the Nova Scotia provincial elections. Canada-Nova Scotia Offshore Petroleum Resources Accord negotiated, covering joint management of oil and gas resources offshore of Nova Scotia.
<b>1987 to 1988</b>	Acts by the federal and Nova Scotia provincial government to implement the Canada-Nova Scotia Accord passed, including provisions for establishing a joint regulatory board, a moratorium on petroleum-related activities on Georges Bank and a public review process prior to the expiration date in 2000.

Period	Note-Worthy Events
1990	Joint Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) established with powers to regulate all aspects of NS offshore petroleum related activities.
1991	US National Academy of Sciences advised President George Bush of the inadequacy of existing science to assure new offshore leases in existing moratoria areas would not cause damage to the environment. President Bush signed a presidential deferral, under section 12 of the <i>Outer Continental Shelf Lands Act</i> , postponing new leases in offshore areas to 2002.
1992	First hydrocarbon (in the form of oil) produced from Nova Scotia's offshore at Cohasset-Panuke production site; project regulated by the CNSOPB.
1996	Georges Bank review panel appointed. Review process began, starting with public introductory meetings at 6 sites in southwestern Nova Scotia (Digby, Saulnierville, Yarmouth, Barrington, Liverpool, Lunenburg) and Halifax.
1997	Canada's <i>Oceans Act</i> came into force. Review Panel information sessions at 5 sites in southwestern NS (Digby, Yarmouth, Barrington, Liverpool, Lunenburg) and Halifax. Sable Gas public hearings began in Nova Scotia; approval given by National Energy Board due to inter-provincial and transborder nature of the project. First oil produced at Hibernia in the Newfoundland and Labrador offshore.
1998	Review Panel held an information session in St. George, New Brunswick and community workshops at 3 sites in southwestern NS (Yarmouth, Shelburne, Bridgewater) and Halifax. US President Clinton issued an executive order extending the US moratorium on new petroleum-related activities on the Outer Continental Shelf, including Georges Bank, to June 30, 2012
1999	Review Panel held public hearings at 3 sites in southwestern NS and Halifax over a three-week period. NS Provincial elections called, fishing sector pressed candidates to state position on moratorium issue. <u>June:</u> Review Panel submitted report to federal and provincial government, recommending actions be taken to have the moratorium on Georges Bank remain in place. Liberal Premier of NS publicly declared acceptance of Review Panel's recommendation in advance of a joint response by provincial and federal government. Progressive Conservative government elected in NS. <u>December:</u> Federal and provincial Ministers of Natural Resources issued joint press release accepting the recommendation of the Review Panel and extending the moratorium to December 31, 2012.
2000	As required by the 1988 <i>Accord Implementation Act</i> , the federal Ministers of Natural Resources published the extension of the Georges Bank moratorium in the Canada Gazette on January 29, 2000.

## 5.2 The Decision-Making Process and Outcome

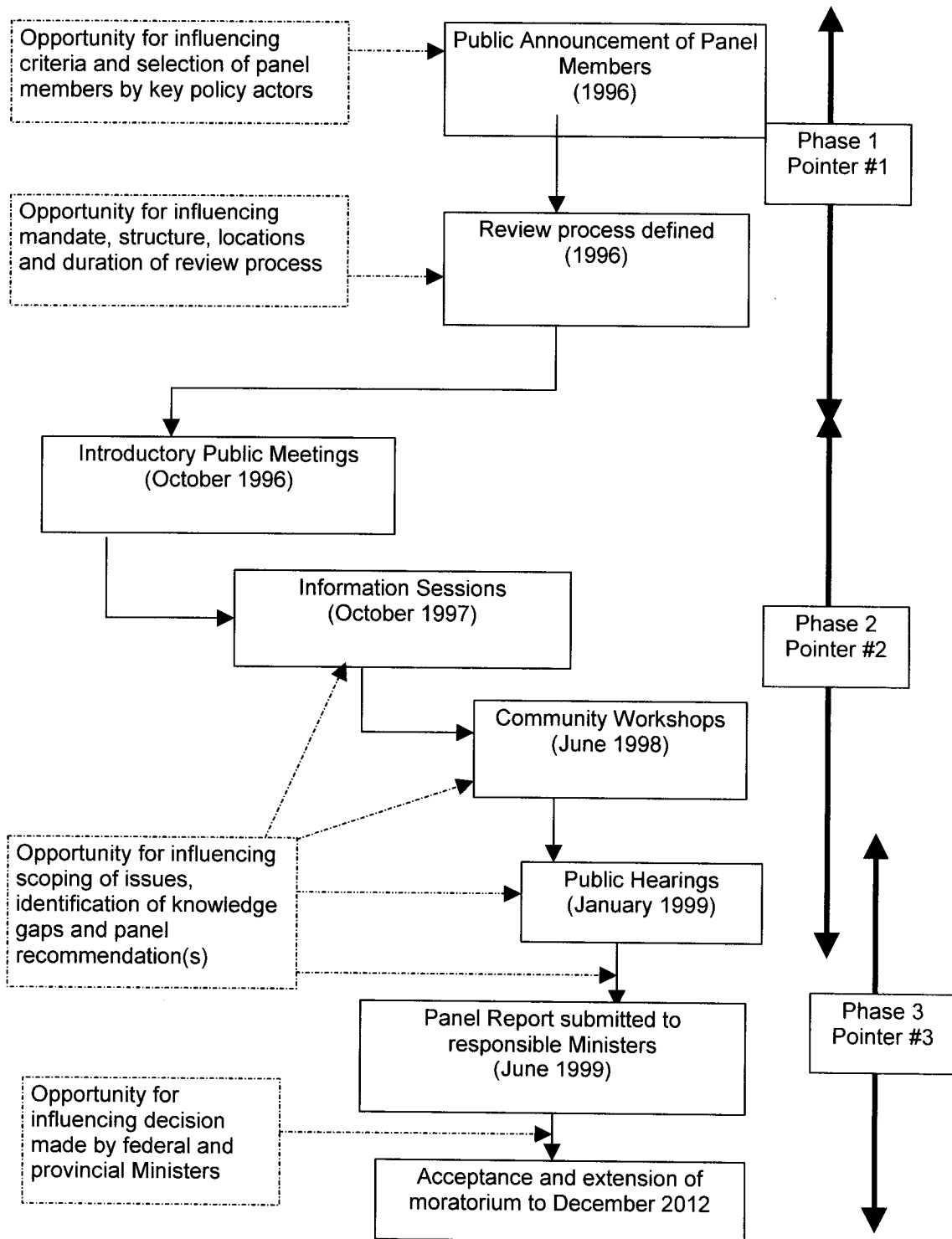
For the purposes of this analysis, the decision-making process is defined as the steps steering the Governments of Canada and Nova Scotia towards a decision as to whether or not an existing moratorium on oil and gas activities should be extended after January 1, 2000. The process commenced with the appointment of three members of the public by the federal and provincial governments to serve on a review panel, commencing its responsibilities on January 1, 1996. Four years later, on December 22, 1999, the federal and provincial Ministers of Natural Resources announced a thirteen-year extension of the moratorium, to December 31, 2012.

The outcome of the policy process reflected the totality of influence exerted by policy actors on the decision. These included those who were capable of affecting the decision and those who could potentially be affected by the decision. As was evident from the outcome, the two levels of government sharing responsibility for the decision decided to continue the prohibition of oil and gas activities on Georges Bank.

Figure 16 illustrates the process undertaken by the decision-makers to comply with a legislative requirement to solicit public input. It also identifies potential opportunities for affected actors to influence the process. Unlike the Fixed Link case study described in the previous chapter, there were no critical decision-making checkpoints inherent in the review process. This was due to the absence of a site-specific project to evaluate and to the legal requirement to conduct and complete the review. Nonetheless, the research suggested the presence of a number of pointers during the three phases of the process that lent support to the decision that was eventually made. These are discussed below and are itemized as:

- (i) the membership and mandate of the review panel;
- (ii) the perceived unique nature of Georges Bank; and,
- (iii) the extension of the US moratorium.

**Figure 16. Opportunities to Affect the Georges Bank Decision-Making Process**



Pointer #1: Membership and mandate of the review panel – The appointment of the specific members to the review panel provided a signal to policy actors of the potential likelihood of a recommendation to extend the moratorium. In fact, the appointment of two private sector consultants with publicly perceived biases towards the environment was cited by actors opposed to petroleum activity on Georges Bank as the main reason for their participation in the public hearings. Furthermore, there was a general sense among those policy actors who had previously participated in coastal and ocean policy decision-making in the region, that the specific individuals appointed to serve on the panel indicated the outcome desired by the decision-makers.

It should be stated that, despite the above-mentioned perception, the process of panel selection allowed for representatives from both of the fishing and petroleum sectors to comment on the proposed membership of the panel. Nonetheless, the implications of previous interactions among some of the key policy actors from within the region, including the panelists, were considered important to evaluate.

The mandate of the review panel was taken directly from the 1988 Accord Implementation legislation. As cited, the panel was to limit its review to the environmental and socio-economic impacts of exploration and drilling activities on the Bank. However, it was the view of the fishing sector, based on a global review of petroleum activities, that the question to be addressed must include all activities associated with the exploitation of the resource, i.e., exploration through development and production to decommissioning.<sup>3</sup> This view of the fishing sector appeared to have also been shared by other policy actors, including non-governmental organizations and the review panel, given the breadth of comments offered and permitted for presentation at the formal

---

<sup>3</sup> All of the representatives of the fishing sector interviewed for this study shared this view, summarized by one representative as follows, "If exploration showed commercial quantities of oil and gas, development and production would follow, sure as night follows day, based on experience around the world." This view was countered repeatedly by representatives from the petroleum sector that "it was not a given that a project would proceed if hydrocarbon resources were found."

public hearings. Further evidence of the 'unofficial' broadening of the mandate was to be found in a review of the studies commissioned by the panel. While some of these studies had a direct bearing on exploratory activities, some, such as those relating to the effects of produced water on larvae and offshore production storage and transportation, were more targeted to environmental impacts associated with production (Mullally *et al.*, 1999). The apparent unequal understanding among policy actors as to the allowable scope of the review led to some actors focusing their efforts only on offshore exploratory activities (as described in the mandate for the review in the legislation) while others examined the impacts of all areas of petroleum exploitation. Without making a judgement as to what the scope of the review should have been, the lack of clarity surrounding the interpretation of the mandate necessarily placed some actors at a disadvantage relative to others. Furthermore, by introducing a discussion on down-stream petroleum-related impacts whose significance were acknowledged to be site and resource dependent (Boudreau *et al.*, 1999), the fishing industry urged for worst case scenarios to be examined. Thus, discussions on events that were unlikely to occur were given the degree of attention that would not have occurred, in the event of a project-specific review, where, as explained by one marine scientist, "the site meant everything to what the impact would be."

Pointer #2: The unique nature of Georges Bank – As one of the most scientifically studied offshore areas of the world, Georges Bank has attained the reputation of a unique marine ecosystem. The Department of Fisheries and Oceans documented the factors cited for its unique nature in reports prepared for the panel (DFO, 1998; Boudreau *et al.*, 1999). These included the following physical, chemical and biological characteristics:

- the convergence of subpolar and subtropical water masses and organisms, resulting in high biodiversity of species;
- strong and persistent tidal currents resulting in high mixing rates, nutrient supply and overall dispersion;

- a partial gyre that typically provides a mechanism for re-circulation and extended residence of a portion of the Bank's water during part of the year;
- a seasonal frontal system with enhanced around-bank drift, elevated phytoplankton production and near-surface convergence zones that may concentrate organisms;
- high productivity of phytoplankton and fish;
- a relatively large number of commercially important species on the Northeast Peak with benthic invertebrates, including scallops and lobster, dominating the landed value; and,
- the co-occurrence on the Northeast Peak of spawning and nursery areas for many fish species.

For each of the above-mentioned characteristics, scientists have been able to confirm and document their existence on Georges Bank. However, there is still considerable uncertainty and gaps in knowledge as to how these factors interact with each other to account for the overall resiliency observed on Georges Bank. Equally unclear is whether the uniqueness of the Bank makes it more or less sensitive to petroleum related impacts (DFO, 1998). Nonetheless, these factors reinforce the "uniqueness" of the Bank for southwestern Nova Scotia and New England fishing communities, who, for generations, have developed a sense of community with Georges Bank.<sup>4</sup> This association has been reinforced by the adjacency of these coastal communities to the Bank, its easily recognizable and physically defined nature and traditional ecological knowledge suggesting Georges Bank provides the seed stock for many of the fisheries in the Gulf of Maine and Bay of Fundy.

The opportunity for the unique nature of Georges Bank to be cited as one of the major reasons why the moratorium should be extended was repeatedly seized by policy actors during

---

<sup>4</sup> As used in this thesis, community follows the definition provided by Matthews (1993) in that it refers to an entity whose members share a sense of intimacy and control over the entity, derived from habitual use by the same users.



the decision-making process. Due to the four-year duration of the process, actors were able to periodically highlight this issue. For example, the process of having introductory meetings (held in October 1996), to solicit input on knowledge and information gaps pertinent to the issue, allowed the significance of Georges Bank to the fishing sector to be raised during the scoping exercise. One year later, information meetings (held in October 1997) were used to convey information pertaining to the physical and biological features of Georges Bank and the known economic value of the Georges Bank fishery. An overview of the regulatory environment for the petroleum sector in the Nova Scotia offshore and generic exploration and drilling activities were also presented at these sessions. At the community workshops held in June 1998, topics discussed included changes in the fishery and existing knowledge of Georges Bank since the moratorium was imposed in 1988 and risks and benefits of petroleum activities on Georges Bank for the ecosystem, fisheries and local communities. These occasions provided advanced opportunities to reinforce the declaration of the perceived and scientifically unique features of Georges Bank at the public hearings in January 1999, as a means of influencing the decision.

Pointer #3: Extension of the US moratorium - The extension of the US moratorium on petroleum activities before formal hearings were held in Canada was identified as a significant potential pointer in terms of gauging the outcome of the Canadian decision-making process. While this research did not examine the rationale behind the US decision to extend its moratorium four years before it was to expire in 2002, its influence on the Canadian review and subsequent decision was considered necessary to examine. The scientific arguments and acceptance in support of a consistent management regime for the area was evidenced from the bilateral efforts in place at the operational level to rebuild fish stocks (NMFS, 1999). The consensus of fishery managers and scientists on both sides of the Hague line was that an equivalent management regime with regards to petroleum-related activity seemed logical. Furthermore, the political strength of the fishing constituency in the New England states was such that fears of negative

impacts arising as a result of activities on the Canadian side could be used to influence Canadian decision-makers. A common sentiment expressed by a number of policy actors was the merit in continuing with the review in Canada, were it not for the specific legal requirement to do so.<sup>5</sup>

### **5.3 Case Study Context**

An understanding of the major factors affecting decision-making in the coastal and ocean policy domain in the Maritimes requires an understanding of the context within which any given policy problem in this domain is defined, structured and resolved. By examining the existing suite of *status quo* policies (i.e., the policy habitat) and the policy environment in which competing values jostle for legitimacy, it is possible to understand why the problem has arisen and who will be involved in influencing its resolution. Of equal (if not greater) interest, is the question of how the problem will be resolved. This case study provides a second attempt to examine a key proposition of this thesis –namely that the resulting composition and pattern of involvement among members of the policy network who coalesce around a particular policy issue, are critical elements to answering this question.

#### **5.3.1 Existing Policy Environment**

The review of the Georges Bank moratorium, over the period 1996 to 1999, presented a unique situation for coastal and ocean policy decision-making in the Canadian context. Firstly, although taking place in a policy environment that was considerably different from that of the late 1980s, the mandate and structure of the decision-making process was in fact based on a political decision that was specified almost a decade earlier. This earlier decision reflected the dominance of government in public policy decision-making processes and the power of the fishing constituency in obtaining an outcome beneficial to the achievement of its core values. These

---

<sup>5</sup> As commented by the representative of one community organization in southwestern Nova Scotia, "If you wanted unbiased deliberation, it [the US decision] didn't help."

factors thus influenced the scope of the review to be undertaken in the future, as was evident in the wording of the mandate for the review panel in the *1988 Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act*. Specifically, section 141 (2) of the federal version<sup>6</sup> of the Act states:

A public review of the environmental and socio-economic impact of exploration and drilling activities in that portion of the offshore area described in Schedule IV shall be conducted by a panel that is to be established for that purpose, in accordance with this section, on or before January 1, 1996.

Thus, the mandate of the 1996-99 Georges Bank moratorium review was set in 1988 and was explicit in its assessment of the impacts resulting only from petroleum activities. This minimized the importance of examining the integrated consequences of impacts, positive and negative, of other coastal and marine user groups dependent on Georges Bank. It also effectively ignored the recognition of the mutually conflicting nature of fishing and petroleum activities in the offshore and the requirement for mitigation by both sectors, if co-existence was to be considered as a potential goal, as was being advocated by the petroleum industry (Davis, 1999; OTANS, 1999). This goal was also being examined carefully by the provincial government, given the potential for the petroleum sector to be a major economic player in Nova Scotia.<sup>7</sup>

Secondly, the review was the first of its kind to address a strategic-level policy question affecting ocean use and space in Canada. As such, precedent was lacking in terms of evaluating the challenges and appropriateness of the public review process for addressing such questions.

---

<sup>6</sup> A slightly different wording is provided in section 134B (1) of the provincial version of the Act, specifying the review to be conducted for exploration *or* drilling (*not and*) and for the panel to be established not later than January 1, 1998. (Note: emphasis added by author).

<sup>7</sup> The political clout and legitimate concerns of the fishing sector were publicly acknowledged by all political parties in Nova Scotia during the provincial elections, following the demand by the NORIGS 2000 coalition for candidates to state their position relative to the debate. However, the minority Liberal government also acknowledged that all of the players needed to recognize that the government "could not turn a blind eye to a potential billion dollar industry on the basis of emotional arguments."

As highlighted in Table 13, the process of public review relating to the offshore was limited to an evaluation of the environmental impacts resulting from a specific project such as the Sable Offshore Energy Project, the Terra Nova Oil Project and the Hibernia Oil Project. In such cases, the proposed activities were specified and the location defined. This level of detail allowed for a focused debate on the costs and benefits, risks and uncertainties associated with proposed activities. In the absence of such specificity, the potential for policy actors to provide meaningful input into the decision-making process is overly dependent on an understanding and agreed acceptance of the purpose of the review and the direction provided to participants by the Panel. These criteria will be examined in the subsequent analysis of the case study and conclusions reached as to their importance in affecting the decision-making process.

Thirdly, the broader policy environment affecting coastal and ocean policy had changed substantially since the moratorium was introduced in 1988. Four identifiable areas of change included:

- The collapse of the groundfish fish stocks throughout the Atlantic Region and the imposition of fishing moratoria off the coast of both Newfoundland and Labrador and Nova Scotia in the early 1990s. Although a fishing moratorium was not placed on the Canadian side of Georges Bank, the US did impose management restrictions on the fishery that included a moratorium on their side of the Bank in 1994. By the time of the Canadian review of the petroleum moratorium, allowable-days-at-sea for US fishers on some traditional fishing grounds on Georges Bank had been cut in half for over five years (NMFS, 1999).
- Although the US had assessed the hydrocarbon resources of their portion of Georges Bank in 1981/82 and found it to be limited (Edson *et al.*, 2000), the level of Canadian petroleum activity in the Newfoundland and Nova Scotia offshore was increasing substantially in the 1990s. Estimates of potential hydrocarbon resources for the Scotian

Basin and Laurentian Sub-basin suggested commercially profitable amounts of oil, gas and gas condensates (Wade *et al.*, 1989; MacLean and Wade, 1992). Although exploratory drilling data were not available to assess its potential, the likelihood of hydrocarbon reserves on the Canadian portion of Georges Bank was considered a good possibility. This was because of preliminary seismic work (Procter *et al.*, 1984) and the evidence that the East Georges sedimentary basin underlying the Canadian area was considered similar to the Scotian Basin, where reserves had been located. Additionally, the East Georges Basin was found to be geologically separate and distinct from the Georges Bank Basin, which underlies the area of the Bank under US jurisdiction (Edson *et al.*, 2000). The potential economic benefits to be reaped by encouraging petroleum exploitation in the Atlantic Region, a traditionally described “have-not” region of Canada, was such that decision-makers could not ignore the opportunities available to the region from petroleum activities.

- As a marine offshore area, the legally imposed maritime boundary that divided Georges Bank (ICJ, 1984) served as an artificial line for management purposes. However, given the biophysical nature of Georges Bank, the boundary was effectively ignored by the non-human components of the ecosystem (Boudreau *et al.*, 1999). As such, decisions affecting ocean use and space on either side of the boundary required due consideration of the consequences of the decision for the entire Bank. This constrained the decision-making process from one that might otherwise have been primarily local or provincial in nature to one that had to consider bilateral relations with a friendly state but powerful neighbour. Additionally, consideration by both states to take into account the impacts arising from transboundary issues was a reasonable expectation, given examples at the time of existing reciprocal and joint management initiatives in the region. Examples included the reciprocal fishing enforcement agreement between the two countries and the

creation of the Gulf of Maine Council on the Marine Environment. This latter initiative was created as a result of co-operation between two Canadian provinces and three American states (Waterman, 1991; Chircop *et al.*, 1995). Thus it was reasonable to evaluate what effect, if any, the extension of the moratorium on the US portion of Georges Bank might have on the decision-making process in Canada.

- The governance structure of the mid-to-late 1990s was such that public involvement in decision-making had become not only an expectation but also a right, enshrined in both “hard” and “soft” policy instruments. The *Canadian Environmental Assessment Act* (1992) and the *Oceans Act* (1996) both required the federal government to ensure public involvement in decision-making. The growing global awareness of the failure of governments to effectively address the linkage between environment and development and to protect against transboundary environmental impacts led to a rise in stakeholder participation in decision-making. In the case of the Georges Bank review, this resulted in the unprecedented submissions by US federal, state and non-governmental groups to the Public Review panel and the attempts by these groups to influence the decision outcome.

### **5.3.2 Major Areas of Concern**

Notwithstanding the mandate as specified to the Georges Bank review panel, a review of government documents, consultants’ reports, public submissions and interviews, scientific papers and reports generated under the direction of the review panel, identified a broad range of concerns surrounding the policy problem. For analytical purposes, these were categorized into the following six major issue areas: (i) the fishery; (ii) the Georges Bank ecosystem; (iii) petroleum exploitation activities; (iv) co-existence; (v) the offshore regulatory regime; and, (vi) the process surrounding decision-making. Appendix 5 provides a listing of the major concerns raised during the decision-making process, categorized into these six major issue areas. The concerns under each of these categories were further subdivided in terms of their relevance to major disciplinary

areas such as the environment, social impacts, ethical issues, economic issues, political considerations, legal issues and institutional arrangements. As with the fixed link case study, this subdivision, by disciplinary area, was deemed essential from an analytical perspective since it allowed for particular disciplines that cross-cut the major areas of concern to be discerned.

(i) Concerns over the fishery - The Georges Bank fishing grounds have been commercially harvested by Canadian and American fishers since the mid-1800s (Gardner Pinfold, 1998). Over that period, the productivity of the various commercially targeted species, including scallops, lobster, groundfish, swordfish and herring have varied considerably. Two reasons have been attributed for this variation, namely excessive fishing pressure and natural variation due to changing environmental factors (Gardner Pinfold, 1998). Nonetheless, to demonstrate the potential productivity of the area, the Department of Fisheries and Oceans provided the review panel with estimates of the potential biomass production of commercially-targeted species on Georges Bank as an indication of what might be realizable if stocks were allowed to rebuild (DFO, 1998). In the 1970s, herring stocks collapsed as a result of foreign overfishing and by 1998, were slowly being rebuilt and harvested as an exploratory fishery,<sup>8</sup> with a limited quota of 2000 tonnes as compared to a potential yield of 100,000 tonnes. In the 1980s, despite the earlier declaration of exclusive fishing zones by Canada and the US in 1977, domestic pressure resulted in declines in the scallop stocks but these have since recovered and stabilized at around 6,000 tonnes. In 1998, quotas for Canadian scallop fishers were set at conservative levels (4,000 to 5,000 tonnes) while in the US, the re-opening of scallop areas under a "crop-rotation management strategy" has meant the re-injection of approximately \$40 million annually into south-east New England

---

<sup>8</sup> It is important to note that in the fishing industry, an "exploratory" fishery implies one in which the available resources are such that there is an expectation it will become fully commercially available in time. As such, the term "exploration", with regards to petroleum activities, was viewed in a similar light by fishers, even though the availability of petroleum resources on Georges Bank was unknown.

communities (NMFS, 1999).

Pressures on the groundfish stocks have led to declines in the 1990s but joint management effort between the US and Canada appeared to be succeeding, particularly for haddock and flounder, in which recruitment success has been measured.<sup>9</sup> On both sides of the maritime boundary line, cod is recovering more slowly, compared to other groundfish species. Total potential yield for groundfish (cod, haddock, and flounder) is estimated at approximately 79,000 tonnes while current catches are limited to 8,200 tonnes, for both US and Canada (DFO, 1998). Swordfish is a highly migratory species whose stocks have also declined in the 1990s, due to over-exploitation by fishers throughout the migration route of this species. Lobster stocks appear to be healthy and well managed and Georges Bank is believed by some fishers to provide seed stock for the inshore fishery. The yield for lobster on Georges Bank in 1997 was 1,300 tonnes, exceeding DFO calculated potential estimates by approximately 60% (Boudreau *et al.*, 1999).

The fishing industry targeting the above-mentioned species has relied on Georges Bank on both a year-round and seasonal basis, depending on the species harvested. Since the first moratorium on petroleum activities in 1988, the number of vessels active on the Bank had decreased an estimated 40% to 175 vessels. Scallops, with an annual value of \$40-\$60 million, are fished year-round in the area known as the Northeast Peak by seven companies, operating 25 vessels from four ports in south-western Nova Scotia. Lobster is also harvested year-round, mainly along the edge of the Bank. Two companies, operating three vessels directly on Georges Bank, harvest approximately 200 tonnes annually, valued at \$2 million.

Groundfish vessels comprise the majority of the boats on Georges Bank with some 80 fixed gear and 65 mobile gear vessels harvesting the quota valued at \$10-12 million. As indicated above, declines in the groundfish stocks have resulted in a decrease in the level of allowable

---

<sup>9</sup> Both US and Canadian managers reported the 1998 year class for haddock on Georges Bank to be the largest in the previous 20 years (NMFS, 1999; Boudreau *et al.*, 1999).



catch from approximately 20,000 tonnes in the early 1990s to 8,000 tonnes in 1998. In general, the groundfish stocks are considered to be in a depleted state with the fishery being conducted with low quotas, closed seasons and spawning season closures to assist in their rebuilding (DFO, 1998). The groundfish harvesters fish mainly during June to December, using all portions of the Banks.

Approximately 50 fixed gear vessels fish swordfish and the 2000 tonne catch is valued at \$2 million. Swordfishing occurs along the southern edge and slope of the Bank during August to October. Based on fishing patterns, the Georges Bank fishery was considered to be fully utilized (Gardner Pinfold, 1998). Efforts necessary to avoid conflicts among different gear types were well understood and were reflected in harvesting plans. A review of the fishery commissioned by the review panel further suggested that any shifting of effort as a result of a new or additional user would cause overcrowding and create inefficiencies and gear conflicts (Gardner Pinfold, 1998).

In total, the Georges Bank fishery has been valued at approximately \$100 million annually, for the majority of the period since the 1988 moratorium. Dependence on the Bank is greatest in southwestern Nova Scotia where fishing, as an economic activity, provided direct income of \$38 million to approximately 1000 fishers and \$6 million to an estimated 600 plant workers annually. Thus, both the fishing industry and the coastal communities along southwestern Nova Scotia that benefit from fishing as an economic activity, raised legitimate concerns about the potential negative effects of all aspects of petroleum exploitations on their existing livelihood.

(ii) Georges Bank ecosystem – Much has been written about the physical, chemical and biological processes occurring on Georges Bank. However, concerns were raised as to the gaps in knowledge with respect to the linkages between these processes and the additional stresses which might be placed on them as a result of petroleum activities. Specific areas of concern related to the retentive capacity of the Bank, which has been attributed as a factor in its high productivity. Interactions between petroleum activities and year-round spawning of the various

commercially exploited species were also areas of significant concern. Additional ecosystem-related concerns included the effects of petroleum activities on the use of the area by over two dozen whale and four seal species (DFO, 1998), impacts on the benthic community and sediment and water quality effects.

(iii) Environmental impacts of petroleum-related activities – In general, societal concerns related to petroleum activities in the marine environment have resulted primarily from media attention surrounding catastrophic spills and blow-outs over the past four decades. As a result of growing concerns, the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) published its review of the impacts of petroleum activities on the marine environment (GESAMP, 1993). The report concluded that the impacts of operational discharges from oil and gas activities on the marine environment were less than those of other human activities (conclusion #1). However, legitimate fears remain due to gaps in available knowledge and the risks associated with catastrophic events, even though the probabilities of such events occurring have been shown to be extremely small.

In the debate surrounding the Georges Bank moratorium, concerns were raised over the potential environmental impacts associated with all phases of petroleum exploitation (Shaw *et al.*, 1999). During the exploratory phase, the effects of seismic-generated noise on marine mammals and fish behaviour and mortality, at different stages of development, were areas of concern. Similarly, during exploratory and development drilling, the impacts arising from the release of drilling muds and cuttings, particularly on the lucrative scallop fishery, were cause for concern. At the production phase, the effects of produced water, containing petroleum, heavy metal and/or naturally occurring radioactive elements, on the commercially exploited biological resources were raised as areas of concern. Also associated with the production phase was concern over the effects of petroleum spillage, whether through blowouts, chronic pipeline failure or tanker accidents. While many of these concerns were applicable to any area of the offshore where

petroleum activities might occur, for some policy actors, the concerns assumed a greater significance when applied to the Georges Bank debate. This was due to the described linkages between the physical and biological processes occurring on the Bank. As well, there was the fear that the documented retentive capacity of the Bank would result in spilled petroleum contaminants being re-circulated throughout the area, for an extended period.

(iv) Issues arising from co-existence – From the fishing industry's perspective, the concerns arising over the possible introduction of the petroleum sector onto Georges Bank centred on perceived irreconcilable areas of conflict arising from external allocation issues (Charles, 1992). Specific areas cited by the fishing industry included a decrease in the quantity and quality of fish harvested; loss of access to fishing areas on the already limited area due to exclusion zones around petroleum operations; and, scheduling conflicts, given the species availability and weather-related dependence imposed on fishers. Additionally, some concerns were raised over competition for skilled labour between the fishing and petroleum sectors, with the fishing industry being placed in a position to compete with salaries offered by the petroleum sector.

From the perspective of environmental non-governmental organizations, Georges Bank had been directly and negatively impacted by the fishing and shipping industries and indirectly from land-based and atmospheric sources of pollution. As such, this policy actor raised the concern of the impacts associated with stressing the area even further by introducing a new user in the form of the petroleum sector (Ecology Action Centre, 1999). This policy actor argued that attempting co-existence with a non-renewable resource user whose activities threatened the renewable nature of the fish stocks was not a viable solution to the unemployment problem facing coastal communities who were dependent on fish stocks.

Concerns raised by the primary steward for US marine resources, the National Oceanic and Atmospheric Administration (NOAA), included the potential for progress in fish stock recovery to be jeopardized by the threat of environmental harm from hydrocarbon development. Co-existence

concerns of NOAA were echoed by other US actors, including the Atlantic States Marine Fisheries Commission, the New England Fishery Management Council, the Massachusetts Office of Environmental Affairs and federal and state politicians representing Maine and Massachusetts.

(v) The offshore regulatory regime – In addition to specifying the requirement for a public review of the moratorium on Georges Bank, the *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act* (1988) provided for the establishment of the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) in Part I, sections 9-17. The CNSOPB is a jointly established independent body, with a mandate to regulate offshore petroleum activities in Nova Scotia, on behalf of both the federal and provincial governments. CNSOPB approval is required for all offshore operations. The exercise of power or performance of a duty by the Board is final and not subject to the review or approval of either government or either Minister (section 31). However, subject to directives from the federal and provincial Ministers of Natural Resources, the Board may call for a public review, if it is the opinion of the Board that it is in the public's interest to do so.

Given the powers granted to the CNSOPB as a result of the *Accord Implementation Act*, the issue of allowing the regulatory regime to address the environmental concerns associated with petroleum exploitation were raised by both the fishing industry and the petroleum industry. In the former case, the fishing industry was concerned that a lifting of the moratorium would result in the *a priori* approval by the CNSOPB to allow petroleum-related activities on Georges Bank. The fishing industry expressed its concern that, in general, regulated activities were typically allowed and the burden of proof fell on opponents to show why the activity should not take place. As such, the concern was that if the moratorium were lifted, the regulatory permitting process would result in petroleum exploration, development and production on Georges Bank. The petroleum sector viewed the sweeping regulatory powers of the CNSOPB as providing for a very controlled environment under which the sector is made to operate. It supported the use of the regulatory

regime to oversee and make decisions pertaining to offshore petroleum activities, given the established procedures in place for decision-making by the Board. Such procedures included application requirements and levels of environmental assessments, ranging from screening to comprehensive study and public review, based on the type of activity for which a permit is being requested.

(vi) The public review process – Concerns surrounding the public review process covered a range of issues. As previously mentioned, the mandate of the review as specified in the legislation was an area of concern for the fishing industry due to its limited scope on exploration and drilling activities. To address this concern, the policy actors from the fishing industry effectively ignored the mandate. The general nature of the question being addressed was seen as a constraint to the petroleum sector and to government scientists. Both policy actors were unable to give any specific information and advice to questions raised, in the absence of knowledge about a specific type of resource, quantity and location on the Bank. Concerns were also raised over the lack of verification of the accuracy of statements made by presenters in the public forum and the absence of a transparent process and criteria for decision-making by the review panel.<sup>10</sup>

Given the US extension of the moratorium prior to the public hearings in Canada, concerns were raised as to the objectivity of the panel to assess the input being received. Additionally, the involvement of US actors as intervenors in the Canadian review process resulted in attempts by these policy actors to influence the decision directly. Examples of US intervention included the

---

<sup>10</sup> This latter point was specifically addressed by the review panel in its report to the two levels of government (Mullally, *et al.*, 1999).

submissions of the Massachusetts Congressional delegation<sup>11</sup> and the US Department of Commerce to the review panel. Additional concerns on the objectivity of the review process were raised by some actors who viewed the process as a venue for collecting opinions from 'local notables' within the fishing sector. This was attributed in part to the panel's emphasis on maximizing participation as a criterion for a successful process and its tolerance for participants to expand the discussion to a review of petroleum exploitation activities, as opposed to exploration and drilling.

### **5.3.3 The Georges Bank Moratorium Policy Network**

Having identified the major areas of concern surrounding the Georges Bank moratorium policy problem, an identification of the policy actors with sufficient interest to commit time and resources (human, financial and ideational) to affect the decision-making process can be undertaken. The clusters of policy actors sharing a diverse range of interests in the Maritime's coastal and ocean policy domain were previously identified in Table 4, Chapter 2. In the case of the Georges Bank moratorium decision-making process, given the existing policy environment and the major areas of concern, the seven categories of policy actors who coalesced to form the policy network can be explained. These included: politicians (federal (Canada and US) and provincial levels); government departments (federal, provincial and state); civil society in the form of non-governmental organizations; technical experts; business associations; companies; and, the review panel.

---

<sup>11</sup> The Massachusetts Congressional Delegation consisted of Senators Edward Kennedy and John Kerry, and Representatives William Delahunt, John Tierney and Barney Frank. Additional US political involvement in the process included the introduction of a resolution by Senator Susan Collins (R-ME). The resolution commended the review panel's recommendation to extend the moratorium and urged the Government of Canada to adopt the same long-term moratorium that was adopted by the United States (Senate Resolution 167, Congressional Record, July 27, 1999, page S9397).

These actors were identified based on their mandated responsibilities, potential to affect or be affected by the decision outcome and/or their involvement at one or more of the review process activities. Organized labour proved not to be an active member of the Georges Bank policy network although the Maritimes Fishermen's Union, Local 9, did make a presentation to the review panel in support of the extension of the moratorium. The absence of labour as an influential actor was not a surprise, given the documented resistance to unionization and collective action by the fishing industry in the Maritimes (Pross and McCorquodale, 1990).

Table 14 provides the listing of policy actors from each of the categories comprising the Georges Bank policy network. While the major categories of actors were similar in number to the fixed link case study, a larger number of individual actors coalesced into the Georges Bank policy network. This finding was consistent with the evolving distributed governance regime in the late 1990s in which a broader array of non-state actors had acquired the resources, analytical capacity and/or had the legal right to participate in the decision-making process. As indicated above, the participation of non-Canadian policy actors at both the governmental and civil society levels in the review process was a tangible demonstration of this evolving trend. However, the decision-making authority for the offshore remained with the two levels of government.

#### **5.4 Identifying the Influence of Actors in the Policy Network**

Policy networks are characterized by the policy analytical capacity and the power of their actors, who are attempting to influence public policy in a manner that translates deep core normative beliefs into secondary, operational-level decisions. By examining the characteristics and relationship among the actors identified the Georges Bank moratorium decision-making process, the analysis focuses on increasing the level of understanding surrounding each actor's ability to ultimately influence the decision.

Table 14. Listing of Actors in the Georges Bank Moratorium Policy Network

Category of Actors	Actors	Representatives from whom data were collected (* = written data only)
<b>Politicians</b>	<ul style="list-style-type: none"> <li>• Federal (Canada)</li> <li>• Federal (US)</li> <li>• Provincial</li> </ul>	1 Advisor to Minister 1 Member of Parliament  1 US Member of Congress*  2 Cabinet Ministers 1 Advisor to Minister
<b>Government departments</b>	<ul style="list-style-type: none"> <li>• Federal</li> <li>• Provincial</li> <li>• State of Massachusetts</li> </ul>	5 DFO Scientists 1 NRCan Bureaucrat  1 NS Petroleum Directorate Bureaucrat  1 Bureaucrat from the Office of Environmental Affairs
<b>Non-governmental organizations</b>	<i>Fishing NGOs</i> <ul style="list-style-type: none"> <li>• NORIGS 2000</li> <li>• Gloucester Fishermen's Wives Association</li> <li>• Massachusetts Fishermen's Partnership</li> </ul> <i>Environmental NGOs</i> <ul style="list-style-type: none"> <li>• Ecology Action Centre</li> <li>• Enviro-Clare</li> <li>• Sable Gas Intervention Coalition</li> </ul>	1 Representative 1 Representative  1 Representatives   1 Representative 1 Representative 1 Representative
<b>Technical experts</b>	<ul style="list-style-type: none"> <li>• Advisors to Panel</li> <li>• Advisors to NGO</li> </ul>	2 private sector consultants 1 US technical advisor  1 advisor from academia



Category of Actors	Actors	Representatives from whom data were collected (* = written data only)
<b>Business associations</b>	<p><i>Fish Processors</i></p> <ul style="list-style-type: none"> <li>• NS Fish Packers Association</li> <li>• Seafood Producers of NS</li> </ul> <p><i>Fish Harvesters</i></p> <ul style="list-style-type: none"> <li>• Scotia-Fundy Mobile Gear Fishermen's Association</li> <li>• Atlantic Herring Co-op</li> <li>• West Nova Fishermen's Coalition</li> <li>• Southwest Nova Tuna Association</li> </ul> <p><i>Petroleum producers</i></p> <ul style="list-style-type: none"> <li>• Canadian Association of Petroleum Producers</li> </ul> <p><i>Petroleum service providers</i></p> <ul style="list-style-type: none"> <li>• Offshore Technology Association of NS</li> </ul> <p><i>Other</i></p> <ul style="list-style-type: none"> <li>• Shelburne Chamber of Commerce</li> </ul>	<p>1 Representative</p> <p>1 Representative</p> <p>1 Representative</p> <p>1 Representative</p> <p>1 Representative</p> <p>1 Representative</p> <p>2 Representatives</p> <p>1 Representative</p>
<b>Private sector companies</b>	<p><i>Petroleum</i></p> <ul style="list-style-type: none"> <li>• Pan Canadian Petroleum Ltd.</li> <li>• Chevron Canada Resources</li> </ul> <p><i>Fishing</i></p> <ul style="list-style-type: none"> <li>• Adams and Knickle</li> <li>• D.B. Kenny Fisheries Ltd.</li> <li>• Sambro Fisheries Ltd.</li> <li>• Clearwater Fine Foods Inc.</li> <li>• Acadian Fish Processors Ltd.</li> </ul> <p><i>Non-Profit</i></p> <ul style="list-style-type: none"> <li>• Yarmouth Airport Commission</li> </ul>	<p>1 Representative</p> <p>1 Representative</p> <p>1 Representative</p> <p>1 Representative</p> <p>2 Representatives</p> <p>1 Representative</p> <p>1 Representative</p>
<b>Review panel</b>	<ul style="list-style-type: none"> <li>• Panel Members</li> </ul>	3 panellists*
<b>No. of categories- 7</b>	No. of actors - 32	No. of representatives - 46

To achieve the objectives of the study, in terms of assessing by whom, why and how the decision-making process was affected, the analysis was divided into two components:

- (i) generic characterization of actors in the policy network, in terms of resources, policy analytical capacity and core values; and,
- (ii) behaviour of actor in the policy network during the Georges Bank policy process.

#### **5.4.1 Characterization of Actors**

The characterization of actors in the Georges Bank policy network followed both a structuralist (Coleman and Skogstad, 1990) and a learning approach (Lindquist, 1992). Following the structuralist model, the relative strength and power of each actor in the network were assessed, in terms of its resources and analytical capacity to shape policy outcomes. Using the learning approach, actors were characterized based on an identification of ideas and values circulating within the policy network. The alignment of actors within the network with certain ideas and values provided insights into each actor's behaviour and allowed for a determination as to when and why actors might clash or coalesce.

##### **5.4.1.1 Structural Analysis of Policy Actors**

In the first subset of data collected, actors were described based on their mandated authority, goals, organizational culture, constituencies and resource capacity (Table 15). A similar methodology as described for the fixed link case study was used to obtain the data provided in Table 15, i.e., policy actors were provided with a range of options from which to select the characteristics that best describe their mandate, goals, organizational culture, major constituency and resource capacity. The accuracy of the information provided was checked for consistency with publicly available documents on the actors.

Table 15. Characterization of Actors in the Georges Bank Policy Network

Policy Actors	Authority for Mandate	Goals	Organizational Culture	Major Constituency	Resource Capacity
<b>Politicians/Political Advisors</b>					
• Federal (Cabinet)	Elected	Public Welfare	Hierarchical	Government	High
• Federal (Members of Parliament)	Elected	Public Welfare	Hierarchical	Public	Low/Medium
• Provincial (Cabinet)	Elected	Public Welfare	Hierarchical	Government	Medium
• Provincial Member of Legislative Assembly	Elected	Public Welfare	Hierarchical	Public	Low/Medium
• US Senator	Elected	Public Welfare	Hierarchical	Public	High
<b>Government Departments</b>					
• Federal	Legislated	Public Welfare	Hierarchical	Government	High
• Provincial	Legislated	Public Welfare	Hierarchical	Government	Medium
• State	Legislated	Public Welfare	Hierarchical	Government	Medium
<b>NGOs</b>					
• NORIGS 2000	Voluntary	Economic	Horizontal	Fishing sector	Medium/High
• Ecology Action Centre	Voluntary	Conservation	Horizontal	Public	Low/Medium
• Enviro-Clare	Voluntary	Conservation	Horizontal	Public	Low
• Sable Gas	Voluntary	Public Welfare	Horizontal	Public	Low
• Intervention Coalition					
• Gloucester Wives	Voluntary	Economic	Horizontal	Fishing sector	Low/Medium
• Fishermen's Association					
• Massachusetts Fishermen's Partnership	Voluntary	Economic	Horizontal	Fishing sector	Medium
<b>Technical Experts</b>					
• To panel (contracted)	Technical	Economic	Horizontal	Review Panel	Medium
• To panel (voluntary)	Technical	Conservation	Horizontal	Review Panel	Medium
• To panel (unsolicited)	Technical	Conservation	Horizontal	NGO/Public	Low/Medium

<b>Policy Actors</b>	<b>Authority for Mandate</b>	<b>Goals</b>	<b>Organizational Culture</b>	<b>Major Constituency</b>	<b>Resource Capacity</b>
<b>Business Associations</b>					
· Fish processors	Members	Economic	Horizontal	Members	Medium/High
· Fish harvestors	Members	Economic	Horizontal	Members	Low/Medium
· Petroleum sector	Members	Economic	Horizontal	Members	Medium
· Chamber of Commerce	Members	Economic	Horizontal	Members	Low
<b>Companies</b>					
· Private sector (fishing)	Ownership	Economic	Hierarchical	Shareholders	Medium/High
· Private sector (petroleum)	Ownership	Economic	Hierarchical	Shareholders	Medium
· Not-for-profit	Municipality	Public Welfare	Hierarchical	Municipality	Low
<b>Review Panel</b>	Appointed	Public Welfare	Horizontal	Federal and Provincial Government	Medium

Politicians and bureaucrats - Federal and provincial government actors from the political and bureaucratic level could be expected to influence public policy decision-making due to their elected and legislative authorities to serve the public. The organizational culture of political parties is "top-down", with party leaders and their Cabinets or portfolio critics displaying a hierarchical dominance over other members of their caucus (Gibbins, 1999b). For members of the political party forming the government, the major constituency was identified as the government while opposition members considered their constituency to be the public at large, specifically those who had elected them.

In the case of the Georges Bank policy network, the resource capacity available to political actors ranged from low to high. At the federal level in both Canada and the United States, policy analytical capacity was high for members forming the government. This was due to the constitutional authority granted to these actors over the marine environment and over decisions affecting bilateral issues and the bureaucratic support of the appropriate federal departments to provide technical and policy-level advice. At the provincial Cabinet level, policy analytical capacity was ranked as medium. This ranking was due to the limited influence of the province over marine fisheries policy, contrasted with the significance of fishing as an important economic driver in southwestern Nova Scotia.

Additionally, the existing minority status of the provincial government during the debate and the geographic dispersal of the fishing constituency into several electoral ridings in rural Nova Scotia, further constrained provincial politicians. However, as a result of the legislation governing the sharing of offshore petroleum resources, the province held joint decision-making responsibility with the federal government, thus providing the ability of the province to challenge or complement federal policy decisions.

Due to the potential for the decision to impact their constituencies in coastal communities in southwestern Nova Scotia, political candidates whose ridings covered areas potentially affected

by the Georges Bank decision, also participated in the debate. These actors had considerably lesser resources available to influence the process than members of the federal or provincial Cabinet. However, their involvement in the debate was linked to their political survival, given the demand from the NORIGS 2000, for all political parties in the province to publicly declare their position with respect to the moratorium issue.<sup>12</sup> The strengths of NORIGS 2000, a coalition of broad-based fishing interests, will be discussed in greater detail below.

As a policy actor, federal departments played an important role in the policy network, providing financial, technical and human resource capabilities to shape the decision outcome. In terms of providing technical and scientific advice on the physical and biological processes occurring on Georges Bank, the Department of Fisheries and Oceans assumed the lead role during the public review process. While the federal and provincial departments responsible for offshore petroleum resources served as co-chairs of the Secretariat providing administrative support to the review panel, neither department publicly commented on the debate during the process. Nonetheless, departmental staff provided policy analytic advice to their respective Ministers regarding the governments' response to the report by the panel. In all cases, bureaucracies were characterized as having a legislated mandate with a principal goal to serve the public. The major constituency for departments was identified as the government.

Unique to the Georges Bank decision-making process, as compared to the fixed link case study, was the public participation of US politicians and bureaucrats. In all cases, the official view from the United States was for an extension of the moratorium until 2012, similar to that adopted

---

<sup>12</sup> All three political parties in the province responded to the demand from the NORIGS 2000 coalition by agreeing with the need to extend the moratorium. In the case of the Liberal party, which formed the minority government at the time, the Premier confirmed his government's acceptance, in principle, of the panel recommendation. This unilateral response, ignoring the established protocol for a joint announcement by the federal and provincial Ministers of Natural Resources, signalled the power of the fishing constituency in affecting the provincial government's decision-making capacity.

by the United States. The policy analytical capacity of the United States federal and state governments was considered high in the case of the federal government for reasons stated previously and medium for state-level government bureaucrats.

Non-governmental organizations – Two distinct categories of non-governmental organizations (NGOs), representing civil society, were identified in the Georges Bank policy network. These were identified as environmental NGOs and special interest NGOs. In the latter case, the special interest in question was fishing as an economic activity.

Environmental NGOs were represented at the provincial level in the form of the Ecology Action Centre and at the local level, in the form of Enviro-Clare. A small special interest group concerned with environmental health issues also participated in the network. While this last group (Sable Gas Intervention Coalition) was formed to raise the awareness of human health issues associated with the use of natural gas at the public review for the Sable Project, the timing was such that it was also able to participate in the Georges Bank review process. Although extremely limited in its policy analytical capacity, the group's spokesperson had strong ties to the Eastern Canada Chapter of the Sierra Club and as such, was able to draw on the resources of the larger organization. The local group, Enviro-Clare, was also extremely limited in its resource capacity and was dependent on a small number of volunteers. However, support was available from the expanding environmental network of voluntary organizations that had grown as a legitimate actor in public policy decision-making over the previous decade.

The provincially based Ecology Action Centre was almost 30 years old at the time of the public hearings, having been formed in 1971. The group has used education, advocacy and specific action to foster an environmental ethic within the province that would lead to environmentally and economically sustainable jobs. As such, its participation in the Georges Bank policy network was seen as critical for achieving its core conservation values. The fundamental distinction drawn by the group in terms of its support for the extension of the moratorium was the

non-renewable nature of petroleum resources as compared to renewable fish resources on the Bank. However, as a result of the ecological importance of Georges Bank, the EAC has been an outspoken critic of mobile gear fishing on the Bank. The group has a small number of paid staff but the success of its efforts, as with most environmental NGOs, is based on volunteers and as such, its resource capacity is ranked as low to medium. Nonetheless, in terms of its policy analytical capacity, the EAC has been an increasingly important player in marine-related issues affecting Nova Scotia and is increasingly recognized by both federal and provincial decision-makers as an important policy actor in the Nova Scotian coastal and ocean policy environment.

Of the special interest fishing groups, two were prominent players in the New England coastal and ocean policy domain and one, the NORIGS 2000 coalition, was specifically formed to participate in the Georges Bank moratorium policy debate.

The Gloucester Fishermen's Wives Association (GFWA), a volunteer organization based in Gloucester, Massachusetts, has been an active campaigner for the rights of fishermen for over three decades. Due to the importance attributed by the group to Georges Bank as a prolific and environmentally sensitive fishing ground, the GFWA was a visible actor in the establishment of the first petroleum moratorium on the US portion of Georges Bank in 1982. The group was also a player in the decision by President Clinton to extend the moratorium in 1998 and was active in its support of the NORIGS 2000 coalition over the course of the policy debate.

Similarly, the Massachusetts Fishermen's Partnership (MFP), a tertiary fishing organization comprised of sixteen inshore and offshore fishing associations in the New England area, played a key supporting role to the NORIGS 2000 coalition. Additionally, the MFP expressed its concerns to the public review panel by reminding the Panel of the management strategies in place under the New England Fishery Management Council to improve stock rebuilding. The argument presented by the MFP was that Canadian and American fishers and their communities would absorb the potentially significant and long-term costs associated with exploration and drilling



activities on the Canadian side of the Bank (MFP 1999). Given the broad based membership of the MFP, which included members of the New England Fishery Management Council, and the political, technical and financial resources from which it could draw, the resource capacity of the organization was considered medium.

As a non-governmental organization, NORIGS 2000 was possibly the most potentially influential non-state actor in the Georges Bank policy network. The organization was unique to Canadian public policy decision-making processes for a number of reasons. First, although established as a special interest group with the single focus to oppose petroleum activities from occurring on Georges Bank in 2000, the group did have a history with the policy problem and was a significant focus for the arguments that resulted in the 1988 moratorium decision. Second, the membership of the group included representatives from all sectors of the Maritime fishing industry – processors and fish packing associations, fishermen's associations of all gear type and unions of fish workers. This was a phenomenal achievement given the traditional sectoral conflict common to the Canadian fishing industry and the fact that only a small minority of the members actually had licences to fish on Georges Bank. Third, the group was able to draw on the policy analytical capacity of its more experienced and resource-rich members and at the same time, maximize the strength in numbers provided to it by the smaller associations. Fourth, the knowledge gained from previous and repeated interactions between the fishing industry and other policy actors within the Georges Bank policy network could be used to significant advantage by the group. Fifth, the group was able to mobilize support from major political, fishing and environmental interests in the United States because of perceived spillover effects on the US portion of the Bank. Due to all of the above factors, the resource capacity of NORIGS 2000 was ranked as medium to high.

Technical experts - Technical experts served as an important policy actor in the Georges Bank policy network. These individuals possessed considerable potential to influence the

decision-making process based on their knowledge and expert judgement. Technical experts were contracted to assist the Public Review Panel in appreciating the significance of the different aspects of the information being considered by the panel. In addition, the Panel visited technical experts in the United States (Shaw *et al.*, 2000). In particular, the panel met with the former Chair of the Committee of the National Research Council that provided advice to President Bush, prior to his extension of the moratorium on the US portion of Georges Bank. The Committee concluded scientific evidence relating to new petroleum activity in the US outer continental shelf areas was inadequate to assure the environmental protection of these areas (NRC, 1991). Two technical experts from academia also provided unsolicited advice to the Panel during the public hearings while the NORIGS 2000 coalition hired its own technical expert to present scientific findings to the Panel, in support of the extension of the moratorium.

Business associations – Both fishing and petroleum business associations were represented in the Georges Bank policy network. For the fishing industry in the Maritimes region, business associations replaced labour organizations as an influential policy actor, representing the collective interest of their members in the decision-making process. Given the profit-making motive of this policy actor, influence exerted was generally aimed at supporting the decision to minimize economic damage to the fishing interests.

In the case of the Georges Bank policy debate, fishing associations were divided into two major categories. The first category represented the small number of large, vertically integrated companies and those with export markets. Long-standing associations in this category possessed considerable policy analytical capacity and included the Seafood Producers Association of Nova Scotia (SPANS) and the Nova Scotia Fish Packers (NSFP). The second category of fishing associations represented the smaller scale harvesters with specific gear type (e.g. Scotia-Fundy Mobile Gear Fishermen's Association) or those targeting particular species (e.g. SouthWest Nova Tuna Association and Atlantic Herring Co-op). The diversity and relatively small size of these

associations have undermined their ability to effectively participate in debates affecting their interests. Additionally, their dependence on volunteers to represent the members' views in policy level debates has resulted in a low to medium policy analytic capacity. This can be compared to the medium/high ranking assigned to the larger fish processing organizations with professional staff and a 'technostructure' in place to evaluate, influence and implement fishery policies (Pross and McCorquodale, 1990).

Two associations representing the petroleum industry were active players in the policy network. The Canadian Association of Petroleum Producers (CAPP) represented upstream petroleum producing companies, including the three existing lease holders on Georges Bank, namely BP-Amoco, Texaco and Chevron. At the time of the policy debate, CAPP was a relatively new player to the ocean policy domain in the Maritimes, having only established an East Coast presence the year prior to the moratorium decision. As such, the association's ability to influence regional decision-making, in which the fishing industry had an established presence, was considerably limited. Furthermore, the competitive nature of the individual member companies and the fact that only three of its members (Chevron, Texaco and Pan Canadian) were specifically interested in the policy debate contributed to its medium ranking in terms of policy analytical capacity.

The second petroleum sector association that participated as a policy actor was the more established Offshore Technology Association of Nova Scotia (OTANS). This actor represented the downstream providers to the producers and possessed limited policy analytic capacity and resources due to the relative smallness of the petroleum sector in the Nova Scotia. At the time of the policy debate, Nova Scotia had one producing oil project in the form of Cohasset-Panuke (which began production in 1992 and was reaching the end of its expected eight-year production period). The second project in the province, the Sable Offshore Energy Project was just coming into production phase.

The Chambers of Commerce for the major population centres in southwestern Nova Scotia played an important role in the policy debate by sponsoring activities aimed at increasing the awareness of the activities associated with the petroleum sector and participating in the public hearings. As a policy actor however, its analytic capacity was ranked as low, given the limited human, technical and financial resources available to the organization.

Companies - Two major actors were active in this category in the Georges Bank decision-making process, namely fishing companies and petroleum-producing companies. As was to be expected, fishing companies supported the extension of the moratorium while petroleum-producing companies supported the expiration of the moratorium. The support of the fish companies for an extension of the moratorium was important to the policy debate, given the economic impact of these businesses in the region and to Nova Scotia in particular. In general, fish companies in the province, regardless of whether or not they were dependent on the biological resources of Georges Bank, argued that the extension of the moratorium was essential to maintain the importance of the fishery as an economic driver in the province. The resources available to this policy actor were significant, given the long-standing participation and experience in policy debates affecting the fishery. Additionally, the economic, political and social importance associated with fishing in coastal communities along southwestern Nova Scotia increased the significance of this policy actor's arguments.

A third actor participating in this category was the Yarmouth Airport Commission. With a mandate to provide the air transport infrastructure necessary to improve the competitiveness of the area for business, the Commission recognized the co-existence potential of the two competing sectors. However, given the dominance of the fishing sector in the area, the Commission was only prepared to argue in support of co-existence, if it could be shown that petroleum activities would not affect the economic well being of the fishing sector. The resource capacity of this player was ranked as low.

Public review panel - As a policy actor, the three-member public review panel participated in the policy network during all stages of the public review decision-making process. The three-member panel was comprised of a retired provincial public servant from the natural resources sector; a private sector environmental consultant, formerly associated with the environmental non-governmental organization, Ecology Action Centre; and, a private sector consultant, providing consulting services to public and private sector clients in the area of coastal and ocean ecosystems. All members were contracted by the joint federal-provincial Canada Nova Scotia Offshore Petroleum Board to serve on the panel. Unlike the EARP Guidelines Order (section 22) used to select members for the Fixed Link review panel, no guidance was provided in the Accord Acts on criteria for selecting panel members.<sup>13</sup> Each Minister had the opportunity to appoint members to the Panel individually, with the Chair being agreed to by both Ministers.

The panel's deliberations and their criteria for decision-making were not publicly declared during the hearings. However, the public input provided to it during the hearings and the panel's final report to the federal and provincial Ministers of Natural Resources were available for public examination. The resource capacity of the Panel was ranked medium due to the environmentally related expertise of its members, its ability to contract independent technical experts,<sup>14</sup> as well as draw on a fixed amount of financial, human and technical resources of the federal and provincial government. As an advisory body to the Ministers responsible for making the decision on whether or not to extend the moratorium on Georges Bank, the panel lacked decision-making authority and was not accountable to the public for the advice it provided to the Ministers. However, it possessed the potential to influence the process.

---

<sup>13</sup> This point is raised not to imply a lack of any guidelines for selecting panel members in the Georges Bank review process but to emphasize the lack of transparency in this regard, as compared to the fixed link process where the selection criteria were available for all to review.

<sup>14</sup> \$500,000 was made available to the Panel from the Canada-Nova Scotia Development Fund for studies related to the review process.

#### **5.4.1.2 Analysis of Core Values**

The second subset of data characterizing policy actors focused on gaining insight into the core values and preferences held by the actors in the network. Using a learning approach,<sup>15</sup> this was accomplished by ascertaining the degree of importance each actor assigned to key disciplinary attributes. These attributes measured the degree of importance policy actors assigned to areas they considered critical for pursuing their core values and objectives. The categories of disciplinary attributes ranked were the same as those used to further subdivide the issues of concern in Appendix 5, and included environmental, social, economic, ethical, political, legal and institutional indicators.

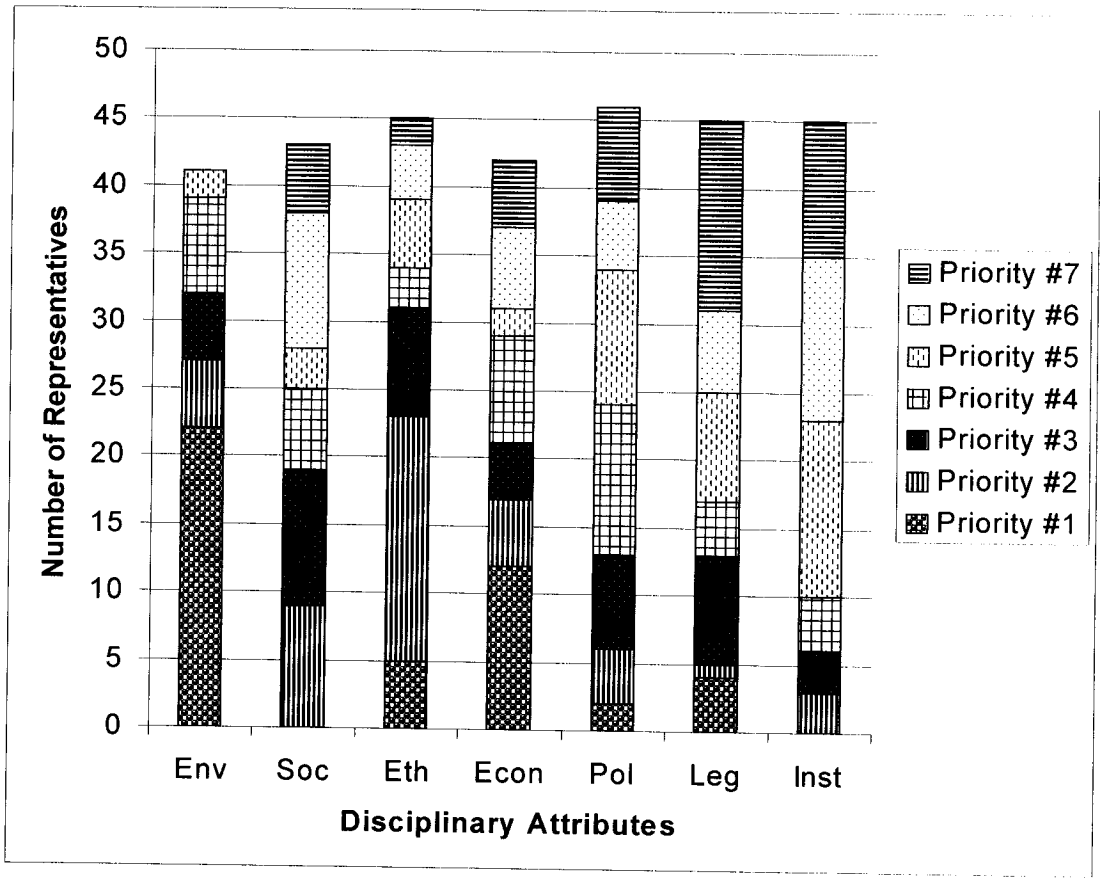
For each of the disciplinary areas, actors were asked to identify and elaborate on the areas of interest they would focus on if they were in a hypothetical policy debate in which a decision affecting coastal and ocean use was to be made. Actors were further asked to provide an overall assessment of the degree of importance they would assign to each of the attributes with respect to policy decisions affecting coastal and ocean use, as prompted for in the interview guide provided in Appendix 1.

Figures 17A and 17B illustrate the degree of importance, in terms of pursuing their core values, which were assigned by the policy actors to each disciplinary attribute. Figure 17A illustrates the differing priority levels assigned by representatives to the same disciplinary attribute. The priority level assigned to the same attribute by the different representatives ranged from the highest (Priority #1) to lowest (Priority #7), for all attributes except the environment, social and institutional attribute. In the case of environment attribute, none of the actors ranked it below a level of priority 5. On the other hand, no actor ranked the social or institutional attribute as having the highest priority.

---

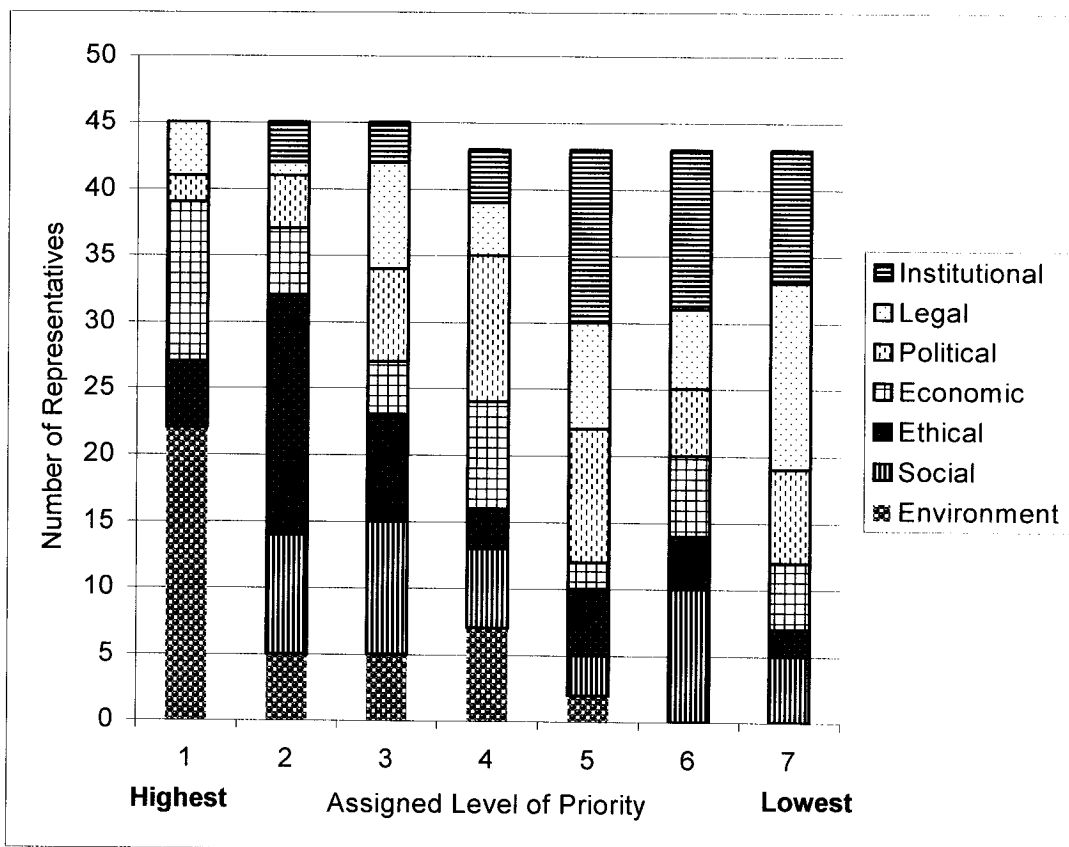
<sup>15</sup> This approach focused on assessing the values and ideas circulating within a policy network, followed by a determination as to which actors subscribed to them (Lindquist, 1992).

Figure 17A. Ranking of Disciplinary Areas by Degree of Importance



<b>Env</b> - Environment	<b>Soc</b> - Social	<b>Eth</b> - Ethical	<b>Econ</b> - Economic
<b>Pol</b> - Political	<b>Leg</b> - Legal	<b>Inst</b> - Institutional	

Figure 17B. Disciplinary Attributes Ranked by Priority Level





The broad range in degree of importance for the same attribute indicated the significant difference in core values among the different actors, as measured by the degree of importance assigned to the disciplinary attributes. This finding is instructive in providing an initial explanation as to the relationship of the actors in the network and their potential to influence the decision reached.

Figure 17B presents the same data analyzed in terms of the full spectrum of disciplinary attributes receiving the same priority level by the representatives who were interviewed for the study. As shown in the diagram, the environmental disciplinary attribute received the highest level of importance from 54 percent of all participants interviewed, followed by the economic attribute, which was ranked highest by 26 percent of the respondents. In contrast, participants ranked legal and institutional disciplinary attributes among the lowest, regardless of the category of policy actor to which they belonged. Nonetheless, as illustrated in Figure 17A, the data shown in Figure 17B also illustrates graphically the diversity among policy actors in terms of the degree of importance assigned to the seven disciplinary attributes which were used to gauge underlying core values.

To obtain a comparison of the degree of importance each policy actor attached to each of the disciplinary attributes, the rankings provided by the actors were weighted across the disciplines. The results of this analysis is presented in Appendix 6 in tabular form while Figure 18 provides graphic illustrations, characterizing the actors with respect to the ability of each attribute to contribute to achieving their core values.

**Figure 18. Weighted Ranking of Disciplinary Attributes by Category of Actors  
(Kite Diagram Visualization)**

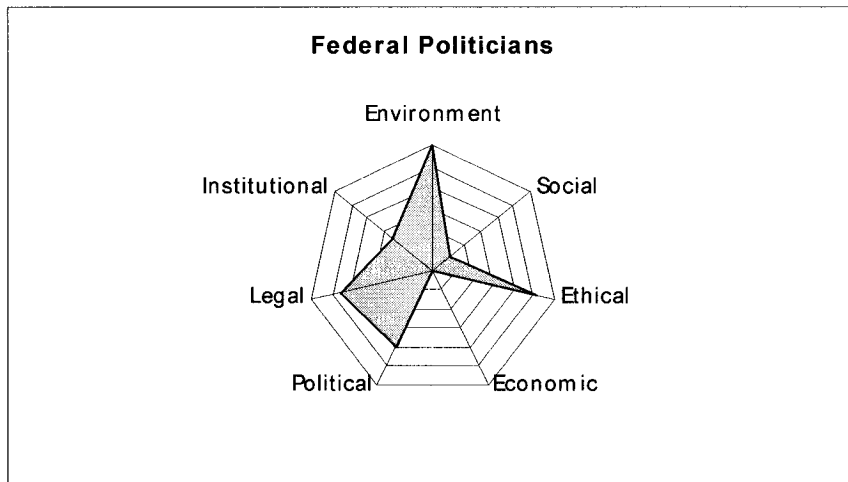


Figure 18a

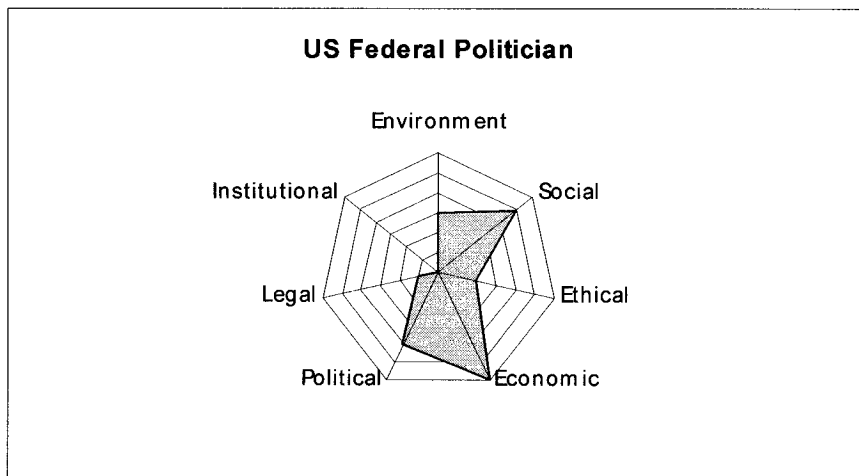


Figure 18b

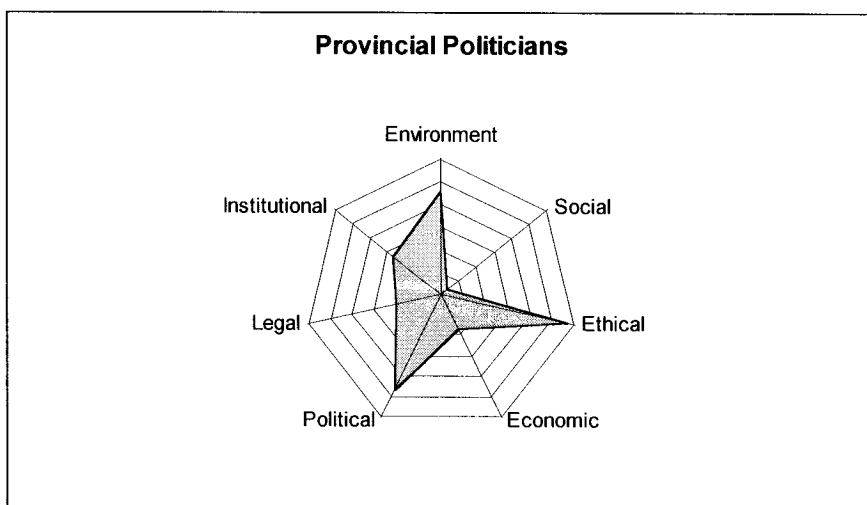


Figure 18c

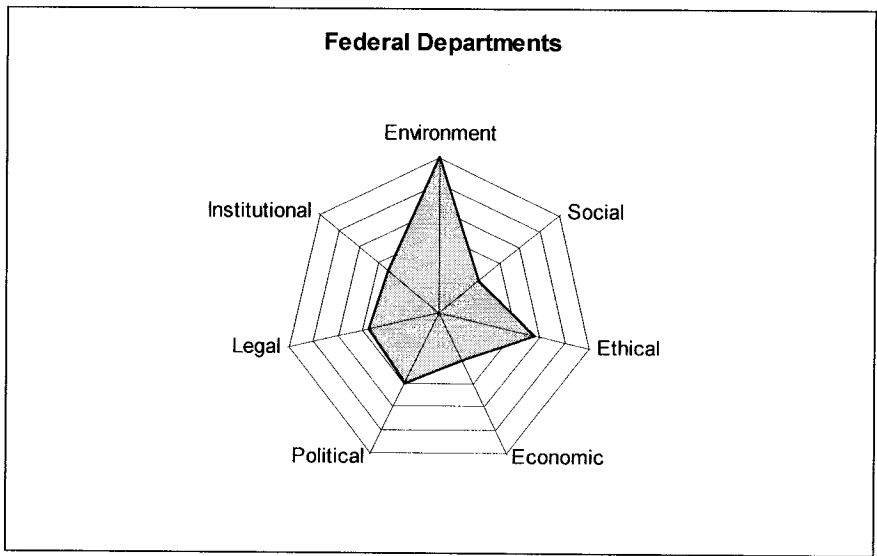


Figure 18d

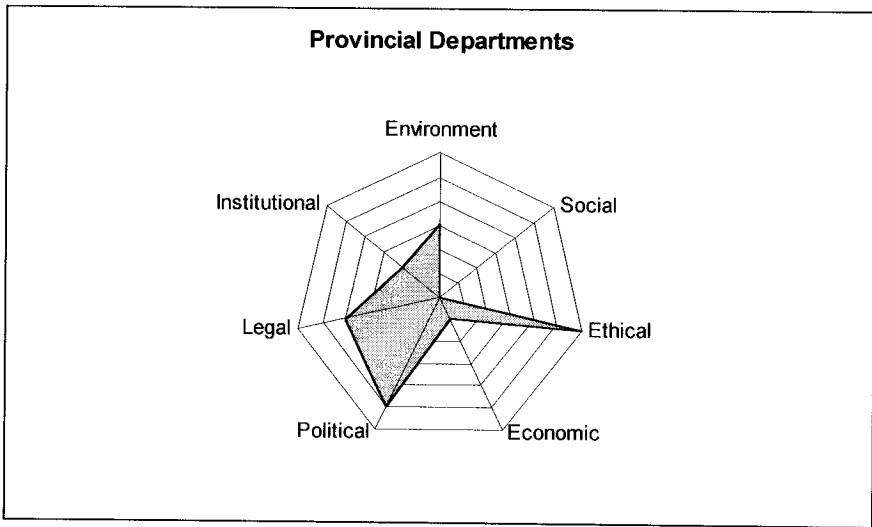


Figure 18e

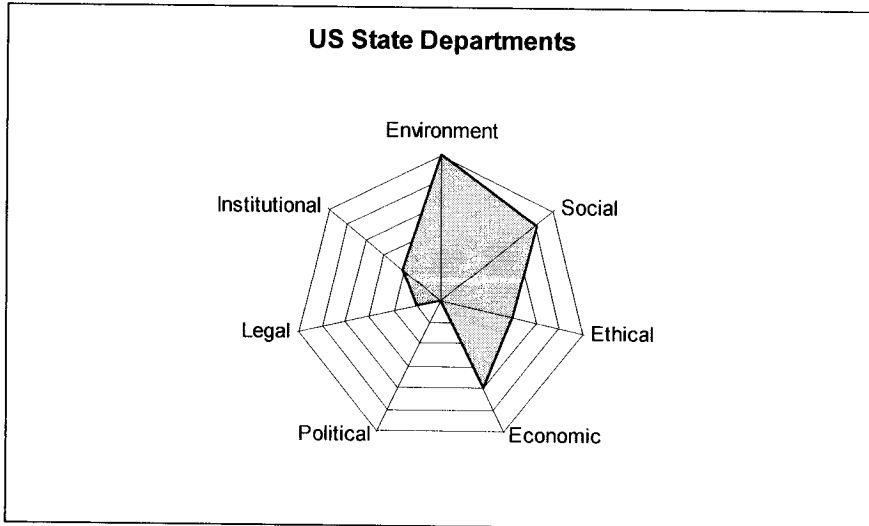


Figure 18f

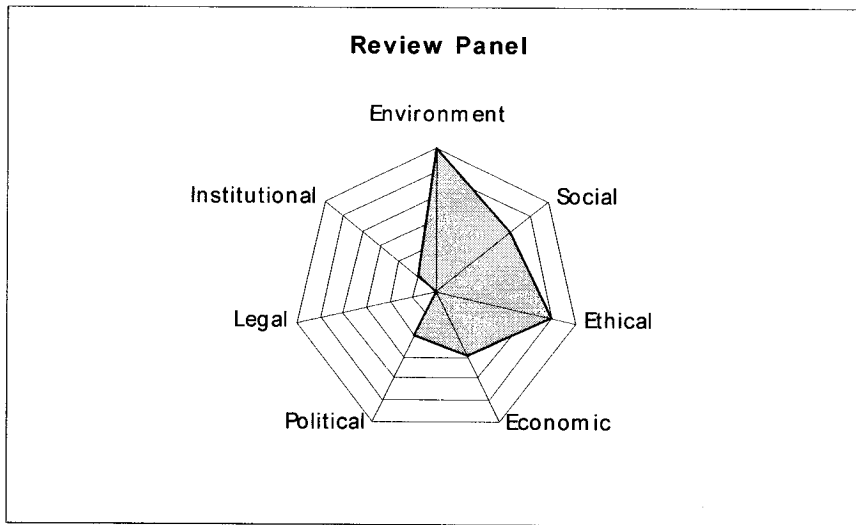


Figure 18g

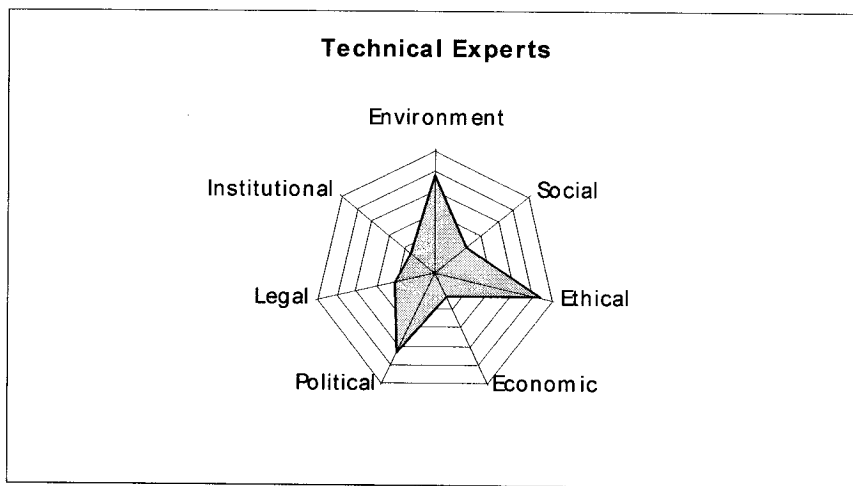


Figure 18h

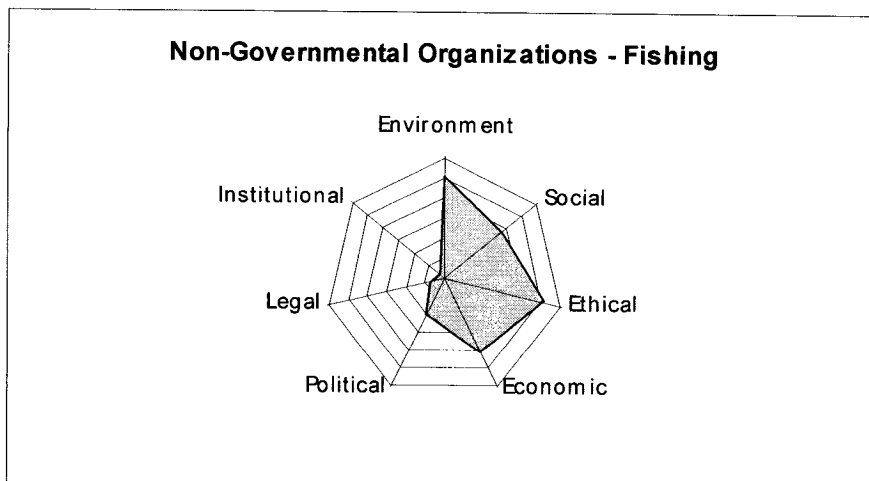


Figure 18i

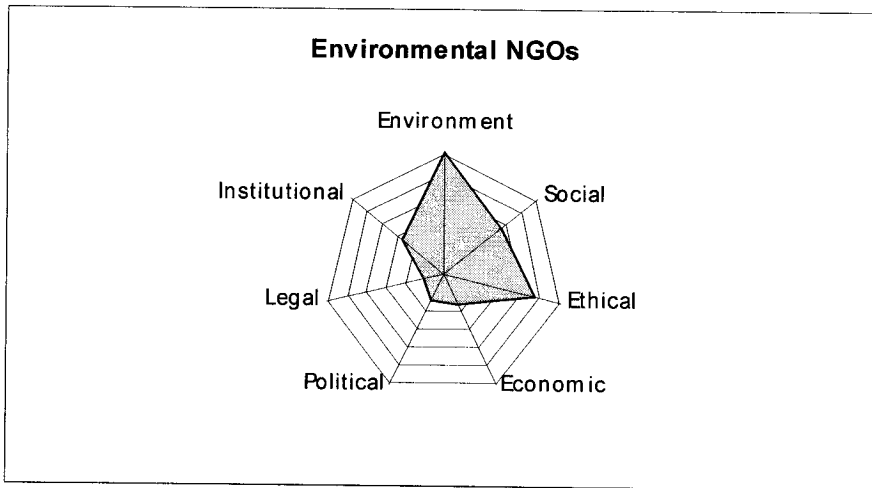


Figure 18j

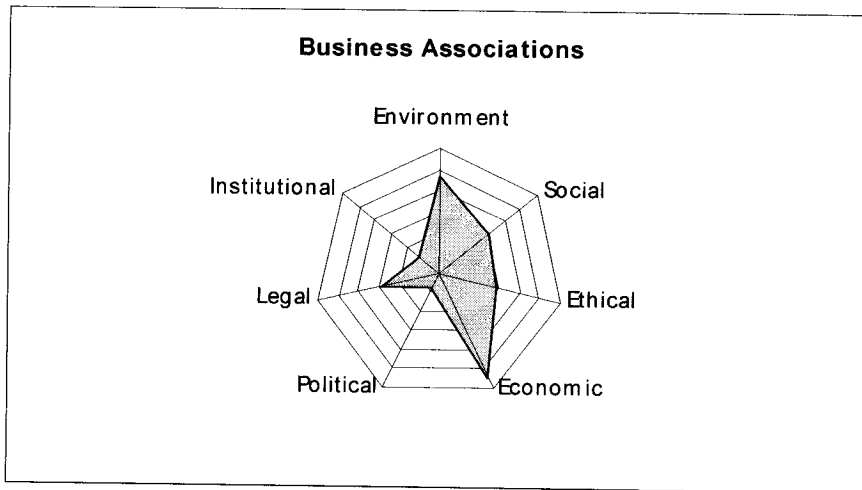


Figure 18k

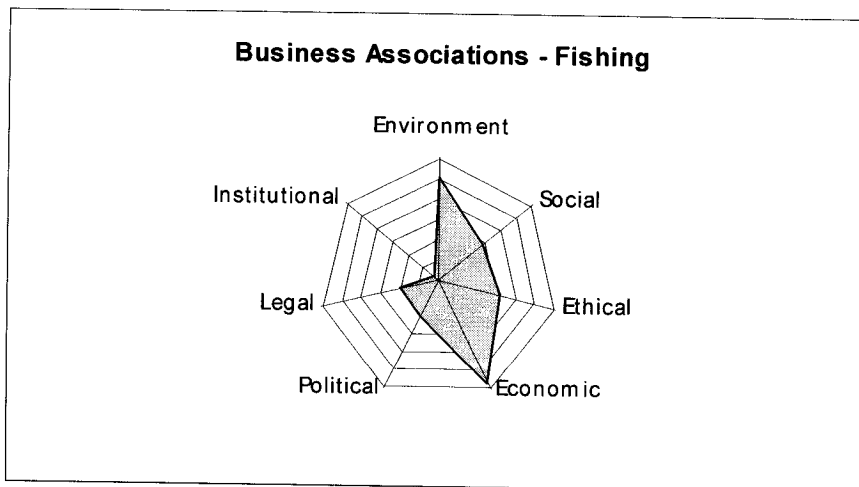


Figure 18l

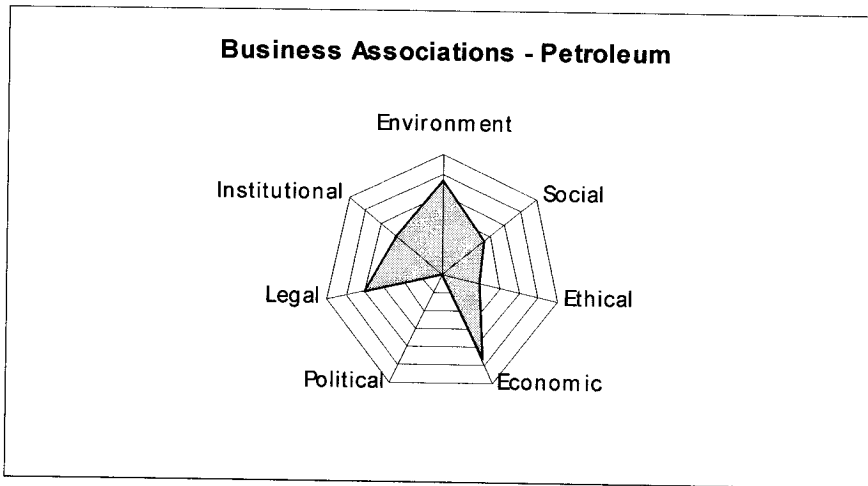


Figure 18m

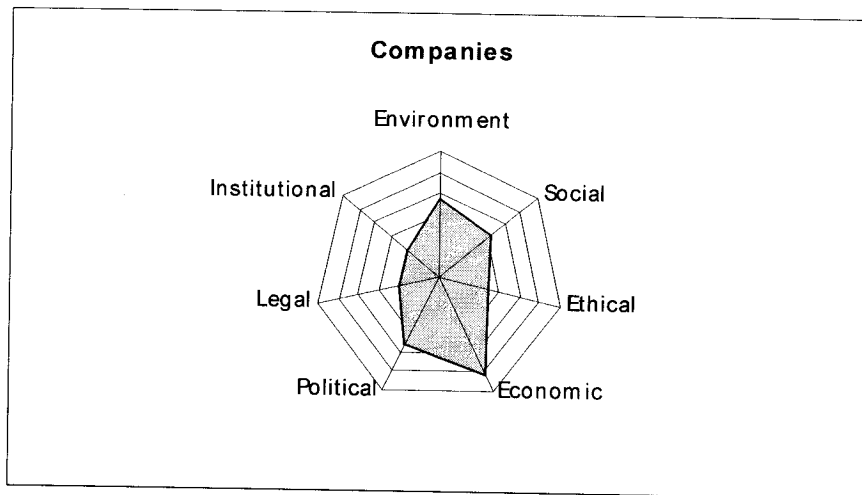


Figure 18n

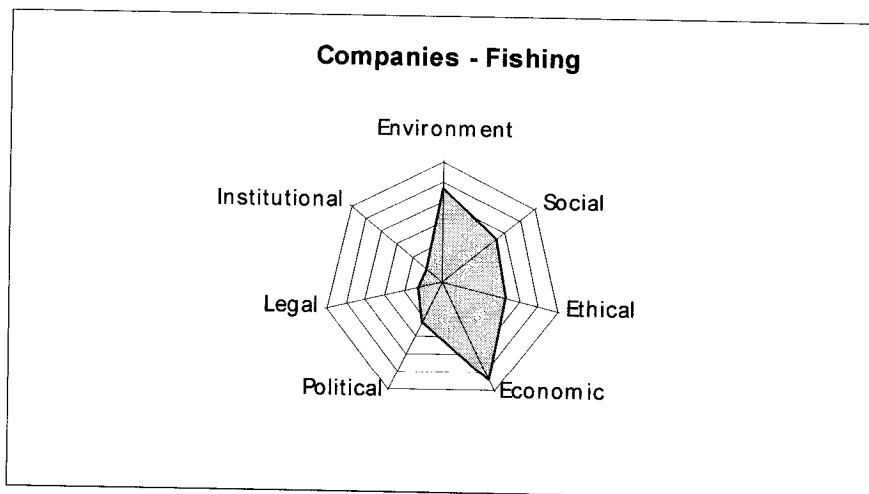


Figure 18o

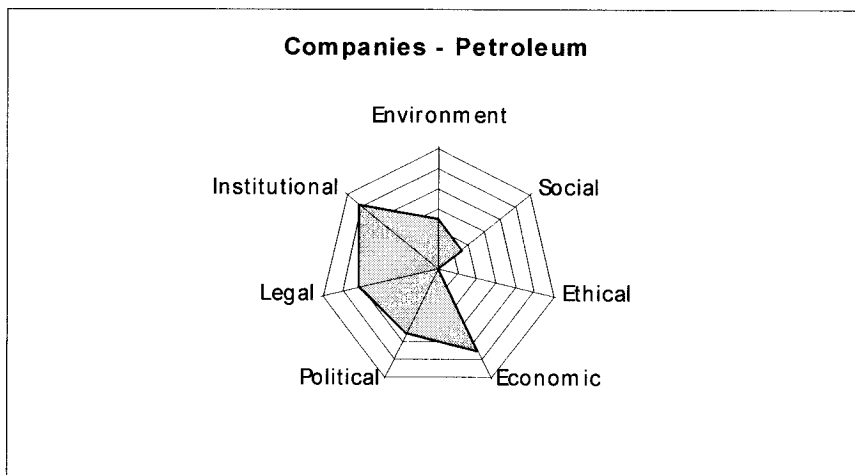


Figure 18p

As illustrated in Figures 18a and 18c, politicians from both levels of government in Canada identified environmental, ethical and political attributes among the top three attributes essential to achieving their core values. There is some variation in the attribute assigned the highest priority, with provincial politicians ranking ethical issues as foremost while their federal counterparts ranked the environment as having the highest priority. Given the authorities of the federal and provincial government<sup>16</sup> and the nature of the policy problem in terms of the potential burden on one user group, the assignment of the ethical and environmental attributes as having the highest priority by Canadian politicians is explainable. Both levels of political actors ranked economic and social attributes as lowest in terms of achieving their core values.

American politicians (Figure 18b) differed from their Canadian counterparts by assigning economic, social and political attributes as the highest ranked. This ranking can be explained,

---

<sup>16</sup> Section 92(13) and 92(16) of the *Constitution Act, 1867* grants provincial powers over property and civil rights and local matters respectively while section 91(12) grants authority to the federal government over protection, conservation, enhancement and policing of freshwater and tidal fisheries.

given the emphasis of arguments made by the US on the potential negative impacts of petroleum activities on the Canadian side of Georges Bank, on the economic and social value of the fishery to their constituencies in New England. The institutional attribute was ranked lowest and its ranking is understandable given the generally limited ability of US politicians to affect Canadian institutional arrangements.

At the bureaucratic level, federal departments (Figure 18d) mimicked their political masters in terms of ranking environment, ethical and political attributes among the top three for achieving core values and placing social and economic attributes among lowest ranked. Provincial departments (Figure 18e) followed a similar pattern with their political masters for the top two ranked and bottom two ranked attributes. However, it is interesting to note that provincial bureaucrats placed legal issues ahead of environmental issues. This may be explained by the primarily administrative role played by provincial departments in the process, as specified in the *Accord Implementation Act* and the limited constitutional powers granted to the province on issues relating to the marine environment.

Analysis of the ranking of attributes by the US bureaucracy (Figure 18f) paralleled that of the political actor by focusing on the social and economic implications of the Canadian decision as among the primary attributes for achieving their objectives. However, the State level departments also ranked the environment as having the highest priority. This replacement of the environment over political issues in the top three rankings, as compared to US federal politicians, may in part reflect the lack of a direct line of responsibility between State bureaucracies and federal politicians.

The review panel, technical experts, and both the fishing and environmental non-governmental organization cited the environmental and ethical attributes among the highest two ranked. In the case of the review panel (Figure 18g) and the environmental non-governmental organizations (Figure 18j), the rankings were identical for the top three attributes. Similarly, these



two actors ranked legal issues as the least important. This overlap indicated the commonality in core values shared by these two actors. As such, it is to be expected that this would reflect the degree of influence the environmental NGOs would have on the review panel. Technical experts (Figure 18h) ranked economic issues as least important while fishing non-governmental actors (Figure 18i) ranked institutional issues as least important to achieving their core values.

Business associations, regardless of whether they represented the fishing or petroleum sector, ranked the environment and economic attributes among the two highest for achieving their objectives. When the weighted scores for business associations were aggregated to include associations representing multi-sectoral businesses, fishing and petroleum interests, social issues were ranked as third most important (Figure 18k). In the case of the fishing associations (Figure 18l), political issues were ranked third most important. This ranking reflected the importance of politics and political actors in decisions affecting fisheries policy in the Maritimes and the use of these associations to influence policy-level decision-making by its members. This actor ranks the institutional attribute lowest. This suggests that, even though the actor interacts intensively with the existing institutional arrangements, the levers of influence for achieving its core values are not perceived to reside at this level. This is a consistent interpretation for the smaller associations, where its members are able to affect policy level decision-making on the basis of its numbers affecting electoral outcomes. It is also consistent for the larger associations who have the policy analytic capacity and resources to influence policies at the political level, despite, or more likely, as a result of, their relatively small numbers.

As with the fishing associations, the business associations representing the petroleum sector (Figure 18m) ranked institutional issues the lowest and legal issues as third most important attribute, after environmental and economic considerations. The importance attributed to legal issues by this actor is understandable, given the highly prescriptive and regulated environment in which its members operate. Likewise, the minimum ranking given to institutional arrangements

may be explained by the view that its interactions at the institutional level serve more of an administrative function, i.e., the implementation of policy decisions, rather than a policy-setting function. It is this latter activity that directly affects the achievement of core values.

For all companies, regardless of the product or service being offered, the economic attribute was ranked among the top three in terms of its priority for achieving core values. The aggregated scores of all companies (Figure 18n) resulted in a ranking of the top three attributes being identical to that of the fishing companies (Figure 18o). These were identified as the economic, environmental and social attributes, in order of declining importance. As well, these two actors assigned the lowest ranking to the institutional attribute. Given the dependence of business success on the availability and quality of the biological resource and the reliance of coastal communities on fishing as an economic activity, the rankings of attributes assigned by the fishing companies can be explained. As with the fishing associations (Figure 18l), the low ranking assigned to institutional arrangements could be viewed as a reflection of the more successful avenues available to this policy actor for achieving its core values.

For petroleum companies (Figure 18p), economic and legal attributes were ranked among the top three attributes, similar to the rankings by associations who represented this sector (Figure 18m). However, petroleum companies as a policy actor differed from all other policy actors by ranking institutional arrangements as most important for achieving its core values. The attention to this attribute may be explained by the relative newness of the companies in the Atlantic offshore; their unfamiliarity with decision-making involving multiple actors in the coastal and marine policy domain); and, the relative inexperience of institutions in Atlantic Canada<sup>17</sup> for interacting with the

---

<sup>17</sup> Although the NS and Newfoundland offshore petroleum boards are over a decade old, they have each had only two major oil and gas projects from which experience could be gained. The provincial agencies have had even less opportunity to develop expertise in this sector. This need has been recognized in NS with the development of a provincial energy strategy and the establishment a dedicated Department of Energy in 2002.

sector.

As with the previous case study described in Chapter 4, the analysis of core values allows for predictions to be made and tested as to the behavior of the actors in the network relative to each other. It also provides insight into the degree of influence actors might have on the decision-making process and its subsequent outcome.

#### **5.4.2 Behaviour of Actors in the Georges Bank Policy Network**

Having obtained information that characterized the policy actors as general players in the coastal and ocean policy domain in the Maritimes, the analysis of each actor's efforts to specifically influence the Georges Bank decision-making process was undertaken. The analysis sought to further assess the relationship among actors in the policy network. It also sought to determine why actors might clash or coalesce, by focusing on the desire for expression of core values as measured by each actor's ranking of the previously analyzed disciplinary attributes. To obtain the information necessary to conduct the analysis, actors were asked to elaborate on the following key areas relating to their direct participation in the decision-making process:

- What purpose did the public review process serve?
- What were the most significant areas of concern?
- What was the preferred solution?

##### **5.4.2.1 Purpose for the Policy Debate**

The public review of the environmental and socio-economic impacts of petroleum exploration and/or drilling activities on Georges Bank, prior to the expiration of the moratorium, was a necessary requirement specified in the *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Acts*. At the time of their assent<sup>18</sup> and subsequent proclamation, the Acts

---

<sup>18</sup> The provincial version of the *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation (Nova Scotia) Act* received assent in May 1987 and was proclaimed in January 1990. The federal version of the *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act* received assent in July 1988 and was proclaimed in January 1990.

provided tangible recognition of the evolving nature of governance in Canada's marine policy domain. Additionally, they responded to the growing expectation and rights of policy actors and stakeholders to participate in policy level decision-making. However, given the array of policy issues confronting actors in the coastal and ocean policy domain, the decision by the members of the policy community to allocate technical, human and financial resources to participate in the decision-making process suggested additional expectations as to its purpose.

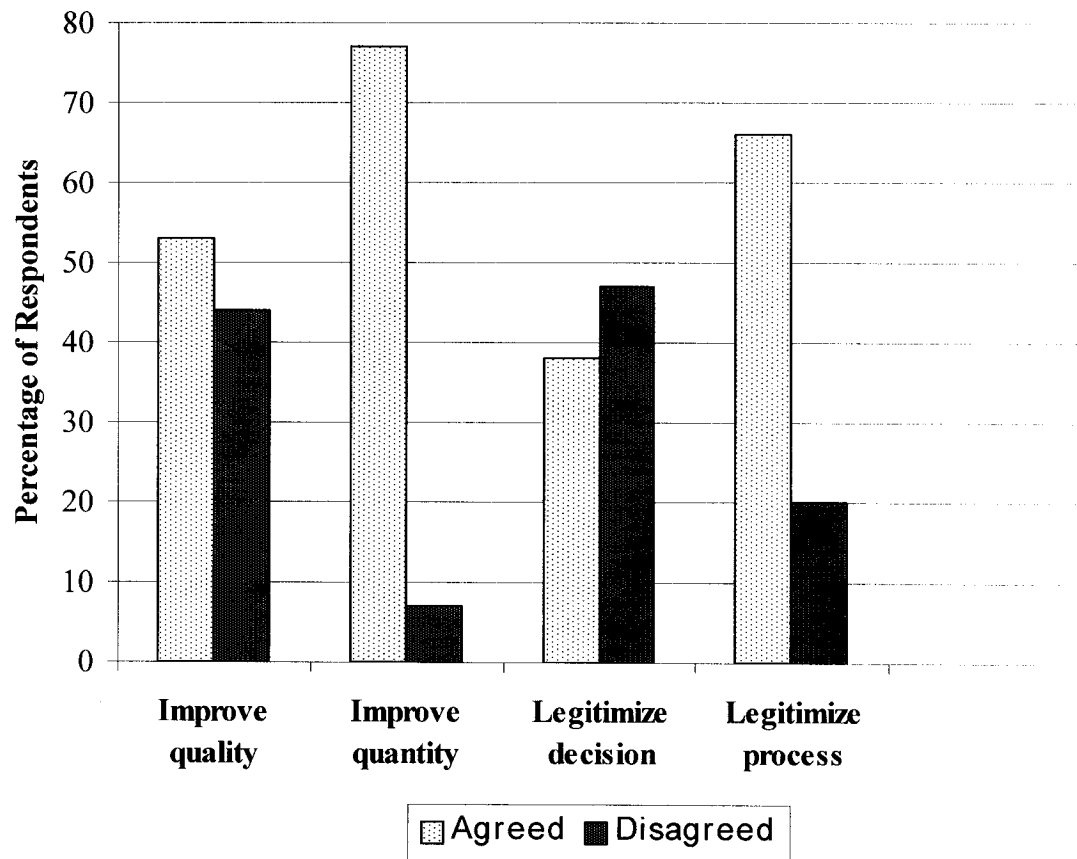
Support for public input in decision-making has been based on two compelling arguments (Lawrence and Daniels, 1996; Lawrence *et al.*, 1997). The first theoretical argument suggests public participation improves the legitimacy of the choices made and hence increases public support for their acceptance. The second argument suggests public involvement improves the quality of the decisions made by allowing for a broader range of alternative choices and their consequences to be revealed. While the two outcomes are not mutually exclusive, the achievement of one does not necessarily imply the other will follow (Jamieson, 1994).

Actors in the Georges Bank policy network were asked which of the following purposes could be served by soliciting public input into the decision-making process and whether they were accomplished. The array of options provided were listed as:

- (i) to improve the 'objective' quality of the decision to be made;
- (ii) to increase the quantity of participation in the process;
- (iii) to legitimize the decision to extend the moratorium; and,
- (iv) to legitimize the process adopted for decision-making.

The breakdown of all responses in terms of the frequency across all categories of actors is provided in Figure 19. The figure illustrates the number of representatives who agreed, as well as those who disagreed, that the process had achieved each of the stated purposes. To identify patterns with respect to categories of policy actors, Figure 20 provides the breakdown of the percentage of actors, by category, for each of the four purposes mentioned.

**Figure 19. Purpose for Soliciting Public Involvement in the Georges Bank Moratorium Debate**



As is illustrated in Figure 19, approximately one-half of the representatives providing responses believed that the process was undertaken to improve the objective quality of the decision to be made. However, almost as many respondents believed that providing objective information on the potential environmental and socio-economic impacts of exploration and drilling on Georges Bank was not essential to the decision-making process. In fact, the findings from the majority of respondents (77%) indicated that the purpose for soliciting public input was primarily to provide a venue for participants to voice their concerns.<sup>19</sup> In terms of soliciting public input to add legitimacy to the decision to be made, 38% agreed with this goal, while 47% disagreed.

Given the specification for the public review process in the *Accord Implementation Acts* a decade earlier, a significant number of respondents, 66% of the policy actors, considered public input was being solicited to add legitimacy to a process that possessed several constraints. Most significant among these was the lack of specific guidelines on eliciting value-relevant information that was appropriate for addressing strategic level policy questions. Additionally, since the public review forum was most valued for its application to a specific problem that can be resolved with public involvement (Keeney *et al.*, 1990), the process was recognized by many as inappropriate for addressing the general nature of the question. As such, actors in the policy network that had coalesced around the problem implemented a range of strategies to address this limitation. Among these was the ignoring of the specified mandate by actors who favoured the extension of the moratorium. This served to further minimize the efficacy of the public review to resolve the

---

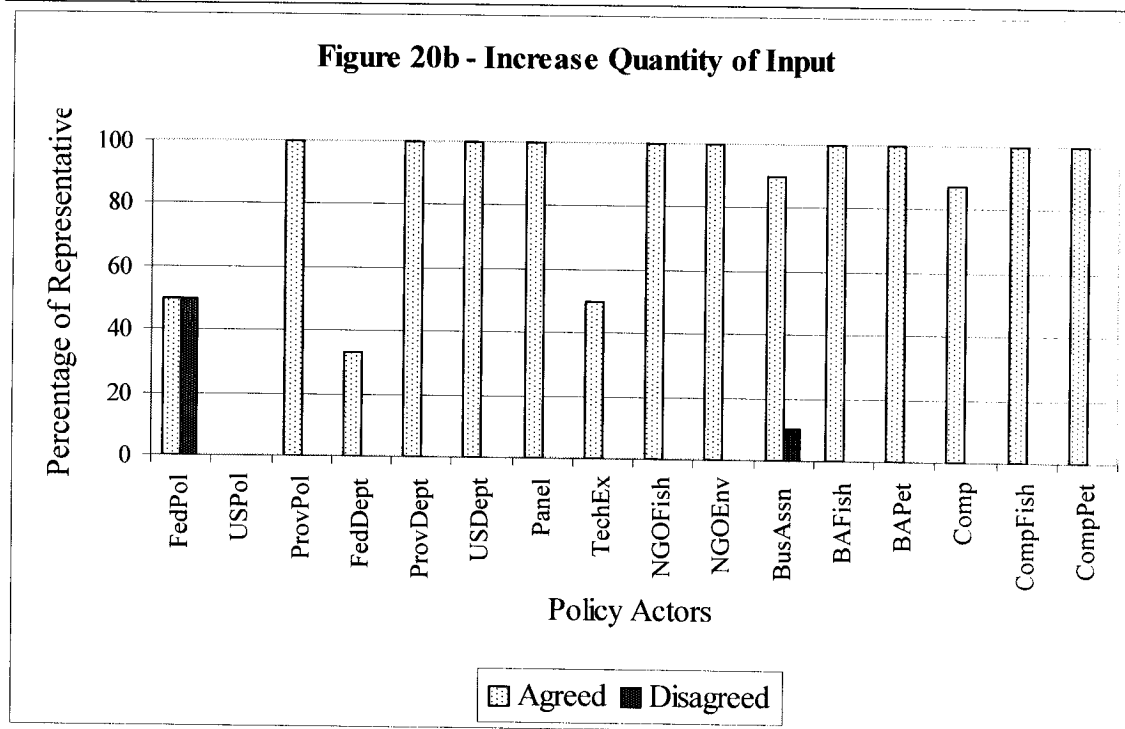
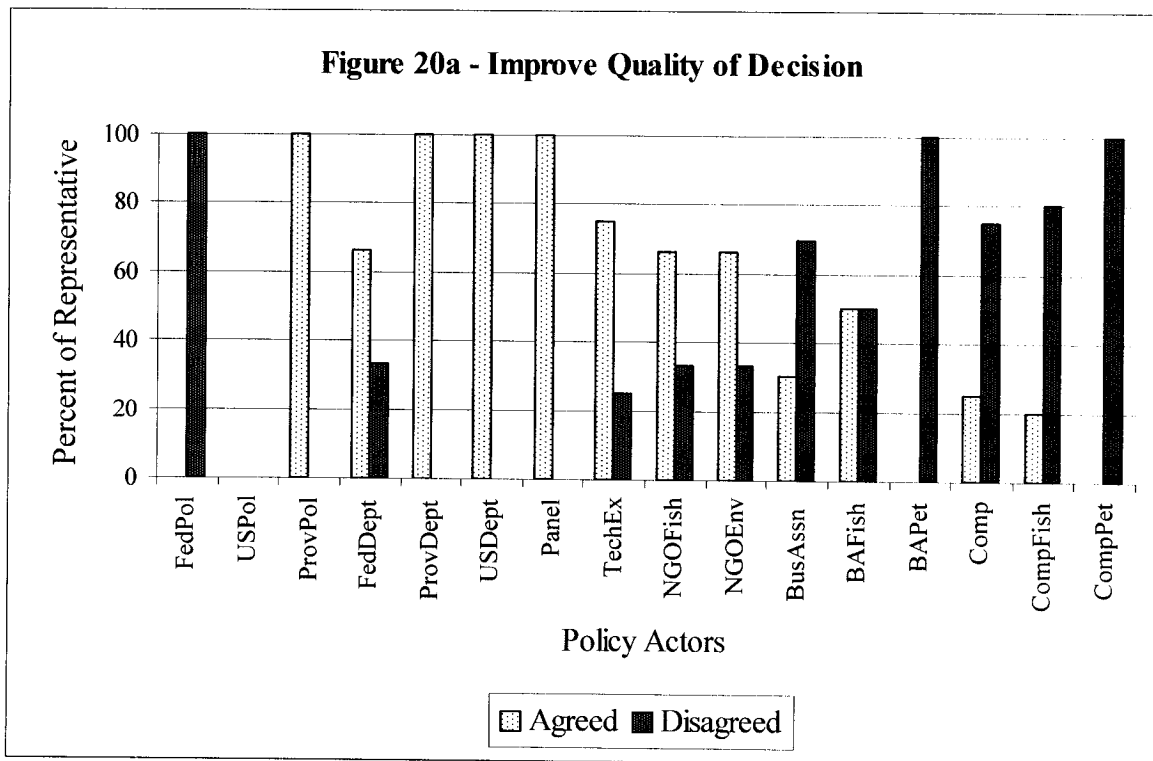
<sup>19</sup> 91 participants, 45 of which were from the fishing sector, made presentations to the review panel over 11 days of hearings at 4 sites in Nova Scotia. The number of participants was significantly smaller than that at the Joint Sable Offshore Energy Project Hearings, which began on April 4, 1997 and ended on July 14, 1997. The 56-days of hearings resulted in 1270 exhibits being made to the Sable review panel, despite the quasi-judicial, less "user-friendly" nature of that process. Possible explanations for this increased level of participation include: the specificity attached to the Sable Project; the perceived appropriateness of the process to address project-level issues of specific concern to actors, the availability of \$200,000 in intervenor funding and the extended duration of the hearings in Halifax, NS and Fredericton, NB.

problem and added to the lack of focus and objectivity in the process.

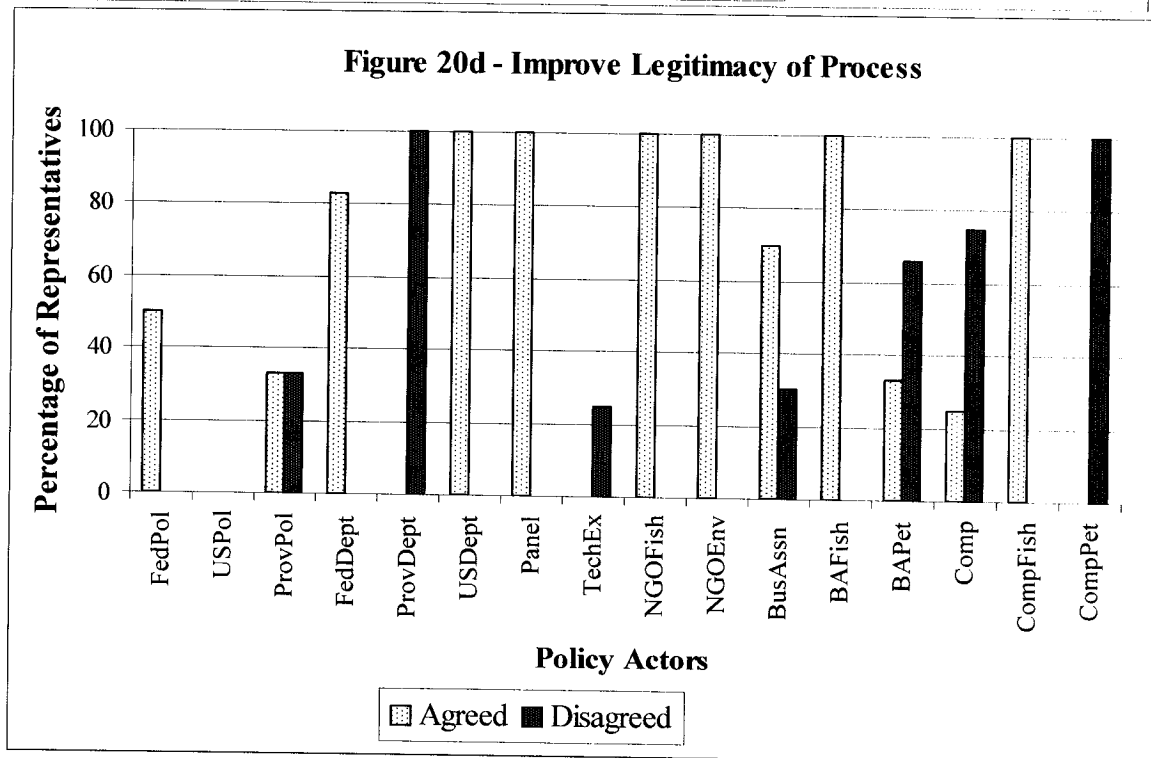
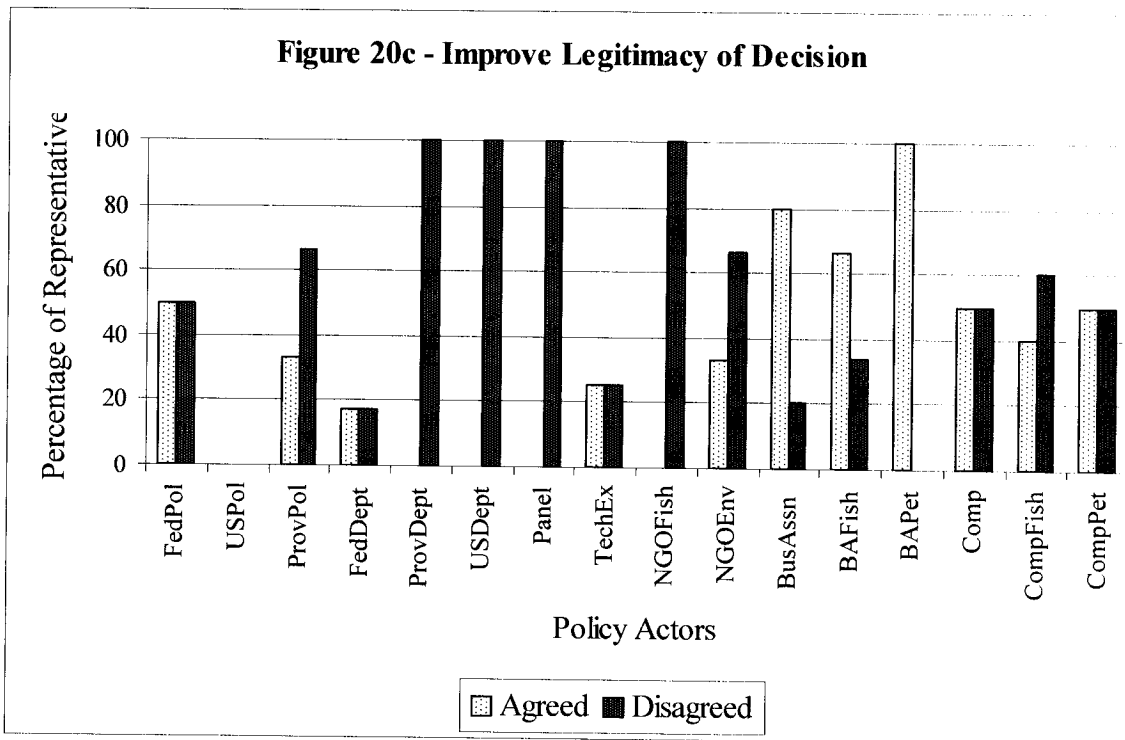
The breakdown of the responses for the purpose of improving the quality of the decision, by category of actors is provided in Figure 20a. This chart illustrates the disagreement with this purpose for the Georges Bank Review by all of the actors representing the petroleum sector and the federal government. This suggested recognition by these actors of the inappropriateness of the process to achieve the stated purpose. Eighty percent of the representatives from fishing companies also disagreed with improving the objective quality of the decision as a stated purpose for the public review process. In contrast, all of the actors representing the provincial politicians and their departments, the review panel and the US bureaucracy, agreed with this purpose as a goal for the Georges Bank process. To a lesser extent, federal departments, technical experts and all non-governmental organizations also agreed with the purpose of improving the objective quality of the decision.

Figure 20b illustrates the almost unanimous view that increasing the quantity of participation was an important purpose of the review process. The only significant exception was among federal politicians, with 50% disagreeing with this purpose. The positive response among policy actors to this purpose may be accounted for by the efforts undertaken over the four-year period to engender public interest in the debate. This included both formal and informal meetings at which the panel members were in attendance, prior to the public hearings.

Figure 20. Purpose for Soliciting Public Involvement by Category of Actors







The increase in numbers involved in a decision-making process is hypothesized to increase the potential for public support of the decision to be made. However, citing extenuating circumstances<sup>20</sup> surrounding the decision-making process, the majority of representatives of the business associations (fishing and petroleum) responded that legitimacy was being sought for a decision that had already been made. As is illustrated in Figure 20c, this view was also shared by half of the federal politicians and petroleum companies.

In contrast, all of the policy actors representing provincial and US State bureaucracies, the review panel and fishing NGOs disagreed that the purpose of soliciting public input was to add legitimacy to an already made decision. As well, at least half of the representatives for the environmental NGOs and fishing companies disagreed with the notion of a predetermined decision.

With respect to the legitimacy of the process, provincial departments, actors representing the petroleum sector, technical experts and provincial politicians disagreed to varying extents with the legitimacy of the process, as adopted to address strategic level decision-making (Figure 20d). In contrast, the US bureaucracy supported the Canadian public hearing process as an improved alternative over strict political decision-making in the United States. Both the fishing and environmental NGOs and review panel agreed with the appropriateness of the process for addressing the policy problem. In the case of the NGOs, these policy actors considered the process conducive to promoting their core values. For the review panel, some concerns were raised over the challenge of providing crucial information to the panel and participants as a result of the general nature of the question (Mullally *et al.*, 1999). However, the panel concluded that these were subsequently addressed and as such, supported the adequacy of the process.

---

<sup>20</sup> The most noticeable issue to affect the process was the US extension of the Georges Bank moratorium two months prior to the Canadian public hearings. This issue will be further analyzed under the following section of this chapter.

#### **5.4.2.2 Significant Areas of Concern**

The concerns raised by policy actors during the Georges Bank decision-making process were subdivided into six broad areas of concern. As discussed earlier, these concerns related to a diverse array of issues and for analytical purposes, have been categorized under the following headings: (i) the fishery; (ii) the Georges Bank ecosystem; (iii) petroleum exploitation activities; (iv) co-existence; (v) the offshore regulatory regime; and, (vi) the process surrounding decision-making. The weighted scores for each actor are presented in Appendix 7 while Figure 21 provides a visual representation of the analysis pertaining to the degree of significance awarded to each area of concern by each policy actor. The analysis showed the pattern among the different categories of actors, in terms of the degree of significance each awarded to the six major areas of concerns.

As illustrated in Figure 21, thirteen of the sixteen actors comprising the policy network, ranked the fishery and the Georges Bank ecosystem among the top two areas of concern. This finding indicated the high degree of commonality among the diverse grouping of actors in terms of degree of importance attributed to the environment-economic nexus of the Georges Bank ecosystem and fishing. The three network members who differed from the majority were identified as those representing the provincial bureaucracy, the aggregated ranking of business associations and the petroleum sector. The provincial bureaucracy (Figure 21e) and the business association and private sector actors representing the petroleum sector (Figure 21m and Figure 21p) ranked the review process and the issues surrounding co-existence as the highest two areas of concern.

Given the provincial government's involvement with the implementation of the process and its mandate to develop the petroleum sector as a viable economic activity for Nova Scotians, the focus on the decision-making process and co-existence can be explained for this actor. For the petroleum sector, the challenges associated with entering into the coastal and ocean policy domain in the Maritimes region provide a plausible explanation as to the focus on co-existence and process at both the company-specific level and at the association level.

**Figure 21. Weighted Ranking of Areas of Concern by Category of Actors  
(Kite Diagram Visualization)**

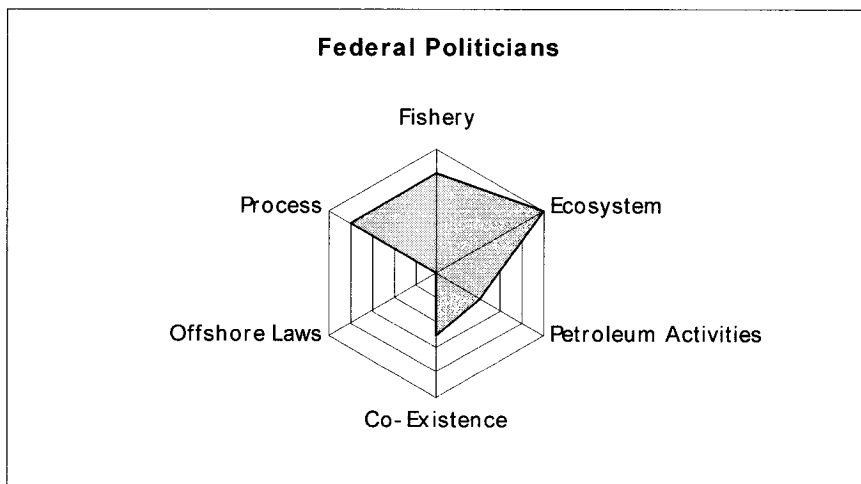


Figure 21a

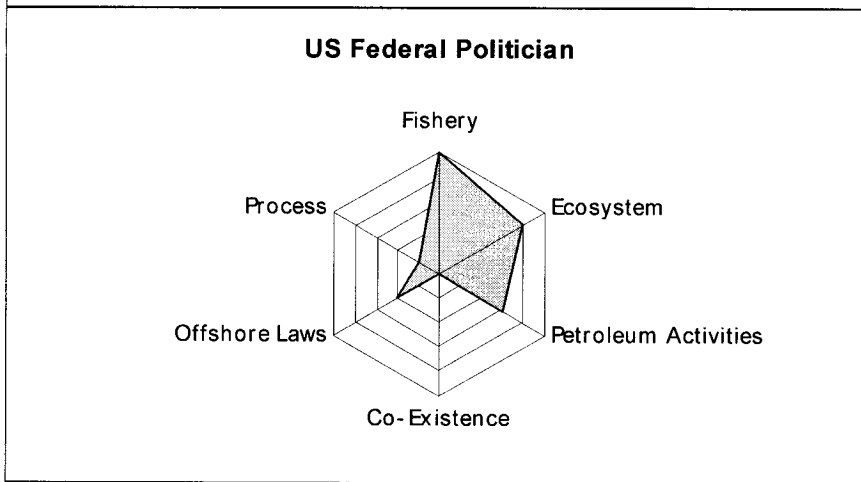


Figure 21b

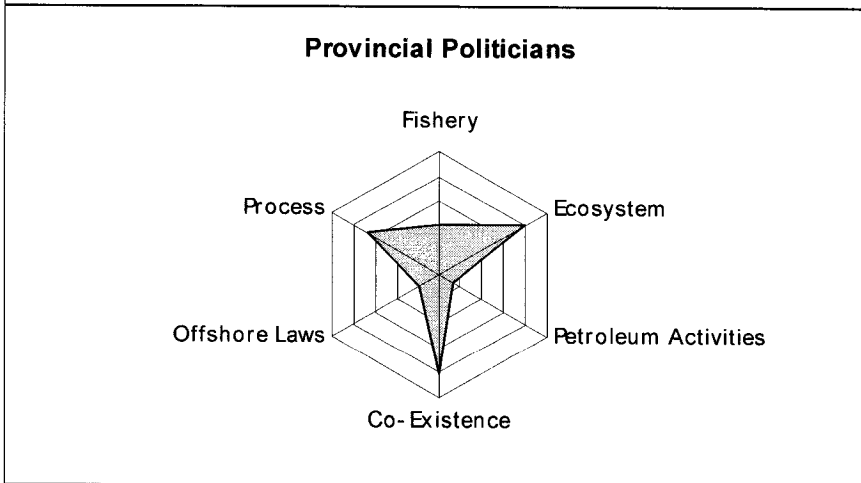


Figure 21c

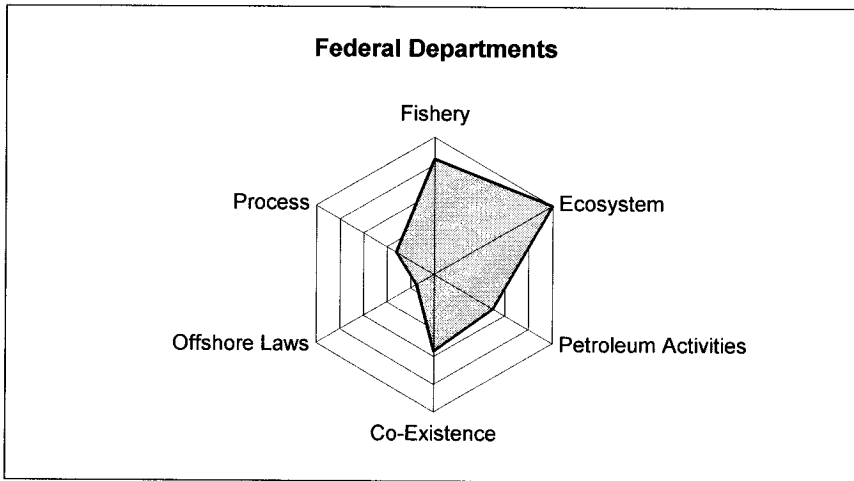


Figure 21d

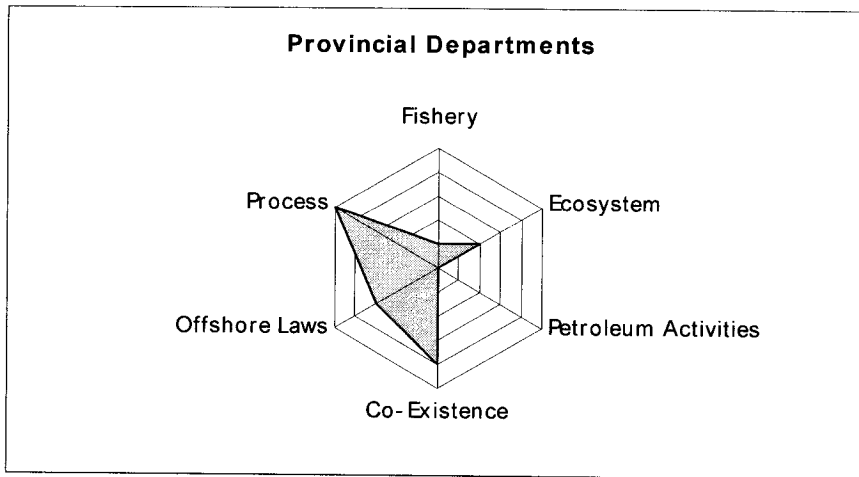


Figure 21e

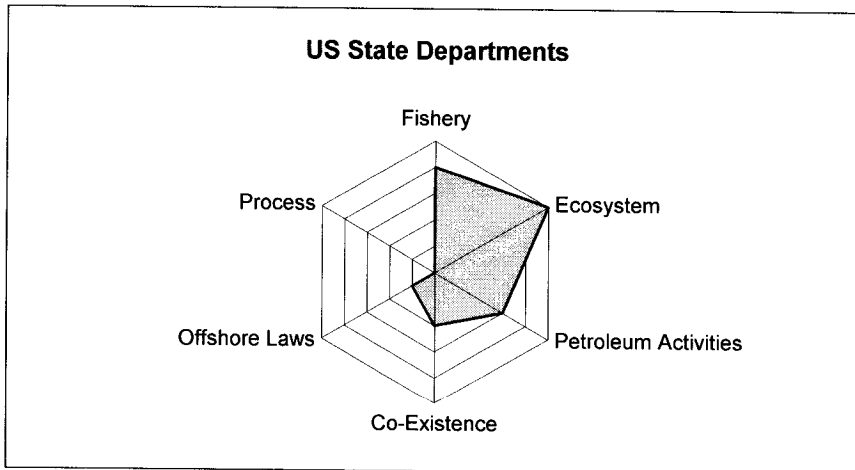


Figure 21f

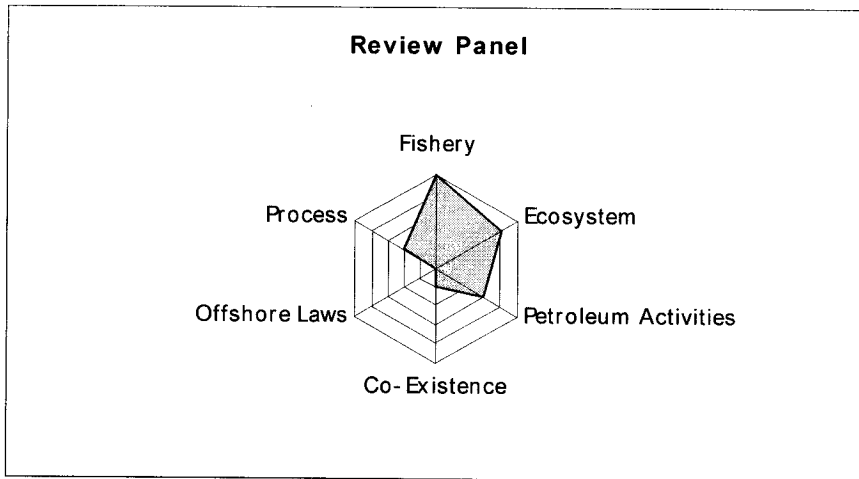


Figure 21g

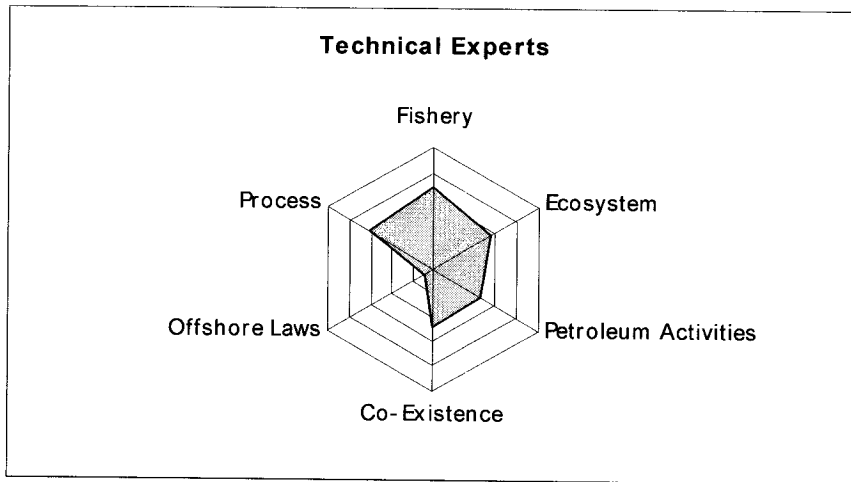


Figure 21h

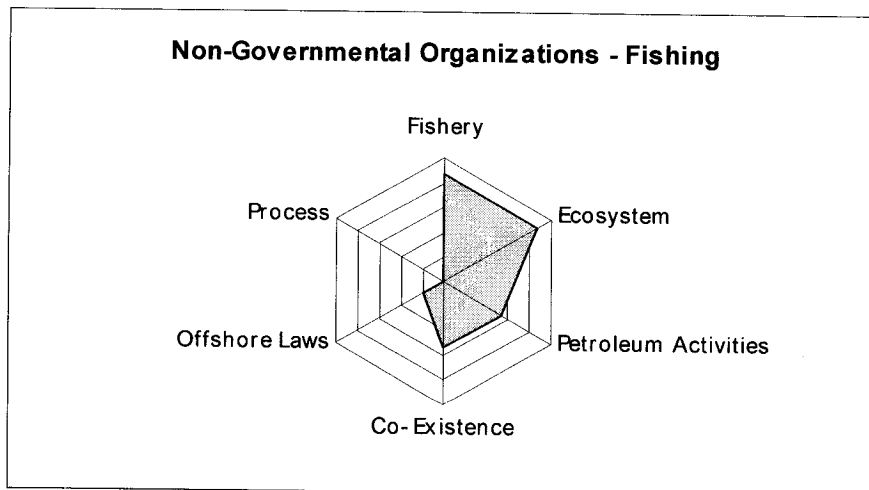


Figure 21i

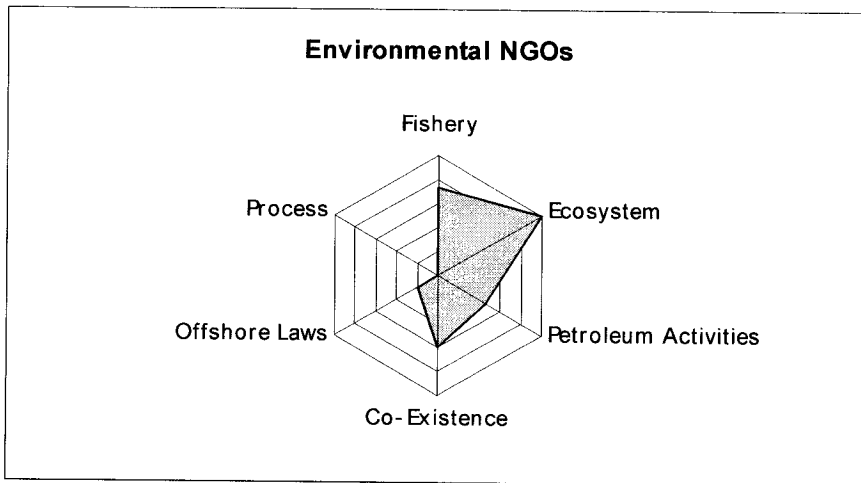


Figure 21j

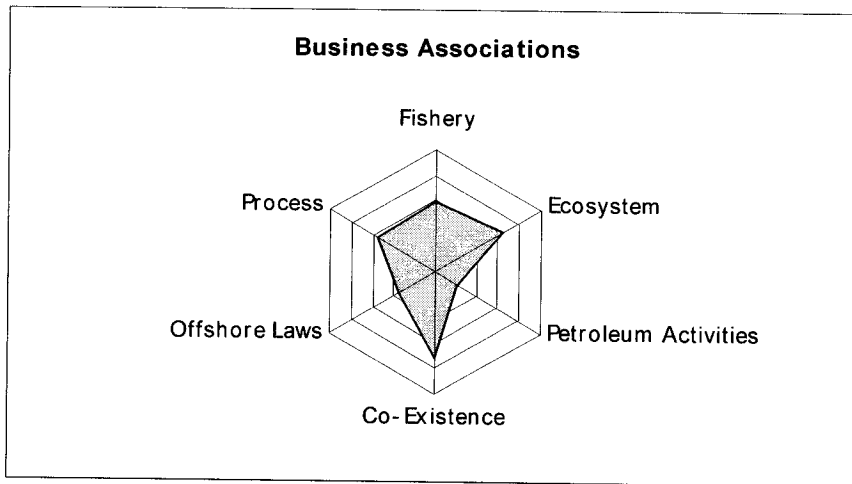


Figure 21k

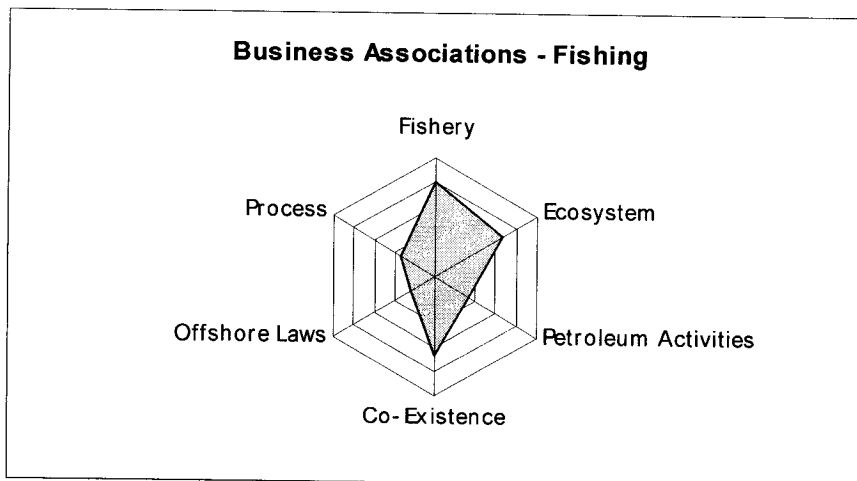


Figure 21l

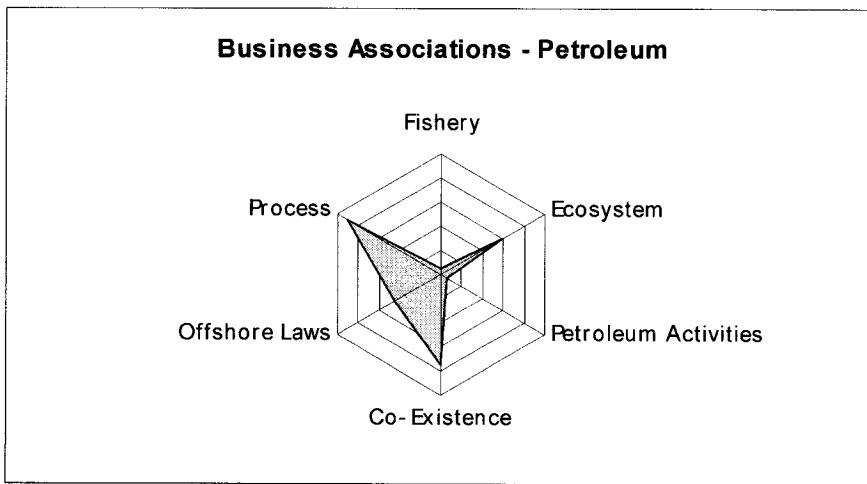


Figure 21m

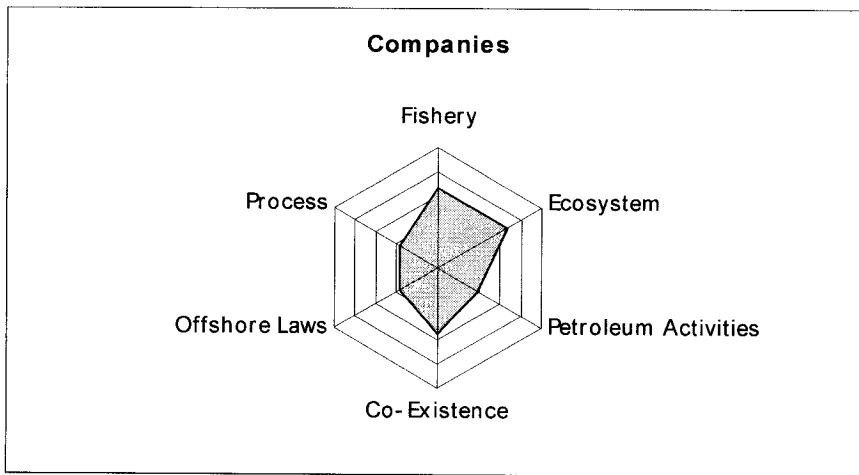


Figure 21n

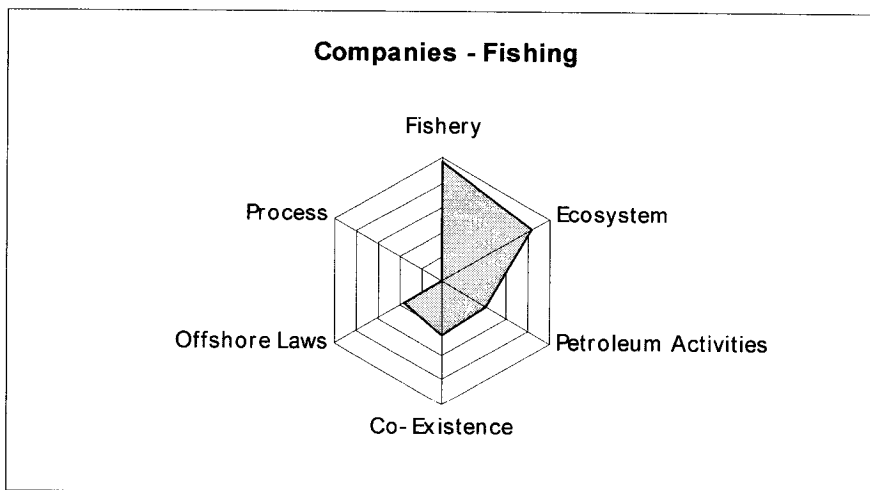


Figure 21o



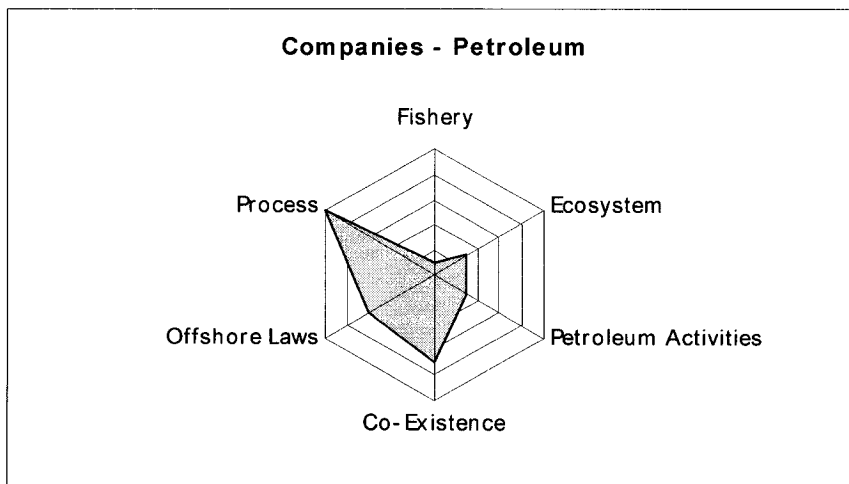


Figure 21p

In the case of the aggregated ranking from all members in the business association category (Figure 21k), co-existence and the fishery were ranked among the highest areas of concerns. This ranking reflected the concerns of the representative from the multi-sectoral business association whose mandate was to promote sustainable economic development in the region. As such, the concerns of the need to explore new business opportunities while ensuring the fishery was maintained were reflected in the overall ranking of the aggregated grouping of representatives from the business association category.

The offshore regulatory regime was ranked as having the least concern for federal (Canadian) politicians (Figure 21a), the Canadian federal and provincial bureaucracy (Figures 21d and 21e), the review panel (Figure 21g), technical experts (Figure 21h), fishing associations (Figure 21l) and all companies (Figure 21n). In general, this ranking indicated a degree of comfort with the existing regulatory regime to manage the offshore petroleum sector.

However, the low ranking by fishing associations was a surprise, given the concerns expressed by the sector as a whole with the offshore regulatory regime. As discussed earlier, the fishing industry considered the regulatory regime as being in favour of approving petroleum

activities, unless proof was provided to withhold approval. One possible explanation for this ranking was the strategy adopted by the sector during the debate. If successful, it would not provide the opportunity for the offshore regulatory regime to be triggered and as such, was not a factor for concern. With the exception of one fishing association, all members of the fishing industry adopted a strategy that focused on two elements. First, presentations from the fishing industry expanded the scope of the review to include all aspects of petroleum exploitation activities so as to draw attention to the potentially significant negative impacts associated with petroleum development and production. Second, the industry effectively curtailed any discussion on its willingness to consider co-existence with the petroleum sector on Georges Bank.

Members of the policy network who were least concerned with the decision-making process were those representing the US bureaucracy (Figure 21f), fishing and environmental NGOs (Figures 21i and 21j), all companies (Figure 21n), and specifically, fishing companies (Figure 21o). In the case of the US bureaucracy, representatives considered any process that legislatively required public involvement to be an improvement over decision-making processes dependent on the whims of politicians and susceptibility to special interest group pressure. Furthermore, the Canadian process provided a venue for US-based intervention on an equal basis with Canadian participants, which was unprecedented in Canadian oceans policy decision-making. Thus, this actor understandably ranked concerns over the Canadian process as having a low priority. Similarly, environmental and fishing NGOs (two of which were US-based), as well as fishing companies, viewed the process as providing an opportunity to influence a panel, perceived as being receptive to their arguments. Thus, the process was not considered a significant area of concern for these policy actors.

Petroleum-related activities were ranked as the least important area of concern for the NS provincial politicians (Figure 21b), all aggregated business associations (Figure 21k) and associations representing the petroleum sector (Figures 21m). The ranking is understandable for

petroleum-related associations, due to an inherent bias on the limited risk posed to the environment by their members and explicit arguments made by the sector as to its ability to have minimal impact on other sectors that use Georges Bank. For provincial politicians, the low ranking reflected the understanding by the representatives interviewed of the regulatory regime in place to control offshore petroleum activities, coupled with an appreciation of the power of the fishing constituency to ensure petroleum-related activities do not become an area of concern.<sup>21</sup> In terms of the ranking provided by the aggregated business associations, the low ranking assigned by the petroleum associations and the multi-sectoral business association skewed the ranking towards minimal importance, even though fishing associations were members of this grouping.

Both private sector and business association actors representing the petroleum sector (Figures 21m and 21p) considered issues with the fishery to be of minimal concern. This ranking was attributed to the earlier described belief in the sector's ability to minimize its impacts on this economic sector. Additionally, public review processes, such as the Sable Gas Project Joint Public Review and the Terra Nova Public Review reinforced the insignificance of the impacts from the sector on the fishery (Fournier *et al.*, 1997; Harris *et al.*, 1997). The reports, recommending approval from these public panels, were both submitted to the responsible government decision-makers in 1997, during the information sessions of the Georges Bank decision-making process.

Finally, US federal politicians ranked co-existence as the least important area of concern from their perspective. This ranking emphasized the attention paid by this policy actor to the fishery as the economic sector of choice in the marine environment. Additionally, it was politically risk-free for US federal politicians, who represented the New England States, to be supportive of the fishery, since earlier efforts to identify petroleum resources on the US portion of the Bank had proven fruitless.

---

<sup>21</sup> The electoral ridings of provincial politicians interviewed for the study included the predominantly fishing communities of southwestern Nova Scotia.

#### **5.4.2.3 Preferred Solution**

Along with collecting data on the values, purpose and concerns of the actors in the Georges Bank policy network, information on each actor's preferred solution for addressing the policy problem was collected. Since an indicator of success in achieving core values is the degree to which these find expression in public policy decisions, information on the preferred solution was considered essential to explaining the behaviour of actors in the policy network. Table 16 identifies the declared preferred solution by each actor during critical stages in the decision-making process, identified as Phase 1, Phase 2, and Phase 3.

During the earliest stage of the process (Phase 1), only the two conflicting economic sectors, fishing and petroleum, declared their preferred solutions to the policy problem. Both federal and provincial Ministers responsible for the review process and their departments refrained from declaring a position. Politicians and bureaucrats responsible for the offshore sector discussed the need to be perceived as promoting a fair and transparent process. Similarly, technical experts advising on the format of the review process did not declare a preferential solution. As expected, representatives from the petroleum and fishing industries who participated at this earliest stage in the process declared their biases.

Over the course of the public review process, members of the policy network attempted to influence the recommendations of the panel as well as the final decision to be made by the two levels of government. As illustrated in Phase 2, Table 16, the majority of the members of the policy network preferred an extension of the moratorium. Exceptions included the federal bureaucracy, particularly those from the federal Department of Fisheries and Oceans.

Table 16. Preferred Solution by Policy Actors during Decision-Making Process

Stages in Process with Active Policy Network Actors	Preferred Solution
<b>Phase 1. Appointment of public review panel and Definition of Process</b> <ul style="list-style-type: none"> <li>- Federal and provincial ministers of Natural Resources</li> <li>- Federal and provincial departments of Natural Resources</li> <li>- Technical experts</li> <li>- Business associations – Fishing</li> <li>- Business associations – Petroleum</li> </ul>	<ul style="list-style-type: none"> <li>Not Declared</li> <li>Not Declared</li> <li>Not Declared</li> <li>Extension of moratorium</li> <li>Expiration of moratorium</li> </ul>
<b>Phase 2. Public Review Process</b> <ul style="list-style-type: none"> <li>- Federal politicians (non-Cabinet)</li> <li>- Provincial politicians ( non-Cabinet)</li> <li>- US politicians</li> <li>- Federal bureaucracy</li> <li>- US state-level bureaucracy</li> <li>- Fishing NGOs</li> <li>- Environmental NGOs</li> <li>- Technical experts <ul style="list-style-type: none"> <li>• Advisors to panel</li> <li>• Advisors to NGOs</li> <li>• Academia</li> </ul> </li> <li>- Business associations – Fishing <ul style="list-style-type: none"> <li>• Nova Scotia Fish Packers</li> <li>• Seafood Producers Association of NS</li> <li>• Scotia-Fundy Mobile Gear</li> <li>• Atlantic Herring Co-op</li> <li>• West Nova Fishermen's Coalition</li> <li>• Southwest Nova Tuna</li> </ul> </li> <li>- Business associations – Petroleum</li> <li>- Business associations – Multi-sectoral</li> <li>- Companies – Fishing</li> <li>- Companies – Petroleum</li> <li>- Companies – Other</li> <li>- Review panel</li> </ul>	<ul style="list-style-type: none"> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Not Declared</li> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Not Declared</li> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Not Declared</li> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Not Declared</li> <li>Extension of moratorium</li> <li>Expiration of moratorium</li> <li>Not Declared</li> <li>Extension of moratorium</li> </ul>
<b>Phase 3. Ministerial Decision-Making</b> <ul style="list-style-type: none"> <li>- Federal and provincial ministers of Natural Resources</li> <li>- US politicians</li> <li>- Fishing NGO – NORIGS2000</li> <li>- Environmental NGOs</li> <li>- Business Associations – Fishing <ul style="list-style-type: none"> <li>• Nova Scotia Fish Packers</li> <li>• Seafood Producers Association of NS</li> </ul> </li> <li>- Business Associations – Petroleum</li> <li>- Companies – Fishing</li> </ul>	<ul style="list-style-type: none"> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Extension of moratorium</li> <li>Expiration of moratorium</li> <li>Extension of moratorium</li> </ul>

Similarly, technical experts, contracted by the panel, declined from declaring a preferred solution to the policy problem, as did representatives from the non-partisan business association and companies. However, the most significant exception at this stage in the process was the fishing association representing members in the Atlantic Herring Fishing Co-op. This policy actor was explicit in its refusal to call for an extension of the moratorium. The significance of this stance was accentuated by the fact that the actor was one of the founders of the NORIGS group that called for the original moratorium in 1988. Reasons cited for the change in support were an increased knowledge in petroleum-related activities, advances in offshore technology and fishery sector input into the regulatory approval process. At the conclusion of this stage in the process, the public review panel explicitly declared its preference by recommending an extension to the moratorium.

During the last stage in the decision-making process (Phase 3, Table 16), influence continued to be exerted on the responsible Ministers. Pressures from US actors to extend the moratorium were noted at both the political and non-governmental levels. Members of the fishing industry continued to lobby for an extension, as individuals and as active members of the NORIGS 2000 coalition. The sole public attempt at influence in favour of the expiration of the moratorium came from the association representing the suppliers to the petroleum producers, namely the Offshore Technology Association of Nova Scotia (OTANS, 1999).

### **5.5 Explaining the Influence of Actors in the Policy Network**

To assist in identifying the effect of the policy network on the ability of each actor to influence the decision, a comparison of the analytical results obtained for each of the policy actors was undertaken.

The criterion selected for grouping actors was based on the rankings for the top pair of disciplinary attributes, regardless of which attribute was placed first and which was placed second. This was chosen as the general criterion for grouping actors since none of the actors had any

difficulty in selecting the top pair of attributes that reflected their values, objectives and preferences. The positions of other attributes in the ranking was not considered as critical to the actors, although legal and institutional issues were ranked as the least important attributes for achieving core values and translating objectives into policy-level decisions (see Figure 17B).

Based on the general criterion of similarity in ranking for the top pair of attributes, six grouping of actors were identified. Of the six groups, three contained an individual category of policy actor. One of these categories was the only one to rank institutional issues as highest and this was sufficiently unique in the pattern recognition phase of the analysis that the category was left as a single grouping of one, to ensure an explanatory basis for this finding would be addressed. Of the remaining two categories of actors, both ranked social issues as being among the highest two levels of priority and fishery and the ecosystem as the highest areas of concern. While not conforming to the general criterion rule, given this degree of similarity among the two categories, they were place together as a single grouping in an attempt to identify explanations for their rankings. These five resulting groupings of policy actors are provided in Tables 17A, 17B, 17C and 17D and 17E.

The tables also provide information on the preferred outcome of individual actors by the end of the public hearings. This stage in the decision-making process was used as by then, actors had clearly established and declared their preferences with respect to a possible solution for the Georges Bank moratorium problem.<sup>22</sup>

---

<sup>22</sup> Exceptions to this were federal and provincial departments and technical experts to the review panel. These actors maintained their impartiality throughout the public review process.

Table 17A. Comparison of Analytical Elements by Policy Actors - Grouping #1

Category of Policy Actor		Federal Politicians	Federal Departments	Review Panel	Technical Experts	NGOs (Fishing)	NGOs (Environment)
Disciplinary Attributes	Priority Level						
	Highest	Environment	Environment	Environment	Ethical	Environment	Environment
	Second Highest	Ethical	Ethical	Ethical	Environment	Ethical	Ethical
Areas of Concern	Lowest	Economic	Social	Legal	Economic	Institutional	Legal
	Highest	Ecosystem	Ecosystem	Fishery	Fishery	Fishery	Ecosystem
	Second Highest	Fishery	Fishery	Ecosystem	Ecosystem	Ecosystem	Fishery
Preferred Option	Lowest	Legal Regime	Legal Regime	Legal Regime	Legal Regime	Process	Process
		Extension	Not Declared	Extension	Not Declared/ Extension	Extension	Extension

Table 17B. Comparison of Analytical Elements by Policy Actors - Grouping #2

Category of Policy Actor		Business Associations (Aggregated)	Business Associations (Fishing)	Business Associations (Petroleum)	Business (Aggregated)	Companies (Fishing)
Disciplinary Attributes	Priority Level					
	Highest	Economic	Economic	Environment	Environment	Economic
	Second Highest	Environment	Environment	Economic	Environment	Environment
Areas of Concern	Lowest	Political	Institutional	Political	Institutional	Institutional
	Highest	Co-existence	Fishery	Process	Fishery	Fishery
	Second Highest	Fishery	Ecosystem	Co-existence	Ecosystem	Ecosystem
Preferred Option	Lowest	Petroleum activities	Legal Regime	Fishery/Petroleum activities	Legal Regime/ Process	Process
		Extension/ Expiration	Extension/ Expiration	Expiration	Extension/ Expiration	Extension



Table 17C. Comparison of Analytical Elements by Policy Actors - Grouping #3

Category of Policy Actor		Provincial Politicians	Provincial Departments
Disciplinary Attributes	Priority Level		
	Highest	Ethical	Ethical
	Second Highest	Political	Political
Areas of Concern	Lowest	Social	Social
	Highest	Ecosystem	Process
	Second Highest	Fishery	Co-existence
Preferred Option	Lowest	Petroleum activities	Legal Regime
		Extension	Not Declared

Table 17D. Comparison of Analytical Elements by Policy Actors - Grouping #4

Category of Policy Actor		US Politicians	US Departments
Disciplinary Attributes	Priority Level		
	Highest	Economic	Environment
	Second Highest	Social	Social
Areas of Concern	Lowest	Institutional	Political
	Highest	Fishery	Ecosystem
	Second Highest	Ecosystem	Fishery
Preferred Option	Lowest	Co-existence	Process
		Extension	Extension

Table 17E. Comparison of Analytical Elements by Policy Actors - Grouping #5

Category of Policy Actor		Companies (Petroleum)
Disciplinary Attributes	Priority Level	
	Highest	Institutional
	Second Highest	Economic
Areas of Concern	Lowest	Legal Regime
	Highest	Process
	Second Highest	Co-existence
Preferred Option	Lowest	Fishery
		Expiration

### **5.5.1 Identification of Advocacy Coalitions**

As identified in the tables, actors in the policy network fell into five distinct groups or advocacy coalitions. These groupings were based on a comparison of their rankings with respect to their core values, as measured by the level of priority assigned to disciplinary attributes, their major areas of concern and preferred solution to the policy problem. The actors in these groupings share a set of normative and causal beliefs and as such, can work in concert to translate these core values into supportive decision outcomes.

In the first grouping, environmental and ethical attributes were assigned the top two highest levels of priority (Table 17A). Members of this group included federal politicians and departments, the review panel, technical experts and all NGOs. All actors with a declared preference opted for the extension of the moratorium. These members also shared concerns for the ecosystem that reflected the high ranking attributed to environmental issues. Ethical issues were reflected in concerns for the fishery, particularly with regards to those bearing the consequences of exposure to risk, as compared to those potentially responsible for increasing the level of risk. Actors in this grouping ranked four of the seven attributes (economic, social, legal and institutional), as least important for achieving core values. This suggested the narrowly defined focus of these policy actors on the top two elements as essential for achieving their objective.

In general, core values were considered achieved by a decision to extend the moratorium. The majority of policy actors in this grouping ranked the legal regime for the offshore petroleum sector as the least important area for concern. The degree of similarity between actors in this grouping, in terms of core values, areas of concern and preferred option with the federal government as one of two principal decision-makers, suggested these policy actors would have the greatest potential to affect the decision-making process. In fact, the retrospective analysis

indicated that this grouping of actors coalesced to form an influential component of the dominant advocacy coalition in the policy network, as was confirmed by the decision outcome.<sup>23</sup>

The importance attributed to the economic-environment nexus was a key characteristic in the second grouping of actors (Table 17B). This was reflected in the significance afforded to fishery and ecosystem-related issues, arising from the potential co-existence of two conflicting economic activities. The analysis identified actors from the private sector (business associations and companies) as representative of this grouping. However, it is of interest to find the business association actor representing the petroleum sector in this grouping. This suggested the significance of the economic and environmental disciplinary attributes in achieving the core values of actors representing offshore, consumptive private sector interests, regardless of whether the resource being exploited was renewable or non-renewable. The policy implication of this finding will be discussed later in the chapter.

Actors in this grouping were also distinguished by the limited degree of attention paid to the political and institutional disciplinary attributes in order to achieve core values. However, as was previously described, actors in this grouping who represented the fishing sector, paid the least attention to the institutional attribute. Actors representing the petroleum sector chose to rank the political attribute as least important, presumably leaving that attribute to the more effective attention of their member companies. In terms of a preferred solution, the positions of the actors were as expected, representing their declared biases. Thus, although identifiable as a separate grouping in terms of the importance attached to disciplinary attributes to achieve its core values, the preferred solution of members reflected the divergence in the secondary aspects of their belief systems. This is consistent with the argument that actors who share core values display widely

---

<sup>23</sup> Given the bilateral significance of the policy problem and the constitutional authority granted to the federal government over the fisheries, these broader policy issues indicated the importance of the federal government in affecting the outcome of decision-making process.

differing views on how those values should be made operational (Van Dyke *et al.*, 1993). The areas of overlap for some members of this second group with those in the first grouping suggested that the former would benefit from forming alliances with those comprising the dominant coalition, in order to influence the outcome of the decision-making process. However, the fundamental difference in degree of importance given to the economic attribute between these two groupings, suggests a temporary nature in the alliance. Actors within the second grouping who were most likely to benefit from such an alliance with the dominant coalition included those representing the fishing sector.

The third grouping of actors was comprised of actors who focused on the ethical and political aspects of the policy issue (Table 17C). As such, major areas of concerns for this grouping were the effects of co-existence on the ecosystem and fishery and specifically, the process that was implemented to examine these issues. Policy actors belonging to this grouping were drawn exclusively from the provincial level of government and comprised both politicians and bureaucrats. Although politicians were in favour of the extension, the degree of dissimilarity between this grouping of actors with either of the two previous groupings suggested that this provincial coalition possessed limited capacity to influence the desired decision of those forming the dominant coalition.

The policy actors from the United States government at both the federal and state levels comprised the fourth grouping of members in the policy network (Table 17D). These actors focused on areas of concern relating primarily to the New England fishery. Similarly, both actors supported the extension of the moratorium as the preferred solution. As such, social, economic and environmental attributes were ranked important for achieving their core values. Politicians in this grouping ranked the institutional aspects associated with the decision-making process as not being critical to their objective while bureaucrats ignored the political implications. Given the declared preference of this grouping of actors, despite its motive, it was expected that it would

have considerable ability to affect the decision-making process, as was in fact shown to be the case.

Petroleum producing companies proved to be the lone member of the fifth grouping (Table 17E). This policy actor formed the contending advocacy coalition that was, in effect, attempting to further its objectives by dislodging the dominant coalition. Focusing on institutional and economic attributes for achieving its core values, the actor concerned itself with the process for decision-making and making an argument for co-existence. This was based on its acceptance of the regulatory regime to impose conditions that would minimize any negative impacts associated with its activities on the fishery.

### **5.5.2. Advocacy Coalitions and Decision-Making**

As with the previously analyzed case study, the identification of distinct advocacy coalitions within the Georges Bank policy network, supports an alternative understanding as to how policy actors exert influence over decision-making. The traditional explanation provided by Pross (1986), focused on the dominance of actors in the 'sub-government' (composed of government decision-makers and agencies, as well as key societal interests, such as specific members of the private sector and/or labour), to formulate and implement public policy. As such, the relative power structures of actors in the network provided an explanation of the actor's ability to exert influence. Members who were not part of the 'sub-government', although possessing considerable expertise and ability to affect the policy agenda, had limited power within the network and as such, limited opportunity to influence the decision outcome. Thus, these members formed the 'attentive public' and constituted a contending or "shadow" sub-government, awaiting either a change in government or external shock to the policy system to gain access to the levers of power.

The research findings of this case study supports the earlier argument in favour of a blurring of the divisions among actors in the 'sub-government' and 'attentive public' and a reduced emphasis on power relationships as the principal reason for explaining influence over public policy

decisions. It provides additional empirical support for the learning approach as a supplementary mechanism to explain how actors work within a network to influence decisions that will reflect shared core values. Regardless of their degree of power, i.e., whether actors comprise the 'sub-government' or 'attentive public' realm, the research suggests that coalitions of actors with shared beliefs will be formed, whenever actors come together to affect decision-making. It further suggests that it is the sharing of common values among the policy actors, which characterizes the policy network, and not their relative power as members of the 'sub-government' or 'attentive public'. However, this is not to minimize the importance of resources available to members of advocacy coalitions. There is no question that their ability to gain the status of a dominant coalition will be dependent on the resources and power available to further their shared objectives.

This research provides supporting evidence for the hypothesis that it is the governance structure in place at the time of the policy debate that determines in which realms ('sub-government' or 'attentive public') decision-making power will be found. Reflecting the expanded number of non-state actors in the decision-making process, the Georges Bank case study suggests that membership in the dominant coalition need not be limited exclusively to members of the 'sub-government'. Furthermore, the introduction of policy actors from both governmental and non-governmental groups in the United States, opens the possibility for the expansion of members of the dominant coalition to include representatives from the 'sub-government' and 'attentive public' of another jurisdiction.

Members of the dominant coalition described above for the Georges Bank decision-making process, did, in fact, include federal members from the traditional 'sub-government' level described by Pross (1986). However, more significantly, was the absence of the provincial government (decision-makers and bureaucracy) from the dominant coalition, despite its placement in the 'sub-government' realm. Rather than focus on the 'sub-government/attentive public' split, the research argues that it was membership in the dominant coalition, which

collectively produced the arguments and strategies, and possessed the resources and power, to further its shared objectives. Membership in a dominant advocacy coalition thus provides opportunities for policy actors, regardless of their location with respect to the 'sub-government', to influence decision-making. Alternately, even members of the 'sub-government', if they are not actors within the dominant advocacy coalition, can be predicted to have limited ability to influence policy-level decisions.

### **5.5.3 Policy Implications**

Based on the analysis conducted for this case study, the policy implications associated with the Georges Bank decision-making process revolved around three major areas. These are itemized below and are associated with each of the phases in the decision-making process illustrated earlier in Figure 16:

- (i) Phase 1 – Intergovernmental relations at the federal-provincial level and the *status quo* influence of policy actors in the ocean policy domain in the Maritimes as factors affecting the selection of panel members and the subsequent decision outcome;
- (ii) Phase 2 – Stakeholder participation, under joint federal-provincial authority as a mechanism for advancing the values and objectives of the dominant advocacy coalition;
- (iii) Phase 3 – Bilateral relations between Canada and the United States and other broader policy issues as significant factors overriding local-level decision-making.

(i) Phase 1 - Two factors were found to affect decision-making at this early stage in the process, namely the relationship between the federal and provincial governments and the influence of key policy actors in the Maritimes region ocean policy domain. At this early stage in the process, the coalescing of actors into an identifiable policy network had not yet occurred. However, as joint decision-makers, the input by the federal and provincial governments provided a significant advantage to these actors to set the stage so as to favour the continuation of policies

promoting the achievement of their core values. By determining who would serve on the panel and how the review process would occur, policy actors involved at this stage had the opportunity to support or oppose the entrenched *status quo* policies in the Maritime ocean policy domain. The retrospective analysis confirmed the support for extending the existing moratorium by both levels of government and the fishing sector. This suggested the limited ability of the petroleum sector to affect this critical stage in the process. However, as discussed below, this actor may have been further disadvantaged by its lack of previous interaction with, and policy relevant knowledge of, these other more established players in the Maritime ocean policy domain.

At the political level, both the federal and provincial Liberal governments were sensitive to the political clout of the fishing constituency and both stood to pay a high political price, should they choose to ignore the pressures exerted by the fishing sector over the Georges Bank problem. However, the factors motivating each government to support the extension of the moratorium differed considerably, although they were mutually supportive of each other's objectives. From a federal government perspective, the political costs associated with the expiration of the moratorium, given the opposition of the fishing constituency, were significantly greater than potential benefits. In any case, these benefits would have accrued primarily at the provincial level, in terms of jobs and other spin-off activities associated with exploration activities. Additionally, given the extension of the moratorium by the United States, the wider implications of the decision on Canada-US relations were matters of concern to the federal government.

From a provincial perspective, the appointment of the Georges Bank public review panel occurred at a time when the Liberal government was in the middle of its term, having defeated the Conservative government in 1993. The government inherited a budget deficit<sup>24</sup> that was the

---

<sup>24</sup> The Liberal government, under Premier John Savage, eliminated the deficit during the 1996-97 fiscal period. This was the first time, since 1978, that the provincial budget was balanced. This effort was duplicated the following year.



highest in the province's history. Coupled with the severe socio-economic impacts resulting from the decline in the fishery in the region, the government was faced with the challenges associated with encouraging economic development in the offshore sector while responding to demands of a powerful fishing constituency. Under new leadership in July 1997,<sup>25</sup> the continued importance attributed to the petroleum sector as an emerging economic driver in the province was visible with the assumption of key ministerial positions by the Liberal Premier. By mid-1997, the Premier held the key positions of Minister responsible for the Petroleum Directorate and the Minister of Intergovernmental Affairs.

While the province did not have an explicit petroleum policy at the time of the review, it was clearly encouraging the petroleum sector to explore Nova Scotia's offshore potential with the establishment of attractive fiscal regimes that out-competed the investment climate in the Gulf of Mexico (De Wolf, 2002). However, the focus of the petroleum sector on the much larger Scotian Shelf area and the requirement to establish the public review panel allowed the provincial government to continue to court the favours of both economic sectors. By supporting the exploitation of oil and gas reserves on the Scotian Shelf, the provincial government was able to encourage investment from the petroleum sector in Nova Scotia's offshore. Similarly, by passing the responsibility for decision-making on the Georges Bank question onto a panel that was perceived as favourable to the extension of the moratorium, the provincial government was able to be supportive of the federal government's concerns. This position also served to appease the politically powerful fishing sector, while not explicitly denying the petroleum sector the opportunity to exploit the area. While the provincial government clearly held different core values from those

---

<sup>25</sup> As a result of the retirement of John Savage, Russell MacLellan assumed leadership of the Liberal party on July 12, 1997. Mr. MacLellan was sworn in as Premier of Nova Scotia on July 18, 1997. On March 24, 1998, the Liberal party was re-elected to form a minority government, under Mr. MacLellan's leadership. On July 27, 1999, Nova Scotians elected a Progressive Conservative government.

of the federal government, a decision that would extend the moratorium nonetheless provided it with political benefits.

Thus, the selection of members to the public review was a critical factor in providing both levels of government with an opportunity to pass the justification for decision-making onto the review panel's findings. This effort was further enhanced with the expected agreement of the fishing sector to the panel members appointed by the two levels of government. This agreement was in part based on previously shared interaction with the panel members, as members of the the Maritime oceans policy domain and the opportunity this allowed to acquire policy-relevant knowledge relating to these actors' core values.<sup>26</sup>

In contrast, the petroleum sector was a relative new comer in the Maritime ocean policy domain whose dissimilar core values posed a significant disadvantage to this actor at this stage in the decision-making process. However, given the dominance of the government actors and the political clout of the fishing sector in the policy network, it was unlikely that this member of a contending coalition would have had much ability to influence the panel selection process.

Additional evidence in support of the ability of those in favour of extending the moratorium to affect the decision outcome was to be found in the number of members appointed to the panel. While the *Accord Implementation Acts* provided for a five-member panel, the decision was made by the two levels of government to reduce the number to three. This effectively minimized the occasions at which conflicting views among panel members might arise. Furthermore, as confirmed by actors in the Georges Bank policy network, the credibility of these panelists as professionals in the environmental and marine sector was such as to provide a degree of comfort

---

<sup>26</sup> Examples of previous interaction included: the earlier involvement of one of the panel members with the NS-based environmental NGO, Ecology Action Centre; the previous appointment of another panel member to the earlier fixed link public review panel in which environmental factors were cited by the panel as reasons to reject the project; and, the previous involvement of the Chair of the panel in the declaration of wilderness areas in Nova Scotia.

to policy actors who wanted to maintain the *status quo*. Thus, the stage was set in support of the continuation of the *status quo* policies affecting Georges Bank, based on the selection of the public review panel.

(ii) Phase 2 – The policy implications associated with the implementation of the public review process were substantial. In general, participation in the public review process served to advance the core values and objectives of the dominant advocacy coalition in a number of ways.

First, the process of the panel holding a series of meeting and being present at events prior to the formal public hearings, provided a level of confusion as to whether only information presented at the public hearings was being considered in its review of the issues or not. If information presented at these events outside of the public hearings were instrumental in influencing the panel's recommendation, then it would appear to have been an unfair process. This assessment is based on the assumption that policy actors may have considered it important to provide input at the formal hearings but not at informal meetings.

Second, the unofficial expansion of the mandate to include information relating to all phases of petroleum exploitation placed some policy actors at a significant advantage over others. Specifically, those who had coalesced into the dominant coalition were able to provide arguments that lent support to the extension of the moratorium. This was due to the discussion on the potential for generic worst case scenarios to be considered when in fact, the potential negative impacts associated with exploration on Georges Bank were considered to be site specific by technical experts (Boudreau *et al.*, 1999). Associated with the breadth of discussion allowed by the panel was the lack of verification of claims and counter claims made to the review panel. This resulted in policy actors depending on the panel to identify factual information from fabrications. In the absence of explicit and transparent decision-making criteria, the potential for policy actors who were negatively affect by unsubstantiated statements to be disadvantaged was significant.

As a separate issue but related to the mandate of the panel, was the policy implication arising

from a lack of clarity in terms of the focus of the panel's recommendation. For some policy actors in the fishing sector, the recommendation was aimed at advising on whether or not exploratory activities would be allowed on Georges Bank. For others, the recommendation was to advise on whether or not the moratorium should be extended. Yet for other policy actors, the advice was based on whether or not the moratorium should be allowed to expire. While subtle in their differences, the inherent biases associated with each of these views carried with them significant policy-level implications. The most damaging in terms of its misconception, was the first interpretation. This view effectively ignored the existing regulatory regime in place to address questions relating to the permitting of petroleum-related activities in the marine environment. The second interpretation was biased in favour of those who desired the extension and placed the burden of proof for expiration on those who were supportive of this objective. In contrast, the third view was biased in favour of those desiring the expiration of the moratorium and placed the burden of proof for extension on those desiring this objective. These varying interpretations served to promote conflict among the members of the policy network when in fact, some of it could have been avoided by all players having the same understanding of this particular issue.

Third, the debate was perceived by Nova Scotians as being of significance primarily at the local, southwestern Nova Scotia level. This resulted in few Nova Scotians outside of the locally affected area participating in the policy process. The significance of this local focus was the exclusivity granted to a relatively small number of representatives in the ocean policy domain to direct strategic level decision-making with provincial, national and international implications. Compounding this finding were: the extremely small number of petroleum-related representatives participating in the process (three companies and two associations); the complete absence of some marine-related sectors such as marine transportation and recreational activities; the limited number of representatives from academia (two members of academia made presentations out of a total of 91 presentations); the paucity in representation from provincial and federal agencies

whose responsibilities are affected by marine-related decision; and, limited community-level representation. This resulted in the absence of views to counterbalance those in the dominant coalition, as well as the absence of views from those outside of the dominant coalition who might be in support of the dominant coalition. Furthermore, given the dominance of the fishing sector in southwestern Nova Scotia, the potential for vilification of any actor from the region who did not support the extension of the moratorium was a real possibility.<sup>27</sup> The policy implication arising from this result was the perception that those who spoke for, or against, the moratorium accurately represented the views of all those affected by the decision. In any case, these factors collectively provided ample opportunity for the dominant advocacy coalition to advance its objectives over those in the competing coalitions.

Fourth, the almost unanimous position presented by members of the fishing industry to the policy debate was instrumental in influencing the policy outcome. This was a significant achievement given the in-fighting commonly associated with the various groups comprising this sector. Regardless of whether the policy actor represented the inshore or offshore sector, mobile or fixed gear, harvestor or processor, the message from the sector was identical and consistent. In addition to presenting the sector's views as individual associations, companies and fishers, the tangible expression of the observed unanimity was the re-establishment of the NORIGS 2000 coalition. Membership in the coalition was initially extended to those whose core values differed from those of the sector but whose objectives were served by a decision to extend the moratorium. Thus, members of environmental NGOs were invited to be a part of the coalition. However, given fundamental difference among the representatives of these policy actors, the alliance was short-lived. Nonetheless, it may be argued that NORIGS 2000 benefited from confining its membership to those united against threats to fishing as an economic activity, as

---

<sup>27</sup> The displeasure of 'local notables' in the fishing sector with the Atlantic Herring Co-op stance in not opposing the expiration of the moratorium was publicly recorded.

opposed to those whose primary focus were threats to the well-being of the ecosystem. Given the existing policy analytical capacity and resources available to NORIGS 2000 from its members, this policy actor formed a formidable ally with the federal government as members of the dominant advocacy coalition.

Fifth, although publicly portrayed as a debate between the powerful petroleum sector and the powerless fishing sector, from an advocacy coalition perspective, the petroleum sector in fact possessed limited capacity to influence the decision-making process. This research argues that this lack of influence was due to fundamental differences in core values between it and the dominant advocacy coalition in the network, rather than the power, in terms of resources, which the policy actor possessed.

(iii) Phase 3 – The issues having a direct bearing on the Georges Bank moratorium debate were significant in terms of influencing the final outcome of the process. However, in addition to these, the Georges Bank moratorium debate was subjected to influences that served to override these direct and more local level issues. Most influential among these was the decision by the United States to extend the moratorium on its portion of Georges Bank. This decision expanded the consequences of decision-making in the Canadian review process from a local/sub-regional issue to one with national and international implications.

In terms of precedence on policy issues relating to the marine environment, Canada had demonstrated its intent to differ with the United States over challenges to Canadian sovereignty in the Arctic archipelago.<sup>28</sup> However, on the majority of marine environmental policy issues affecting the two countries, Canada had generally followed the direction set by the United States (Doern *et*

---

<sup>28</sup> The 1969 test voyage of S.S. *Manhattan* through the Northwest Passage, without first obtaining Canada's permission and the subsequent unauthorized voyage of the US Coast Guard icebreaker, *Polar Sea* in 1985 focused attention on issues of Canadian sovereignty in the Arctic. In other areas however, Canada deferred to the United States lead, as was the case with deep seabed concerns in the negotiations relating to the LOSC.

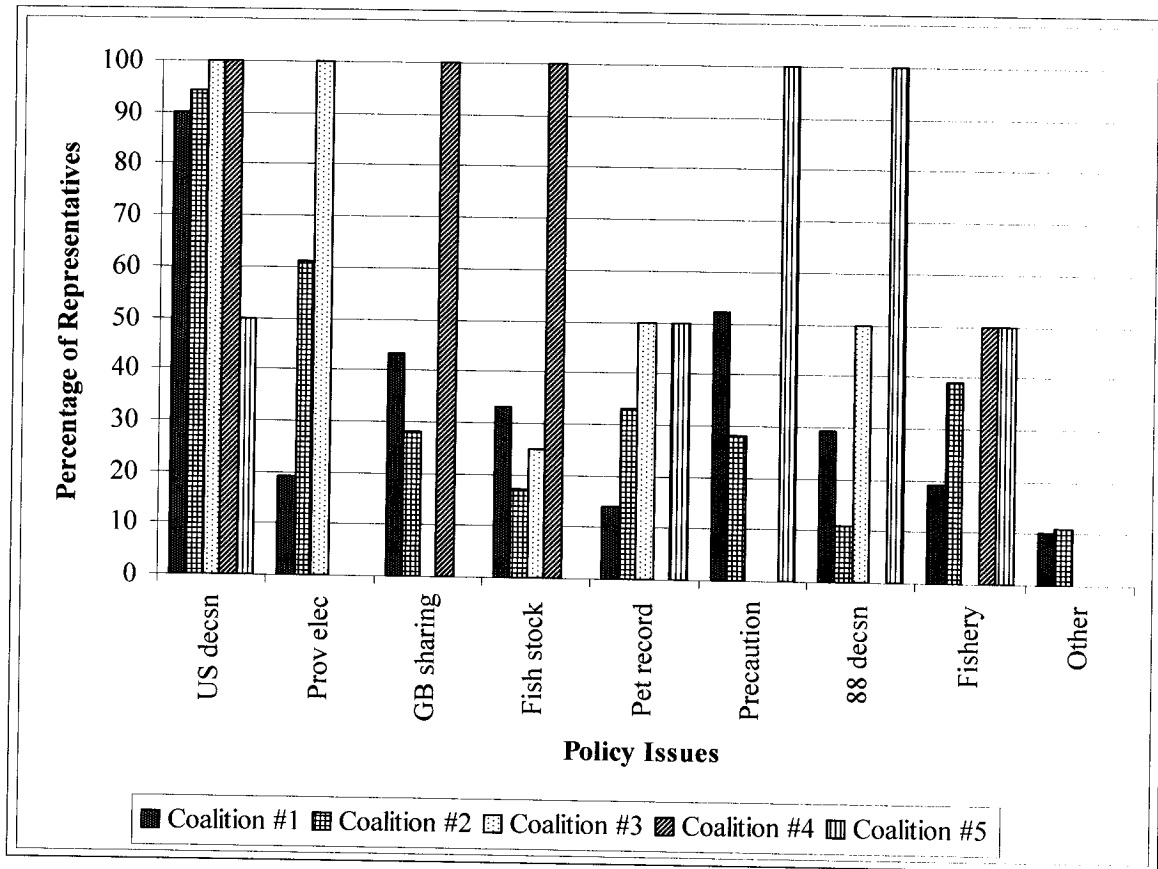
*al.*, 1996). Because of this position, Canada has been described as a “policy taker”, relegated to emulating American policies, particularly on environmental issues (Toner and Conway, 1996). Continuing support for this view may be inferred from the termination date for the Canadian moratorium on Georges Bank - six months *after* the US is currently due to make a decision on its moratorium. Given the complicated linkages between the two countries and examples where decisions in one policy domain are made as a result of consequences in another, it is to be expected that the US decision would have, and will continue to have, consequences on the Canadian process.

Figure 22 provides the breakdown of the importance of broader policy issues that affected the policy debate by actors in each of the five advocacy coalitions identified in the network (see Tables 17A, 17B, 17C, 17D and 17E). As is evident from the chart, all advocacy coalitions indicated the influence of the US decision over the Canadian decision-making process and the consequence of bilateral issues as overriding local-level impacts. In fact, 91% of all actors interviewed cited this policy issue as the most significant one affecting the outcome of the Georges Bank decision-making process.

The members of the Georges Bank policy network identified other policy issues affecting the process. Those specifically identified included the following:

- the 1999 provincial election;
- efforts promoting consistent management regimes for Georges Bank, by Canada and the US, despite the jurisdictional dividing of the Bank;
- declining fish stocks;
- the existing record of the petroleum sector globally;
- the precautionary approach as a principle in marine environmental decision-making;
- the 1988 moratorium decision; and
- the importance of the fishery as an economic driver in Nova Scotia.

**Figure 22. Importance of Broader Policy Issues by Advocacy Coalition Groupings**



**Legend**

- US decsn** 1998 US moratorium decision
- Prov elec** 1999 Porvincial elections
- GB sharing** Shared management regime for Georges Bank
- Fish stock** Declining fish stocks
- Pet record** Environmental records of petroleum industry
- Precaution** Precautionary principle
- 88 decsn** 1988 Canadian moratorium decision
- Fishery** General importance of fishery to Nova Scotia
- Other** Marshall decision; failure of regulators and, influence of friends



In addition, a minority of actors who were interviewed cited other policy issues such as the Marshall decision,<sup>29</sup> the failure of regulators and the influence of friends of the decision-makers. These are collectively displayed under the “other” category on the chart.

It is of interest to note that all actors in the advocacy coalition comprised of the provincial actors (Coalition #3) considered the provincial election influential. As well, almost 70% of all actors in Coalition #2 considered the provincial election significant. The representatives of this grouping included those from the fishing and petroleum sectors. All US actors, (Coalition #4) considered the jurisdictional division of Georges Bank and declining fish stocks as important policy issues influencing the decision-making process. The record of the petroleum industry globally was considered significant by 50% or less of the representatives in the different advocacy coalitions.

In contrast, all of the petroleum companies (Coalition #5), considered the 1988 moratorium decision and the ability of policy actors to invoke the precautionary principle as influencing the decision. Finally, and somewhat surprisingly, was the less than 50% of actors, regardless of their location in advocacy coalitions, who considered the economic value of the fishery to Nova Scotia (in general), to be important in affecting the decision. A possible explanation for this finding was its consistency with the claim of segregation between finfish and invertebrates stocks on Georges Bank with those of the wider Scotian Shelf by technical experts. This finding may therefore reflect the fishing industry's acceptance of this segregation. Given the focus of the debate on the Georges Bank fish stocks, the importance on other segregated stocks could thus be discounted. This explanation is also consistent with the higher percentage of petroleum sector actors

---

<sup>29</sup> *R v. Marshall*, Supreme Court of Canada, September 17, 1999. The appellant, a Mi'qmaq native was charged with three offences under the federal fishery regulations. Mr. Justice Binnie, in ruling for the majority, held that the Treaties of 1760-61 affirmed the right of the Mi'kmaq people to continue to provide for their own sustenance, which exempted him from compliance with the federal fishery regulation under which he was charged. While this right was found to have always been subject to regulation, the Crown's position before the Court was that no treaty rights existed.

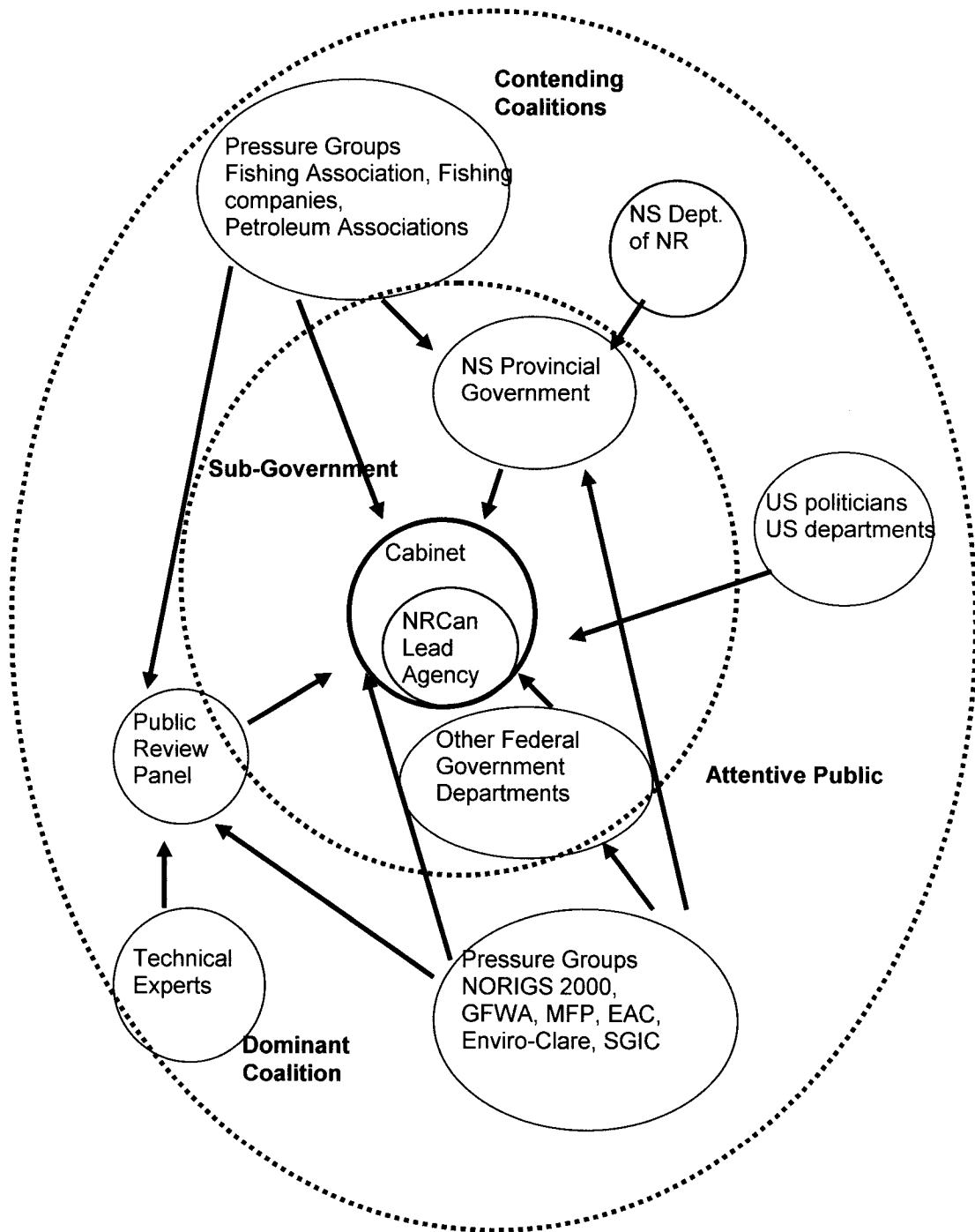
(Coalition #5) and US actors (Coalition #4) who considered the general importance of the fishery to be significant in influencing the decision. These actors would most likely not be as knowledgeable on this very specific scientific finding, as compared to the actors in the fishing sector.

#### **5.5.4 Summary**

Based on the analysis of the relationship between the members of the Georges Bank moratorium policy network, a model of the policy habitat, in existence at the time the decision was made, can be constructed (Figure 23). This model illustrates the location of the actors within the 'sub-government' and 'attentive public realms' (Pross, 1986) but also shows the dominant and contending advocacy coalitions, whose members span both of these realms.

While authority for decision-making remained with the elected federal and provincial governments, the involvement of government representatives from the United States, the private sector and representatives of civil society in the public review process, signalled a shift in the process of public policy decision-making. Specifically, the addition of environmental and sector-specific NGOs as members in the dominant coalition, along with federal level politicians and departments, demonstrated a broadening in the collectivity of actors previously found in the more traditional hierarchical form of governance. Equally as significant was the absence of the provincial actors from this coalition, despite their decision-making role and the separate coalition within which the economic actors were to be found. However, by focusing on the similarities in core values among policy actors, explanations can be provided which are consistent with the behaviour of actors during the decision-making process.

Figure 23. Georges Bank Policy Network



The analysis of the behaviour of actors in this case study suggests that the policy networks, and more specifically the advocacy coalitions that form within the network, can play an important role in predicting the influence of actors over public policy decisions. By focusing on selected characteristics common to the participating actors, the research suggests that it is possible to identify advocacy coalitions that form within the network. Furthermore, by examining the governance regime and policy environment in place during the decision-making process, predictions can be made as to the dominance of one coalition over another in terms of affecting the decision outcome.

In the case of the Georges Bank decision, the research findings suggested that the dominant coalition would be the one that included those actors in positions of authority and those who shared similar core values with these actors. Additionally, the values of these actors in the coalition were made operational by having a similar preferred outcome that addressed key areas of concern. However, the analysis also raised the possibility of a particular outcome allowing for the achievement of core values of actors outside of the dominant coalition. This was evidenced with provincial actors, US actors and economic actors being located in coalitions that were not dominant. Nonetheless, in the case of the provincial actors, US actors and those from the fishing industry, these all benefited from the outcome preferred by those in the dominant advocacy coalition. As such, the research findings of this case study add to the conclusions reached in the previous one described in Chapter Four. It does so by suggesting that only those actors who actively align themselves in a contending advocacy coalition, with core values differing significantly from those of the dominant advocacy coalition, would have limited ability to see their objectives reflected in the decision.

The number of rival yet non-aligned coalitions in a policy network, i.e., those that are neither the dominant and contending coalition, is expected to increase in a governance regime that increases the number of players in the decision-making process. This is because coalitions are

defined by actors sharing a set of normative and causal beliefs and not by their power structures relative to each other. As was evident in the Georges Bank policy network, these beliefs may differ from those shared by either the dominant or lead contending coalition. Furthermore, they are not indicative of the location of the actors in the 'subgovernment' or 'attentive public' realms (Pross, 1986).

While it may be challenging to deal with multiple advocacy coalitions in a given network, their presence can serve a constructive purpose in terms of promoting policy-oriented learning among all actors in the network. Such learning is considered essential to further efforts aimed at policy clarity and predictability within Canada's ocean policy domain, particularly in a more distributed form of governance with multiple, legitimate ocean users and decision-makers. It is also instructive to note that policy-oriented learning has also been shown to occur in areas where advocacy coalitions co-operate. In these situations, policy actors are typically responding to an external stimulus that threatens a significant number of actors within the policy network, regardless of the status of the coalition to which they belong. This example was typified in the Georges Bank policy network, with the introduction of the petroleum sector as both a new actor in the region's ocean policy domain and the cause for the policy debate. As described above, the success of actors in the dominant, as well as some of the non-aligned coalitions, was attributed to the sharing of fundamental core values, which were made operational by maintaining the *status quo* policies affecting Georges Bank.

In terms of characterizing the Georges Bank policy network based on the categories defined in Chapter Three (Table 5), the results suggest that the network cannot easily be pegged into any one of the categories described. This finding is consistent with earlier attempts to characterize the East Coast fishing policy network, which was described as a combined pressure pluralist and state-directed network, with limited corporatist tendencies (Pross and McCorquodale, 1990).

In the case of the Georges Bank policy network, given the addition of a broader array of actors, the network may best be described as a combined clientele pluralist and state-directed network. Clientele pluralist tendencies were noted in the ability of the various interests to organize in such a way as to collectively bring pressure to bear on the government actors. Furthermore, government actors at both the federal and provincial levels were clearly reliant on these interests, particularly the fishing interests. Policy-making in clientele pluralist networks is fully directed towards maintaining the *status quo*. However, in many other respects, the authority of the government actors was visible in the policy network. Most significant was that of the federal government, with its ability to make decisions that addressed national objectives rather than reflect sector specific concerns. An example of this was the importance the federal government was able to attribute to US policies regarding Georges Bank.

Neither corporatist nor concertationist type tendencies were revealed in the assessment of the Georges Bank policy network. In both of these networks, two equally strong societal interests compete for dominance and the role of government, given its legitimacy in allocating public values, is to negotiate with (concertation network) or arbitrate between (corporatist network) these two interests. With the potential for the petroleum sector to acquire strength in policy setting affecting the Nova Scotian offshore, it is likely that the Georges Bank policy network could eventually evolve to include characteristics from one or both of these networks.

## CHAPTER SIX

### COMPARATIVE ANALYSIS OF CASE STUDIES

#### 6.1 Identification of Cross-Cutting Factors

A comparative analysis of the two case studies examined in this thesis allows for an identification of cross-cutting factors affecting the influence of actors in policy networks in general, and advocacy coalitions in particular, on specific examples of coastal and ocean policy level decision-making. Furthermore, the cross-case comparison of the two decision-making processes provides the opportunity to assess the consistency of the theoretical propositions relating to Canada's evolving ocean governance structure, over the period 1984 to 1999.

While the results of a single case may be subject to criticism regarding the extent to which theoretically grounded ideas about decision-making may be advanced, arguments have been made in support of the substantial advantages which carefully conducted case studies provide. In particular, the methodology has been invaluable in the search for evidence consistent with, or disconfirming of, hypothesized relationships and the subsequent strengthening of theory-based arguments (Young, 1998). As such, it is recognized that the comparison of the results from this research does not allow for the broad-based extrapolation of conclusions arising from the two case studies. However, it does allow for an assessment of the consistency of theoretical propositions regarding decision-making processes in which actors compete for expressions of core values in decisions affecting coastal and ocean use in Canada's Maritime provinces.

For each case study, the significance of substantive, contextual and procedural factors acting on the decision-making process are evaluated, based on the research findings described in Chapter Four and Chapter Five. The policy implications arising from this examination are then subsequently addressed, with an aim towards expanding the theoretical knowledge base pertaining to coastal and ocean policy decision-making. This examination is considered important since interactions among these actors are expected to increase in a regime advocating multi-stakeholder participation and distributed governance mechanisms. Furthermore, policy-oriented

learning among network members has been cited as necessary to reduce institutional uncertainty and promote shared decision-making in heterogenous environments, such as the multi-use, multi-user oceans policy domain (Lindquist, 1992).

## **6.2 Comparison of Substantive Elements**

The following factors, relating to the substance of the policy problem, were compared for their potential to affect decision-making in each of the two case studies:

- the type or focus of the policy problem;
- the nature of the policy problem;
- areas of concern; and,
- the locus of significance of the policy problem.

### **6.2.1 Type of Policy Problem**

For both of the case studies, the type or focus of the policy problem was found to be significant in affecting the decision-making process because it set the stage for raising the awareness among potential policy actors of the importance of the issues to their well being. In the case of the Fixed Link case study, the problem centred around the federal government's commitment to provide year-round transportation to Prince Edward Island by constructing a Fixed Link between the island and the New Brunswick mainland. In the case of the Georges Bank case study, the policy problem focused on making a determination as to whether or not a potentially conflicting ocean user should have access to a specific area of ocean space. As such, its focus was on inter-sectoral interactions, specifically the fishing and petroleum sectors.

For the Fixed Link case study, the transportation focus of the policy problem highlighted a range of consequences that were instrumental in identifying the policy actors who would eventually coalesce around the problem to see it resolved. Similarly for the Georges Bank case study, the focus of the problem on petroleum-fishing sector interactions dictated the scope with which the problem would be examined and the policy actors who would seek to influence its outcome. Based on the importance of the type of the policy problem in determining who would



eventually participate in a policy debate affecting coastal and ocean use, this substantive factor is considered to be of cross-cutting significance.

### **6.2.2 Nature of Policy Problem**

The irrelevance of the nature or degree of specificity of the policy problem in affecting the decision-making process was an important cross-case conclusion from the standpoint of the significance of substantive elements. This finding is counter-intuitive to expectations since it was reasonable to assume that the more tightly circumscribed the policy problem, the easier it would be for some policy actors to influence its outcome, based on their policy analytical and resource capability. However, while the Fixed Link policy problem was project-specific and more focused in terms of an assessment of its perceived costs and benefits, this characteristic of the problem provided no identifiable advantage to participating policy actors, based on the assessment of their ability to influence the decision. In the Georges Bank case study, the policy problem being addressed was considerably more strategic in nature and lacked project specificity, thereby reducing the level of detailed knowledge that could be applied to an evaluation of problem-related impacts. However, as was the case in the Fixed Link example, where a perceived advantage appeared to have had no effect, this potential constraint in the case of the Georges Bank policy problem did not appear to be particularly relevant in influencing the decision-making process.

If this finding proves to be reproducible in policy level decision-making, its significance would be considerable in terms of promoting policy-oriented learning, given the diversity of policy problems that arise in the coastal and marine environment. In effect, the irrelevance of the specific nature of the policy problem to policy actors interested in affecting the outcome provides the opportunity for the repetitive use of successful strategies by policy actors. This ability would contribute to a refinement of these strategies and a more efficient use of effort and resources by policy actors. With this knowledge, actors in the policy network could limit the amount of ideational, technical and financial resources that might otherwise be expended on elements that are irrelevant to affecting the decision-making process.

### **6.2.3 Areas of Concern**

The analyses of both the Fixed Link and Georges Bank case studies supported the significance of the areas of concern, i.e., substantive issues associated with each of the policy problems, as critical factors in affecting the decision-making process. Specifically, these substantive issues were instrumental in identifying the composition of actors who coalesced to form the policy networks around each of the problems being debated.

In the case of the Fixed Link case study, the areas of concern were local in nature. These focused on the ferry workers, fishery, 'island way of life', tourism and transportation related impacts, bridge design, construction and operational issues and the process adopted to address the policy problem. Given the mandated responsibilities of the federal and the NB and PEI provincial governments as decision-makers in the resolution of the policy problem and in responding to the areas of concern, their role as actors in the policy network was confirmed. Additionally, it was to be expected that actors who would be affected by the decision outcome or who could affect the process as a result of their policy analytical capacities and available resources would attempt to influence the process. These included locally affected economic actors and societal interests, such as an array of labour organizations, who stood to lose or benefit from the resulting decision, and non-governmental organizations. This latter group of actors was relatively new to the policy making process, and reflected the onset of the growing demand for increased credibility and legitimacy in the decision-making process through increased participation of affected stakeholders.

In the case of the Georges Bank policy problem, the areas of concern were also found to be instrumental in determining the composition of actors in the policy network. For this case study, these areas spanned a complex mix of local and transboundary issues, including the fishery, the Georges Bank ecosystem, petroleum-related activities, co-existence, the offshore regulatory regime and the process for decision-making. Consistent with the theoretically grounded linkage between areas of concern and composition of the policy network, the actors in the Georges Bank policy network were found to consist of a mix of those affected by, or who could affect, the decision, on the basis of its local and transboundary nature. These actors included federal and

provincial decision makers and their supporting bureaucracies, the two major economic interests to be affected by the policy debate, non-governmental organizations and extra-territorial policy actors from both the non-governmental and governmental sectors of US society.

#### **6.2.4 Locus of Significance**

The locus of significance of the policy problem determines the spatial boundaries within which policy actors would likely take an interest in the policy debate. As such, this factor is considered to be of significance in affecting the composition of actors in the policy network and the subsequent formation of advocacy coalitions.

In the case of the Fixed Link policy problem, the locus of significance was primarily local, in terms of interest in resolving the policy problem. This allowed the policy debate to maintain a significantly local focus that would not have been possible had the issue gained national attention. An examination of the key actors who participated in the public review process provided evidence of the local nature of the policy problem and its affect on the outcome of the decision-making process (FEARO, 1990). Key policy actors who coalesced around the issue were generally limited to those from PEI and NB, with the necessary involvement of the federal government as decision-maker. Participants from Nova Scotia accounted for less than 3% of all presentations to the review panel (FEARO, 1990). This low level of participation may be attributed in part to the limited perceived negative impact of the project to the province and the perception of increased opportunities for community economic development and tourism in the Cumberland/Colchester, Pictou and Cape Breton areas of the province. Additionally, the two successive federal Cabinet Ministers responsible for Public Works Canada during the decision-making phase of the debate were from Nova Scotia, which may have provided some assurance to Nova Scotians that their interests were being taken into account (FEARO, 1990).<sup>1</sup>

In the case of the Georges Bank policy problem, the locus of significance included both local

---

<sup>1</sup> At the political level, the federal Progressive Conservative Member of Parliament representing Cumberland/Colchester was publicly supportive of the proposed fixed link project (Casey, 1990). Only one presenter from Nova Scotia publicly expressed concern over the potential for localized climatic changes to negatively affect commercial vineyards in Nova Scotia (Jost Winery, 1990).

(to southwestern Nova Scotia) and trans-national loci of significance. By expanding the spatial boundaries of the policy problem to include policy actors in the United States, the influence exerted on the decision-making process necessarily reflected the role played by these actors. Thus, the research findings support the cross-cutting significance of the zone of influence of a given policy problem in affecting its outcome.

### **6.2.5 Policy Implications of Substantive Factors**

The policy implications associated with a comparison of substantive factors arise primarily from the composition of policy actors who are involved in the process during the various stages of the policy debate. Key issues that were identified relate to the level of involvement of policy actors at critical stages in the debate; previous relationships among policy actors; dynamism within the policy network; and, the changing values of policy actors.

(i) Level of involvement - Significant advantages may be afforded to some policy actors involved in the policy network, based on their involvement at particular stages in the decision-making process. For the Fixed Link debate, the unilateral involvement of the federal government at the early stages of the policy process allowed this policy actor to exercise its dominance in terms of how the policy problem was structured and the type and sources of information used to advance the process. Similarly, the involvement of the federal and provincial governments, along with representation from the fishing industry, in the appointment of the members of the review panel, gave these policy actors an opportunity to shape the direction of the Georges Bank policy process.

(ii) Previous interactions - A familiarity among policy actors as a result of previous interactions suggests the importance of possessing policy-relevant knowledge pertaining to actors involved in resolving policy debates in the Maritimes Region ocean policy domain. This knowledge assumes greater significance in a governance regime that considers a broader array of input to affect the decision outcome than it would in one that is hierarchical, and where the application of such knowledge to influence the decision is limited. In examining the Georges Bank moratorium process, the relative newness of the petroleum sector to the Maritime ocean policy domain, and

its short history of interaction with key policy actors and the public at large, served to limit the degree of policy-relevant knowledge this actor had at its disposal. When compared to other actors in the policy network, this placed the actor at a disadvantage, in terms of its ability to affect the decision-making process. This finding is of significance to the petroleum sector and to all other policy actors with an interest in the Maritimes ocean policy domain, since the sector is slowly acquiring a presence and history in the region. With the acquisition of knowledge relevant to the behaviour of actors in the policy network, this can only serve to minimize the disadvantages that were inherent to this policy actor during the 1996-1999 policy debate, when the problem is next revisited.

(iii) Dynamism of policy networks - The analyses of the case studies also highlighted the dynamic characteristic of the policy networks that coalesced around the two case studies. For both the Fixed Link and Georges Bank decision-making processes, the composition of the policy network during different periods ranged from limited to extensive. This finding is instructive in terms of its policy implication on the resolution of issues raised during a policy debate. Depending on when and for how long policy actors chose to be active participants in a decision-making process, the significance of issues raised may be either limited or extensive. More importantly, issues that actors in the network may have resolved may suddenly gain prominence as a result of a new or re-introduced level of involvement by one or more policy actors, or as a result of new information. Similarly, issues that had not previously arisen may erupt, as was evidenced in the legal challenge by the Friends of the Island in the Fixed Link case study, on the alleged breach by the federal government of the 1873 *Terms of Union* for PEI. Thus, the dynamic nature of the policy network needs to be included as a form of known institutional uncertainty that is inherent in decision-making processes involving multiple actors, such as in the coastal and ocean policy domain.

(iv) Changing values, objectives and preferences - The membership of actors in advocacy coalitions who share core values will be determined from the pool of policy actors who participate in the policy debate. Thus, the substance of the policy problem will affect the strength of these

coalitions and their relative position in the network, since it is the assessed significance of specific areas of concern that determines the composition of actors in the policy network. This suggests that the successful or unsuccessful expression of core values by members of an advocacy coalition in one policy problem, in the form of objectives being sought, should not be assumed in the resolution of a second policy problem. Furthermore, as these goals and objectives change with circumstances and as a result of organizational learning (Argyris and Schon, 1978), it is possible for policy actors who once differed in the pursuit of core values to find themselves sharing similar membership in a coalition, which may be dominant or contending. This was illustrated in the movement of membership of the federal government and environmental non-governmental organizations from opposing coalitions in the Fixed Link case study, to the same dominant coalition in the resolution of the Georges Bank policy problem. The contextual significance of the changing values, objectives and preferences leading to such shifts is discussed below.

### **6.3 Comparison of Contextual Elements**

The policy habitat within which decisions were being made and the shaping of the structure of policy network, as a result of underlying core values held by policy actors, were examined as contextual factors with the potential to affect decision-making. Additional factors that were identified in comparing the research findings of the two case studies included the impacts of broader policy issues and the availability of new information technology tools to influence the decision-making process.

#### **6.3.1 Policy Habitat**

The policy habitat defines the existing allocation of public values and reflects the collective underlying values of successful advocacy coalitions in the ocean policy domain. For decision-making in the Canadian context, the policy habitat is thus a collection of nested values, influenced in part by international and national interests, as well as provincial and local level interests. Thus, depending on the substance of any particular policy problem, the ability of contextual factors to affect the outcome of the policy debate may range from limited to extensive. As such, an

examination of the *status quo* policies that define the policy environment within which decision-making occurred is essential for understanding the behaviour of actors in public policy debates.

In comparing essential elements of the policy habitat for the Fixed Link and Georges Bank case studies, attention was focused on the effects of the regime in place for policy level decision-making and the influence of *status quo* policies on the process.

(i) Decision-making regime - Over the fifteen-year period spanned by the two case studies (1984–1999), the structure for reaching coastal and ocean policy decisions in Canada had evolved from one reflecting the exclusivity of governments to one in which stakeholder participation had become an accepted norm and legal right.<sup>2</sup> In part, the case studies were selected to examine whether or not the theoretical propositions associated with a shifting from a strictly hierarchical regime to a more distributed form of decision-making is consistent with empirical data captured in the comparative analysis of the two case studies.

As was evidenced at the onset of the Fixed Link policy problem, the federal government possessed unilateral authority to decide on whether or not the problem would be placed on the government's policy agenda. Coupled with the jurisdictional authority granted to provincial governments, these two levels of government dominated the decision-making process. It was only after the political consequences of ignoring public opinion on PEI were demonstrated that non-state policy actors were provided with the opportunity to participate in the process. As the legitimacy of stakeholder participation was increasingly being recognized, the ability for non-state actors to participate in decision-making and, if necessary, challenge the actions of the government, became more accepted. By the end of the Fixed Link policy process, the legal regime for environmental decision-making had advanced from the discretionary 1984 *EARP Guidelines Order* to the formalizing and mandatory requirement of public participation in the reform package associated with the assessment of environmental impacts of government-

---

<sup>2</sup> Although interests in the form of lobbyists and the unofficial activity of non-governmental organizations have been around for decades, their participation in public policy decision-making has assumed a legitimacy not previously afforded, with the acceptance of the principle of public participation in Canadian and international laws.

sponsored projects.

In contrast to the Fixed Link debate, the process adopted to review the Georges Bank moratorium question included public participation from the outset. Furthermore, the growing acceptance of principles of stakeholder participation, integrated management and the precautionary approach allowed for the inclusion of extra-territorial actors in the review, an opportunity that was not available in the 1988 decision to impose the moratorium.

(ii) Status quo policies - In the case of the Fixed Link policy debate, a policy environment advocating deficit reduction and a reliance on the private sector for job creation significantly impacted both the definition of the policy problem and its potential solutions. As such, adherence to fiscal considerations was a stated priority by the federal government that had to be met in any proposed solution advocated to address the Fixed Link policy problem. This limitation also necessarily constrained the scope by which the problem could be evaluated. Once this limitation was addressed, secondary criteria such as the environmental soundness of proposed solutions, their technical feasibility and degree of socio-economic impacts on PEI and the Atlantic region as a whole, could then be weighed. Thus it was primarily at this secondary level that influence could be exerted to affect the outcome of the decision-making process.

The policy environment surrounding the Georges Bank decision-making process was considerably different from that of the Fixed Link process. Occurring in the latter half of the 1990s, the Georges Bank debate took place in an environment in which principles guiding ocean governance that were nascent in the 1980s, were becoming accepted norms. Increased participation, and by extension, increased distributional fairness among a broad range of affected stakeholders, was an expectation for any decision-making process affecting ocean use at this time. Based on the hope that all ocean use and users could be subject to reasonable considerations of equity and rational concepts of efficiency or effectiveness (Johnston, 1993), core principles for sustainable ocean governance were being promulgated at the international, national and sub-national levels of policy making (Costanza *et al.*, 1998). Key among these principles were sustainable development, the precautionary approach, integrative management



and participation, all of which Canada embraced at the international and domestic levels (Runnals and Bregha, 2002).

Against this backdrop of theoretical, principled decision-making, the Georges Bank review process was also subject to an examination of the problem in terms of the mandate specified in the 1988 legislation and a range of serendipitous factors. In the case of the 1988 mandate, there was a clear mismatch in the focus of the policy problem only on petroleum-related impacts and the principles of integration and distributional fairness among a broad range of affected stakeholders. Furthermore, at the operational level of decision-making, theoretical principles were overtaken by chance elements such as a minority provincial government during an election campaign, a preemptive decision by the US to extend its moratorium and the opportunities these events presented to a politically powerful fishing constituency.

### **6.3.2 Values, Objectives and Preferences of Policy Actors**

In addition to affecting the existing policy habitat, contextual factors play an important role in influencing the expression of public values, objectives and criteria. During the decision-making process, the underlying values of actors in the policy debate jostle and compete for expression in the form of the decision reached. The structural approach (Coleman and Skogstad, 1990) suggests that the resource capacities of individual actors determine the power relationship among actors in the policy network to influence the decision. These resources include a workable set of policy ideas; political and organizational leadership; money and financial resources; legal and statutory capacity; and, scientific and technical knowledge. The learning approach (Lindquist, 1992) suggests shared core values as an equally viable driving force influencing decision-making in the coastal and ocean policy domain. However, a comparison of the research findings of the two case studies suggests that while both hypotheses may have merit, the interactions among policy actors appear to be more complex than a simple juxta positioning of values and power.

In an assessment of each of the participating policy actors in the Fixed Link policy process, the ranking assigned to disciplinary attributes used to identify core values provided considerable insight into how contextual factors affected the motivation behind each actor's attempt at influence

on the process. In the case of the federal and provincial governments and private sector companies, political and economic objectives were identified as the means by which fundamental values could be pursued. This was consistent with the mandate and responsibilities of these policy actors and the existing policy context within which the Fixed Link debate was occurring. Furthermore, the criteria or measures of performance by which the objectives were characterized by these policy actors were also indicative of the temporal and spatial context of the policy problem. Thus, for example, PEI's 10 conditions for concurrence with the policy outcome and the agreed upon terms of the federal-provincial agreements and other negotiated contracts, gave expression to the synthesis of the multiple values, objectives and criteria of importance to these policy actors. It is important, however, to recognize that both objectives and values are dynamic, changing with time and place, as well as when the policy actors and the world, changes. Thus, attention to contextual factors is essential for understanding the underlying values of any actor in Canada's coastal and ocean policy domain.

For the other policy actors in the Fixed Link network whose values were found to be non-commensurate and conflicting with those of the decision-makers, the objective of protecting the environment was viewed as essential to achieving core values. Similarly, these policy actors identified criteria based on avoidance of negative impacts on the marine and terrestrial environment as measures of performance for evaluating whether or not objectives and goals had been accomplished. These objectives were similarly indicative of the growing awareness of the linkage between development and the environment in the late 1980s. Given the desire by these actors to fill the gaps in information and address consequences which governments had traditionally failed to consider essential in decision-making, these policy actors responded to the increasing global awareness of the environment-development nexus as furthering the achievement of their values.

The interests of the remaining actors in the policy network, such as the labour organizations and Marine Atlantic, underscored the existing concern with social and economic attributes as objectives to pursue and the existing policy environment. Given the roles and responsibilities of

these actors, the protection of jobs for their members and employees was an essential performance indicator against which their success was to be measured, particularly in an environment of already high unemployment rates, cutbacks in government expenditures and limited economic development potential.

In the case of the Georges Bank case study, the numbers of policy actors participating in the policy network reflected the increasing involvement of a broader array of interests in the decision-making process. Competition among policy actors to see their values expressed in the authoritative allocation of public values was expected to increase, given the heterogeneity among actors. Similarly, based on the resource capacity of individual actors and the perceived strength of the power-based hypothesis to explain the behaviour of policy actors in the network, it was expected that government would play the role of mediator between the two principal economic sectors in the policy debate. However, contextual factors played a significant role in challenging the validity of these assumptions. Specifically, a global recognition of declines in fish stocks from anthropogenic threats accentuated the value in protecting areas such as Georges Bank from further human-induced impacts. As well, the subsequent burden to be borne by the fishing sector, in the event of catastrophic petroleum-related impacts, increased the importance of ethical values among a number of policy actors involved in the network. This increase in the subscription to an ethical objective was attributed to the growing awareness of the need to address the consequences of decision-making in a broader policy context than was traditionally the case.

Additional contextual factors supporting this view were the topical and well-publicized downturn in the fishery, the non-renewable nature of petroleum exploitation and the perceived need to minimize further impacts on an already depressed fishing sector. To justify these

objectives, the precautionary principle,<sup>3</sup> which had gained status as an essential tool to address uncertainties arising from inadequate knowledge, was invoked as a reason for extending the moratorium on Georges Bank.

### 6.3.3 Broader Policy Issues

The broader policy issues affecting two case studies differed considerably in shaping the behaviour of actors in the policy networks. For the Fixed Link debate, the scope of issues dominating the review was limited primarily to areas of concern at the local level on Prince Edward Island. In fact, there was considerable resistance on the part of the population and Government of PEI to view the project as anything other than a 'PEI project'. This view was held because it was believed that the negative impacts from the project, specifically those on the ferry workers, the fishery, tourism, transportation and the island's culture, would be borne mainly by Prince Edward Islanders. In contrast, benefits arising from the project were expected to be shared by all three Maritime provinces, which accounted in part for the support given to the project by New Brunswick and Nova Scotia businesses and politicians, both federally and provincially.<sup>4</sup> The containment of the debate to issues of local interest was also a product of the traditional government-dominated regime for decision-making and the limited communication tools available to policy actors to garner support for their positions, even as the level of broader stakeholder involvement was increasing.

---

<sup>3</sup> The precautionary principle was first articulated in the German Air Pollution Act of 1968 to explicitly address the problem of government action going beyond the prevention of known dangers (von Moltke, 1999). It provided support to government action in the face of systemic scientific uncertainty (Schrecker, 1984). From Germany, the principle permeated to the rest of Europe and from there, via UNCED in 1992, to the international level and into the domestic legislation of nation states, including Canada, e.g., in Canada's *Oceans Act*, 1996 and the *Canadian Environmental Protection Act*, 1999.

<sup>4</sup> In contrast, the federal Cabinet Minister responsible for Newfoundland and Labrador was not supportive of the Fixed Link project. This was due to the requirement in that province for federal assistance as a result of the collapsing Northern cod fishery. Given the policy of fiscal restraint by the federal government, it was feared that support for the Fixed Link project would reduce the resources available to alleviate the magnitude of the impacts associated with the collapse of the fishery. Given the political power of both the fishing constituency and the Newfoundland Minister within the federal Cabinet, the strength of the arguments made by federal Maritime politicians for the project to effectively address the goals of the government had to be virtually irrefutable.

In contrast, the interdependence of the Georges Bank policy problem with broader policy issues at the provincial, national and international levels was readily obvious. This expansion of the issues surrounding the policy debate from a strictly local focus to include transboundary interests was considered to be a direct result of the evolving regime affecting decision-making and advances in communication technologies. As such, issues as diverse as the US extension of a moratorium in offshore areas not currently subject to oil and gas activity, to the environmental record of the petroleum sector globally, could be brought into the debate, along with more direct issues of local concern. The significance of these factors to collectively influence decision-making was evident in the conclusions reached by the public review panel and its recommendation to extend the moratorium (Mullally *et al.*, 1999).

The following three examples at the provincial, national and international levels highlight the interdependence associated with the resolution of the Georges Bank moratorium as a policy problem. At the provincial level, an election call in 1999 provided the fishing constituency in southwestern Nova Scotia with considerable leverage over political candidates from all parties. An indication of the power of the fishing constituency was evident in the unilateral acceptance by the Premier of Nova Scotia of the review panel's recommendation, during the election's campaign.<sup>5</sup>

At the national level, the 1996 *Oceans Act* provided for the formulation of an oceans strategy, guided by the explicit recognition of the importance of marine environmental quality in the Act. Additionally, principled decision-making was enshrined in the legislation with attention to sustainable development, integrated management and the precautionary approach being advocated. Arguments invoking these principles and references to the potential for offshore petroleum activity to affect both the marine environmental quality of Georges Bank and the viability of the biological resources were cited by policy actors in favour of extending the moratorium. Ongoing socio-economic concerns over the tremendous costs associated with the

---

<sup>5</sup> This action on the part of the Nova Scotia government was contrary to the established protocol relating to federal and provincial government responses to recommendations made by jointly-established review panels.

closure of the Northern cod fishery in Newfoundland (Cashin, 1993) and declining fish stocks in the Maritimes region were also prevalent issues that could not be ignored in the policy debate concerning petroleum exploration on Georges Bank.

At the international level, President Clinton extended the prohibition of petroleum activity on the US portion of the Bank in November 1998, two months prior to the commencement of public hearings on whether the Canadian moratorium should be extended. While this decision was mentioned repeatedly during the Georges Bank policy debate (Mullally *et al.*, 1999), it is significant to note that the US decision referred to all new petroleum activities on the Outer Continental Shelf of the United States. Specifically, the US portion of Georges Bank was just one of the areas affected by the President's executive order and secondly, the decision did not affect new petroleum activities in existing offshore areas, such as the Gulf of Mexico.

The interest of the US Government in the outcome of the Canadian decision-making process was also evident during the public hearings and after the panel submitted its recommendation to the federal and provincial Ministers of Natural Resources. During the public review process, the Massachusetts Congressional Delegation, (comprised of Senators Edward Kennedy and John Kerry, along with Representatives William Delahunt, John Tierney and Barney Frank) submitted a written brief to the review panel. After the panel's report was submitted, Senator Susan Collins submitted Senate Resolution 167 on July 27, 1999, commending both the panel on its recommendation to extend the moratorium and the Government of Canada for continuing the moratorium through 1999. The Senate resolution also urged the Government of Canada to extend the moratorium to 2012. In submitting the resolution, Senator Collins acknowledged that while Canada was entitled to make its own mineral management decisions,

Nonetheless, given the joint jurisdiction that the United States and Canada have over Georges Bank, I believe it appropriate for this body to convey its concern and support for the unique ecosystem and fisheries of Georges Bank...

The resolution...encourages the Government of Canada to accept the recommendations of its review panel. It also goes further by asking our neighbour to the north to extend its drilling moratorium until the year 2012 to match the American moratorium. In that way, both Canadians and Americans may be assured that Georges Bank will remain in its traditional uses.

(Congressional Record: July 27, 1999. Page S9397)

#### 6.3.4 Advances in Information Technologies

Throughout the Fixed Link policy debate, there was only minimal use of the internet as a tool available to policy actors to influence decision-making. Access and wide-spread availability of electronic communication to readily transfer and retrieve information and communicate with a wide range of contacts was still severely limited. In situations where access to these tools was available, its use was primarily to send and retrieve information to and from specific users, not for widespread broadcast to unknown users. As such, the tool did not appear to play a significant role in influencing the strategies adopted by policy actors in the Fixed Link policy debate. Communications media used during this process focused on the more traditional written form to specific recipients and the use of the press (local and regional print and radio and limited television) for wide spread message broadcasting.

In contrast, political action groups in the Georges Bank case study incorporated the advantages offered by advances in information technology to mount effective campaigns aimed at soliciting support for the extension of the moratorium. The use of the internet and electronic communication by non-state actors in the fishing and environmental sectors was substantial and an important tool in the success achieved by these actors over the decision-making process. The tool was also used to convey policy actors' values, objectives and criteria directly to decision-makers and to obtain technical information in support of arguments presented by policy actors.

For example, NORIGS 2000 used this medium to continuously communicate its strategy with its membership during the debate.<sup>6</sup> It also used the tool to effectively solicit support from fishing constituencies and the broad-based membership of environmental non-governmental groups

---

<sup>6</sup> Examples included a call by NORIGS 2000 for intervenors to register their opposition to oil and gas development. <http://www.web.net/~nben/envnews/action/98/georg.htm> (accessed 16 April, 2000); support from the Sierra Club Eastern Canada Chapter and Massachusetts Sierra Club in providing electronic mailing of form letters to key members in the Canadian federal and Nova Scotian Cabinet. <http://www.web.net/nben/envnews/action/99/gbank.htm> (accessed 10 October, 2000), <http://www.web.net/nben/envnews/action/99/gb.htm> (accessed 16 April, 2000) and [http://www.sierraclubmass.org/news.../hails\\_canadian\\_recommendation.htm](http://www.sierraclubmass.org/news.../hails_canadian_recommendation.htm) (accessed 10 October, 2000); and, the submission of editorials by members of NORIGS 2000 in US-based newsletters. For an example, see <http://www.fishingnj.org/artnorigs.htm> (accessed 10 October, 2000).

outside of the Maritime Region, most notably the United States. Such campaigns, regardless of which policy actor conducts them, can potentially serve to pressure decision-makers into making decisions that further the goals of one policy actor over another, without a balanced consideration of the issues that affect the public at large. Thus the internet, as well as other forms of communication media, may cause decision-making processes in the coastal and ocean policy domain to be reactive to a perceived crisis when in fact, a more proactive process which decreases polarization among user groups through balanced debate is needed.

This use of the internet is countered with examples in which it has played an important role in altering poor environmental practices and the laws governing such practices (Barker and Soye, 1994).<sup>7</sup> The challenge to decision-makers will be in determining whether processes that assist in public policy decision-making recognize the potential for misuse of the tools available to policy actors and do in fact allow for a balanced perspective that would provide guidance on the public's values, objectives and criteria. The caution from this discussion is that information retrieval and widespread dissemination of a particular viewpoint do not necessarily translate into enhanced knowledge transfer, increased understanding of the relevant issues or the promotion of cooperative decision-making (Pal, 1999b).

### **6.3.5 Policy Implication of Contextual Factors**

The policy implications arising from a comparison of contextual factors affecting the two case studies are extensive and provide opportunities for policy-oriented learning among actors in the Maritimes ocean policy domain. Key issues that were identified relate to: aspects of the regime

---

<sup>7</sup> A classic example is the efforts of Earth Island Institute and other organizations to stop all drift net and purse-seine fishing by tuna fleets in an effort to reduce dolphin mortality associated with tuna harvesting (Wapner, 1995). This resulted in a reduction of dolphins killed from 100,000 in 1989 to less than 5,000 in 1993. By mobilizing efforts aimed at a transnational ban on all canned tuna, environmental activists targeted the economic realm of collective life to affect change. Success was achieved as corporations promised to bring their practices in line with environmental concerns. The strategy focused efforts on the major corporations purchasing tuna, rather than politicians or the harvesters, signaling the recognition of the economic realm as form of governance to be manipulated, in addition to the traditional governmental realm. Governments followed with domestic conservation policies and international efforts to reduce dolphin mortality, such as the UN moratorium on drift nets in late 1992, the 1995 Panama Declaration and the 1997 US *International Dolphin Conservation Program Act*, 105-42, 105<sup>th</sup> Congress.



structure; the effects of the policy habitat on shaping the decision outcome; intergovernmental relations; time lag between implementation and action; the disconnect between theoretical principles and practice; and, the opportunities afforded from the use of the internet.

(i) Regime for decision-making - The potential significance of the evolving governance regime resides not only in the sharing of the process of decision-making, but in sharing the determination of what items are placed on the policy agenda for decision-making. In a regime that allocates the definition of alternatives to a single, or a few, policy actors, the power to shape the outcome of the decision is exercised long before the substance of an issue is debated. This is because these actors have the authority to determine what issues are placed on the policy agenda. This ability to determine whether issues are organized into, or out of, politics has been cited as the 'supreme instrument of power' (Schattschneider, 1975).

Examples of the use of such power were demonstrated in the case studies examined for this thesis. For the Fixed Link policy process, such power was exercised with the government-determined identification of the Fixed Link as the option for addressing the policy problem. It was also demonstrated in the Georges Bank case study with the 1988 decision by the federal and provincial governments to have a legislative requirement to revisit the policy problem prior to 2000. As the regime affecting decision-making has continued to evolve, efforts by a broader array of policy actors to influence the policy agenda as well as the policy process have increased. This was particularly evident in the Georges Bank policy debate where the fishing sector and the review panel refused to be constrained by the mandate of the review, as it was provided in the 1988 legislation.

(ii) Policy habitat - For the Fixed Link case study, the dominance of the federal government in the decision-making process and the importance of the fiscal factor in determining the resolution of the policy problem appeared to have been missed by the majority of non-state actors in the policy network. As such, these actors failed to recognize the continued role of the federal government as the 'holder' of the supreme instrument power, as defined by Schattschneider (1975), despite their improved access to the decision-making process. This lack or ignoring of

critical policy-relevant knowledge led to the expenditure of ideational, technical and financial resources by all actors in the network that appeared to have served no useful purpose, since it focused on raising alternatives that were fiscally incompatible with the *status quo* policies of the day. This finding was particularly evident in the arguments provided by policy actors such as technical experts, the FEARO review panel and the Friends of the Island, who focused on highlighting alternative criteria to fiscal considerations as the basis for influencing decision-making.

In contrast, by recognizing that levers of influence were available at the secondary aspects of decision-making, policy actors who seized these opportunities were able to see considerable return on their expenditure of resources in the policy process. Examples of such return included the benefits obtained by both the PEI and NB governments in negotiations with the federal government within the context of existing federal-provincial relations, and the benefits afforded to key economic actors in transportation, tourism and manufacturing as a result of the decision made. Additionally, when policy actors, who had had little success in promoting non-fiscally acceptable alternatives, shifted their efforts to those aimed at addressing areas of concern arising from fiscally acceptable alternatives, success was more likely. This was evident in the improvements made to the selected bridge design as a result of recommendations made by technical experts and the FEARO panel. Examples of such improvements included a decrease in the cross-section of the Northumberland Strait blocked by the structure, improved ice-breaking capacity around the footings and reduced in-filling at the approaches of the structure to ensure minimal disruption to the marine habitat. As well, concerns raised by any policy actor relating to the displacement of ferry-workers and providing compensation for disruption of fishing activities were received as legitimate and credible issues by the decision-makers.

By the end of the Fixed Link policy process, the evolving governance regime allowed for a broader array of policy actors in shaping the overall policy outcome but not the shaping of the policy agenda. In contrast, evidence of partial sharing in the setting of the policy agenda was observed in the Georges Bank policy process, in terms of the scope of the review. The

significance of this is more an indication of the continuing trend in Canada towards distributed governance rather than any significant indication of such a regime in practice.

(iii) Intergovernmental relations - Given the dominance of government actors in decision-making affecting coastal and ocean use in Canada, the relationship between the federal and provincial governments resulted in significant policy implications, affecting not only the behaviour of these two policy actors, but all members of the resulting networks as a whole. In the government-dominated regime surrounding the Fixed Link policy process, the relationship between the federal Progressive Conservative government and the provincial Liberal government on PEI was shaped by differences in personalities, ideologies and political agendas. In each case, these differences negatively impacted on federal-provincial relations, resulting in lack of trust on both sides, concern for political "fall-out" on the part of the provincial government,<sup>8</sup> and confusion among other policy actors as to the goals and objectives of the provincial government.

In contrast, the relationship between the federal government and the NB Liberal government at the personal and political levels was mutually supportive of each other's explicit goals and objectives. However, in both examples, as well as in the case of a tripartite relationship, the respective governments negotiated agreements that each believed to be in the best interest of their constituencies and the assertion of jurisdictional authorities.

For the Georges Bank policy problem, federal-provincial relations were shaped more by the traditional constitutional issues that the provinces and the federal government have perennially debated, rather than differences in personalities and ideologies. In a policy environment that needed to consider international as well as domestic factors and actors, the federal government had paramountcy over provincial wishes aimed at seeking the economic rents available from offshore resources. At the same time, the political strength of the fishing constituency within the province was such that it was politically astute to have the review panel recommend a course of

---

<sup>8</sup> Provincial and federal Liberal politicians on PEI cited their reluctance to publicly support the federally-sponsored Fixed Link project due to fears of abandonment by the federal Progressive Conservative government, as was done in 1968 by the Liberal Prime Minister of the day, Pierre Trudeau.

action that deflected responsibility for the decision from either level of government. Even with a change in the provincial government from minority Liberal to majority Progressive Conservative after the receipt of the panel's recommendation, the rules governing the dominance of the federal government on issues with international implications held.

(iv) Lag time between implementation and action - Another significant policy implication arising from an examination of the two case studies is the lag time between the structural and procedural changes affecting decision-making processes and the actual acceptance and practice of these changes by the affected policy actors. Based on an examination of the similarities and differences of the two case studies, the declaration of the pursuit of shared decision-making was not matched by the requisite changes in established institutional arrangements. This was noticeable in the Fixed Link case study where the goals articulated in the federal government's 1990 Green Plan to embrace sustainable development, protect the environment and improve decision-making, were yet to be reflected in the practices of government (Environment Canada, 1990). It was also noticeable in the Georges Bank policy process where the political clout of the fishing constituency, particularly in southwestern Nova Scotian communities, was a key factor in minimizing broader stakeholder participation in the review process. This occurred despite procedural efforts (by the federal and provincial levels of governments in Canada) to integrate a broader cross-section of disciplines and consequences into coastal and ocean policy decisions.

(v) Potential for disconnect between principled decision-making and practice - The research findings suggest that self-interested manipulation may be more important in invoking principled decision-making than any theoretical notion of the benefits to be gained by invoking such principles. For example, policy actors such as the fishing constituency, environmental non-governmental organizations, technical experts, the review panel and federal decision makers all

promoted their interests by invoking the precautionary principle<sup>9</sup> as the basis for extending the moratorium. However, this invocation ignored the fact that techniques to help make the principle operational were generally useable only at the 'micro' or discrete project level (Dovers, 1995), while the policy problem being addressed in the Georges Bank debate was at the strategic level.

Examples of the application of the principle at the project-specific level were evident in two public reviews of offshore petroleum development applications for Newfoundland as well as the Nova Scotia offshore in the late 1990s. For example, in concluding that Newfoundland's Terra Nova oil development project could proceed in August 1997, the public review panel cited the adoption of the precautionary principle as a fundamental condition for approval. Similarly, adherence to the principle was also a key recommendation of the Sable Gas public review panel in October 1997, in reaching its conclusion that the Nova Scotia offshore natural gas project could proceed. In both cases, the governments accepted the recommendations of the panel to proceed, based on a precautionary approach.<sup>10</sup>

In both cases, the panels were reviewing project-specific details relating to petroleum development projects in the Atlantic offshore. The irony in invoking the precautionary principle in the Georges Bank policy debate arises from the fact that considerable scientific knowledge exists to inform decision-making on risks to specific areas of the Bank from specific petroleum-related activities (Boudreau *et al.*, 1999). However, by using the precaution argument at the strategic level of policy decision-making, where its limitations have been recognized, the goal of precaution to

---

<sup>9</sup> Governments use the precautionary principle to legitimate the need to act in the absence of clear scientific evidence. However, the usefulness of the principle in a practical sense has been questioned due to the loose qualitative descriptors in its definition in the 1992 Rio Declaration, Principle 15, which states: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation".

<sup>10</sup> Both reports are available at the Canadian Environmental Assessment Agency's website. *The Report of the Terra Nova Development Project Environmental Assessment Panel (August 1997)* is available at [http://www.ceaa-acee.gc.ca/0009/0001/0001/0010/0002/contents\\_e.htm](http://www.ceaa-acee.gc.ca/0009/0001/0001/0010/0002/contents_e.htm) (accessed 17 November, 2002). *The Joint Public Review Panel Report: Sable Gas Projects (October 1997)* is available at [http://www.ceaa-acee.gc.ca/0009/0001/0001/0008/0002/SABLE\\_EN.PDF](http://www.ceaa-acee.gc.ca/0009/0001/0001/0008/0002/SABLE_EN.PDF), (accessed 17 November, 2002).

prevent harm could potentially become overshadowed by policy actors using it as a means to advance their self-interests.<sup>11</sup> This use of the precautionary principle for socio-political purposes supports the view that the principle is as much political as it is scientific (O’Riordan, 1992). This view is also echoed in Dovers’ (1995) conclusion that the principle “is primarily a moral or political notion that may be informed (or misinformed!) by science.”

In part, the potential for misuse of the precautionary principle may be due to the unavailability of explicit guidelines on when the principle should be applied. For example, ‘threats of serious or irreversible damage’ suggest uncertainty over a plausible cause-effect relation. Yet the principle proposes action be taken, in the absence of knowledge that would assist in determining whether or not the action contemplated would in fact address the perceived hazard. Similarly, the definition does not inform decision makers as to what threshold of uncertainty would trigger its application, if one accepts that all efforts of risk assessment have some level of ‘lack of full scientific certainty’. Thus its use is dependent on societal judgements which necessarily vary as a result of place, time and/or space. In terms of the value laden qualifier, ‘cost-effective measures’, questions relating to ‘how much’ and ‘by whom’ are open to varying interpretation, in the absence of clear guidelines. Furthermore, it may be argued that ‘cost-effectiveness’, unlike cost-benefit analysis, is only meaningful after a target or goal has been set. However, in cases where it is not possible to set such a target due to the lack of scientific knowledge to do a risk assessment, it seems irrelevant to cite cost-effectiveness as a meaningful criterion in the precautionary approach.

This short discussion on some of the inherent difficulties associated with the precautionary approach is not meant to minimize its importance as a valuable principle in sustainable ocean governance and its use in addressing limits to knowledge and unreliable data. Rather, its purpose is to highlight the potential for its use by policy actors whose principal objective is to further the achievement of their underlying core values in decisions affecting coastal and ocean use. In

---

<sup>11</sup> Representatives for the environmental NGOs indicated that arguments they presented in support of the precautionary approach and preserving biodiversity were not contended by those in the fishing sector because it “served their purpose”. Similarly, representatives from the fishing industry indicated that their “main concern was an economic one, not an environmental one.”

institutional terms, it has been observed that the precautionary principle provides advantage to those who are in favour of maintaining the *status quo* since the principle operates on the basis of 'reverse onus' (Young, 1998). This implies that those proposing an action are subjected to higher standards of proof than those wanting to ban or restrict such action. As such, advocating the adoption of the principle as a decision rule can be used as a means of furthering the political objectives of particular interest groups.

The awareness of the potential for abuse has been recognized in the review of science relating to the offshore oil and gas moratorium on Canada's Pacific Coast (Strong *et al.*, 2002). These scientists caution that while a precautionary approach is necessary to minimize harm arising from uncertainties due to inadequate knowledge and external perturbations, a policy of a blanket moratorium,

... has also set back our understanding of the coasts and oceans of British Columbia. It is time now to return marine scientific research to levels appropriate for a modern advanced society in general terms, and particularly as a basis for comprehensive, balanced and inclusive deliberation and assessment of specific proposals for BC offshore activity...

With a firm commitment to comprehensive assessment of any proposals for specific offshore activities as provided in the existing legislative framework, and continuing commitment to ongoing principles of adaptive management and sustainable development, the existing policies maintaining an ongoing moratorium on hydrocarbon exploration and development offshore British Columbia can be responsibly ended.

(Strong *et al.*, 2002, pages ii and iii)

A comparison of the above arguments with the research findings of this thesis, specific to factors affecting decision-making on Canada's East Coast, highlights the importance of contextual factors in advancing policy-oriented learning. The quoted statements above reflect advances in project-specific scientific knowledge and an appropriate legislative framework as viable tools to assess risk. Both of these tools were available for consideration in the Georges Bank review process. However, when evaluated within the context of a strategic policy question, a politically-powerful fishing constituency on both sides of the 'Hague line' and the policy direction provided by a powerful neighbour with jurisdictional authority over a portion of Georges Bank, their value to influence outcomes become considerably tempered.

(vi) Advances in information technologies - An evaluation of the significance of contextual factors in shaping public values in the late 1990s would be incomplete without a discussion of the role of information technologies, particularly the internet, in affecting public policy decision-making. The widespread promotion of principles such as the precautionary approach and public participation, as well as the growing significance of non-state actors in decision-making, were indicative of this important change in the context surrounding policy debates in the late 1990s that was not evident in the 1980s. With relatively easy availability and access, this new tool allowed for rapid information retrieval and communication and increased the range of personal contacts. As such, it possessed enormous potential to change the way in which people, institutions, and scientists communicate, prioritize and implement decisions.

The value of the internet as a communication tool has been touted by its proponents as essential for the adoption of the sustainable development model for environmental decision-making (Pfaffenberger, 1990; Bonine, 1992; Hall, 1994). This model focused on the benefits to be gained from multi-sectoral integration, information exchange and broad-based participation in decision-making, following the international consensus reached in Agenda 21 at UNCED in 1992 (Perry and Vanderklein, 1995). In particular, claims for the internet included an increased ability to maintain and gain access to sources of knowledge relevant to the policy problem being debated. Additional benefits included its use to democratize decision-making through increased participation and increases in the speed with which issues could be resolved (Hall, 1994).

However, examples of the use of the internet to affect decision-making in practice do not necessarily support these theoretical expectations. For example, it may be argued that the interdisciplinary nature of coastal and marine problem solving requires much more than immediate access to data to be effective. In addition to currency, it requires the veracity of the data to be corroborated by scientific peers. This suggests time may be more important than speed, if the risk of using current but unsubstantiated data is to be minimized. In terms of its use in democratizing knowledge, efforts to fulfill this potential require not only greater access to more people but a broadening of subject matter discussed. To date, the evidence suggests the opposite



outcome, with people's use of like-minded list serves and news groups actually decreasing their access to new or alternative arguments, positions and ideas (Perry and Vanderklein, 1995). This has led to the greater risk of decreasing debate and increasing the entrenchment of positions among policy actors, given the perception among internet users of the widespread support for their views.

Furthermore, the assumption of universal access to the internet is challenged by gender, financial and educational constraints (Webster, 1994), and while 'user friendly' software may increase the ability to retrieve information, it makes no claims on increasing the understanding of this information by the users. Thus the internet can potentially create the dangerous assumption that quantity is a substitute for quality. This caution is also relevant to the expectation of the internet to resolve problems more quickly. In the absence of balanced and alternative viewpoints, the widespread use of the internet by policy actors to further their underlying values may create the perception of a crisis, where one does not necessarily exist, as well as the reverse situation in which crises may be underestimated.

#### **6.4 Comparison of Procedural Elements**

Having examined the process by which each decision was made in Chapter Four and Chapter Five, the procedural aspects associated with the two case studies were compared to evaluate their significance in affecting decision-making. Key elements affecting how problems in the coastal and marine policy domain were resolved are identified as:

- the structure the policy network and formation of advocacy coalitions, based on shared values;
- the review process, including the purpose for soliciting public input, format and level of public interest;
- the composition of the public review panel, including number, expertise and basis for involvement; and,
- the recommendations of the public review panel.

#### 6.4.1 Structure of the Policy Network

The similarity in underlying values shared by policy actors and the achievement of these values through declared objectives, appeared to be significant in understanding how influence was being exerted in the two case studies examined in this thesis. As observed in both cases, a number of advocacy coalitions formed within the policy network, each vying to have their goals and objectives reflected in the resulting policy decision. Although the research suggests that shared values could be used to group members into distinct advocacy coalitions, the results also suggest that a coalition gained dominance over others in the policy network when its members possessed the resource capacity necessary to ensure its shared values are reflected in public policies. This linkage between resources and values speaks to the complexity of factors affecting the behaviour of actors in the policy network.

For the Fixed Link case study, the dominant coalition focused on political and economic objectives to pursue shared core values and saw the Fixed Link as the preferred option to resolve the policy debate (Table 18A). For the Georges Bank policy problem, environmental and ethical objectives reflected the core values of the dominant coalition, with the extension of the moratorium being the preferred solution (Table 18B). In some cases, such as the Georges Bank decision, the dominant coalition seeks to maintain the *status quo* since this position furthers its goals. In other cases, such as the Fixed Link decision, the dominant coalition overturns the *status quo* policy, but only to further the achievement of its core values. Thus, the pursuit of underlying values can be used to identify membership in an advocacy coalition, with the resulting resource capacity of members then becoming available to achieve their shared goals and objectives. How members of the advocacy coalitions use their collective power to exert influence will vary, depending on the responsibilities and accountability of members within the coalition.

**Table 18A. Comparison of Analytical Elements in Dominant Advocacy Coalition – Fixed Link Case Study**

Category of Policy Actor		Federal Politicians	PEI Provincial Politicians	NB Provincial Politicians	Companies (private sector)
Priority Level					
<b>Disciplinary Attributes</b>	Highest	Political	Political	Economic	Economic
	Second Highest	Economic	Economic	Political	Political
	Lowest	Institutional	Institutional	Institutional	Ethical
<b>Areas of Concern</b>	Highest	Transportation	Tourism	Process	Transportation
	Second Highest	Bridge-Related	Transportation	Transportation	Bridge-Related
	Lowest	Island-Way	Island-Way	Island-Way	Not Ranked
<b>Preferred Option</b>		Bridge	Bridge	Bridge	Bridge

**Table 18B. Comparison of Analytical Elements in Dominant Advocacy Coalition – Georges Bank Case Study**

Category of Policy Actor		Federal Politicians	Federal Departments	Review Panel	Technical Experts	NGOs (Fishing)	NGOs (Environment)
Priority Level							
<b>Disciplinary Attributes</b>	Highest	Environment	Environment	Environment	Ethical	Environment	Environment
	Second Highest	Ethical	Ethical	Ethical	Environment	Ethical	Ethical
	Lowest	Economic	Social	Legal	Economic	Institutional	Legal
<b>Areas of Concern</b>	Highest	Ecosystem	Ecosystem	Fishery	Fishery	Fishery	Ecosystem
	Second Highest	Fishery	Fishery	Ecosystem	Ecosystem	Ecosystem	Fishery
	Lowest	Legal Regime	Legal Regime	Legal Regime	Legal Regime	Process	Process
<b>Preferred Option</b>		Extension	Not Declared	Extension	Not Declared/ Extension	Extension	Extension

For the Fixed Link dominant coalition, federal politicians were 'resource-rich', reflecting the regime in place at the time. However, although less endowed in terms of resource capacity than their federal counterparts, provincial politicians contributed to achieving the coalition's values based on the capabilities they possessed, as did the private sector companies. In the absence of shared values, it is unlikely that the federal government would have unilaterally succeeded in moving the Fixed Link project ahead, despite its decision-making and resource capacity. A similar argument could be made for the dominant coalition in the Georges Bank case study, where the high ranking assigned to achieving environmental and ethical objectives were shared by a diverse array of policy actors with varying levels of resource capacities. These included federal politicians and bureaucrats, the review panel, technical experts and non-governmental organizations.

Contending coalitions provide the strongest competition to dominant coalitions and generally have significantly different values, objectives and preferences to those of the dominant coalition. The contending coalition in the case of the Fixed Link policy network focused on environmental objectives (Tables 19A) while the single policy actor forming the contending coalition in the Georges Bank network concentrated on institutional and economic objectives (Table 19B).

It is significant to note the degree of overlap between the composition of policy actors in the contending coalition for the Fixed Link policy network, almost a decade earlier, (Table 19A) and that of the dominant coalition in the Georges Bank policy network (Table 18B). This finding suggested the relative constancy of policy actors whose underlying values were achieved by pursuing environmental and ethical objectives and the importance of contextual factors in determining their position within the policy network. It also indicated the altering of the federal government's objectives to reflect the changing policy environment that had occurred between the time of the Fixed Link policy debate and that of Georges Bank.

**Table 19A. Comparison of Analytical Elements in Contending Advocacy Coalition – Fixed Link Case Study**

Category of Policy Actor		Federal Departments	FEARO Review Panel	NGOs (Friends of the Island)	Technical Experts	Business Associations
<b>Disciplinary Attributes</b>	<b>Priority Level</b>					
	Highest	Environment	Environment	Ethical	Environment	Environment
	Second Highest	Economic	Ethical	Environment	Social	Economic
<b>Areas of Concern</b>	Lowest	Ethical	Legal	Legal	Institutional	Institutional
	Highest	Bridge-Related	Fishery	Fishery	Fishery	Island-Way
	Second Highest	Fishery	Ferry Service	Ferry Service	Bridge-Related	Fishery
<b>Preferred Option</b>	Lowest	Tourism	Tourism	Tourism	Tourism	Transportation
		Bridge/Ferry	Ferry/Tunnel	Ferry/Tunnel	Ferry/Bridge/Tunnel	Bridge

**Table 19B. Comparison of Analytical Elements in Contending Advocacy Coalition – Georges Bank Case Study**

Category of Policy Actor		Companies (Petroleum)
<b>Disciplinary Attributes</b>	<b>Priority Level</b>	
	Highest	Institutional
	Second Highest	Economic
<b>Areas of Concern</b>	Lowest	Legal Regime
	Highest	Process
	Second Highest	Co-existence
<b>Preferred Option</b>	Lowest	Fishery
		Expiration

In addition to these two competing coalitions, a number of non-aligned coalitions may be found, depending on the diversity in policy actors coalescing around the policy problem. These coalitions have values that are reflected by sufficiently distinct rankings of objectives from either the dominant or contending coalition but may benefit from the efforts of either of these coalitions to influence the decision. For example, the non-governmental organization, Islanders for a Better Tomorrow, preferred the Fixed Link option for achieving its core values and objectives, although these differed from those of actors in the dominant coalition (Table 20A). This policy actor benefited from the success of the dominant coalition whereas Marine Atlantic, whose preference was similar to that expressed by a number of actors in the contending coalition, did not. Similarly, a number of policy actors with values different from the dominant coalition in the Georges Bank case study, most noticeably fishing companies, provincial and US politicians and their departments, were able to benefit from the efforts of this coalition (Tables 20B).

Consistent with the expectation of increasing heterogeneity in the Georges Bank policy debate, a greater number of policy actors held core values that differed from those expressed by actors in either the dominant or contending coalition. This lends support to the theory of an increasing degree of complexity associated with decision-making in a shared policy environment, as compared to the findings from the earlier Fixed Link policy network.

**Table 20A. Comparison of Analytical Elements in Non-Aligned Advocacy Coalitions – Fixed Link Case Study**

Category of Policy Actor		NGOs (Islanders for a Better Tomorrow)	Labour Organizations	Companies (Marine Atlantic)
Priority Level				
Disciplinary Attributes	Highest	Economic	Social	Legal
	Second Highest	Social	Economic	Economic
	Lowest	Ethical	Institutional	Institutional
Areas of Concern	Highest	Fishery	Ferry Service	Transportation
	Second Highest	Transportation	Fishery	Tourism
	Lowest	Ferry Service	Transportation	Fishery
Preferred Option		Bridge	Ferry/Bridge/Tunnel	Ferry

**Table 20B. Comparison of Analytical Elements in Non-Aligned Advocacy Coalitions – Georges Bank Case Study**

Category of Policy Actor		Business Associations (Aggregated)	Business Associations (Fishing)	Business Associations (Petroleum)	Companies (Aggregated)	Companies (Fishing)
Priority Level						
Disciplinary Attributes	Highest	Economic	Economic	Environment	Economic	Economic
	Second Highest	Environment	Environment	Economic	Environment	Environment
	Lowest	Political	Institutional	Political	Institutional	Institutional
Areas of Concern	Highest	Co-existence	Fishery	Process	Fishery	Fishery
	Second Highest	Fishery	Ecosystem	Co-existence	Ecosystem	Ecosystem
	Lowest	Petroleum activities	Legal Regime	Fishery/Petroleum activities	Legal Regime/Process	Process
Preferred Option		Extension/Expiration	Extension/Expiration	Expiration	Extension/Expiration	Extension

Table 20B continued. Comparison of Analytical Elements in Non-Aligned Coalitions – Georges Bank Case Study

Category of Policy Actor		Provincial Politicians	Provincial Departments	US Politicians	US Departments
<b>Disciplinary Attributes</b>	<b>Priority Level</b>				
	Highest	Ethical	Ethical	Economic	Environment
	Second Highest	Political	Political	Social	Social
<b>Areas of Concern</b>	Lowest	Social	Social	Institutional	Political
	Highest	Ecosystem	Process	Fishery	Ecosystem
	Second Highest	Fishery	Co-existence	Ecosystem	Fishery
<b>Preferred Option</b>	Lowest	Petroleum activities	Legal Regime	Co-existence	Process
		Extension	Not Declared	Extension	Extension



#### **6.4.2 Review Process**

A second important procedural factor affecting how actors exerted influence on decisions affecting coastal and ocean use was the actual process by which information was obtained and incorporated by the public review panel in making its recommendations to government. Specific process-related areas affecting the exercise of influence included the purpose behind the solicitation of public input and the format of the public review.

For both case studies examined in this thesis, an examination of these factors allowed considerable insights to be gleaned on how advocacy coalitions were able to exert influence at this specific stage in the decision-making process.

(i) Purpose for public review - In the case of the Fixed Link process, the public review process arose as a result of public pressure over concerns that the environmental and socio-economic impacts associated with a Fixed Link were not being adequately addressed by the responsible federal authorities. These concerns stemmed from the apparent conflict of interest in the lead federal agency, Public Works Canada, as both proponent of the project and guardian of the process. Similarly, the outspoken support of the project by the federal Minister of Environment led to a lack of trust in his ability to objectively assess the environmental impacts of the proposed project.

Growing public displeasure on PEI over the handling of the process by the federal government was made explicit by the defeat of the federal Minister of Environment during the 1988 elections, where the level of political debate during the campaign focused entirely on this single issue. Interpreting this outcome as reflecting the concerns of Prince Edward Islanders, the Premier of PEI ignored an earlier procedural agreement with the federal government over the timing of an environmental assessment and publicly called for an environmental review, prior to the selection of a specific project proposal. The importance of the issue to the federal government was such that the (newly appointed) federal Minister of Public Works Canada asked the (newly appointed) federal Minister of Environment to appoint a public review panel. Thus, the process for soliciting public involvement in decision-making was reluctantly agreed to by the federal

government, at a time it considered too early in the process for a substantial review of the project impacts. Given the dominance of the federal government in decision-making, it was plausible to expect that those who did not share its core values would have limited ability to influence the decision through this process. As such, the purpose behind the solicitation of public input proved to be a significant factor in affecting the behaviour and success of actors within the policy network.

In contrast, the 1996 through 1999 public review process surrounding the Georges Bank policy debate was an expectation of all policy actors, following its inclusion in the 1988 *Accord Implementation Act*. As such, the legislative purpose for the review had little significance in affecting the behaviour of policy actors who had coalesced to form a policy network. Additionally, the policy environment during this time made public reviews an expectation and experience associated with project-related public review was growing, given the concurrent reviews associated with the Sable Gas project and Terra Nova project. The assumption that this experience could be transferred to the Georges Bank problem ignored the fundamental differences in effectiveness in using the public review process to resolve project-specific issues as compared to its use in more strategic level issues. However, it was reasonable to assume that the federal and provincial governments had expectations of improving the legitimacy and credibility of the decision to be made, as a result of having a public review and involving affected stakeholders in the process.

(ii) Format of review process - The degree of attention given to the policy problems, particularly by non-state actors was a direct result of the format followed in reviewing the policy problems. As a result, the format of the review process played a significant role in affecting the decision-making process. For the Fixed Link case study, the analysis focused on the period from 1986 through 1993, although two sets of formal public hearings occurred in June 1989 (over a two-week period) and in March 1990 (over a three-week period). For the Georges Bank policy debate, the process commenced in 1996 and terminated in 1999, with formal public hearings being held in 1999 over a three-week period. Despite the multi-year similarity in duration on the public agenda and period for formal public hearings, the preparedness of the policy actors to

participate in the decision-making process was significantly different between the two case studies.

In the case of the Fixed Link policy debate, panel members conducted preliminary and formal hearings on PEI to assess the effects and risks of a hypothetical bridge on the biophysical and socio-economic environment in the study area. The hearings followed a period in which various aspects of the policy problem had been widely debated, through the process conducted by the Institute for Island Studies at the request of the provincial government (Institute of Island Studies, 1987). These formal debates occurred prior to the plebiscite vote, which gave the provincial government the authority to proceed with its support for a Fixed Link project. Additional public discussion on PEI during the 1988 federal elections kept the issue on the political agenda at the local level. By the time of the formal hearings in 1989 and 1990, policy actors who had coalesced around the problem had followed the process for an extended period of time and their declared preferences and objectives for implementing these were well established. Thus, over a period beginning in 1986 and ending in 1993, the issue of the Fixed Link remained topical to the people of PEI and those NB coastal communities bordering the Northumberland Strait.<sup>12</sup>

For the Georges Bank decision-making process, the process followed a four-year time frame but the attention given to resolving the policy problem varied considerably during this time period. Introductory and information meetings were held at key locations in southwestern Nova Scotia in 1997 and 1998. However, interest in the policy problem remained low until late 1998, following the declaration of the US moratorium and the re-formation of NORIGS 2000 as a policy actor, representing the diverse yet collective views of the fishing industry.<sup>13</sup> Thus, while the process appeared to be of a multi-year time frame, in effect, public involvement occurred over a relatively

---

<sup>12</sup> Despite the sustained interest in the policy problem on PEI, relatively little interest was generated by the policy problem, once off of the island. The few exceptions included the incredulity in Central Canada that the project, estimated to cost \$600 million, would proceed, given the small size of PEI's population and its relative insignificance in contributing to Canada's overall economic well-being (Globe and Mail, Jan.31, 1992).

<sup>13</sup> According to a fishing industry representative, "while SPANS was instrumental in the selection process for panel members, the industry went back to sleep until it was almost too late."

short period, immediately prior to, during and immediately after the three weeks of formal hearings. As a result of this, sector-specific interests dominated the hearings, resulting in a narrowing of the breadth of consequences considered, as compared to the broad-based input received in the Fixed Link policy process. These factors necessarily influenced the composition of policy actors within the network and their subsequent efforts at influencing the policy outcome.

#### **6.4.3 Review Panel**

For both of the case studies examined in this thesis, the mandates of the public review panels required a joint examination of the technical and scientific nature of the problem being addressed, (i.e., to evaluate scientific judgements), alongside the expression of competing societal values. In the absence of explicit decision-making criteria, the panels were then expected to make their advice known to the decision-makers. The use of public reviews to assist in environmental decision-making has become a readily accepted tool by government decision-makers in response to increasing public demands to participate in decisions. It has been legislated for in environmental laws and has also gained credence as a valuable tool in support of principles promoting sustainable ocean governance.

However, as has been previously noted, public reviews are not suitable for addressing any and all policy problems. Their effective use has been found to be restricted to fairly small problems that can potentially be resolved by a relatively low level of public involvement (Hammond *et al.*, 1977; Keeney *et al.*, 1990; Hammond *et al.*, 1999). This is because participation in public reviews has been shown to be generally limited and unrepresentative of the affected stakeholders due to a number of reasons. These range from public apathy and lack of appreciation of the importance of the issues through availability of time and resources and other pressing priorities to intimidation of the process and fear of possible repercussions. Due to these constraints, public reviews of problems for which they are not suitable allow for the potential misuse of the intent of the process. Furthermore its inappropriate use places a considerable burden on the review panel to advise on the resolution of seemingly irreconcilable issues, while the consequences of misuse may be further exacerbated by a panel lacking the necessary expertise or authority to fully

address the policy problem. Thus, the composition of the review panel has been shown to be significant in determining the recommendations provided by the panel as a result of the public hearings.

Key compositional factors identified in the analysis of the Fixed Link and Georges Bank review process include: the size and expertise of the panel; and, the basis for involvement, e.g. private sector consultant, academic, member representing the public's interest, or government bureaucrat.

(i) Size and expertise of review panel - In comparing the compositional factors of the review panels for the two case studies, the most striking difference was the number of panelists appointed and the breadth of the panel's expertise. The *EARP Guidelines Order* followed in the Fixed Link allowed for six members to be appointed and provided clear guidance on the criteria for selecting panelists (section 22), including lack of bias and absence of any potential conflict of interest relating to the proposal. Given the size of the panel, its breadth of expertise was considerable, including technical and scientific knowledge in bridge design, marine ecology, fishery issues and oceanology, procedural knowledge and experiential knowledge. Furthermore, panel members were drawn from the private consulting sector, academia, civil society and the federal bureaucracy.

The diversity of expertise and backgrounds expanded the potential for broad-based consideration of the issues and consequences and minimized the potential for any one or grouping of panel members to dominate the assessment of the information presented to the panel. However, the appointment of members whose basis for involvement had the potential to lead to conflict of interest compromised the perceived objectivity of the panel. For example, the appointment of a member of the public with a perceived bias against the proposed project could be conceived as either poor judgement or a deliberate attempt to influence the outcome of the panel's deliberations. Similarly, the appointment of a member whose economic livelihood could be impacted, negatively or positively, as a result of the panel's advice, seemed to contradict the intent of the criteria listed for selection of panel members.

In contrast, the composition of the Georges Bank review panel, with half as many members as the Fixed Link panel, lacked the corresponding breadth of expertise and this also was found to have a significant impact on the review process. In terms of numbers, it is worth noting that the legislation providing the guidance for the review process allowed for up to five members to be appointed to the panel. With the subsequent appointment of three members, a trade-off was made between the perceived benefits associated with a diverse panel and the reduction in complexity and disagreement expected with a smaller panel.<sup>14</sup> Additionally, the prior involvement of one of the panelists with an environmental non-governmental organization opposed to the project and the perception among some policy actors of the 'pro-extension' bias of a second panel member added weight to the predicted outcome of the panel's recommendation.<sup>15</sup>

(ii) Basis for involvement - The basis for involvement appeared to be important in terms of the degree of reliance decision-makers placed on the advice provided, with academics perceived as being more objective than those experts from the private sector or representing the interests of particular sectors or the public. This was demonstrated in the case of the Fixed Link review panel where four of the six panel members fell into the category of private sector, public-interest or sector-specific interests. The lack of interest in non-quantifiable issues relating to the policy problem was a major characteristic of the one academic who participated in the process, reflecting this panel member's technical training and reliance on objectively obtained results. The similar focus on scientific objectivity was also evident in terms of justification for the decision made by the political decision-makers. Using the specific technical recommendation of the panel that the proposed project result in no more than two days of delay in ice out conditions in Northumberland Strait, the federal government struck a technical ice-committee. The committee

---

<sup>14</sup> Representatives from both the federal and provincial levels of government also cited reduced costs as a factor in limiting the number of members on the Georges Bank review panel. One is left wondering why cost did not also limit the number of members on the Fixed Link panel, especially since it occurred during a period of widespread national fiscal restraint.

<sup>15</sup> Representatives of environmental non-governmental organizations, as well as the fishing industry, cited known biases of two of the three panel members as indicative of the policy outcome.

was comprised of academic and government scientists, as well as an experienced navigator, and was asked to advise on the feasibility of the submitted project proposals to meet this criterion. The objective rendering of scientific advice by the ice committee provided the justification for the decision-makers to defend the decision to proceed with the Fixed Link project (Barry *et al.*, 1991).

In contrast, the basis for involvement of panel members on the Georges Bank review panel was limited to the category of private sector consulting for two of the three members.<sup>16</sup> This dependence on the private consulting sector to recommend a course of action was unusual for a public review process, which typically included a broader basis for involvement on review panels.<sup>17</sup> However, this composition was consistent with the analysis of the broader political agenda as a driving force for both levels of government, relative to the Georges Bank question.

#### **6.4.4 Recommendations of the Public Review Panel**

The public review process is an important component of the decision-making process and is used by advocacy coalitions in pursuit of core values. However, the authoritative allocation of public values resides with legitimate decision-makers in the federal and provincial governments, namely elected politicians with the responsibilities and accountabilities associated with being Cabinet Ministers in a democratically elected government. The government's response to the recommendations of a public review panel has been found to be a significant determinant in the subsequent behaviour of policy actors.

In the Fixed Link case study, the response to proceed with the project resulted in the legal challenge by one of the members of the contending advocacy coalition. This action led to the potential for the judicial system to usurp the decision-making process which had been established for public review, bringing into question the legitimacy of the process as an appropriate exercise for making decisions. For the Georges Bank policy problem, the response led to the expected

---

<sup>16</sup> The third member, who served a Chair of the Panel, was a retired public-sector official.

<sup>17</sup> For example, the Sable Gas panel was comprised of five panel members, three from academia (including the Chair), one from the private sector and one from the lead regulatory agency, the National Energy Board. The Terra Nova review panel consisted of three members, two from academia (including the Chair) and one from the Newfoundland provincial bureaucracy (retired).

extension of the moratorium to 2012, delaying the resolution of the policy problem, if one accepts that a moratorium is defined as any temporary suspension of an activity.<sup>18</sup> Not unexpectedly, this response of the government was such as to result in no further action on the part of policy actors, having recognized the issue will be revisited in the not so distant future.

#### **6.4.5 Policy Implications of Procedural Factors**

A comparison of procedural elements identified a number of factors that were responsible for affecting the behaviour of actors in each of the two examined policy network. These findings suggested opportunities for promoting policy-oriented learning both within the Maritimes oceans policy community and the broader ocean policy domain in general. Key issues that were identified relate the level of public interest and involvement in the process; and, the perception of a biased process.

(i) Level of public interest and involvement - It is a safe assumption to make that all segments of the population on PEI were aware of, if not involved to some degree, with the Fixed Link policy problem. Furthermore, the decision-making process allowed issues to be identified and addressed until only those relating to fundamental, conflicting core values among coalitions remained unresolved. Given the entrenchment of positions among the dominant and contending coalitions, and the ability to legally challenge the actions of the federal government, it was inevitable that this avenue would be pursued, with the matter being brought before the courts for a decision.

In contrast, the intensive public involvement with the Georges Bank policy process occurred over a period of weeks to months rather than years, although the process gave the perception of a multi-year time frame. As a result of the localized, sector-specific focus of the debate and the extenuating transboundary circumstances driving the process, public interest was contained to the southwestern region of the province. In contrast, issues that assume a province-wide level of importance, such as was evident with the potential for petroleum development in the offshore

---

<sup>18</sup> As defined in *The Living Webster Encyclopedic Dictionary of the English Language*, English Language Institute of America, 1975.



areas of Newfoundland and the Sable Gas project in Nova Scotia, lead to more broad-based and balanced input in the review process.

(ii) Perception of a biased process - The perception of bias in the review process can present legal and policy implications that ought to be recognized if policy-oriented learning is to result. The case studies highlighted three areas whereby bias could be introduced: rationale for the review; access to information and vetting of input; and, absence of explicit decision rules.

Rationale for review - The forcing of a public review process at a time considered inappropriate by the decision-maker can have repercussions on the value attributed to the advice provided as a result of that process. Similarly, a review process that appeared to serve as a mechanism to endorse an already predicted outcome can undermine the legitimacy and value of the approach to policy actors and the public at large. Both of these outcomes were evident in the two case studies examined for this thesis.

The Fixed Link case study occurred at a time when the dominance of the government, particularly the federal government, in the policy network was paramount. Additionally, the practical benefits of an integrative approach that would require the government to be open to an alternative, stakeholder consensus approach was not widely demonstrated. The public review process associated with the Fixed Link project was more a response to public pressure at the political level than it was a genuine need or desire on the part of the decision-makers to improve either the subjective or objective quality of the decision to be reached. This approach was not unusual given the regime in place for decision-making at the time. Nonetheless, the existing national and international policy environment was evolving in the direction favouring increased stakeholder involvement in government decision-making processes. However, given the previously discussed time lag between policies and action, this led to the forcing of a process that had limited opportunity to influence the decision at the time.

For the Georges Bank case study, the perception of bias was primarily at the level of the review panel and the implications of the broader policy issues driving the government decision-making authority. With regards to the panel composition, the appointment of members from the

private consulting sector introduced a level of perceived conflict of interest for two of the three panelists and undermined the perception of a fair and open process by some policy actors.<sup>19</sup> This finding suggests the importance of a broad cross-section of policy actors to be actively involved in the selection of panel members, each seeking to ensure the appointment of those who are perceived to share similar core values, or at least unbiased against preferred alternatives. It seems likely that the increased involvement of the petroleum sector at this stage in the process might have led to an expansion in the number of panel members, an increase in the breadth of expertise on the panel and/or in the basis for involvement. However, given the policy direction provided by the United States, the view of many of the policy actors interviewed was that it was unlikely that this would have had any effect on the decision rendered by the decision-makers.<sup>20</sup>

Lack of Public Vetting and Access to Information – A key goal of the process associated with the formal hearings for both the Fixed Link and Georges Bank public review was to encourage members of the public to participate in the review and to make their views known to the panel. As such, a non-judicial process was advocated. The immediate consequence of this approach was the absence of public verification relating to the substance of the presentations, leading to a reduced requirement for accountability on the part of the presenters. This resulted in an almost absolute reliance on the panels to sort factual and anecdotal information from fiction and to provide an appropriate weighting to the qualitative and quantitative information received. Such weightings need to recognize that the social values that are most difficult to measure and define are the ones that appear to be of increasing importance.

---

<sup>19</sup> Curiously, this view was most dominant among those in favour of extending the moratorium. These actors saw the perceived biases of panel members as supportive of their position. The argument could also be made that private sector consultants, because of concerns for future job prospects, might be more likely to be unbiased in situations where potential clients can come from both sides of the policy debate. This view was exemplified in the following statement made, concerning the two private sector consultants on the panel: "One step either way may result in you not working so much".

<sup>20</sup> The view with regards to the influence of the US decision on the Canadian process can be summarized in the following quote from a business association representative, "After the US decision, unless a miracle happened, the decision to extend the moratorium was a given."

Associated with a need to focus on enhancing the quality of the information presented is an assumption that the information available to inform the decision is accessible to all participants. This assumption was not valid in the case of the Fixed Link review process since the timing of the review was such that only a bridge concept assessment document could be provided for review. As such, citing confidentiality assurances to companies who had submitted actual proposals for a fixed link, the federal government did not provide all of the documentation at its disposal to the review panel and the public for examination. This necessarily resulted in considerable effort being expended by participants on hypothetical issues that may or may not have enhanced the value of the input provided in assessing the environmental and socio-economic impacts of the project that was ultimately selected. Widespread knowledge that the federal government was in possession of information that was not being shared with the public promoted distrust and an increased sense of lack of transparency in the process, regardless of the confidentiality restrictions surrounding the information.

Secondly, even if information is accessible, ease of access to the process does not necessarily translate into inclusiveness, as participation is voluntary in a democracy and actors may choose to dedicate their resources to other priorities (Cuthbertson, 1983). In cases where the public review hearings increase participation through volunteer organizations, public interest groups and sector-specific groups, rather than through individual involvement, this lack in inclusiveness is exacerbated. Although increasingly important in policy networks, it cannot be assumed that these organizations represent the full spectrum of public values. To counter this shortcoming, panels such as the Georges Bank review panel, have proceeded on the assumption that increasing the numbers involved would translate into increased legitimacy for the process and support for the recommendations made (Knopp and Caldbeck, 1990). However, it has been shown that in situations where policy actors are highly ideological or their livelihoods are perceived to depend on the outcome of the decision-making process, no amount of participation would substitute for getting the answer which that group needs (Creighton, 1983). Such was clearly the case in the Georges Bank debate, and to a lesser extent, the Fixed Link policy problem.

Absence of explicit decision-making criteria - The appointment of public review panels to provide advice in environmental decision-making has legislative authority in both federal and provincial statutes relating to the environment.<sup>21</sup> However, while the law may specify under what conditions, how many members and who appoints panel members, it is significantly lacking in specifying the criteria by which the information presented is weighed and recommendations reached. In the absence of such guidance, panel members must necessarily look to the surrounding policy environment and their own underlying core values, objectives and preferences for implied decision-making criteria. This was evident in both review panels examined.

For example, in the case of the Fixed Link panel, the acceptance of a tunnel as an acceptable alternative to the bridge as a way of solving the policy problem, provided insight into the decision-making criteria adopted by the panel (FEARO, 1990). By indicating that a tunnel was acceptable, the panel appeared to have accepted that the socio-economic and ethical concerns associated with the closure of the ferry and concerns relating to 'island way of life' issues were either suitably mitigated or insignificant. This could be inferred since these issues would be similar for a bridge or a tunnel. However, the potential environmental impacts on the marine environment from a bridge were significantly different from those of a tunnel. Thus it could be deduced that the decision-making criterion that carried the most weight with the panel was based on environmental objectives. This criterion reflected the growing awareness of the need to link environmental issues with development, since the release of *Our Common Future* by the Brundtland Commission (WCED, 1987) and, more importantly, the consistency of this view with the priority assigned to environmental objectives by the panel.

The lack of explicit decision-making criteria was of sufficient concern to the Georges Bank review panel that it formed a part of the discussion in the panel's final report to the responsible

---

<sup>21</sup> Examples of such legislation include the previously referenced *Canada Nova Scotia Offshore Petroleum Resources Accord Implementation Act*, S.C., 1988, c. 28, the *Canadian Environmental Assessment Act*, S.C., 1992, c. 37, ss. 33, 34, 35 and 36) and the *Nova Scotia Environment Act*, S.N.S., 1994-95, c. 1, s. 49.

federal and provincial Ministers (Mullally *et al.*, 1999, p. 51-56). As with the Fixed Link panel, guidance for decision-making appeared to have been provided by the surrounding policy environment. The increasing recognition of the precautionary approach as a means of minimizing threats to the environment in cases of uncertainty was evident in the panel's justification for its recommendation to extend the moratorium, as was following the US's lead. This philosophy of erring on the side of caution was also consistent with the perceived biases of two of the three panel members.

While it may be prudent not to constrain review outcomes by providing too prescriptive a role for decision-making, the increasing expectation for open and transparent processes would suggest a need to be explicit about basic ground rules for decision-making in a public forum. Furthermore, if these rules are to be based on principles recommended for sustainable oceans governance such as the precautionary approach, integration and subsidiarity, to name just a few, it would also be important to be explicit about the priority rankings to be assigned to the adoption of these principles. This would be necessary, given the potential for the non-commensurate and oftentimes conflicting application of these principles in coastal and ocean policy decision-making. For example, the principle of subsidiarity, which suggests decision-making should be done at the level that is most affected by the decision (Bellah, 1991), would appear to be in conflict with principles of broad-based participation and integration. Nonetheless, the application of this principle in the case of community management boards in the inshore fishing sector in the Maritime Region of Atlantic Canada has proven beneficial to the fishers involved (Fanning, 1999). Thus, a general endorsement of a listing of principles would seem to be insufficient in addressing decisions affecting coastal and ocean use, particularly if those decisions relate to the sustainability of marine biological resources (Rice, 2002).

## **6.5 Theoretical Considerations**

The research conducted for this thesis has allowed for an increased understanding of the theoretical considerations affecting the behaviour of policy actors involved in two decision-making processes. Furthermore, by comparing the results obtained for the case studies occurring during

distinct phases in the evolution of Canadian ocean governance, the research has been able to highlight how decisions might be influenced by changes in the surrounding policy habitat. Based on these findings, the following theoretical considerations are offered as a means of addressing the policy implications associated with a decision-making process that favours broad-based input from an increasingly heterogeneous array of policy actors.

#### **6.5.1 Policy Predictability and Policy-Oriented Learning**

Policy-oriented learning has been defined as the process by which policy actors attempt to better understand and achieve core values, until confronted with new constraints or opportunities, at which point attempts are made to adjust to the new situation in a manner that is consistent with the core (Jenkins-Smith, 1990). Given the diversity of policy actors with conflicting belief systems and core values in the coastal and ocean policy community, the argument has been made that learning is difficult and unlikely to occur in such a heterogeneous setting (Lindquist, 1992). Furthermore, as members of the policy community assume an increased role in the decision-making process, interdependencies increase. This exacerbates the mismatch between the ability of the community as a whole to effectively address the issues confronting it and the complexities inherent in resolving them.

Nonetheless, members need to react with appropriate strategies, i.e., to learn, if their policy objectives are to remain viable in the pursuit of core values. It is suggested that it is the learning capability and the acquisition of knowledge relating to the functioning of the policy network, that allow members within a given policy domain to effectively address the problems confronting them.

There have been recent examples attempting to promote policy-oriented learning among the differing members of Canada's coastal and ocean policy community. The effort by the Department of Fisheries and Oceans in the Maritimes Region to develop a regional integrated management plan for the Eastern Scotian Shelf (DFO, 2001) provides such an example. While indicative of the government's commitment to a broadening of decision-making responsibilities and accountabilities on paper, 'top-down', governmental directives are nonetheless driving this effort. This raises the previously discussed challenge of 'bottom-up' legitimacy among the policy actors,

if the initiative is to succeed in practice. Additionally, the range of stakeholders is such that co-operation across actors and interests would be a formidable task, if viewed in its totality. Complicating the potential for success even further is the lack of ability of participating representatives to commit their constituencies or coalition members to alternatives raised during the discussion.

To facilitate policy-oriented learning in such an environment, the findings of the research for this thesis suggest that efforts to promote policy-oriented learning be targeted at the advocacy coalition level of policy networks, rather than at the policy community-wide level. In a policy domain where actors repeatedly coalesce around a range of issues, the potential for members in newly structured policy networks to use the knowledge gained from the behaviour of actors in previous networks is substantial. This would allow for advocacy coalitions of actors sharing similar core values to be recognized, along with the potential for conflict and clashes among coalitions as a result of differing core values. Focusing first on the resolution of issues aimed at the secondary aspects of the actors' belief systems, informed debate among actors would allow for policy-oriented learning to occur across all coalitions. This allows coalitions to recognize errors and correct approaches in a way consistent with the realities of the policy environment. This type of learning has been described as single loop learning and is considered the most basic form of learning for organizations (Argyris and Schon, 1978). However, the shared values that unite members of advocacy coalitions also allow for double loop learning to occur. This type of learning occurs when organizations not only recognize and correct errors but also re-examine the underlying assumptions and beliefs on which strategies were developed in the first place. Given the commonality of these values among coalition members, their re-examination is more likely to be undertaken in an environment that does not require having to defend them from competing coalitions. Policy-oriented learning at this more advanced stage is thus more likely to occur within coalitions. The most advanced form of learning that has been identified by Argyris and Schon, deutero-learning, builds on the knowledge gained from double-loop learning by focusing attention on how such learning has in fact occurred. Advocacy coalitions who advance to this stage of

learning become capable of making adjustments to underlying belief systems, developing alternate strategies and responding to changes arising in the policy environment with improved efficiency and effectiveness.

The research supports the view that advocacy coalitions comprised of members with shared core values have the potential to acquire all three types of learning discussed above. This is not to suggest that advocacy coalitions are conflict free. In fact, while members may share similar core values, they differ extensively in the means by which these goals should be made operational and the mechanisms and authorities available to them for implementing them. However, by acquiring the knowledge of how and why actors respond to challenges and threats confronting their underlying beliefs, the clarity and predictability of policies affecting the network are enhanced (Paquet, 2000).

For example, in the Georges Bank policy debate, single loop learning occurred within the dominant coalition as members recognized and adjusted to the reality of a challenge to the *status quo* by the petroleum sector. In the Fixed Link case study, single loop learning was evident across coalitions as the contending coalition adjusted to the realities of the fiscal policies and the strength of the dominant coalition. In response, the latter coalition adjusted to the reasoned arguments relating to the secondary aspects of the policy problem by the contending coalition.

Examples of double loop learning were not readily evident from the analysis of the two case studies. However, the apparent shift on the part of the federal government over the course of the two case studies warrants further investigation to ascertain whether it did in fact adjust its underlying belief systems and strategies in response to an increased environmental ethic within the policy network. Examples of deutero-learning were more difficult to isolate in the two case studies. However, the opportunity to acquire such knowledge is expected to increase over time as members in the Maritimes Region policy community form dynamic policy networks, comprised of advocacy coalitions with shared values, to address issues of mutual concern. With such an increased level of understanding among network members, opportunities to promote all forms of



policy-oriented learning can be seized, leading to reduced institutional uncertainty and enhanced policy clarity and predictability in decisions affecting ocean use and space.

### **6.5.2 Guidelines for Decision-Making**

The examination of the two case studies for this thesis allowed for an increased understanding of the behaviour of these actors as they attempted to influence decisions that affected their well being. In both cases, public involvement in the decision-making process was solicited through a formal public review process. In both cases, the criteria to guide decision-making were lacking or not explicitly known to those participating in the process.<sup>22</sup> As such, the most influential aspect of the process lacked transparency, increasing the potential for institutional uncertainty and reducing the level of predictability and clarity in the policy outcome.

This ad hoc nature of decision-making in the coastal and ocean environment inhibits the achievement of policy-oriented learning among actors, since efforts are expended at reshaping the constitutive rules for each decision the network confronts, rather than advancing the knowledge required to address the problem at hand. To minimize the expenditure of such 'rent-seeking' effort<sup>23</sup> and to better reflect the growing interdependencies among policy actors in the coastal and ocean policy domain, explicit guidelines, or even fundamental rules where appropriate, should be determined by decision-makers and made explicit for policy debates involving public hearings. Such guidelines might take into account the level of uncertainty or degree of risk to be incorporated in making a decision; identification and weightings for accepted societal values, such as fairness, the right to protect one's family, earn a living and environmental

---

<sup>22</sup> It should be noted that some arguments have been offered on the beneficial consequences of some level of institutional uncertainty (Haas and Haas, 1995). These relate to the potential for uncertainty to increase the incentive among policy actors to invest the time and energy in improving the quality of knowledge used in the debate. This "veil of uncertainty" prevents individual members from anticipating how the outcome would affect individual interests and as such, all affected members work towards achieving an outcome that would be fair and equitable to all (Brennan and Buchanan, 1985).

<sup>23</sup> "Rent-seeking" is the term used by James Buchanan to describe behaviour in institutional settings, where individual effort to maximize value generates social waste rather than social surplus. This is in contrast to 'economic rent', defined as a genuine 'social surplus' in that the owner of the resource is paid more than the alternative earning power of that unit (Buchanan, 1985).

protection; and, clarification of role for subjectivity in decision-making, including the definition of "special or unique".

The consideration for explicit guidance over decision-making presumes that policy actors will agree to the stated criteria, which further presupposes knowledge of the values circulating within the policy network and broader societal values. While there would necessarily be uncertainty associated with such assumptions, specifying what factors will be taken into account by the panel allows participants to structure their arguments and collect the kinds of evidence appropriate for the review, based on the prescribed rules. As responsibilities and accountabilities become increasingly blurred in a distributed governance regime, the requirement for explicit decision-making rules became increasingly critical. Given the evolution towards shared decision-making, such rules have to be accepted by the majority, or at least the most powerful within the society. It is not until attempts of control through such rule-making become increasingly successful, and compliance with them increasingly patterned, that a system of rules for shared decision-making can be said to have evolved (Czempiel, 1992).

### **6.5.3 Role of the Public Review Panel**

Public review panels has been prescribed as a tool in domestic environmental legislation to assimilate public input and condense it into a form to be used by decision-makers. The use of this tool has introduced a new form of policy actor in the coastal and ocean policy network. However, it is important to recognize that environmental public reviews are relatively rare, with a total of five occurring in Atlantic Canada over the period spanning 1984 to 1999.<sup>24</sup> Ensuring the legitimacy of each panel's recommendation(s) with all participating actors should be a stated goal of public

---

<sup>24</sup> These are listed as the Fixed Link project between PEI and NB (1990), the Terra Nova Oil project (1997) and the Voisey's Bay metal mining project (1999) in Newfoundland and Labrador and the Sable Gas projects (1997) and the Georges Bank moratorium (1999) in Nova Scotia. Current offshore development projects, such as the White Rose oil project off of Newfoundland and the Deep Panuke gas project off of Nova Scotia, were not subject to public review under the 1992 *Canadian Environmental Assessment Act*. However a review of public concerns surrounding seismic activity in the inshore area off of Cape Breton, NS was conducted in 2001.

hearings. This requires the panel to have the appropriate expertise to address its mandate, be devoid of conflict of interest and to provide assurance of a fair and transparent process.

While the panel performs an advisory function, the evidence to date in the environmental assessment of Canadian public review panels relating to the coastal and marine environment is such that its advice has been accepted on all but one occasion, that exception relating to the Fixed Link project. Thus the public review hearings serve as an important venue for influencing decision-making. Because of the condensing role performed by panels, the responsibilities of the panel and its basis for any recommendations need to be explicitly stated as part of the formal review process. Additional elements identified as a result of the two examined case studies include:

- Panel members should be screened for bias, conflict of interest or other attributes that would compromise the perception of a fair and transparent process;
- Panel members should possess the skill sets necessary for fulfilling its mandate;
- The panel should provide assurance that only informed and accurate input is considered in making its recommendations, regardless of the input it receives. One way of providing this assurance is through public vetting of information presented;
- Recommendations should take into account both the level of concern among the public and the basis for such concern;
- Recommendations and their justification should relate only to the mandate provided;
- As advisors, the panel should not be making political judgements, such as acceptability of means or degree of acceptable risk;
- The panel should not be used as a mechanism to pass responsibility for decision-making away from the appointed decision-makers;
- The accountability (or lack) of the panel for its recommendations should be explicitly stated.

#### **6.5.4 The Public Review Process**

Conflict resolution is less likely to occur by amicable means in situations where there is confusion with facts and values in a policy debate. This was demonstrated in the Georges Bank review process where addressing the problem was delayed, without having resolved the outstanding issues to the satisfaction of either the fishing or petroleum sector. Similarly, as was evident in the court challenges during the Fixed Link decision-making process, the enforcement of consensus on the part of a political decision-maker decreases the degree of legitimacy afforded to the process by participating policy actors. To minimize these situations, legitimizing the quality of the decision needs to be pursued by other means.

One framework that has generated success has been to separate value judgements from facts in the resolution of the policy problem (Kleindorfer *et al.*, 1993). The process first requires the definition of the specific features of alternative options in a scientific and objective manner and the translation of these micro attributes of the alternatives into meaningful variables for politicians and the public, (i.e., societally-relevant attributes), using expert judgement (Hammond *et al.*, 1977). Hammond cautions that up to this point, neither politicians nor the public should have input into these judgements. Their role should be limited to selecting the appropriate experts and variables and in ensuring the integrity of the process. The output of this process is the mapping of scientific attributes ('x' variables) into societally-relevant attributes ('y' variables). The choice of which combination of feasible 'y' levels is most desirable from a public policy viewpoint depends on the trade-offs the public and political decision-makers are willing to make.

Since such trade-offs require political or public judgement as to the relative desirability of the available options, it is in the making of these value judgements that public involvement and input should be focused. The benefits of this framework relate to the making of scientific judgements by technical experts in an environment devoid of its emotional context and for the making of public value judgements on the basis of information which has not been distorted to fit any one policy actor's pre-commitments. Thus, separation of fact and values appears to be an alternative and feasible technique for dealing with complex, emotionally charged issues.

Two applications of variants of this approach have been tried recently in the public policy decision-making arena in Canada. The first application relates to the appointment of a science review panel to make scientific judgements on the suitability of the available science to allow for a lifting of the oil and gas moratorium on the Pacific coast of Canada (Strong *et al.*, 2002). Concurrent with this scientific review, the Government of British Columbia established a task force of provincial politicians to collect public value judgements regarding the lifting of the moratorium (Government of British Columbia, 2002). This example is somewhat limited in reaping the benefits described above since it made no attempt to use the output of scientific judgement to inform the trade-offs the public might be willing to make in the setting of public values. The second example is currently being tried in a review process to determine whether specifically proposed oil and gas activities should be allowed in the waters off of Cape Breton, Nova Scotia. In this example, an ad hoc committee of policy actors will be using the scientific judgements of a small number of technical experts to inform the advisory process on whether the activities should proceed or not (MacNeil, 2002). This process appears to be more consistent with that advocated by Hammond *et al.* (1977). However, its limitation may lie in the small number of actors who are invited to participate in the process, particularly those on the ad hoc committee advising on public value judgements relating to the matter being examined.<sup>25</sup>

The two Canadian examples of attempts to improve the review process associated with policy level decisions suggest a recognition of the inadequacy of the existing process to meet the needs and expectations of the expanding array of policy actors. The breadth of this recognition and the desired options for addressing inadequacies are yet to be ascertained. However, given the significance of both substantive and contextual factors in affecting the procedural component associated with decision-making, it seems appropriate to assess the likelihood of success of a range of approaches, relative to the type and nature of the policy problem being examined.

---

<sup>25</sup> To some extent, the prior holding of a public review attempted to solicit input from a wider representative base of affected stakeholders. However, this process included the confusion associated with the mixing of facts with values. It was this recognition that led to the Commissioner's recommendation to separate out these distinct forms of judgements.

## CHAPTER SEVEN

### CONCLUSION

#### 7.1 Thesis Overview

The public policy environment in Canada, particularly as it applies to coastal and ocean policy decision-making, has changed over the period examined in this dissertation (Aucoin, 1995; Government of Canada, 2002a). The change has been partly attributed to a shift from a hierarchical governance regime to one involving an increasing number of societal actors in decision-making, particularly over the past two decades (Paquet and Wilkins, 2002). Using two examples spanning the period 1984 through 1999, the dissertation has focused on the relationships among members of an interacting policy community to explain the outcome of coastal and ocean policy decision-making in the Maritimes region of Atlantic Canada.

The notion of policy communities, and the coalescing of some of its members into an ad hoc network to resolve a particular policy issue, has emerged from efforts to explain how society-centred interests have interacted to affect policy level decision-making, both outside and within the structure of government. Similarly, a recognition of the growing inability of lead policy bureaucracies to possess all of the resources necessary to achieve policy objectives has led to a movement of internal state structures out to groups, interests and communities, adding support to policy communities and networks as explanatory concepts (Pross, 1986).

This chapter provides the concluding statements relating to the knowledge that has been acquired as a result of the research conducted on policy-level decision-making in Canada's coastal and ocean policy domain. It concludes the thesis by summarizing the key findings of the research, assesses the consistency of the theoretical propositions underpinning the research framework with the empirically based findings and addresses limitations in the methodological framework used to examine the two selected case studies.

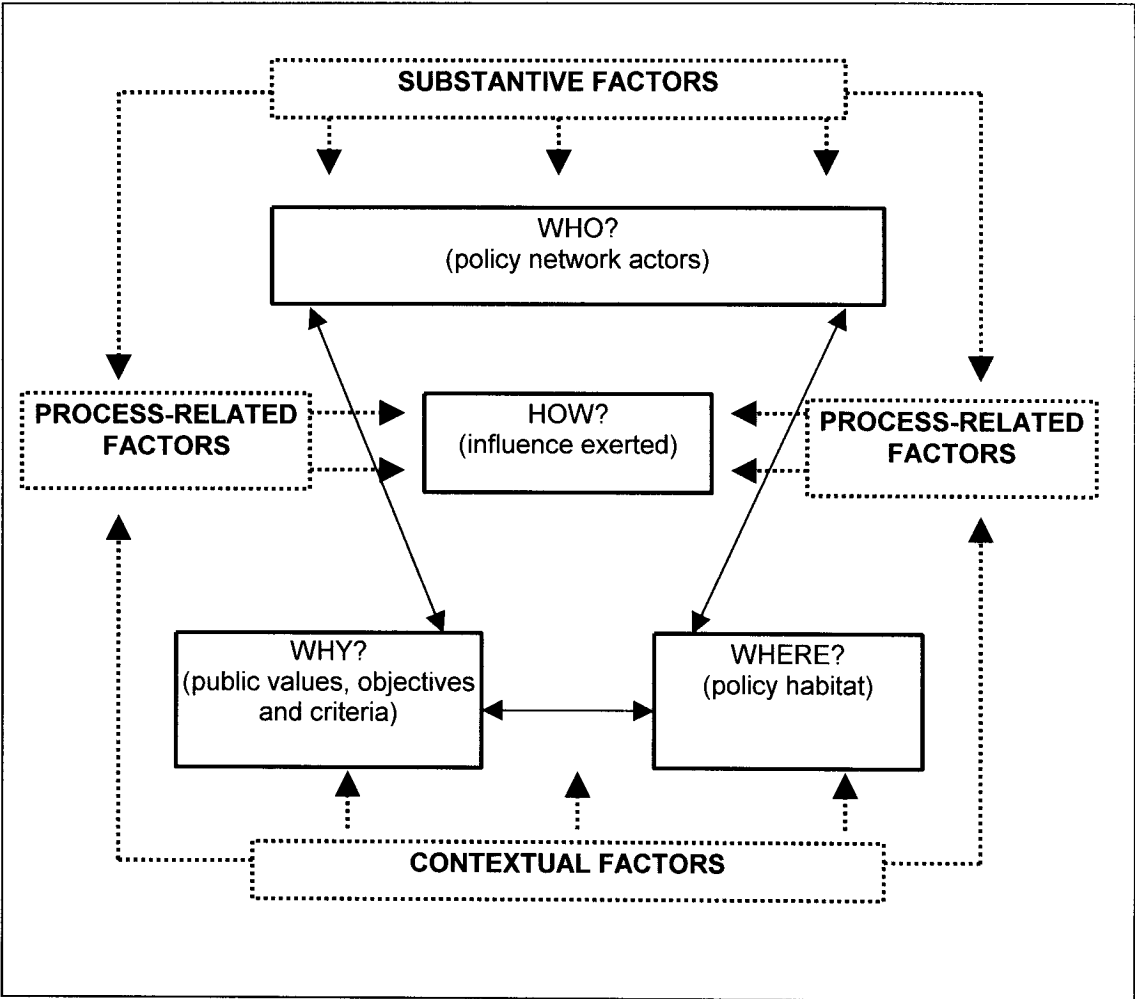
## 7.2 Summary of Research Findings

The underlying premise of this thesis is that decisions affecting Canada's coastal and ocean policy domain are determined by the multivariate interactions between the substance of the policy problem, the environment within which it is being debated and the affected policy stakeholders who participate in its resolution. The conceptual framework for the analysis suggested that where and when the problem arises, who is affected by it and why it is deemed important by some actors, will all combine to influence how the problem is resolved, i.e., the decision-making process. Depending upon the composition and pattern of involvement of particular policy actors who coalesce around a given policy issue, and the existing policies and policy environment, factors influencing decision-making may be either limited or comprehensive.

The research conducted for this thesis suggests that identifying shared core values among actors in the policy network can be used to determine the composition of advocacy coalitions. However, the formation of these coalitions and their role in collectively influencing the decision-making process are dependent on the existing governance regime. Furthermore, the research suggests that these substructures in the policy network, based on shared belief systems, play an important role in determining the success in influencing the decision-making process. Thus shared values among members of the policy network, rather than a reliance only on the resource capabilities of participating policy actors, enhance the opportunities available to individual actors to influence the decision-making process. Furthermore, the research findings indicate that substantive, contextual and process-related factors are all critical determinants in affecting the design elements of coastal and ocean policy decision-making.

This multivariate model of decision-making is illustrated in Figure 24, with the substantive factors affecting the composition of the policy actors. In contrast, context influences the expression of underlying values, objectives and criteria and reflects the existing policy habitat. Process-related factors are affected by both the context and substance of the policy problem and determine how policy actors exert influence, as they attempt to resolve the problem to their satisfaction.

Figure 24: Multivariate Model of the Decision-Making Process





The two case studies were selected to allow the drawing of cross-cutting conclusions regarding the significance of elements affecting coastal and ocean policy decision-making conceptualized in Figure 24. The effects of the substance of the problem, particularly on who would be involved in its resolution, were evaluated based on the difference in the policy problems being addressed in the two case studies. For the Fixed Link case study, the problem centred on resolving the federal government's commitment to provide year-round transportation to Prince Edward Island by constructing a specific project, namely a Fixed Link between the island and the mainland. For the Georges Bank case study, the policy problem was more strategic in nature. It focused on making a determination as to whether or not a potentially conflicting ocean user should have access to a specific area of ocean space.

Regarding the contextual element, the case studies were chosen to allow for an examination of the influence of policy networks on decisions occurring at two identifiably different periods in Canada's evolving governance regime. The Fixed Link case study covered the period from 1984 to 1993 and was selected as an example of decision-making at the early stages of public involvement in decisions affecting the coastal and ocean use and space. The Georges Bank case study, covering the period 1996 to 1999, was selected as an example in which public involvement in decision-making had evolved to become not only an expectation among affected stakeholders, but a right seized upon by an increasing array of non-state actors. As such, the assumptions on the significance of contextual factors were assessed. Likewise, having examined the process by which each decision was made, the procedural aspects associated with the two case studies were compared to evaluate the significance of this element on decision-making.

By comparing the effects of the three factors acting on the two selected case studies, the degree of consistency with the theoretically grounded ideas and propositions regarding governance and policy networks that were posited at the outset of the research can be assessed.

### 7.3 Assessment of Theoretical Propositions

As described in Chapter Three, the research approach for this thesis has been guided by three propositions which provided the theoretical underpinning for understanding the public policy environment within which the two examples of coastal and ocean policy decisions were made. The propositions provided a theoretical rationale to explain the composition and behaviour of policy actors in these differing policy environments. They also reflected the evolving nature of governance, away from the exclusive domain of government to a more inclusive and participatory process.

While the lessons from the two case studies point to the significance of substantive, contextual and procedural factors as critical determinants to explain the behaviour of actors in the respective policy networks, the methodology employed does not allow for the findings to be extrapolated to other decision-making processes. However, case study methodology does allow for the research findings to further test and advance theory. With this objective in mind, a comparison of the analytical results obtained for the two case studies was used to evaluate their consistency with the stated propositions.

*Proposition #1- A political administrative system espousing disaggregation, decentralization and broad-based input in decision-making leads to an expanding array of heterogeneous actors actively participating in the coastal and ocean policy domain.*

In terms of proposition #1, the onset of the Fixed Link decision-making process reflected the hierarchical authority and policy analytical capacity of the government actors in the policy network. Changes in legislation affecting the policy environment appeared to be reflecting the call by Canadians for a shift from the paternalistic modes of authoritative control to partnerships in setting goals and means.<sup>1</sup> However, the case study provides only limited evidence in support of the practice of a move towards distributed governance. This is reflected in the application of the 1984 *EARP Guidelines Order* to have public reviews of the environmental impacts associated with

---

<sup>1</sup> Tangible evidence in support of this recognition was visible as early as 1960, with the proclamation of the *Canadian Bill of Rights*. This declaration outlined the rights and fundamental freedoms of individual Canadians and required every law of Canada to be consistent with the purposes and provisions of the Act (Part 1, section 2).

government-sponsored projects. As was demonstrated in the analysis of the case study, the federal government continued to exercise its dominance over all other policy actors, including those at the provincial levels of government. This dominance was however tempered by reduced resources and fiscal restraint in the 1980s, leading to an increased participation of non-governmental actors in developing and implementing policy. With greater access to the process of decision-making, these actors began to assume their roles in policy level decision-making processes, increasing the number and diversity involved in decision-making affecting coastal and ocean policy in Canada.

During this early transitional period, non-state actors began to define their roles as both a participatory one and in ensuring actions undertaken by government lived up to the responsibilities outlined in newly crafted legislation. In practice, the dominance of the federal government in decision-making and policy analytical capacity was still evident throughout most of the Fixed Link decision-making process. In particular, the power of the federal government to decide what was placed on the policy agenda for evaluation remained paramount.

The Georges Bank case study, beginning in 1996 and concluding in 1999, allowed for the effects of the evolving governance regime to be examined. By the close of the twentieth century, the expectations of a growing number of stakeholders to be active players in decision-making were established as rights in legal instruments as well as in governance practices. In terms of proposition #1, the policy network associated with the Georges Bank decision-making process demonstrated the involvement of not only an array of state and non-state actors within Canada's borders but those from the United States as well. This public involvement of extraterritorial policy actors in a Canadian review process, ostensibly designed to solicit public values, provided tangible evidence of the consistency of the theoretical proposition cited above and the shift in the regime affecting decision-making in Canada's ocean policy domain. Furthermore, the apparent lack of concern by Canadian actors to the equality afforded American actors in the Georges Bank

public review process indicated the growing acceptance of an expanding array of actors in the coastal and ocean policy domain.<sup>2</sup>

Supporting the continued trend in this direction, the *Oceans Act* provides tangible evidence of the duty for the Minister of Fisheries and Oceans to co-operate with a diverse array of governmental and non-governmental actors in the development of a national oceans management strategy and integrated management plans. The subsequent release of *Canada's Oceans Strategy* identified the following as core commitments of the Government of Canada:

Work collaboratively within the federal government and among levels of government;  
Share responsibility for achieving common objectives; and,  
Engage Canadians in oceans-related decisions in which they have a stake.

(Government of Canada, 2002a, , p.v)

The strategy also reaffirms the federal government's commitment to principles of sustainable development, integrated management and the precautionary approach for guiding all ocean management decision-making. Additional principles guiding the implementation of an integrated management approach are outlined in the associated policy and operational framework document for managing Canada's estuarine, coastal and marine environments. Key among those and relating to proposition #1 is the duty in shared responsibility and accountability and inclusiveness, in which, "all interested and affected parties guide decisions from definition and articulation of goals to planning, implementation and evaluation." (Government of Canada, 2002b, p.10).

Thus the evidence seems to support the continuing trend for decision-making in Canada's coastal and ocean policy domain to include an expanding array of heterogeneous actors. While this approach was first specifically reflected in the discretionary environmental guidelines governing the federal environmental assessment and review of projects, it has changed to a

---

<sup>2</sup> The only policy actor interviewed who raised the question of appropriateness of US actors in the review process was the business association representing member companies in the petroleum sector. In contrast, representatives for the fishing industry and environmental non-governmental groups, as well as the review panel itself, actively solicited input from US actors in the review process. In addition, as discussed in Chapter Five, US Federal and State politicians and bureaucrats provided unsolicited input to the review process (Mullally *et al.*, 1999).

mandatory requirement in domestic legislation affecting Canada's coastal and marine environment.

*Proposition #2- Heterogeneity among actors participating in the decision-making process increases the potential for conflicting core values to compete for expression in the form of the decision reached.*

Proposition #2 refers to the increasing potential for conflicting core values to be expressed in policy debates due to the heterogeneity of actors participating in the policy process. In the case of the Fixed Link process, the research identified four groupings of policy actors based on their core values. Of these, all government actors belonged to the same group, which formed the dominant advocacy coalition. This finding suggested that in a strictly hierarchical regime in which governments alone set and implemented policy decisions, the potential for conflicting core values among policy actors would not have been an issue. Rather, government actors would have debated which values should be pursued and how these should be made operational in policy-level decisions. With the introduction of a more heterogeneous grouping of actors during the public hearings, conflicting core values did in fact arise and competed for expression in the decision to be reached. However, all of these non-state actors lacked the authority, policy analytical capacity and resources to significantly challenge the dominance of government in this classically defined state-directed type of policy network (Lindquist, 1992).

For the Georges Bank case study, the research identified five groupings of policy actors based on their core values. These groupings reflected the diversity of these values among the actors in the network and emphasized the danger of assuming actors with traditional positions of power would share similar core values when debating particular policy problems. For example, based on the analysis conducted for this study, the federal, provincial and US-based politicians all belonged to different advocacy coalitions. Furthermore, members within the petroleum sector were found to differ in core values, with producers differing in values from the associations representing them and suppliers of services to the sector. Thus, with the introduction of a more heterogeneous grouping of actors, conflicting core values did in fact arise and competed for expression in the decision to be reached. Thus the research also lent support to proposition #2,

suggesting its potential as an important theoretical consideration in policy-level decision-making in the coastal and ocean policy domain.

*Proposition #3- Decision-making, within an environment that pursues the goal of policy integration, co-ordination and coherence, promotes interdependencies among actors that tend to minimize individual opportunistic behaviour.*

Support for Proposition #3 is an explicit result of the research conducted for the case studies examined in this thesis. With the introduction of an expanding array of policy actors in the decision-making processes, the recognition that no one actor had all of the resources necessary to achieve the policy objectives became readily apparent. By identifying policy actors who shared similar core values, the research allowed for groupings of policy actors into advocacy coalitions. This logic behind such a theoretical structuring suggests that co-operation among like-minded actors increased the likelihood of core values being achieved. Thus, the research reinforces the notion that increasingly complex social systems will tend to self-organize, finding areas of common ground appropriate to the challenges presented.

As illustrated in the Georges Bank case study, the NORIGS 2000 coalition succeeded in its efforts to unite the diverse fishing sector due to the indisputable shared belief that having fish available to harvest was a goal to which all members could subscribe. The challenge confronting the sector was the fundamental right to have fish available for harvesting. Disputes regarding allocation of the resource or gear-type conflicts, traditional areas for demonstrating opportunistic behaviour within the sector, were put aside since these assume the availability of the resource. By recognizing that these arguments become meaningless should the resource itself be lost, the sector was able to collectively address the threat posed by the petroleum sector. It is interesting to note that such a unified view seemed more easily accomplished when the perceived threat to the resource was from an external source.

This observation is consistent with the premise that policy-oriented learning among actors in an advocacy coalition is most likely when external forces threaten the underlying core values of its members (Sabatier, 1987). Given that sectoral conflicts inherent in the fishing industry occur at the secondary level of belief systems, i.e., issues affecting how the shared values should be made

operational, it is not surprising that learning is difficult under these conditions. This is due to the fact that positions are taken at this secondary level where an almost infinite array of views may be held. This minimizes the recognition of shared core values and focuses efforts by groups within the sector on defending entrenched positions, leading to sectoral conflict between gear types, inshore versus offshore, etc.

For the Georges Bank case study, the core value of protecting fish and fish habitat from additional threats was shared not only by the NORIGS 2000 policy actor, but also the federal government, the review panel, technical experts and environmental NGOs. Since no one policy actor possessed the resources on its own to achieve the policy objectives, recognition of the interdependencies among the actors in this grouping was critical in achieving the status of the dominant coalition. This allowed all of the actors with the opportunity to see the shared core values reflected in the resultant policy-level decision, lending empirical support to proposition #3, as stated above.

Using the two case studies to examine how public policy decisions are reached in a changing governance structure, the research also allowed for the following examination of the assumptions underlying the existing theory of governance which has gained credence in the academic literature:

- i) *Governance refers to a set of institutions and actors that are drawn from, but also outside of, government*

As defined by Rosenau (1995), governance is the ability to get things done without necessarily having the legal competence to command that they be done. As such, governance scholars have argued that while government actors and state institutions are components of governance, governance mechanisms are not limited to government (Rosenau and Czempiel, 1992). In fact, these scholars go farther in suggesting that governance can be said to exist, even in the absence of government.

In a policy environment that supported the centralized decision-making capacity of the federal and provincial governments in areas under their respective jurisdictions, government actors assumed and exercised the principal role in setting coastal and ocean policies. This hierarchical

dominance was demonstrated at the onset of the Fixed Link case study, which began in the mid-1980s.

Based on the constitutional division of powers in Canada, the federal government held jurisdictional authority over the marine environment while provinces were constitutionally responsible for intra-provincial activities. As such, the policy environment at the onset of the Fixed Link policy problem reflected the governmental nature of decision-making as opposed to a more governance-based environment. However, as discussed above, the shift to a more distributed form of governance began to be evident by the late 1980s. Critical to this shift was the growing global awareness of the link between environment and development (WCED, 1987) and the associated expanding expectation among actors outside of government to participate in public policy decision-making. In this sense, the research identifies a limited support of the onset of governance in the Canadian coastal and ocean policy domain. This was to be expected, given the period during which the decision-making process commenced and the obvious resistance and lag that followed such a fundamental shift in the public administrative framework.

In contrast, the Georges Bank moratorium case study is an example of the maturation that had occurred in Canadian ocean governance in the decade since the proclamation of the *Accord Implementation Acts* in the late 1980s. When the policy problem first arose in the mid-1980s, the solution was based on a unilateral decision by the government actors of the day. Specifically, political pressure was exerted by a powerful fishing sector at a time that coincided with provincial and federal elections. With the specific requirement for a public review in the 1988 legislation, the stage was set to expand the involvement of actors in the process beyond those in government. By the mid-to-late 1990s, the involvement of non-state actors in the decision-making process had increased from no formally prescribed role through to a legislatively required, consultative and advisory role.

In addition, policy actors who sought to influence the policy decision were not restricted to those within the territorial boundaries of Canada. This reflected the growing acceptance of the



interconnectivity of problems and solutions across artificially imposed administrative boundaries, particularly within the coastal and ocean policy domain.

Thus, a comparison between the policy environment surrounding the two decisions highlighted the change that had occurred in Canadian ocean governance over the period covering the two case studies. In this sense, the research identified a limited support of the onset of governance in the Canadian coastal and ocean policy domain in the mid 1980s followed by an expansion in the involvement of actors in the process by the mid-to-late 1990s from those beyond government. Furthermore, the evolution of Canadian ocean governance during this period was complemented by changes in legislation governing the decision-making process,<sup>3</sup> legitimizing the belief among coastal and ocean stakeholders that decisions affecting their wellbeing were enhanced by their input. Thus, the research suggests that support for the proposition of policy actors being drawn from and outside of government is warranted.

ii) *Governance blurs the boundaries and responsibilities for tackling social and economic issues*

The examination of the Fixed Link decision-making process suggests that the hierarchical and centralized governmental structure in place at the time provided little evidence of the blurring of boundaries and responsibilities for tackling social and economic issues. The responsibilities of the decision-makers were explicit, with the public's reliance on the state to make the decisions necessary to ensure its interests are protected. However, increasing examples globally of governments' inability to protect its citizens from an expanding array of transnational problems (Rosenau, 1995), led to growing public demand for involvement in decision-making and increased accountability on the part of governments. As was illustrated in the court challenges associated with the Fixed Link process, changes in the governance regime reflected these demands and introduced oversight onto the broad, mostly unchallenged, discretionary decision-making authority of federal Cabinet Ministers.

---

<sup>3</sup> Examples include the 1982 *Canadian Charter of Rights and Freedoms*, 1992 *Canadian Environmental Assessment Act* and the 1996 *Oceans Act*.

In the late 1990s, the authority vested in the two levels of government to make the decision on whether or not the Georges Bank moratorium should be extended suggests that there was also little evidence of the blurring of boundaries and responsibilities for tackling social and economic issues. However, when one considers the influences exerted on the decision-making process in 1999, as compared to the earlier decision to impose a moratorium in 1988, the absolute authority of the Canadian federal and provincial governments for tackling the social and economic issues associated with the policy problem appears blurred. In fact, the research suggests that in the complex coastal and ocean policy domain of the late 1990s, the authority to make a decision may have increasingly little to do with the outcome of the decision-making process. Rather, it is the influence exerted by those who share similar core values, and their ability to implement strategies leading to the reflection of these values in the decision, that seems to be of greater relevance.

This finding illustrates a challenging dilemma for subscribing to a more distributed form of governance since it undermines the attribution of accountability that has been associated with authoritative decision-making. Some governance scholars have suggested this can be adequately compensated for by a form of accountability that has been described as 360-degree accountability, i.e., pertaining to all stakeholders surrounding any official or decision-maker (Paquet and Wilkins, 2002). However, the delineation of such shared accountabilities and the resolution of any conflicts that are likely to emerge become even more challenging in the absence of alternative legitimate institutions of governance to assume shared responsibility and accountability. Thus principled decision-making, based on integrated management or participatory governance, is necessarily ineffective without the establishment of institutions that facilitate their pursuit. By increasing the reliance on a broader array of policy actors to contribute to decision-making, the potential effectiveness of decisions that reflect the values of the dominant advocacy coalition must be weighed against losses in efficiency that are potentially available in a hierarchical regime. Even with accepted mechanisms to address the devolution of authority by governments, it cannot be assumed that policies that allow for the achievement of the underlying

core values of dominant coalitions represent the values of the majority who are affected by the decision.

The research findings do not allow for any definitive statements to be made about accountability in terms of the dominant advocacy coalitions identified in the retrospective analyses of the two case studies. However, it can be speculated that in the case of the fixed link decision, the resulting policy decision appeared to be serving the interests of the majority of stakeholders and the public affected by the decision. In the case of the Georges Bank Moratorium decision, the values of the dominant advocacy coalition reflected those of a vocal and politically powerful set of policy actors. However, given the relative dominance of these small groups of actors in the review process, as compared to the larger population affected by the decision who did not participate, it is not as easy to speculate whether the decision served the interests or values of the majority or not.

*iii) Governance identifies the power dependence involved in the relationships between institutions engaged in collective action*

This proposition suggests that policy actors involved in collective decision-making rely on the strengths of each other in order to ensure their persistence. With the coalescing of the key policy actors around both the Fixed Link and Georges Bank moratorium policy problems, the research was able to retrospectively identify key groupings among the actors, based on shared values that assisted in explaining the relationships observed between actors involved in collective action. Additionally, the policy analytical capacity and resources of actors sharing similar values, if effectively harnessed, can play an instrumental role in determining the level of success achieved by these actors, in terms of achieving core values. With the active recognition of members in the policy network of those sharing core values, the collective policy analytical capacity and resources can be brought to bear to affect the level of success achieved by these coalitions, in terms of achieving core values. An example of such active recognition was the grouping of actors comprising the dominant coalition in the Georges Bank policy network. This finding suggests that, in addition to the identification of power dependence, the proposition should be amended to

include the identification of shared underlying belief systems as a key driver affecting institutions involved in collective action.

*(iv) Governance leads towards autonomous self-governing networks of actors*

Despite the evolution that has occurred in Canadian oceans governance since the mid-1980s, the analyzed case studies provided little evidence in support of this proposition. In part, this may be due to the insufficiency of the time period to document the change suggested in the proposition. Political theorists have identified factors necessary for such institutional formation to include a shared purpose, abilities and resources (Stoker, 1998). Since these factors were present in advocacy coalitions found in the Fixed Link and Georges Bank case study, they may be necessary but insufficient components to the formation of self-governing networks. In addition, as is cautioned,

Governance does not just suddenly happen - circumstances must be suitable, people have to be amenable to collective decisions being made, tendencies towards organizations have to develop, habits of cooperation have to evolve and the readiness not to impede the processes of emergence and evolution has to persist.

(Rosenau, 1995, p. 17)

While the case studies confirm the movement towards some of the essential elements for governance as identified by Rosenau, it is equally clear that, in the Canadian context, the readiness to allow and encourage processes of governance to emerge and prosper is still not imminent. Examples that do exist have been restricted to limited sector specific issues, such as the community based management boards of the inshore groundfish sector (Fanning, 1999). In part, the slowness to embrace the evolving governance regime has been due to the even slower development of a legitimate framework in which the emerging system of governance can be placed (Paquet, 1999).

Within the Canadian context, other outstanding concerns to be resolved include barriers to the sharing of responsibility and accountability among state and non-state actors as a result of the existing constitutional framework and treaty commitments made to First Nations people. Approaches for addressing these concerns have been to either marginalize collaborative

governance efforts as an adjunct or supplement to existing decision-making processes, thereby ensuring the authoritative channels of accountability prevail (DFO, 2001) or developing new notions of accountability (Paquet and Wilkins, 2002). The research findings from the two case studies do not dispute the claim that accountability structures are necessary to ensure the continuation of collaborative processes and negotiated agreements (Wondolleck and Yaffee, 2000). However, while it is logical to expect a shift in accountability away from a single stakeholder towards multiple stakeholders in a distributed governance environment, it is also equally logical for the rules governing the assigning of such accountabilities to be based on moral contracts, rather than coercion. This suggests that the development of accountability structures in a distributed governance regime may benefit more from an examination of the moral forces in play among members of the policy network than from the formal assigning of inflexible levels of accountability through legal frameworks.

As described by Nozick (1981), accountability might best be understood by examining the behaviour of actors based on the tension between moral forces at work within the policy network. These forces 'push' actors to behave in certain ways because of their inner values and 'pull' them in certain ways because of the expectations of others. For example, in a legal setting, an actor might be 'pulled' to be accountable because of liability concerns whereas the same actor might be 'pushed' into being held accountable because of his sense of obligation to others. Similarly in a political setting, an actor might be 'pulled' into assuming accountability based on the expectation by others to be responsive while the moral 'push' might result in accountability based on a genuine desire to do what is in the best interest of the public. As discussed in the literature on distributed governance (Paquet and Wilkins, 2002), when the moral 'push' is greater than or equal to moral 'pull', ethical action results. However, an ethical gap results in the reverse situation. While there is no conclusive evidence to suggest that accountability based on ethical action is more likely to occur in a distributed governance regime or that ethical gaps are to be expected in hierarchical regimes, the hypothesis proposed by these authors argues in favour of these outcomes.

Finally, additional legal issues for Canada to resolve before self-governing networks could gain widespread support in terms of autonomy include an addressing of the procedural requirement to delegate authority, for which some precedence has been established<sup>4</sup> and the issue of enforceability. On this latter matter, the issue relates specifically to compliance by new governments to certain agreed-upon mechanisms for the sharing of responsibility and accountability, since parliamentary sovereignty exempts successive governments from the contractual commitments of a previous government (Schrecker, 1985).

- (v) *Governance recognizes the capacity to get things done which does not rest on the power of the government to command or use its authority*

In the coastal and ocean policy domain in Canada, government dominance over decisions relative to other policy actors has been paramount, despite the observed movement towards a more distributed form of governance at the end of the twentieth century. As such, the application of this theoretical proposition on matters relating to coastal and ocean use may prove to be difficult or at least variable, depending on the policy problem being addressed.

The case studies examined provided only limited evidence of the absence of government authority over decision-making. While the legislation guiding both public review processes called for broad-based participation, the federal government was an important member in the dominant advocacy coalition in both case studies examined. For the Fixed Link case study, the research identified the dominance of the state actors, particularly the federal government, in having the capacity to get things done. Similarly, provincial government actors were instrumental in negotiating agreements that ultimately led to the implementation of the decision and the construction of the Fixed Link. These results were consistent with a hierarchical decision-making structure for public policy decisions at the onset of the Fixed Link debate. However, as the surrounding policy environment moved towards an inclusion of non-state actors in decision-making, evidence hinting at the evolution of a more distributed form of governance could be

---

<sup>4</sup> One level of government may authorize another to administer areas not under the latter's authority by delegating that administrative power through appropriate legislation (*PEI Potato Marketing Board v H.B. Willis Inc.* (1952), D.L.R. 146 (S.C.C)).

found. In the Fixed Link case study, this included the formation and active participation of two non-governmental organizations, Friends of the Island and Islanders for a Better Tomorrow, in the decision-making process.

For the Georges Bank case study, the nature of the policy problem was such as to require the exercise of authority by the two levels of government. In this example and other cases involving the ocean environment, it is unlikely that the dominance of the government to command or use its authority would diminish in the foreseeable future. This assumption seems especially valid if broader policy issues such as bilateral relations can be affected by the outcome of the decision-making process. Nonetheless, the growing expansion of actors in the broader coastal and ocean policy domain may provide opportunities in which the power of government to command or use its authority may diminish in time. Thus, of all of the stated propositions of governance, it may very likely be that this one will serve as the best indicator of a systemic change in the way Canadian coastal and ocean policy decisions are made. Despite calls for greater involvement in decision-making, the exercise of the authority vested in the government is still an expectation of the public. This situation is likely to continue until alternate institutions of collective action are developed and gain legitimacy in the eyes of the public.

It is somewhat ironic that recent efforts to expand decision-making in the Canadian coastal and ocean policy domain have been driven by the codification of the 'duty to consult' by the federal Minister of Fisheries and Oceans, with the passing of the 1996 *Oceans Act*. The success of such efforts is questionable if one accepts the arguments made by governance scholars that to acquire legitimacy and support needed to endure, successful mechanisms of governance are more likely to evolve from bottom-up rather than top-down processes (Rosenau and Czempiel, 1992). This is because mechanisms for evoking the consent of the governed are developed through shared needs of groups and the acceptance of shared instruments of control. As has been noted repeatedly in the governance literature (Ostrom, 1992; Singleton and Taylor, 1992; Botts and Muldoon, 1996), institutions and regimes that have proven effective in addressing problems requiring a collective solution seldom result in the absence of bottom-up support for

“paper arrangements” (Young, 1998). The research findings of this thesis suggest that the formation of advocacy coalitions by members sharing common values around issues in the coastal and ocean policy domain can potentially form the basis for such successful mechanisms of governance. However, identification and recognition of these shared values is a necessary first step for actors within the policy network to advance towards this level of co-operation.

#### **7.4 Critical Assessment of Methodological Tool**

The methodological tool used in this dissertation focused on providing a retrospective analysis of the characteristics and behaviour of actors participating in a decision-making process as a means of understanding how influence was exerted and as such, how the problem was resolved. By assessing the behaviour of actors around a given policy problem, the research aimed at providing an increased understanding of how relationships among actors in the policy network are shaped, as well as provide insights into when and why these actors might clash, co-operate or modify positions on specific issues. Having applied the research tool to two specific examples of decision-making in the Maritimes region coastal and ocean policy domain, a preliminary assessment of its limitations, as well as suggested areas for improvement, are offered.<sup>5</sup>

##### **7.4.1 Limitations and Areas for Improvement**

Three limitations of the methodological tool, along with suggestions for improvement, have been identified as a result of its use in examining the two selected case studies. These focus on limitations arising from:

- (i) the retrospective nature of the conceptual framework;
- (ii) the use of disciplinary attributes as a proxy measure for core values; and,
- (iii) the lack of predictive capacity in terms of numbers of advocacy coalitions formed.

---

<sup>5</sup> These limitations came to light as a result of a critical assessment of the use of the methodological tool in examining the selected cases. They are offered in addition to the general caution issued in Chapter Three on the degree of confidence that might be assumed in extrapolating the research findings. These arose due to the context-specific nature of the selected cases and the limited application of the methodology to the two examples studied in the thesis.



(i) Retrospective constraint - It is a key proposition of this thesis that the resulting composition and pattern of involvement among members of the policy network who coalesce around a particular policy will determine how the policy problem will be resolved. This requirement on the actual identification of policy actors in a given decision-making process imposes an *ex post* constraint on the application of the methodology to assist in understanding how influence is exerted over decision-making. This limitation is imposed in part because of the focus of the tool on assessing the behaviour and relationship among actors in the policy network by examining their resource capacity and on shared core values. Thus, knowledge of who eventually coalesced around the policy problem is critical for predicting the subsequent behaviour of actors in the network and their ability to influence how the problem is resolved.

Additionally, the methodological tool is of limited use in predicting the composition of a policy network *ex ante* of a problem arising, and as such, in predicting the resulting policy outcome. This arises since the composition of actors who coalesce into a policy network is reflective of the major areas of concern associated with the policy problem. Thus, the application of the methodology to hypothetical policy problems would lead to highly speculative findings since assumptions would have to be made on areas of concern raised, composition of policy actors and underlying capacities and values of these actors.

However, the limiting retrospective nature of the methodology is compensated for by allowing for policy-oriented learning, which has occurred as a result of an increased understanding of the behaviour of actors in one decision-making process, to be applied in subsequent policy debates. The potential for actors to utilize the opportunities offered from policy-oriented learning is enhanced in situations where actors repeatedly interact to resolve a number of pressing policy challenges, such as is the case in the Maritimes region coastal and oceans policy domain. In such instances, the application of the methodology allows actors to recognize and understand the inherent tensions and dynamics pertaining to subsequent policy development and consensus building. With this understanding and mindful of the contextual significance of factors affecting decision-making, actors can develop new process strategies for addressing the challenges and

opportunities they might face, as a result of conflicting or shared values and beliefs circulating within the policy network.

(ii) Characterization of policy actors using proxy measures for core values – The methodological tool allows for the grouping of actors within a policy network based on an assessment of similarity in core values among actors who coalesced around the policy problem. Core values were identified and quantified based on the rankings which actors assigned to attributes describing different areas of interests and which they considered essential for pursuing the achievement of underlying core values. As described in Chapter Three, these attributes related to environmental, social, ethical, economic, political, legal and institutional areas of interest or ‘disciplines’. While the ranking of disciplinary attributes has been used as a proxy in assessing analogously complex systems such as the “health” of a fishery (Pitcher, 1999), the use of a simple ranking scale for measuring key attributes which reflect underlying values may nonetheless be subject to criticisms of over-simplification. Efforts may be made to refine and enhance the existing listing of attributes used to rank the different areas of interests deemed essential for pursuing core values. However, it is also conceivable that in the existing methodology, policy actors may be ranking attributes that have little discriminatory value, in terms of identifying differences in core values among actors in the network. Thus efforts should be made to cull these superfluous rankings while strengthening those most valuable in discriminating among differing value sets held by actors in the policy network. This potential limitation of the methodological tool reflects the relative newness of its application in assessing underlying values and belief systems. Efforts aimed at further refining its suitability as a proxy measure for core values would also serve to reduce and respond to criticisms levelled at the approach.

(iii) Lack of predictive capacity for determining numbers of advocacy coalitions – There is nothing inherent in the conceptual multivariate model of the decision-making process used in this thesis that predicts the number of potential advocacy coalitions that might form in any given policy network. While this may be viewed as a limitation in the model in terms of its predictive ability, it needs to be recognized that coalitions are necessarily formed from the pool of actors who

coalesce around the policy problem.

In the case of the Maritimes region coastal and ocean policy community, policy actors who coalesced around the two examined case studies formed into four (Fixed Link case study) and five (Georges Bank case study) advocacy coalitions, based on rankings reflecting similarities in core values. Although somewhat higher than the theoretical expectation of two to four coalitions suggested by Sabatier (1990), the findings for the two cases are within the range of the numbers predicted to be formed, based on shared beliefs and the economic and organizational interests of members. The somewhat higher number observed in the Georges Bank case study may be explained in terms of an evolving oceans governance regime in the late 1990s which encourages an increasing number of actors to participate in decision-making.

The consistency in terms of numbers of coalitions observed in both of the examined case studies warrants further testing of the methodology to determine whether there is in fact a limit on the number of differing coalitions that might be formed. The theoretical propositions for this thesis posit that increasing heterogeneity leads to an increase in the number of conflicting core values, suggesting an increase in the number of advocacy coalitions that may be formed. However, interdependence among policy actors is also postulated to serve as a critical factor limiting the exercise of individual opportunistic behaviour. Thus, the significance in being able to predict the number of coalitions that might be formed may lie in the ability to further attest to the validity of assumptions associated with theoretical propositions, rather than in providing any significant policy learning advantage from knowing what exactly that number might be.

While the highlighting of the above constraints is considered an essential component of scholarship, it is of critical importance to stress the suitability of the case study approach to an examination of the research questions posed in this thesis. The beneficial aspects offered by this methodology in furthering the inductive approach to the pursuit of knowledge used in this dissertation, specifically to advance theory (Eisenhardt, 1989), have been amply demonstrated in the research findings.

## 7.5 Concluding Statement

The research findings of the two case studies analyzed in this thesis support the theoretical notion of shared values among policy actors as an important driver to explain the influence exerted over public policy decisions. The analysis provides some empirical support for the learning approach as a mechanism to explain how actors can potentially work within a network to influence decisions that will reflect shared core values. The research suggests that coalitions of actors with shared beliefs will be formed, whenever actors come together to affect decision-making. The evidence in support of this conclusion was based on the retrospective identification of groupings of actors who did make tentative attempts at working collectively within the networks to influence the decision. It is thus posited that with an active seeking out of those with similar values and objectives in policy networks that coalesce around future coastal and ocean policy debates, actors can maximize the collective resources of the grouping to achieve tangible results that promote their shared beliefs.

The research further suggests that the theory relating to the sharing of common values among the policy actors, which characterizes the policy network, along with their relative power as members of the 'sub-government' or 'attentive public' (Pross, 1986) may be advanced. This finding on the significance of shared values does not minimize the importance of the resources available to members of advocacy coalitions, as dominance within the network has been shown to be dependent on the collective resources available to actors within coalitions to further their shared objectives.

While it may be challenging to deal with multiple advocacy coalitions in a given network, their presence can serve a constructive purpose in terms of promoting policy-oriented learning among all actors in the network. Such learning permits policy actors to develop strategies that better allow them to achieve their core values and objectives by adjusting to new constraints and opportunities which challenge actors to adjust to the new situation in a manner that is consistent with core values. This view is supported by the following quotes from a diverse cross-section of policy actors interviewed for the Georges Bank Moratorium case study:

Fine to say you don't want it but that is not based on any facts or figures and decision-makers would just dismiss you. You have to have a strategy based on fact and logic, that is where you hang your hat...like linking uncertainty with the special nature of Georges Bank.

Fishing Industry Representative

Courts are not necessarily the vehicle you want making coastal and ocean policy decisions.

Provincial Politician

A good thing that came out of the Georges Bank review was an increased awareness of oil and gas, which in the long run is better for us --- we want people to be informed, we want our regulators to be informed, we want better informed decisions.

Petroleum Industry Representative

With no project, no activity, no location, it made for a challenge to reply or to even know how to reply...The site meant everything really, to what the impact would be.

Government Science Representative

Wanted panel to know that other people than fishing industry and oil and gas would be impacted by decision.

Community Organization

Unique nature of Georges Bank absolutely critical to making argument before panel.

US-based Environmental Organization

History does confer a certain hierarchy in term of oceans usage but that should not allow us to dispose of the issue when there are competing interests.

Technical Expert

In conclusion, the analyses of the case studies strongly support the theoretical notion of an expanding array of policy actors drawn from beyond government and participating increasingly in coastal and ocean policy decision-making. Similarly, there is supporting evidence for the hypothesis that success in influencing decisions in the coastal and ocean policy domain is enhanced by actors with similar core values developing strategies that collectively benefit the

members who share such core values. However, numerous challenges remain before the public and these policy actors themselves, can assume a more authoritative role in policy setting. Critical among these is the need to resolve issues of accountability. Despite the disenchantment with government, it is unlikely that the Canadian public will be prepared in the near future to allow non-governmental actors to assume the rights associated with setting public policy decisions, in the absence of a tested alternative institution to government accountability.

## Appendix 1. Influence Analysis Interview Guide

### Document general information pertaining to the interview

- 1.1 Name of organization
- 1.2 Name of subject
- 1.3 Position held by subject, how long with organization
- 1.4 Date, time and duration of interview (In-person\_\_\_\_ or Tel\_\_\_\_)
- 1.5 Consent form provided \_\_\_\_\_; signed\_\_\_\_\_ ; collected by researcher\_\_\_\_\_
- 1.6 Follow-up required?

### Explore with the interviewee, the characteristics of the policy network member

- 1.7 Description of the mandate of the organization.  
(request any written material available from the organization)
- 1.8 Goals, objectives, roles and responsibilities of the organization.
- 1.9 Structure of the organization and relevant sub-units.
- 1.10 Culture of the organization.
- 1.11 Constituencies
- 1.12 Human resources/information/knowledge possessed/pursued/generated by the organization in the ocean policy domain.
- 1.13 Sources of information/knowledge pursued.
- 1.14 Ability to influence policy level decision making in the area of coastal and ocean policy formation and implementation.
- 1.15 If “yes” to 1.14, explore how influence is perceived to be exerted.
- 1.16 Describe the capacity of the organization (technical, financial and ideational)
- 1.17 Tactics used/pursued in getting its views across:
  - to its constituency;
  - to decision makers;
  - to other network members/stakeholders
  - to the public?
- 1.18 Who, in the opinion of the interviewee, are stakeholders in the ocean policy domain? (Explore interviewee’s views based on legal, social, technical, equity, economic and substantive rationality arguments).
- 1.19 Explore the underlying values, preferences, interests and criteria for coastal and ocean use and space by questioning the degree of importance attributed by the interviewee to each of the following issue areas.

Interviewees will be asked to rank their response to a number of questions relating to each of the following issue areas, both in terms of importance of the issue to the policy actor and the direction of the actor's support for the issue area, using a scale from -4 to +4, where: + indicates support for the issue area, - indicates opposition to the issue area and 0 = no importance; 1 = moderately important; 2 = important; 3 = very important; and 4 = mandatory.

- |      |                                       |
|------|---------------------------------------|
| i)   | ecological integrity/environment      |
| ii)  | social impacts                        |
| iii) | ethical issues, including empowerment |
| iv)  | economic considerations               |
| v)   | politics                              |
| vi)  | legal issues                          |
| vii) | institutional arrangements            |

### **Goal of the policy network actor with respect to the specific decision under examination**

2.1 Check decision being examined:

- Decision GB99: The 1999 Georges Bank moratorium on offshore oil and gas development; \_\_\_\_\_
- Decision FL93: The 1993 approved fixed-link project between Prince Edward Island and New Brunswick; \_\_\_\_\_

2.2 Key actor in other decision? No \_\_\_\_\_ Yes \_\_\_\_\_

N.B. If the interviewee is a member of more than one of the decision case studies, it is important to collect information on each case study separately.

2.3 Provide an overview of the specific policy issue being examined to the interviewee.

Ask interviewee to focus on the process involved in decision making prior to the declaration of the actual decision.

Inform the interviewee that this section of the interview is to solicit information on what the actor would have liked the decision of the case study to have been. Ask the interviewee to focus on the process involved in decision making prior to the declaration of the actual decision.

It is important at this stage to keep the interviewee focussed on the specific case study under examination in order to solicit information on the relevance of each of the issue areas to best achieve the preferred outcome from the perspective of the policy actor, thereby satisfying the underlying preferences, values and criteria of the actor.

2.4 Explore and rank what would have been the preferred outcome of the decision-making process, from the perspective of achieving the interviewee's underlying goals and objectives, based on the degree of importance attributed to the following issue areas.

Interviewees will be asked to rank their response to a number of questions relating to each of the issue areas, both in terms of importance of the issue to the policy actor and the direction of the actor's support for the issue area, using a scale from -4 to +4, where: + indicates support for the issue area, - indicates opposition to the issue area and 0 = no importance; 1 = moderately important; 2 = important; 3 = very important; and 4 = mandatory.

- |      |                                       |
|------|---------------------------------------|
| i)   | ecological integrity/environment      |
| ii)  | social impacts                        |
| iii) | ethical issues, including empowerment |
| iv)  | economic considerations               |



- v) politics
- vi) legal issues
- vii) institutional arrangements

### **Perception of the policy network actor with respect to the specific decision under examination**

3.1 Provide an overview of the actual decision.

Get interviewee to focus on the declared decision

Inform the interviewee that this section of the interview is to solicit information on how the actor actually viewed the outcome of the case study, from the perspective of it meeting the actor's underlying values, objectives and preferences.

It is important at this stage to keep the interviewee focussed on their perception of the declared decision of the specific case study under examination, in order to solicit information on how each of the issue areas were perceived to have been addressed by the decision outcome.

3.2 Explore and rank how the actual decision, as perceived by the interviewee, addressed the following issue areas, from the perspective of achieving the interviewee's goals and objectives.

Interviewees will be asked to rank their response to a number of questions relating to each of the issue areas, both in terms of importance of the issue to the policy actor and the direction of the actor's support for the issue area, using a scale from -4 to +4, where: + indicates support for the issue area, - indicates opposition to the issue area and 0 = no importance; 1= moderately important; 2 = important; 3 = very important; and 4 = mandatory.

- i) ecological integrity/environment
- ii) social impacts
- iii) ethical issues, including empowerment
- iv) economic considerations
- v) politics
- vi) legal issues
- vii) institutional arrangements

### **Other Pertinent Information**

4.1 How important were activities/decisions outside of the specific policy issue process to the interviewee's efforts? (e.g. President Clinton's decision to extend moratorium on US side of Georges Bank)

4.2 Who were considered allies during the decision-making process? Was there communication with them? Did they work together? If so, how?

4.3 Who were considered opponents during the decision-making process? Was there communication with them?

4.4 What factors were considered successful by the organization/interviewee for influencing the decision? Did the organization employ them? If so, at what point in the process? If not, why not?

4.5 What factors were considered irrelevant by the organization/interviewee for influencing the decision? Did the organization employ them anyway? If so, why? And at what point in the process?

4.6 Was there any lateral attempt amongst actors to influence each other?

4.7 Provide an opportunity for the interviewee to ask any questions relating to clarification of the questions asked and responses provided, and to offer any additional comments, including the provision of subsequent comments and material after the interview process has been completed.

**Appendix 2. Fixed Link Case Study Issues  
Major Areas of Concern by Disciplinary Attributes**

<b>Disciplinary Attributes</b>	<b>Major Area of Concern –i) Ferry Closure</b>
<b>Environmental Issues</b>	<ul style="list-style-type: none"> <li>· Loss of beneficial ice-break-up capacity of ferry</li> <li>· Decreased risk to marine ecosystem from ferry/marine vessel mishap</li> <li>· General interference with migration</li> </ul>
<b>Social Impacts</b>	<ul style="list-style-type: none"> <li>· Loss of jobs to local community</li> <li>· Provision of alternative employment and retraining</li> <li>· Limited family uprooting</li> <li>· Adequate number of jobs</li> <li>· Equivalent or better income</li> <li>· Full-time/permanent jobs</li> <li>· Accommodating to the ferry schedule</li> <li>· Loss of social interactions on ferry</li> </ul>
<b>Ethical Issues</b>	<ul style="list-style-type: none"> <li>· Provision of benefits package to ferry workers</li> <li>· Priority access to bridge-related jobs</li> <li>· Adequacy of compensation package to cover loss               <ul style="list-style-type: none"> <li>- to ferry workers</li> <li>- to local municipality</li> <li>- to businesses dependent on ferry service</li> </ul> </li> <li>· Ethical redistribution of wealth</li> </ul>
<b>Economic &amp; Financial Considerations</b>	<ul style="list-style-type: none"> <li>· Negative effects of loss of ferry worker income on               <ul style="list-style-type: none"> <li>- PEI economy</li> <li>- local economy</li> </ul> </li> <li>· Negative effects of loss of spin-off economic activity               <ul style="list-style-type: none"> <li>- on ferry and staging area</li> <li>- in local community</li> </ul> </li> <li>· Inability of jobs created from construction of project to compensate for loss of ferry-related jobs</li> </ul>
<b>Political Issues</b>	<ul style="list-style-type: none"> <li>· Participatory democracy</li> <li>· Appropriate use of plebiscite</li> <li>· Power of constituency</li> </ul>
<b>Legal Issues</b>	<ul style="list-style-type: none"> <li>· Participatory democracy</li> <li>· Appropriate use of plebiscite</li> </ul>
<b>Institutional Arrangements</b>	<ul style="list-style-type: none"> <li>· Fair and transparent procedures of ferry workers committee</li> <li>· Appropriate structure and chair</li> <li>· Response time adequate</li> <li>· Adequacy of role played by               <ul style="list-style-type: none"> <li>- federal departments</li> <li>- PEI Premier's Office</li> <li>- Academia</li> <li>- NGOs</li> <li>- Unions</li> <li>- Media</li> </ul> </li> </ul>

<b>Disciplinary Attributes</b>	<b>Major Area of Concern –ii) The Fishery</b>
<b>Environmental Issues</b>	<ul style="list-style-type: none"> <li>· Negative effect on ice regime, particularly delayed ice out; diminished sea temperature days; increased ice scouring; increased ice jamming</li> <li>· Lack of confidence in ice models to predict maximum tolerable ice out delay on fish</li> <li>· Negative effect from reduction in shorefast ice, ice scouring and tidal currents around piers, particularly on: <ul style="list-style-type: none"> <li>- benthic community/habitat</li> <li>- commercial fish species</li> <li>- marine mammals</li> </ul> </li> <li>· Increased risk to marine ecosystem from accidental spills during construction; during operation</li> <li>· Increased risk to marine environment from bridge run-off</li> <li>· Negative effect from project-related sediments, particularly on: <ul style="list-style-type: none"> <li>- benthic community/habitat</li> <li>- commercial fish species</li> <li>- marine mammals</li> <li>- primary productivity</li> <li>- water quality</li> </ul> </li> <li>· General interference with migration patterns, particularly on: <ul style="list-style-type: none"> <li>- commercial species</li> <li>- marine mammals</li> </ul> </li> <li>· Delayed ice-out on life cycle of biological resources, particularly on: <ul style="list-style-type: none"> <li>- lobster growth rates</li> <li>- lobster moulting</li> <li>- spawning</li> <li>- egg survival</li> </ul> </li> <li>· Additional habitat for commercially-viable species from bridge piers</li> </ul>
<b>Social Impacts</b>	<ul style="list-style-type: none"> <li>· Scheduling conflicts during construction activity</li> <li>· Fishing communities at risk</li> </ul>
<b>Ethical Issues</b>	<ul style="list-style-type: none"> <li>· Uncertainty of fishery-related impacts too great to support project</li> <li>· Need for compensation package</li> <li>· Adequacy of compensation package to cover losses <ul style="list-style-type: none"> <li>- Spatial and temporal</li> <li>- Eligibility (who and what)</li> </ul> </li> <li>· Fishers' empowerment</li> </ul>
<b>Economic &amp; Financial Considerations</b>	<ul style="list-style-type: none"> <li>· Negative effects of accidental spills on market value of bivalves</li> <li>· Decreased landings</li> <li>· Decreased overall \$ value</li> <li>· Increased access to markets</li> <li>· Loss of fishery-related jobs</li> </ul>
<b>Political Issues</b>	<ul style="list-style-type: none"> <li>· Participatory democracy</li> <li>· Appropriate use of plebiscite</li> <li>· Power of constituency</li> </ul>
<b>Legal Issues</b>	<ul style="list-style-type: none"> <li>· Loss of fishing grounds from exclusion zone and bridge piers</li> </ul>

**Institutional Arrangements**

- Fair and transparent procedures of Fisheries Liaison Committee
- Appropriate structure and chair
- Response time adequate
- Role played by
  - Federal departments
  - PEI Provincial departments
  - PEI Premier's Office
  - Academia
  - NGOs

<b>Disciplinary Attributes</b>	<b>Major Area of Concern – iii) Island Way of Life</b>
<b>Environmental Issues</b>	<ul style="list-style-type: none"> <li>· Stressed water quality and quantity</li> <li>· Protection of natural areas including beaches and dunes from pollution effects and overuse</li> <li>· Terrestrial habitat degradation</li> <li>· Marine habitat degradation</li> <li>· Threats to biodiversity in Strait and on land</li> </ul>
<b>Social Impacts</b>	<ul style="list-style-type: none"> <li>· Survivability of character of island way of life</li> <li>· Tolerance level for “outsiders”</li> <li>· Changes in land use patterns</li> <li>· Borden/C-T redevelopment plans</li> <li>· Bridge closure contingency plans</li> <li>· Shoreline access</li> <li>· Protecting heritage resources</li> <li>· Irreversible nature of project on island “psyche”</li> <li>· Maintenance of Wood Islands ferries</li> <li>· Loss of Marine Atlantic ferry jobs</li> <li>· Worker accommodation during construction</li> <li>· Community integration of workers</li> <li>· Increase in criminal and other illegal activities</li> <li>· Stressed government services</li> </ul>
<b>Ethical Issues</b>	<ul style="list-style-type: none"> <li>· Uncertainty of risk for an unknown amount of benefits or disadvantages</li> <li>· Non-resident ownership</li> <li>· Regional benefits implementation plan</li> </ul>
<b>Economic &amp; Financial Considerations</b>	<ul style="list-style-type: none"> <li>· Changes to the island economy</li> <li>· Increased tax base during construction phase</li> <li>· Increased economic activity in selected sectors, during operational phase</li> <li>· Boom and bust scenario</li> </ul>
<b>Political Issues</b>	<ul style="list-style-type: none"> <li>· Participatory democracy</li> <li>· Appropriate use of plebiscite</li> <li>· Loss of political distinctness of PEI from mainland</li> </ul>
<b>Legal Issues</b>	<ul style="list-style-type: none"> <li>· EARP review to include socio-economic impacts</li> </ul>
<b>Institutional Arrangements</b>	<ul style="list-style-type: none"> <li>· Role played by: <ul style="list-style-type: none"> <li>- PEI Provincial departments</li> <li>- PEI Premier’s Office</li> <li>- academia</li> <li>- NGOs</li> </ul> </li> </ul>

<b>Disciplinary Attributes</b>	<b>Major Area of Concern – iv) Transportation</b>
<b>Environmental Issues</b>	<ul style="list-style-type: none"> <li>· Increased risk to marine environment from transportation of hazardous material on bridge</li> <li>· Increased risk to marine environment from bridge run-off</li> <li>· Increased risk to terrestrial environment from transportation of hazardous material on bridge</li> <li>· Increased risk to terrestrial environment from bridge run-off</li> <li>· Decreased navigation/vessel safety from increased vessel traffic during construction</li> <li>· Decreased vehicular safety due to high winds; ice, snow and blizzards</li> </ul>
<b>Social Impacts</b>	<ul style="list-style-type: none"> <li>· Changes in traffic patterns</li> <li>· Reducing traffic peaks from ferry</li> <li>· Increased commercial/tourist traffic</li> <li>· Negative impacts on quality of supporting highways</li> <li>· Improved traffic planning and management, e.g., Borden/Charlottetown highway</li> <li>· Loss of land for expanded road building</li> <li>· Need for back up services in case of bridge closure</li> </ul>
<b>Ethical Issues</b>	<ul style="list-style-type: none"> <li>· Access for pedestrians/bicyclist</li> <li>· Maintaining access to wildlife area</li> <li>· Adequate examination of transportation needs and impacts</li> </ul>
<b>Economic &amp; Financial Considerations</b>	<ul style="list-style-type: none"> <li>· Need for alternate transportation route from ferry</li> <li>· Improved reliability of bridge over ferry service</li> <li>· Need for backup services in case of bridge closure</li> <li>· Decreased commercial transportation costs</li> <li>· Increased spin off benefits from lower transportation costs</li> <li>· Increased benefits to transportation industry</li> <li>· Increase in external competitiveness</li> <li>· Increase in mainland shopping by islanders</li> <li>· Increase in mainlanders shopping on PEI</li> <li>· Bridge toll rates</li> <li>· Improved transportation efficiency, particularly for agricultural produce</li> </ul>
<b>Political Issues</b>	<ul style="list-style-type: none"> <li>· Participatory democracy</li> <li>· Appropriate use of plebiscite</li> <li>· Power of constituency</li> <li>· Federal funding for road upgrading</li> </ul>
<b>Legal Issues</b>	<ul style="list-style-type: none"> <li>· Constitutional requirement for year-round mainland connection</li> <li>· Appropriate permits and inspections</li> </ul>
<b>Institutional Arrangements</b>	<ul style="list-style-type: none"> <li>· Role played by: <ul style="list-style-type: none"> <li>- federal departments</li> <li>- PEI Provincial departments</li> <li>- PEI Premier's Office</li> <li>- NB Provincial departments</li> <li>- Academia</li> <li>- NGOs</li> </ul> </li> </ul>

<b>Disciplinary Attributes</b>	<b>Major Area of Concern – v) Tourism and Recreation</b>
<b>Environmental Issues</b>	<ul style="list-style-type: none"> <li>· Negative effect of increased tourists on natural areas, particularly on:               <ul style="list-style-type: none"> <li>- Marshlands and wildlife areas</li> <li>- PEI dune system</li> <li>- PEI parks</li> </ul> </li> <li>· Duck-hunting access</li> <li>· Increased pollution and erosion of local beaches</li> <li>· Decreased marine environmental quality</li> <li>· Decreased fresh water quality and quantity</li> </ul>
<b>Social Impacts</b>	<ul style="list-style-type: none"> <li>· Increased visitorship</li> <li>· Increased tourist-related traffic</li> <li>· Over-crowding in key tourist areas</li> <li>· Increased illegal activities</li> <li>· Stressed infrastructural support, particularly               <ul style="list-style-type: none"> <li>- Water</li> <li>- Sewage</li> <li>- solid waste</li> <li>- hospitals, policing, fire</li> </ul> </li> <li>· Attraction of ferry to tourists</li> <li>· Impacts on Borden community</li> <li>· Changes in land use patterns from demands for               <ul style="list-style-type: none"> <li>- tourist/recreational facilities</li> <li>- roads</li> <li>- increased traffic congestion</li> <li>- non-resident ownership</li> </ul> </li> </ul>
<b>Ethical Issues</b>	<ul style="list-style-type: none"> <li>· Shoreline access to public</li> <li>· Costs of short-term gains from tourism</li> </ul>
<b>Economic &amp; Financial Considerations</b>	<ul style="list-style-type: none"> <li>· Importance of tourism sector</li> <li>· Importance of an enhanced tourism industry</li> <li>· Increased tourism-related jobs</li> <li>· Spin off economic activity, including               <ul style="list-style-type: none"> <li>- interpretation centres (natural areas and bridge)</li> </ul> </li> <li>· Impacts of tourist on local communities</li> <li>· Impacts of tourist by-pass of Borden</li> <li>· Benefits to food/restaurant industry</li> <li>· Benefits to accommodation sector</li> <li>· Improved reliability of bridge and ease of access to bring tourists to PEI</li> </ul>
<b>Political Issues</b>	<ul style="list-style-type: none"> <li>· Participatory democracy</li> <li>· Appropriate use of plebiscite</li> <li>· Power of constituency</li> </ul>
<b>Legal Issues</b>	<ul style="list-style-type: none"> <li>· Non-resident ownership</li> </ul>
<b>Institutional Arrangements</b>	<ul style="list-style-type: none"> <li>· Role played by:               <ul style="list-style-type: none"> <li>- PEI Provincial departments</li> <li>- PEI Premier's Office</li> <li>- Academia</li> <li>- NGOs</li> </ul> </li> </ul>



Disciplinary Attributes	Major Area of Concern – vi) Bridge Design, Construction & Operation
<b>Environmental Issues</b>	<ul style="list-style-type: none"> <li>· Technical feasibility of the project</li> <li>· Environmental effects of operating and repair of bridge</li> <li>· Noise during construction on terrestrial animals, birds; marine mammals; local community</li> <li>· Quarry activity, particularly on wildlife; local community; transportation route</li> <li>· Worker camps on birds; ground water supply</li> <li>· Habitat loss/degradation, in marine and terrestrial environment</li> <li>· Damage to rare plants</li> <li>· Filling-in wetlands</li> <li>· Increased risk to marine environment from marine sediment mining</li> <li>· Increased risk to marine environment from ice-out delay; ice jamming; ice scouring</li> <li>· Changes in oceanography of Strait</li> <li>· Bridge safety concerns, particularly from ice jams; wind loads; current speeds; waves; earthquakes; snow load; sea level rise</li> <li>· Decreased vehicular safety due to wind; ice; snow and blizzards</li> <li>· Accidental spills</li> <li>· Monitoring</li> </ul>
<b>Social Impacts</b>	<ul style="list-style-type: none"> <li>· Conflicts from scheduling bridge-related works</li> <li>· Closure contingency plan</li> <li>· Employee training</li> <li>· Worker use of wildlife area and Noonan's Marsh</li> <li>· Public health and safety, particularly lack of lane separation median; adequate emergency services; contingency plans</li> <li>· Unionization of construction workers, particularly <ul style="list-style-type: none"> <li>- benefits plan</li> <li>- 'no strike, no lock-out' agreement</li> </ul> </li> </ul>
<b>Ethical Issues</b>	<ul style="list-style-type: none"> <li>· Regional Benefits Implementation plan</li> </ul>
<b>Economic &amp; Financial Considerations</b>	<ul style="list-style-type: none"> <li>· Cost-effectiveness of project</li> <li>· Life span of bridge</li> <li>· Ownership of bridge</li> <li>· Financing of bridge</li> <li>· Toll structures</li> <li>· Procurement requirements</li> <li>· Ability of small local firms to compete</li> <li>· Increased employment from construction and operation jobs</li> </ul>
<b>Political Issues</b>	<ul style="list-style-type: none"> <li>· Participatory democracy</li> <li>· Appropriate use of plebiscite</li> <li>· Power of constituency</li> <li>· Federal funding for road upgrading</li> </ul>
<b>Legal Issues</b>	<ul style="list-style-type: none"> <li>· Constitutional requirement for year-round mainland connection</li> <li>· Appropriate permits and inspections</li> <li>· Transfer of ownership of lands to federal government</li> <li>· Bid packaging requirements</li> <li>· Compliance monitoring</li> </ul>

	· Reporting requirements
<b>Institutional Arrangements</b>	· Role played by: <ul style="list-style-type: none"><li>- Federal departments</li><li>- PEI Provincial departments</li><li>- PEI Premier's Office</li><li>- NB Provincial departments</li><li>- Academia</li><li>- NGOs</li></ul>

<b>Disciplinary Attributes</b>	<b>Major Area of Concern – vii) Process</b>
<b>Environmental Issues</b>	<ul style="list-style-type: none"> <li>· Adequate ecosystemic baseline data available to assess environmental concerns</li> <li>· Appropriate baseline studies conducted to address environmental concerns</li> <li>· Adequate assurance from technical experts               <ul style="list-style-type: none"> <li>- knowledge</li> <li>- judgements</li> <li>- models</li> </ul> </li> <li>· Comprehensive scoping of issues</li> <li>· All valuable environmental components identified</li> </ul>
<b>Social Impacts</b>	<ul style="list-style-type: none"> <li>· Necessity and support for review process</li> <li>· Adequate mitigation assurances               <ul style="list-style-type: none"> <li>- fisheries liaison committee</li> <li>- ferry workers committee</li> <li>- socio-economic committee (regional benefits implementation plan)</li> <li>- environmental effects monitoring plan (terrestrial committee)</li> <li>- environmental effects monitoring plan (aquatic committee)</li> </ul> </li> <li>· Divisiveness within local communities</li> <li>· “Luddites vs Progressives” atmosphere</li> </ul>
<b>Ethical Issues</b>	<ul style="list-style-type: none"> <li>· Fair and transparent process</li> <li>· Access to appropriate documentation in form and time to allow for meaningful intervention</li> <li>· Equal access to all who chose to participate</li> <li>· Public meetings               <ul style="list-style-type: none"> <li>- numbers held</li> <li>- frequency during process</li> <li>- adequate space, time</li> </ul> </li> <li>· Threat of reprisals for intervention</li> <li>· PWC conflict of interest</li> <li>· Due consideration of Panel recommendations</li> </ul>
<b>Economic &amp; Financial Considerations</b>	<ul style="list-style-type: none"> <li>· Cost of review process, particularly to               <ul style="list-style-type: none"> <li>- governments</li> <li>- project proponent</li> <li>- private sector</li> <li>- civil society</li> <li>- courts</li> </ul> </li> <li>· Adequacy of resources allocated for review process</li> </ul>
<b>Political Issues</b>	<ul style="list-style-type: none"> <li>· Participatory democracy</li> <li>· Appropriate mandate for EARP to examine</li> <li>· Appropriate structure and composition of Review Panel</li> <li>· Appropriate timing for review</li> <li>· Adequate duration for review</li> <li>· Recognition of advisory role of Panel</li> <li>· Recognition of decision making role of PWC Minister</li> </ul>
<b>Legal Issues</b>	<ul style="list-style-type: none"> <li>· EARP guidelines followed</li> <li>· Use of courts</li> </ul>
<b>Institutional Arrangements</b>	<ul style="list-style-type: none"> <li>· Insufficient attention to issues from media               <ul style="list-style-type: none"> <li>- Printed</li> <li>- Radio</li> </ul> </li> </ul>

- TV
- Role played by
  - governments
  - academia
  - NGOs
  - Premiers and politicians
  - proponent
  - labour organizations
  - industry associations
  - other

**Appendix 3. Fixed Link Case Study  
Weighted Rankings of Disciplinary Attributes by Category of Actors**

<b>Categories of Actors</b>	<b>Weighted Priority Ranking</b> (A value closest to 1.00 indicates the highest priority level)	<b>Disciplinary Attributes</b> ( <sup>1</sup> denotes highest priority; <sup>2</sup> denotes lowest priority)
Federal Politicians	2.86 3.18 4.67 2.24 <b>2.00</b> 5.75 7.00	Environment Social Ethical Economic <b>Political<sup>1</sup></b> Legal <i>Institutional<sup>2</sup></i>
Provincial Politicians	3.51 3.40 5.00 2.59 <b>1.76</b> 3.76 6.24	Environment Social Ethical Economic <b>Political<sup>1</sup></b> Legal <i>Institutional<sup>2</sup></i>
Federal Departments	<b>1.17</b> 4.66 5.18 3.63 3.88 4.59 4.71	<b>Environment<sup>1</sup></b> Social <i>Ethical<sup>2</sup></i> Economic Political Legal Institutional
FEARO Review Panel	<b>1.40</b> 2.60 2.40 4.40 6.00 6.60 4.40	<b>Environment<sup>1</sup></b> Social Ethical Economic Political <i>Legal<sup>2</sup></i> Institutional
Non-Governmental Organizations  Friends of the Island	1.75 2.50 <b>1.50</b> 5.33 4.67 6.00 5.00	Environment Social <b>Ethical<sup>1</sup></b> Economic Political <i>Legal<sup>2</sup></i> Institutional
Non-Governmental Organizations  Islanders for a Better Tomorrow	3.65 2.00 6.00 <b>1.00</b> 3.50 4.00 6.00	Environment Social Ethical <b>Economic<sup>1</sup></b> Political Legal <i>Institutional<sup>2</sup></i>

Categories of Actors	Weighted Priority Ranking (A value closest to 1.00 indicates the highest priority level)	Disciplinary Attributes ( <sup>1</sup> denotes highest priority; <sup>2</sup> denotes lowest priority)
Labour Organizations	3.60 <b>1.40</b> 3.60 4.60 5.40 6.60	Environment <b>Social<sup>1</sup></b> Ethical <b>Economic<sup>1</sup></b> Political Legal <i>Institutional<sup>2</sup></i>
Technical Experts	<b>1.85</b> 2.61 3.58 3.81 4.81 5.54 5.58	<b>Environment<sup>1</sup></b> Social Ethical Economic Political Legal <i>Institutional<sup>2</sup></i>
Business Associations	2.56 4.35 4.01 <b>2.32</b> 3.00 4.99 6.67	Environment Social Ethical <b>Economic<sup>1</sup></b> Political Legal <i>Institutional<sup>2</sup></i>
Companies	5.50 3.33 6.50 <b>1.33</b> 2.66 2.05 6.00	Environment Social Ethical <b>Economic<sup>1</sup></b> Political Legal <i>Institutional<sup>2</sup></i>

**Appendix 4. Fixed Link Case Study  
Weighted Rankings of Areas of Concern by Category of Actors**

<b>Categories of Actors</b>	<b>Weighted Priority Ranking (A value closest to 1 indicates the highest priority level)</b>	<b>Areas of Concern (<sup>1</sup> denotes highest priority; <sup>2</sup> denotes lowest priority)</b>
Federal Politicians	4.24 2.62 6.67 <b>1.50</b> 3.96 2.50 4.42	Ferry Service Fishery <i>Island Way of Life</i> <sup>2</sup> <b>Transportation</b> <sup>1</sup> Tourism & Recreation Bridge Design, etc. Process
Provincial Politicians PEI Politicians	5.00 4.00 6.00 3.00 <b>2.00</b> 6.00 3.5	Ferry Service Fishery <i>Island Way of Life</i> <sup>2</sup> Transportation <b>Tourism &amp; Recreation</b> <sup>1</sup> <i>Bridge Design, etc.</i> <sup>2</sup> Process
Provincial Politicians NB Politicians	5.30 3.31 5.94 2.65 3.30 2.98 <b>2.00</b>	Ferry Service Fishery <i>Island Way of Life</i> <sup>2</sup> Transportation Tourism & Recreation Bridge Design, etc. <b>Process</b> <sup>1</sup>
Federal Departments	4.85 <b>2.62</b> 4.25 4.45 5.26 <b>2.61</b> 3.75	Ferry Service <b>Fishery</b> <sup>1</sup> Island Way of Life Transportation <i>Tourism &amp; Recreation</i> <sup>2</sup> <b>Bridge Design, etc.</b> <sup>1</sup> Process
FEARO Review Panel	3.20 <b>1.40</b> 5.00 3.80 5.20 5.20 4.60	Ferry Service <b>Fishery</b> <sup>1</sup> Island Way of Life Transportation <i>Tourism &amp; Recreation</i> <sup>2</sup> <i>Bridge Design, etc.</i> <sup>2</sup> Process
Non-Governmental Organizations Friends of the Island	3.00 <b>1.25</b> 3.25 5.30 6.00 5.00 3.67	Ferry Service <b>Fishery</b> <sup>1</sup> Island Way of Life Transportation <i>Tourism &amp; Recreation</i> <sup>2</sup> Bridge Design, etc. Process

Categories of Actors	Weighted Priority Ranking (A value closest to 1 indicates the highest priority level)	Areas of Concern ( <sup>1</sup> denotes highest priority; <sup>2</sup> denotes lowest priority)
Non-Governmental Organizations	5.00 <b>2.64</b> 4.62	<i>Ferry Service</i> <sup>2</sup> <b>Fishery</b> <sup>1</sup> Island Way of Life
Islanders for a Better Tomorrow	2.98 3.33 3.00 4.63	Transportation Tourism & Recreation Bridge Design, etc. Process
Labour Organizations	<b>2.40</b> <b>2.40</b> 4.80 5.40 4.60 5.00 3.60	<b>Ferry Service</b> <sup>1</sup> <b>Fishery</b> <sup>1</sup> Island Way of Life <i>Transportation</i> <sup>2</sup> Tourism & Recreation Bridge Design, etc. Process
Technical Experts	4.35 <b>2.52</b> 4.42 4.15 4.80 3.90 4.57	Ferry Service <b>Fishery</b> <sup>1</sup> Island Way of Life Transportation <i>Tourism &amp; Recreation</i> <sup>2</sup> Bridge Design, etc. Process
Business Associations	3.00 1.66 <b>1.34</b> 5.68 4.02 5.00 4.00	Ferry Service Fishery <b>Island Way of Life</b> <sup>1</sup> <i>Transportation</i> <sup>2</sup> Tourism & Recreation Bridge Design, etc. Process
Companies	5.00 7.00 2.00 <b>1.00</b> 2.00 2.40 3.58	Ferry Service <i>Fishery</i> <sup>2</sup> Island Way of Life <b>Transportation</b> <sup>1</sup> Tourism & Recreation Bridge Design, etc. Process



**Appendix 5. Georges Bank Moratorium Case Study Issues  
Major Areas of Concern by Disciplinary Attributes**

<b>Discipline</b>	<b>Major Area of Concern – i) The Fishery; and ii) Georges Bank Ecosystem</b>
<b>Environmental Issues</b>	<ul style="list-style-type: none"> <li>· Physical environment of Georges Bank, including tides, currents, salinity, stratification, re-circulation</li> <li>· Biological environment of Georges Bank, including productivity levels of phytoplankton, zooplankton, fish, lobster, scallops, spawning and maturation periods</li> <li>· General interference with migration and feeding patterns of marine mammals and seabirds</li> <li>· Inconsistencies in scientific findings, knowledge gaps and lack of robust models to assist in decision-making</li> </ul>
<b>Social Impacts</b>	<ul style="list-style-type: none"> <li>· Fishing communities at risk in the event of negative impacts</li> <li>· Scheduling conflicts during exploratory phase</li> <li>· Adjustment to traditional way of life and community structure</li> </ul>
<b>Ethical Issues</b>	<ul style="list-style-type: none"> <li>· Uncertainty of impacts too great for sector and society to bear</li> <li>· Ethical redistribution of wealth from resource exploitation</li> <li>· Priority of renewable resource exploitation over non-renewable resource exploitation</li> <li>· Priority to existing fishing activities</li> </ul>
<b>Economic &amp; Financial Considerations</b>	<ul style="list-style-type: none"> <li>· Decrease in fish landings due to limitation of space on fishing grounds</li> <li>· Decrease in dollar value of fish, lobster, scallops caught</li> <li>· Negative effects of loss of spin-off economic activity in the fishery</li> <li>· Effects of accidental spills on market value of the resource</li> </ul>
<b>Political Issues</b>	<ul style="list-style-type: none"> <li>· Participatory democracy</li> <li>· Bilateral relations with the US</li> <li>· Power of constituency</li> </ul>
<b>Legal Issues</b>	<ul style="list-style-type: none"> <li>· Loss of fishing grounds due to loss of access to fishing grounds from exclusion zones and pipeline routes</li> <li>· Legislative requirement for public review</li> <li>· Existing regulatory process for petroleum activities</li> </ul>
<b>Institutional Arrangements</b>	<ul style="list-style-type: none"> <li>· Appropriateness of panel members and review structure</li> <li>· Adequacy of role played by               <ul style="list-style-type: none"> <li>- federal departments</li> <li>- provincial departments</li> <li>- academia</li> <li>- NGOs</li> <li>- communities</li> </ul> </li> </ul>

<b>Discipline</b>	<b>Major Area of Concern – iii) Petroleum-Related Activities</b>
<b>Environmental Issues</b>	<ul style="list-style-type: none"> <li>· Duration and effects of seismic activity               <ul style="list-style-type: none"> <li>- noise levels on mortality of eggs; larvae and adult fish; behaviour of adult fish</li> <li>- noise levels on marine mammals' behaviour</li> </ul> </li> <li>· Effects of drilling muds and cuttings               <ul style="list-style-type: none"> <li>- dispersion, settlement patterns and residence time</li> <li>- detection of impacts</li> <li>- tainting, biological affects on growth rate and reproductive potential</li> </ul> </li> <li>· Effects of produced water               <ul style="list-style-type: none"> <li>- dispersion, dilution, re-circulation</li> <li>- exposure to benthic organisms from surface sediments</li> </ul> </li> <li>· Effects of accidental spills and routine operational discharges</li> <li>· Inconsistencies in scientific findings, knowledge gaps and accuracy of models</li> </ul>
<b>Social Impacts</b>	<ul style="list-style-type: none"> <li>· Scheduling conflicts</li> <li>· Fishing communities at risk</li> </ul>
<b>Ethical Issues</b>	<ul style="list-style-type: none"> <li>· Legitimacy of ocean users</li> </ul>
<b>Economic &amp; Financial Considerations</b>	<ul style="list-style-type: none"> <li>· Increase in petroleum-related benefits in terms of job opportunities and spin-off activities</li> <li>· Decrease in fishery-related benefits in terms of value of the resource caught</li> </ul>
<b>Political Issues</b>	<ul style="list-style-type: none"> <li>· Participatory democracy</li> <li>· Power of constituency</li> </ul>
<b>Legal Issues</b>	<ul style="list-style-type: none"> <li>· Existing regulatory process for petroleum activities</li> </ul>
<b>Institutional Arrangements</b>	<ul style="list-style-type: none"> <li>· Appropriateness of panel members and review structure</li> <li>· Fair and transparent procedures</li> <li>· Role played by               <ul style="list-style-type: none"> <li>- federal departments</li> <li>- provincial departments</li> <li>- academia</li> <li>- NGOs</li> <li>- Communities</li> </ul> </li> </ul>

<b>Discipline</b>	<b>Major Area of Concern – iv) Co-Existence Issues</b>
<b>Environmental Issues</b>	<ul style="list-style-type: none"> <li>· Stressed water quality and quantity</li> <li>· Marine habitat degradation</li> <li>· Threats to biological resources and biodiversity</li> </ul>
<b>Social Impacts</b>	<ul style="list-style-type: none"> <li>· Sector conflicts</li> <li>· Tolerance level for “outsiders”</li> </ul>
<b>Ethical Issues</b>	<ul style="list-style-type: none"> <li>· Uncertainty of risk for an unknown amount of benefits or disadvantages</li> <li>· Unfair requirement to estimate risk when type, amount and location of resource unknown</li> </ul>
<b>Economic &amp; Financial Considerations</b>	<ul style="list-style-type: none"> <li>· Changes to the economy of SW Nova Scotia</li> <li>· Increased economic activity in selected sectors, during operational phase</li> <li>· Boom and bust scenario</li> </ul>
<b>Political Issues</b>	<ul style="list-style-type: none"> <li>· Participatory democracy</li> <li>· Power of constituencies</li> </ul>
<b>Legal Issues</b>	<ul style="list-style-type: none"> <li>· Review to include socio-economic and environmental impacts only of petroleum activities, not other sectors, especially fishing</li> </ul>
<b>Institutional Arrangements</b>	<ul style="list-style-type: none"> <li>· Role played by: <ul style="list-style-type: none"> <li>- federal departments</li> <li>- provincial departments</li> <li>- communities</li> <li>- academia</li> <li>- NGOs</li> </ul> </li> </ul>

<b>Discipline</b>	<b>Major Area of Concern – v) Offshore Regulatory Regime</b>
<b>Environmental Issues</b>	· Discounting of existing environmental review process to evaluate petroleum activities
<b>Social Impacts</b>	· Discounting of existing mechanisms in place to address social impacts of petroleum activities
<b>Ethical Issues</b>	· Input on decision to prohibit ocean user activities and potential benefits to NS society limited to a few participants
<b>Economic &amp; Financial Considerations</b>	· Discounting of established process for negotiating regional benefits
<b>Political Issues</b>	· Power of constituency · Power of CNSOPB
<b>Legal Issues</b>	· Constitutional requirement for year-round mainland connection · Appropriate permits and inspections
<b>Institutional Arrangements</b>	· Role played by: - review panel

<b>Discipline</b>	<b>Major Area of Concern – vi) Process</b>
<b>Environmental Issues</b>	<ul style="list-style-type: none"> <li>· Adequate ecosystemic baseline data available to assess environmental concerns</li> <li>· Appropriate baseline studies conducted to address environmental concerns</li> <li>· Adequate assurance from technical experts               <ul style="list-style-type: none"> <li>- knowledge</li> <li>- judgements</li> <li>- models</li> </ul> </li> <li>· Comprehensive scoping of issues</li> </ul>
<b>Social Impacts</b>	<ul style="list-style-type: none"> <li>· Necessity and support for review process</li> <li>· Adequate mitigation assurances</li> </ul>
<b>Ethical Issues</b>	<ul style="list-style-type: none"> <li>· Fair and transparent process</li> <li>· Lack of explicit decision-making criteria</li> <li>· Public meetings               <ul style="list-style-type: none"> <li>- numbers held</li> <li>- locations</li> <li>- frequency during process</li> <li>- adequate space, time</li> <li>- absence of verification of information presented</li> </ul> </li> <li>· Threat of reprisals for intervention</li> <li>· Lack of consideration of existing mechanisms for petroleum activities by Panel</li> </ul>
<b>Economic &amp; Financial Considerations</b>	<ul style="list-style-type: none"> <li>· Cost of review process, particularly to               <ul style="list-style-type: none"> <li>- governments</li> <li>- private sector</li> <li>- civil society</li> </ul> </li> <li>· Adequacy of resources allocated for review process</li> </ul>
<b>Political Issues</b>	<ul style="list-style-type: none"> <li>· Participatory democracy</li> <li>· Appropriate mandate for Panel to examine</li> <li>· Appropriate structure and composition of Review Panel</li> <li>· Appropriate timing for review</li> <li>· Adequate duration for review</li> <li>· Recognition of advisory role of Panel</li> <li>· Recognition of decision making role of Ministers</li> </ul>
<b>Legal Issues</b>	<ul style="list-style-type: none"> <li>· Absence of panel selection criteria in legislation</li> <li>· Appropriateness of mandate as outlined in legislation</li> </ul>
<b>Institutional Arrangements</b>	<ul style="list-style-type: none"> <li>· Role played by               <ul style="list-style-type: none"> <li>- federal and provincial departments</li> <li>- Premier, Ministers and other politicians</li> <li>- academia</li> <li>- NGOs</li> <li>- communities</li> <li>- private sector</li> <li>- industry associations</li> <li>- other</li> </ul> </li> </ul>

**Appendix 6. Georges Bank Moratorium Case Study  
Weighted Rankings of Disciplinary Attributes by Category of Actors**

<b>Categories of Actors</b>	<b>Weighted Priority Ranking</b> (A value closest to 1.00 indicates the highest priority level)	<b>Disciplinary Attributes</b> ( <sup>1</sup> denotes highest priority; <sup>2</sup> denotes lowest priority)
Federal Politicians	<b>1.00</b> 6.00 2.00 <i>7.00</i> 3.00 2.50 4.50	<b>Environment<sup>1</sup></b> Social Ethical <i>Economic<sup>2</sup></i> Political Legal Institutional
US Federal Politician	4.00 2.00 5.00 <b>1.00</b> 3.00 6.00 <i>7.00</i>	Environment Social Ethical <b>Economic<sup>1</sup></b> Political Legal <i>Institutional<sup>2</sup></i>
Provincial Politicians	3.00 6.66 <b>1.33</b> 5.37 2.34 5.00 4.33	Environment <i>Social<sup>2</sup></i> <b>Ethical<sup>1</sup></b> Economic Political Legal Institutional
Federal Departments	<b>1.00</b> <i>5.04</i> 3.18 4.95 4.01 4.23 4.49	<b>Environment<sup>1</sup></b> <i>Social<sup>2</sup></i> Ethical Economic Political Legal Institutional
Provincial Department	4.00 <i>7.00</i> <b>1.00</b> 6.00 2.00 3.00 5.00	Environment <i>Social<sup>2</sup></i> <b>Ethical<sup>1</sup></b> Economic Political Legal Institutional
US State Department	<b>1.00</b> 2.00 4.00 3.00 <i>7.00</i> 6.00 5.00	<b>Environment<sup>1</sup></b> Social Ethical Economic <i>Political<sup>2</sup></i> Legal Institutional

Categories of Actors	Weighted Priority Ranking (A value closest to 1.00 indicates the highest priority level)	Disciplinary Attributes ( <sup>1</sup> denotes highest priority; <sup>2</sup> denotes lowest priority)
Review Panel	<b>1.00</b> 3.00 2.00 4.00 5.00 7.00 6.00	<b>Environment<sup>1</sup></b> Social Ethical Economic Political <i>Legal<sup>2</sup></i> Institutional
Technical Experts	2.25 5.00 <b>1.75</b> 5.75 2.75 5.00 5.50	Environment Social <b>Ethical<sup>1</sup></b> <i>Economic<sup>2</sup></i> Political Legal Institutional
Non-Governmental Organizations · Fishing	<b>2.00</b> 3.33 <b>2.00</b> 3.00 5.00 6.33 6.66	<b>Environment<sup>1</sup></b> Social <b>Ethical<sup>1</sup></b> Economic Political Legal <i>Institutional<sup>2</sup></i>
Non-Governmental Organizations · Environmental	<b>1.00</b> 3.33 2.33 5.33 5.66 6.00 4.33	<b>Environment<sup>1</sup></b> Social Ethical Economic Political <i>Legal<sup>2</sup></i> Institutional
Business Associations	2.30 4.00 4.01 <b>1.50</b> 6.20 4.10 5.80	Environment Social Ethical <b>Economic<sup>1</sup></b> <i>Political<sup>2</sup></i> Legal Institutional
Business Associations · Fishing	2.00 4.20 3.83 <b>1.33</b> 3.57 5.22 6.66	Environment Social Ethical <b>Economic<sup>1</sup></b> Political Legal <i>Institutional<sup>2</sup></i>

Categories of Actors	Weighted Priority Ranking (A value closest to 1.00 indicates the highest priority level)	Disciplinary Attributes ( <sup>1</sup> denotes highest priority; <sup>2</sup> denotes lowest priority)
Business Associations · Petroleum	2.31 4.32 5.00 <b>2.33</b> <i>7.00</i> 3.00 4.00	Environment Social Ethical <b>Economic<sup>1</sup></b> <i>Political<sup>2</sup></i> Legal Institutional
Companies	3.25 3.88 4.50 <b>1.75</b> 3.37 5.00 5.12	Environment Social Ethical <b>Economic<sup>1</sup></b> Political Legal <i>Institutional<sup>2</sup></i>
Companies · Fishing	2.40 3.60 3.80 <b>1.60</b> 4.80 5.80 6.00	Environment Social Ethical <b>Economic<sup>1</sup></b> Political Legal <i>Institutional<sup>2</sup></i>
Companies · Petroleum	4.50 5.50 7.00 2.50 3.50 3.00 <b>2.00</b>	Environment Social <i>Ethical<sup>2</sup></i> Economic Political Legal <b>Institutional<sup>1</sup></b>



**Appendix 7. Georges Bank Moratorium Case Study  
Weighted Rankings of Areas of Concern by Category of Actors**

<b>Categories of Actors</b>	<b>Weighted Priority Ranking</b> (A value closest to 1.00 indicates the highest priority level)	<b>Areas of Concern</b> ( <sup>1</sup> denotes highest priority; <sup>2</sup> denotes lowest priority)
Federal Politicians	2.00 <b>1.00</b> 4.00 3.50 6.00 2.00	Fishing <b>Georges Bank ecosystem<sup>1</sup></b> Petroleum-related activities Co-existence <i>Offshore regulatory regime<sup>2</sup></i> Review process
US Federal Politician	<b>1.00</b> 2.00 3.00 6.00 4.00 5.00	<b>Fishing<sup>1</sup></b> Georges Bank ecosystem Petroleum-related activities <i>Co-existence<sup>2</sup></i> Offshore regulatory regime Review process
Provincial Politicians	4.00 <b>2.00</b> 5.33 <b>2.00</b> 5.00 2.66	Fishing <b>Georges Bank ecosystem<sup>1</sup></b> <i>Petroleum-related activities<sup>2</sup></i> <b>Co-existence<sup>1</sup></b> Offshore regulatory regime Review process
Federal Departments	1.80 <b>1.00</b> 3.50 3.20 5.26 4.40	Fishing <b>Georges Bank ecosystem<sup>1</sup></b> Petroleum-related activities Co-existence <i>Offshore regulatory regime<sup>2</sup></i> Review process
Provincial Department	5.00 4.00 6.00 2.00 3.00 <b>1.00</b>	Fishing Georges Bank ecosystem <i>Petroleum-related activities<sup>2</sup></i> Co-existence Offshore regulatory regime <b>Review process<sup>1</sup></b>
US State Department	2.00 <b>1.00</b> 3.00 4.00 5.00 6.00	Fishing <b>Georges Bank ecosystem<sup>1</sup></b> Petroleum-related activities Co-existence Offshore regulatory regime <i>Review process<sup>2</sup></i>
Review Panel	<b>1.00</b> 2.00 3.00 5.00 6.00 4.00	<b>Fishing<sup>1</sup></b> Georges Bank ecosystem Petroleum-related activities Co-existence <i>Offshore regulatory regime<sup>2</sup></i> Review process

Categories of Actors	Weighted Priority Ranking (A value closest to 1.00 indicates the highest priority level)	Areas of Concern ( <sup>1</sup> denotes highest priority; <sup>2</sup> denotes lowest priority)
Technical Experts	<b>2.67</b> 3.33 3.67 3.60 5.67 3.00	<b>Fishing<sup>1</sup></b> Georges Bank ecosystem Petroleum-related activities Co-existence <i>Offshore regulatory regime<sup>2</sup></i> Review process
Non-Governmental Organizations · Fishing	<b>1.67</b> <b>1.67</b> 3.33 3.33 5.00 6.00	<b>Fishing<sup>1</sup></b> <b>Georges Bank ecosystem<sup>1</sup></b> Petroleum-related activities Co-existence Offshore regulatory regime <i>Review process<sup>2</sup></i>
Non-Governmental Organizations · Environmental	2.33 <b>1.00</b> 3.66 3.00 5.00 6.00	Fishing <b>Georges Bank ecosystem<sup>1</sup></b> Petroleum-related activities Co-existence Offshore regulatory regime <i>Review process<sup>2</sup></i>
Business Associations	3.10 2.80 4.90 <b>2.50</b> 4.30 3.20	Fishing Georges Bank ecosystem <i>Petroleum-related activities<sup>2</sup></i> <b>Co-existence<sup>1</sup></b> Offshore regulatory regime Review process
Business Associations · Fishing	<b>2.00</b> 2.67 4.34 2.66 4.83 4.34	<b>Fishing<sup>1</sup></b> Georges Bank ecosystem Petroleum-related activities Co-existence <i>Offshore regulatory regime<sup>2</sup></i> Review process
Business Associations · Petroleum	5.75 3.00 5.75 2.25 3.75 <b>1.50</b>	<i>Fishing<sup>2</sup></i> Georges Bank ecosystem Petroleum-related activities Co-existence Offshore regulatory regime <b>Review process<sup>1</sup></b>
Companies	<b>2.63</b> <b>2.63</b> 4.12 3.25 4.20 4.20	<b>Fishing<sup>1</sup></b> <b>Georges Bank ecosystem<sup>1</sup></b> Petroleum-related activities Co-existence <i>Offshore regulatory regime<sup>2</sup></i> <i>Review process<sup>2</sup></i>
Companies · Fishing	<b>1.20</b> 1.80 4.00 3.80 4.20 6.00	<b>Fishing<sup>1</sup></b> Georges Bank ecosystem Petroleum-related activities Co-existence Offshore regulatory regime <i>Review process<sup>2</sup></i>

Categories of Actors	Weighted Priority Ranking (A value closest to 1.00 indicates the highest priority level)	Areas of Concern ( <sup>1</sup> denotes highest priority; <sup>2</sup> denotes lowest priority)
Companies  Petroleum	5.50 4.50 4.50 2.50 3.00 <b>1.00</b>	<i>Fishing</i> <sup>2</sup> Georges Bank ecosystem Petroleum-related activities Co-existence Offshore regulatory regime <b>Review process</b> <sup>1</sup>

## BIBLIOGRAPHY

### Primary Sources

#### Statutes

- Arctic Waters Pollution Prevention Act*, R.S.C. 1985, c.2 (1<sup>st</sup> Supp.),s.1.
- Auditor General Act*, R.S. 1985, c.A-17, s.2.
- Canada Newfoundland Atlantic Accord Implementation Act*, S.C.1987, c.3.
- Canada Newfoundland Atlantic Accord Implementation (Newfoundland) Act*, R.S.N. 1990, c. C-2.
- Canada Nova Scotia Offshore Petroleum Resources Accord Implementation (Nova Scotia) Act*, S.N.S. 1987, c.3.
- Canada Nova Scotia Offshore Petroleum Resources Accord Implementation Act*, S.C. 1988, c.28.
- Canada Shipping Act*, R.S.C. 1985, c. S-9.
- Canada-United States Free Trade Agreement Implementation Act*, S.C. 1988, c. 65.
- Canadian Bill of Rights*, S.C. 1960, c.44.
- Canadian Environmental Assessment Act*, S.C. 1992, c.37.
- Canadian Environmental Protection Act*, S.C. 1999, c.33.
- Canadian Laws Offshore Application Act*, S.C. 1990, c. 44.
- Constitution Act, 1867*. (U.K.), 30 & 31 Victoria, c.3.
- Constitution Act, 1982*, (includes Part 1, Schedule B, Charter of Rights and Freedoms).
- Constitution Amendment Proclamation, 1993* (Prince Edward Island).
- Fisheries Act*, R.S.C. 1985, c. F-14.
- Government Organization Act, 1979* (Department of Environment), 1978-79, c. 13.
- International Dolphin Conservation Program Act, 1997*, 105-42, 105<sup>th</sup> U.S. Congress.
- North American Free Trade Agreement Implementation Act*, S.C. 1993, c. 44.
- Northumberland Strait Crossing Act*, S.C. 1993, c.43.
- Nova Scotia Environment Act*, S.N.S., 1994-95, c. 1, s. 49.
- Oceans Act*, S.C. 1996, c.31.
- Outer Continental Shelf Lands Act*, 43 U.S.C. 1331 – 1356, P.L. 212 Ch. 345. August 1953, 67 Stat 462.

*Prince Edward Island Terms of Union, 1873.*

*Territorial Seas and Fishing Zones Act, R.S.C. 1985, c. T-8.*

#### Treaties and Agreements

*Gwich'in (Dene-Métis) Comprehensive Land Claim Agreement.* Ottawa: Department of Indian Affairs and Northern Development, 1992.

*James Bay and Northern Quebec 1975 Agreement and Complementary Agreements.* 1998 Edition, Government of Quebec, 1998.

*Nunavut Land Claims Agreement.* Ottawa: Published under the joint authority of the Tungavik and the Minister of Indian Affairs and Northern Development, 1993.

*Sahtu Dene and Métis Comprehensive Land Claim Agreement.* Ottawa: Department of Indian Affairs and Northern Development, 1993.

*The Western Arctic Claim: The Inuvialuit Final Agreement.* Ottawa: Department of Indian Affairs and Northern Development, 1984.

International Maritime Organization. (1992). *International Convention for the Prevention of Pollution from Ships, MARPOL 73/78 Consolidated Edition, 1991.* IMO: London, 1992.

United Nations. (1995). *Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea, of December 10, 1982, Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Stocks.* U.N. Doc A/CONF. 164/37 (1995).

United Nations Conference on Environment and Development. (1992). *Convention on Biological Diversity,* (done June 5, 1992, entered into force December 29, 1993).

United Nations Conference on Environment and Development. (1992). *Framework Convention on Climate Change,* (done June 5, 1992).

United Nations Convention on the Law of the Sea, done at Montego Bay on December 10, 1982, U.N. Doc. A/CONF.62/122, reprinted in United Nations, *The Law of the Sea: Official Text of the United Nations Convention on the Law of the Sea with Annexes and Index.* U.N. Sales No. E.83.V.5, 1983. New York: United Nations.

United Nations Environmental Programme (UNEP). (1995a). *Convention for the Protection of the Marine and Coastal Region of the Mediterranean, in UNEP (OCA)/MED IG 6/7, 1 July 1995.* UNEP.

#### Guidelines

1984. *Environmental Assessment and Review Process (EARP) Guidelines Order, SOR/84-467* 22 June 1984.

### Cases and Case Documents

*Attorney General for British Columbia v. Attorney General for Canada (British Columbia Fisheries Reference)*. [1914] A.C. 153. 15 D.L.R. 308 (P.C. 1913).

*Friends of the Island (Inc.) v Canada (Minister of Public Works) (T.D.)* [1993] 2.F.C. 299 (T.D.).

*Friends of the Oldman River Society v Canada (Minister of Transport)* [1992] 88 D.L.R. (4<sup>th</sup>) 42.

*R. v. Marshall*, [1999] 3 S.C.R. 533.

*Reference Re Ownership of Offshore Mineral Rights of British Columbia*, [1967] S.C.R. 792.

*Reference Re Seabed and Subsoil of the Continental Shelf Offshore Newfoundland*, [1984] 1 S.C.R. 86.

*Reference Re Ownership of the Bed of the Strait of Georgia and Related Areas*, [1984] 1 S.C.R. 388.

*PEI Potato Marketing Board v H.B. Willis Inc.* (1952), D.L.R. 146 (S.C.C).

Canada (1982). *International Court of Justice Case Concerning Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada/USA)*. Memorial submitted by Canada, September 1982.

Government of Prince Edward Island (PEI). (1990). *In Transcript Submission to the FEARO Public Review Panel*. Charlottetown, PE: Federal Environmental Assessment and Review Office, Volume 2.

International Court of Justice (ICJ). (1984). *Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada/USA)*. ICJ Decision of October 12, 1984.

International Court of Justice (ICJ). (1998). *Fisheries Jurisdiction Case (Spain v Canada)*, 4 December 1998, General List No. 96. Available on the internet at <http://www.lawschool.cornell.edu/library/cij/www/icjwww/idoCKET/iec/iecframe.htm> (accessed December 19, 2002).

United States (1982). *International Court of Justice Case Concerning Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada/USA)*. Memorial submitted by the United States of America, September 1982.

### Documents and Reports

Canada-USA. (1977). *Reciprocal Fisheries Agreement between the Government of Canada and the Government of the United States of America*, 24 February 1977.

Canada-USA. (1979). *Agreement between the Government of Canada and the Government of the United States of America on East Coast Fishery Resources*, 29 March 1979.

Department of Fisheries and Oceans (DFO). 1987. *Oceans Policy for Canada: A Strategy to Meet the Challenges on the Oceans Frontier*. Ottawa, Canada.

- Department of Fisheries and Oceans (DFO). (1998). *Possible Environmental Impacts of Petroleum Exploration Activities on the Georges Bank Ecosystem*. Dartmouth, NS: Department of Fisheries and Oceans Maritimes Region, Regional Habitat Status Report, 88/2E.
- Department of Fisheries and Oceans (DFO). (2001). *The Eastern Scotian Shelf Integrated Management (ESSIM) Initiative: Development of a Collaborative Management and Planning Process*. Dartmouth, NS: Oceans and Coastal Management Division, Oceans and Environment Branch.
- Department of Natural Resources (NRCan). (1997a). *Government of Canada Responds to the Report of the Joint Public Review Panel for the Sable Gas Projects*. Ottawa: Natural Resources Canada, 97/99.
- Department of Natural Resources (NRCan). (1997b). *Backgrounder - Government of Canada Responds to the Report of the Joint Public Review Panel for the Sable Gas Projects*. Ottawa: Natural Resources Canada, 97/99 (a).
- Department of Natural Resources (NRCan). (1999a). *Georges Bank Moratorium Extended*. Ottawa: Natural Resources Canada, 99/115.
- Department of Natural Resources (NRCan). (1999b). *Backgrounder - Georges Bank Moratorium Extended*. Ottawa: Natural Resources Canada, 99/115 (a).
- Department of Natural Resources (NRCan). (2000). *Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act: Georges Bank Moratorium Extended*. Jan 29, 2000, *Canada Gazette Part I*, 134, 275-276.
- Environment Canada. (1990). *Canada's Green Plan for a Healthy Environment*. Ottawa: Environment Canada.
- Government of British Columbia. (2002). *Northern Caucus Oil and Gas Task Force: Task Force Report on Offshore Oil and Gas*. Victoria, BC: Government of British Columbia.
- Government of Canada. (1994). *Vision Paper for a National Ocean Management Strategy*. Ottawa: Fisheries and Oceans Canada.
- Government of Canada. (1997a). *The Role of the Federal Government in the Oceans Sector*. Ottawa: Fisheries and Oceans Canada, Communications Directorate.
- Government of Canada. (1997b). *The Role of the Provincial and Territorial Governments in the Oceans Sector*. Ottawa: Fisheries and Oceans Canada, Communications Directorate.
- Government of Canada. (2000). *Canada's National Programme of Action for the Protection of the Marine Environment from Land-Based Activities (NPA)*. Ottawa: Public Works and Government Services Canada.
- Government of Canada. (2002a). *Canada's Ocean Strategy. Our Oceans, Our Future*. Ottawa: Fisheries and Oceans Canada, Oceans Directorate.
- Government of Canada. (2002b). *Canada's Oceans Strategy. Our Oceans Our Future. Policy*

- and Operational Framework for Integrated Management of Estuarine, Coastal and Marine Environments in Canada.* Ottawa: Fisheries and Oceans Canada, Oceans Directorate.
- Government of Newfoundland and Labrador. (2002). *Estimating the Value of the Marine, Coastal and Ocean Resources of Newfoundland and Labrador.* St. John's, NF: Department of Finance, Economics and Statistics Branch.
- Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP). (1990). *The State of the Environment.* Nairobi, Kenya. UNEP 1990, Report and Studies No. 39.
- Group of Experts on the Scientific Aspects of Marine Pollution (GESAMP). (1993). *Impact of Oil and Related Chemicals on the Marine Environment.* London: International Maritime Organization, Report and Studies No. 50.
- National Advisory Board on Science and Technology (NABST). (1994). *Opportunities from Our Oceans.* Ottawa: NABST Committee on Oceans and Coasts.
- National Marine Fisheries Service (NMFS). (1999). *Testimony of Penelope Dalton before Members of the Senate Subcommittee on Oceans and Fisheries Committee on Commerce, Science and Transportation.* Portland, ME: Senate Subcommittee on Oceans and Fisheries Committee on Commerce, Science and Transportation.
- National Research Council (NRC). (1991). *The Adequacy of Environmental Information for Outer Continental Shelf Oil and Gas Decisions: Georges Bank.* Washington, DC: National Academy Press.
- Province of Nova Scotia. (2001). *Seizing the Opportunities - Nova Scotia Energy Strategy.* Halifax, NS: Province of Nova Scotia.
- Public Works Canada (PWC). (1987). *Northumberland Strait Crossing - Jourimain Island, New Brunswick to Borden Point, Prince Edward Island: Stage I Proposal Call for Expression of Interest.* Ottawa: Public Works Canada.
- Public Works Canada (PWC). (1989a). *Bridge Concept Assessment.* Halifax, NS: Public Works Canada, prepared by Delcan-Stone and Webster.
- Public Works Canada (PWC). (1989b). *Supplement to the Bridge Concept Assessment.* Halifax, NS: Public Works Canada, prepared by Delcan-Stone and Webster.
- Public Works Canada (PWC). (1990). *Northumberland Strait Crossing Project: Federal Government's Response to the Recommendations from the Report of the Environmental Assessment Panel.* Ottawa: Public Works Canada.
- Public Works and Government Services Canada (PWGSC), Strait Crossing Inc. (SCI), & Jacques Whitford Environment Limited. (1997). *Environment - The Northumberland Strait Bridge Project.* Charlottetown, PE.
- Statistics Canada. (1989). *Census of 1986 Population.* Ottawa: Statistics Canada.
- Statistics Canada. (1992). *Census Catalogue.* Ottawa: Statistics Canada, #93-304.



- Statistics Canada. (1994). *Human Activity and the Environment 1994*. Ottawa: Statistics Canada and Ministry of Industry, Science and Technology.
- United Kingdom Department of Environment (UKDOE). (1991). *Policy Appraisal and the Environment: A Guide for Government Departments*. London: HMSO.
- United Nations *Driftnet Resolution*, UN General Assembly Resolution, UNGA No. 46/215, December 1991.
- United Nations Conference on Environment and Development. (1992). *Agenda 21: Programme for Action for Sustainable Development* UNCED. A/CONF. 151/26.
- United Nations Conference on Environment and Development. (1992). *Agenda 21: Programme for Action for Sustainable Development: Annex 1. Rio Declaration on the Environment and Development, June 3-14, 1992*. Rio de Janeiro, Brazil: UNCED. A/CONF. 151/26 (Vol I).
- United Nations Conference on Human Environment. (1972). *Declaration, Doc.A.CONF. 48/14, 1972*.
- United Nations Environmental Programme (UNEP). (1995b). *Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities*.
- United States (1999). *Senate Resolution 167*, Congressional Record, July 27, 1999, page S9397.
- World Bank. (1989). *Sub-Saharan Africa: From Crisis to Sustainable Growth*. Washington, D.C.: World Bank.
- World Bank. (1993). *Noordwijk Guidelines for Integrated Coastal Zone Management*. World Coast Conference, 1-5 November, 1993, Noordwijk, Netherlands.
- World Commission on Environment and Development (WCED). (1987). *Towards Sustainable Development: Our Common Future*. New York: Oxford University Press.

### **Secondary Sources**

- Abele, F. (1992). *How Ottawa Spends 1992-93: The Politics of Competitiveness*. Ottawa: Carleton University Press.
- Apostle, R. and G. Barrett (1992). A Theoretical Overview. In R. Apostle and G. Barrett (Eds.), *Emptying their nets: Small capital and rural industrialization in the Nova Scotia fishing community*. Toronto, ON: University of Toronto Press, pp. 11-38.
- Apostle, R., B. McCay and K. Mikalsen (1997). The Political Construction of an IQ Management System: The Mobile Gear ITQ Experiment in the Scotia-Fundy Region of Canada. In G. Palsson and G. Petursdottir (Eds.), *Social Implications of Quota Systems in Fisheries*. TemaNord, pp. 27-49.
- Argyris, C. and D.A.Schon (1978). *Organizational Learning: A Theory of Learning Perspective*. Reading, MA: Addison-Wesley.
- Atlantic Provinces Economic Council (APEC). (1992). *The Atlantic Economy in 1992 and 1993*:

*Turning the Corner*. APEC, Halifax, Nova Scotia.

- Atlantic Provinces Transportation Commission (APTC). (1990). *In Transcript Submission to the FEARO Public Review Panel*. Charlottetown, PE: Federal Environmental Assessment and Review Office, Volume 2.
- Atlantic Provinces Transportation Commission (APTC). (1992). Fixed Link Closer to Reality. *Tips and Topics*, 32, 1-2.
- Aucoin, P. (1995). *The New Public Management: Canada in Comparative Perspective*. Montreal: Institute for Research on Public Policy.
- Backus, R.H. and D.W. Bourne (1987). *Georges Bank*. Cambridge, MA: The MIT Press.
- Barker, M.L., and D. Soye (1994). Think Locally, Act Globally? The Transnationalization of Canadian Resource-Use Conflicts. *Environment*, 36, 12-36.
- Barry, G., T. Carstens, K.R. Croasdale and R. Frederking (1991). *Final Report of the Ice Committee, prepared for the Northumberland Strait Crossing Project*. Ottawa: Public Works Canada.
- Begley, L. (1993). *Crossing That Bridge: A Critical Look at the PEI Fixed Link*. Charlottetown, PE: Ragweed Press.
- Bellah, R.N. (1991). *The Good Society*. New York: Alfred A. Knopf.
- Berkes, F., J. Mathias, M. Kislalioglu and H. Fast. (2001). The Canadian Arctic and the Oceans Act: The Development of Participatory Environmental Research and Management. *Ocean & Coastal Management*, 44, 451-469.
- Birnie, P.W. (1993). The Law of the Sea and the United Nations Conference on Environment and Development. In N. Ginsberg, E. Mann-Borgese and J. Morgan (Eds.), *Ocean Yearbook, Vol 10*, Chicago: The University of Chicago Press, pp. 13-35.
- Bogetoft, P. and P. Pruzan (1991). *Planning with Multiple Criteria: Investigation, Communication and Choice*. New York: Elsevier Scientific Publishing Co.
- Bonine, J.E. (1992). Internet and Environmental Law. *Internet Society News*, 1, 26-27.
- Botts, L. and P. Muldoon (1996). *The Great Lakes Water Quality Agreement: Its Past Successes and Uncertain Future*. Hanover, NH: Institute of International Environmental Governance.
- Boudreau, P.R., D.C. Gordon, G.C. Harding, J.W. Loder, J. Black, W.D. Bowen, S. Campana, P.J. Cranford, K.F. Drinkwater, L. Van Eeckhaute, S. Gavaris, G.C. Hannah, G. Harrison, J.J. Hunt, J. MacMillan, G.D. Melvin, T.G. Milligan, D.K. Muschenheim, J.D. Neilson, F.H. Page, D.S. Pezzack, G. Robert, D. Sameoto and H. Stone. (1999). *The Possible Environmental Impacts of Petroleum Exploration Activities on the Georges Bank Ecosystem*. Dartmouth, NS: Public Works and Government Services Canada, Can. Tech. Rep. Fish. Aquat. Sci. 2259.

- Bradley, M.D. (1973). Decision-Making for Environmental Resource Management. *Journal of Environmental Management*, 1, 289-302.
- Brennan, G., and J.M. Buchanan. (1985). *The Reason of Rules: Constitutional Political Economy*. Cambridge: Cambridge University Press.
- Brown, J. (1993). The Process. In L. Begley (Ed.), *Crossing That Bridge: A Critical Look at the PEI Fixed Link*. (pp. 162-171). Charlottetown, PE: Ragweed Press.
- Buchanan, J.M. (1985). Rent Seeking and Profit Seeking. In J.M. Buchanan, R. Tollison, & G. Tullock (Eds.), *Towards a Theory of the Rent Seeking Society*. College Station: Texas A&M University Press.
- CanMac Economics Ltd., School for Resource and Environmental Studies, Enterprise Management Consultants and the Secretariat of the Atlantic Coastal Zone Information Steering Committee. (2002). *The Value of the Ocean Sector to the Economy of Prince Edward Island*.
- Caldwell, L.K. (1995). Science Assumptions and Misplaced Certainty in Natural Resources and Environmental Problem Solving. In J. Lemons (Ed.), *Scientific Uncertainty and Environmental Problem Solving*. Cambridge: Blackwell Science Inc., pp. 394-421.
- Capello, R. (1996). Industrial Enterprises and Economic Space: The Network Paradigm. *European Planning Studies*, 4, (4), 485-498.
- Carlsson, I. and S. Ramphal. (1995). *Our Global Neighbourhood. Report of the Commission on Global Governance*. Oxford: Oxford University Press.
- Casey, Wm. (1990). *In Transcript Submission to the FEARO Public Review Panel*. Charlottetown, PE: Federal Environmental Assessment and Review Office, Volume 3.
- Cashin, R. (1993). *Charting a New Course: Towards the Fishery of the Future. Report of the Task Force on Incomes and Adjustment in the Atlantic Fishery*. Ottawa: Department of Fisheries and Oceans.
- Charles, A.T. (1992). Fisheries Conflict: A Unified Framework. *Marine Policy*, 16, 5, 379-393.
- Charles, A.T. (1998). Living with Uncertainty in Fisheries: Analytical Methods, Management Priorities and the Canadian Groundfishery Experience. *Fisheries Research*, 37, 37-50.
- Chircop, A., H. Kindred, P. Saunders and D. VanderZwaag. (1995). Legislating for Integrated Marine Management: Canada's Proposed Oceans Act of 1996. 33 *Canadian Yearbook of International Law*, 305-331 (1995).
- Chircop, A., D. VanderZwaag, and P. Mushkat. (1995). The Gulf of Maine Agreement and Action Plan: A Novel But Nascent Approach to Transboundary Marine Environmental Protection. *Marine Policy*, 19, 317-333.
- Chircop, A. (2000). Teaching Integrated Coastal Management: Lessons from the Learning Arena. *Oceans & Coastal Management*, 43, 343-359.

- Clark, A.M., E.J. Friedman and K. Hochstetler. (1998). Sovereign Limits of Global Civil Society: A Comparison of Non-Governmental Participation in UN World Conferences on the Environment, Human Rights and Women. *World Politics*, 51 (1), 1-35.
- Clark, J. (1986). *Notes for a Statement in the House of Commons by the Secretary of State for External Affairs, the Right Honourable Joe Clark, P.C., M.P., on Canadian Sovereignty*. 10 September, 1986.
- Coffen-Smout, S. (1996). *Final Report of the Canadian Ocean Assessment: A Review of Canadian Ocean Policy and Practice*. Halifax, NS: International Ocean Institute.
- Cohen, E.B. and M.D. Grosslein, M.D. (1987). Production on Georges Bank Compared With Other Shelf Ecosystems. In R.H. Backus and D.W. Bourne (Eds.), *Georges Bank*. Cambridge, MA: The MIT Press, pp. 383-391.
- Coleman, W.D. and G. Skogstad. (1990). *Policy Communities and Public Policy in Canada: A Structural Approach*. Mississauga: Copp Clark Pitman Ltd.
- Coles Associates Ltd., P. Bein and Allardice and Associates Ltd. (1987). *Northumberland Strait Bridge Vessel Traffic and Bridge Safety Study*. Charlottetown, PE: Prepared for Public Works Canada.
- Costanza, R., F. Andrade, P. Antunes, M. van den Belt, D. Boersma, D.F. Boesch, F. Catarino, F., S. Hanna, K. Limburg, B. Low, M. Molitor, J. Periera, S. Rayner, R. Santos, J. Wilson, and M. Young. (1998). Principles for Sustainable Governance of the Oceans. *Science*, 282, 198-199.
- Couper, A.D. (1992). History of Ocean Management. In P. Fabri (Ed.), *Ocean Management in Global Change*. New York: Elsevier Applied Science.
- Courchene, T.J. (1995). Glocalization: The Regional/International Interface. *Canadian Journal of Regional Science*, 18 (1), 1-20.
- Creighton, J.L. (1983). An Overview to the Research Conference on Public Involvement and Social Impact Assessment. In M. Daneke, M.W. Garcia, & J.D. Priscoli (Eds.), *Public Involvement and Social Impact Assessment*. Boulder, CO: Westview Press.
- Cuthbertson, L.D. (1983). Evaluating Public Participation: An Approach for Government Practitioners. In G.A. Daneke, M.W. Garcia, & J.D. Priscoli (Eds.), *Public Involvement and Social Impact Assessment*. Boulder, CO: Westview Press.
- Czempiel, E.O. (1992). Governance and Democratization. In J.M. Rosenau & E.-O. Czempiel (Eds.), *Governance Without Government: Order and Change in World Politics*. Cambridge: Cambridge University Press, pp. 250-271.
- Dadswell, M.J. (1993). Potential Impacts of the Proposed Bridge on the Marine Environment and Fisheries of the Southern Gulf of St. Lawrence. In L. Begley (Ed.), *Crossing That Bridge: A Critical Look at the PEI Fixed Link*. (pp. 103-113). Charlottetown, PE: Ragweed Press.
- Davis, K. (1999). Co-Existence on Georges Bank. *Ocean Resources*, 17, 2-5, April, 1999.

- Deutsch, M. (1973). *The Resolution of Conflict: Constructive and Destructive Processes*. New Haven, Connecticut: Yale University Press.
- De Wolf, R. (2002). *Scotian Shelf Gas Supply Region, 2002 Report*. Calgary: Ziff Energy Group.
- Doern, G.B., L.A. Pal, and B.W. Tomlin (1996). *Border Crossings: The Internationalization of Canadian Public Policy*. Toronto: Oxford University Press.
- Dovers, S. (1995). A Framework for Scaling and Framing Policy problems in Sustainability. *Ecological Economics*, 12, 93-106.
- Dowling, I.J., F.L. Driscoll, A.F. MacDonald, and J.J. Revell. (1990). *In Transcript Submission to the FEARO Public Review Panel*. Charlottetown, PE: Federal Environmental Assessment and Review Office, Volume 3.
- Duncan, G. (1985). A Crisis of Social Democracy. *Parliamentary Affairs*, 38, 267-281.
- Dunn, Wm.N. (1994). *Public Policy Analysis: An Introduction. 2nd Edition*. Englewood Cliffs, NJ: Prentice Hall Inc.
- Easton, D. (1953). *The Political System*. New York: Knopf.
- Ecology Action Centre (EAC). (1999). *In Transcript Submission to the Georges Bank Public Review Panel*. Halifax, NS: Natural Resources Canada.
- Edson, G.M., D.L. Olson, and A.J. Petty. (2000). *Georges Bank Petroleum Exploration - Atlantic Outer Continental Shelf*. New Orleans: US Department of Interior, Minerals Management Service, Gulf of Mexico Outer Continental Shelf Region. OCS Report MMS 2000-13.
- Eisenhardt, K. (1989). Building Theories from Case Study Research. *Academy of Management Review*, 36, No. 4, 532-550.
- Fanning, L.M. (1999). *Community-Based Quota Management of the Fixed Gear Groundfish Fishery, Scotia-Fundy Region, Canada*. Dartmouth, NS: Prepared for Marine Fish Division, Science Branch, Maritimes Region, Department of Fisheries and Oceans.
- Fanning, L.M. (2000). The Co-Management Paradigm: Examining Criteria for Meaningful Public Involvement in Sustainable Marine Resource Management. *Ocean Yearbook*, 14, 80-113.
- FEARO Review Panel. (1990). *The Northumberland Strait Crossing Project. Report of the Environmental Assessment Panel*. Ottawa: Federal Environmental Assessment and Review Office, Panel Report No. 34.
- Ferguson, A. (1993). Popular Protest - The Prince Edward Island Fishermen's Association. In L. Begley (Ed.), *Crossing That Bridge: A Critical Look at the PEI Fixed Link*. (pp. 176-177). Charlottetown, PE: Ragweed Press.
- Finlayson, A.C. (1994). *Fishing for Truth: A Sociological Analysis of Northern Cod Stock Assessments from 1977-1990. Social and Economic Studies no 52*. St. John's, NF: Institute of Social and Economic Research, Memorial University.

- Fournier, R., J.L. Davies, J.T. Sears, A. Côté-Verhaaf, and K.W. Vollman. (1997). *Joint Public Review Panel Report: Sable Gas Projects*. Halifax, NS: CEAA.
- Fraser, C. (1996). *Integrated Coastal Area Management: A Canadian Retrospective and Update*. Ottawa: Fisheries and Oceans Canada, Presented to the United Nations Commission on Sustainable Development.
- Friedheim, R.L. (1999). Ocean Governance at the Millennium: Where We Have Been - Where We Should Go. *Ocean & Coastal Management*, 42, 747-765.
- Friedheim, R.L. (2000). Introduction to the Special Issue on Ocean Governance. *Ocean & Coastal Management*, 43, 137-139.
- Friends of the Island. (1992). *Position Paper: Northumberland Strait Fixed Crossing Environmental Concerns*. Charlottetown, PE: Friends of the Island, unpublished paper.
- Gardner Pinfold Consulting Economists Ltd. (1998). *Georges Bank Resources - An Economic Profile*. Halifax, NS: Prepared for the Georges Bank Review Panel.
- Ghali, A., G. Tadros and P.H. Langohr. (1996). Northumberland Strait Bridge: Analysis, Techniques and Results. *Canadian Journal of Civil Engineering*, 23, 86-97.
- Gibbins, R. (1998). Local Governance and Federal Political Systems. In UNESCO (Ed.), *Governance*. Oxford: Blackwell Publishers Ltd., pp. 163-169.
- Gibbins, R. (1999a). Taking Stock: Canadian Federalism and its Constitutional Framework. In L.A. Pal (Ed.), *How Ottawa Spends 1999-2000: Shape Shifting: Canadian Governance Toward the 21st Century*. Toronto: Oxford University Press.
- Gibbins, R. (1999b). Federalism and Regional Alienation. In M. Westmacott and H. Melloni (Eds.), *Challenges to Canadian Federalism*. Toronto: Prentice-Hall, pp. 40-51.
- Gold, E., J. Gratwick and P. Yee. 1996. *Canadian Oil Spill Response Capability: An Investigation of the Proposed Fee Regime*. Final Report (Ottawa: Fisheries and Oceans Canada, 1996).
- Goodin, R. (1996). Institutions and Their Design. In R. Goodin (Ed.), *The Theory of Institutional Design*. Cambridge: Cambridge University Press.
- Graves, F. (1999). Rethinking Government as if People Mattered: From 'Reaganomics' to Humanomics. In L.A. Pal (Ed.), *How Ottawa Spends 1999-2000: Shape Shifting: Canadian Governance Toward the 21st Century*. Toronto: Oxford University Press.
- Griffiths, F. (1987). *Politics of the Northwest Passage*. Kingston and Montreal: McGill-Queens University Press.
- Griffiths, F. (1999). The Northwest Passage In Transit. *International Journal*, Spring, 189-202.
- Haas, P.M. and E.B. Haas. (1995). Learning to learn: Improving International Governance. *Global Governance*, 1, 255-285.

- Hall, B.W. (1994). Information Technology and Global Learning for Sustainable Development: Promise and Problems. *Altern Social Transform Hum Govern*, 19, 99-132.
- Hammond, J.S., R.L. Keeney and H. Raiffa (1999). *Smart Choices: A Practical Guide to Making Better Decisions*. Boston, MA: Harvard Business School.
- Hammond, K.R., J. Rohrbaugh, J. Mumpower and L. Adelman. (1977). Social Judgement Theory: Application in Policy Formation. In M.F. Kaplan & S. Schwartz (Eds.), *Human Judgment and Decion Processes in Applied Settings*. New York: Academic Press, pp. 1-27.
- Hardin, G. (1968). The Tragedy of the Commons. *Science*, 162, 143-148.
- Harris, L., J.M. Baird, I.M. and J. Lein. (1997). *Terra Nova Development: An Offshore Petroleum Project. Report of the Terra Nova Development Project Environmental Assessment Panel*. St. John's, NF: CEAA.
- Hertzman, O. (1993). The Effects of Climate and Weather on a Bridge. In L. Begley (Ed.), *Crossing That Bridge: A Critical Look at the PEI Fixed Link*. Charlottetown, PE: Ragweed Press, pp. 85-95.
- Hildebrand, L.P. (1989). *Canada's Experience in Coastal Zone Management*. Halifax, NS: Oceans Institute of Canada.
- Hildebrand, L.P. (1997). Introduction to Special Issue of Community-Based Coastal Management. *Ocean & Coastal Management*, 36, Nos. 1-3, 1-9.
- Hogg, P.W. (1997). *Constitutional Law of Canada*. 4<sup>th</sup> Edition. Scarborough, Ontario: Carswell.
- Inglehart, R. (1997). *Modernization and Postmodernization: Cultural, Economic and Political Change in 43 Societies*. Princeton, NJ: Princeton University Press.
- Institute of Island Studies. (1987). *Public Meetings on the Fixed Crossing: A Report to the Office of the Premier, December 1987 to January 1988*. Charlottetown, PE: Prepared for Public Works Canada.
- Islanders for a Better Tomorrow. (1990). *A Discussion of Northumberland Strait Crossing Project, In transcript*. Charlottetown, PE: Federal Environmental Assessment and Review Office, Volume 3.
- Jacobson, J.L. and G. Boledovich. (1994). Ocean Governance Policy Coordination in the United States. In T.A. Mensah (Ed.), *Ocean Governance: Strategies and Approaches for the 21st. Century*. University of Hawaii, Honolulu: The Law of the Sea Institute, William S. Richardson School of Law, pp. 458-497.
- Jacques Whitford Environment Ltd. (JWEL). (1993). *Strategic Environmental Evaluation of SCI's Proposed Northumberland Strait Crossing Project*. Halifax, NS: Prepared for Strait Crossing Inc.
- Jamieson, D. (1994). Problems and Prospects for a Forest Service Program in the Human Dimensions of Global Change. In Anonymous, *Breaking the Mold: Global Change, Social*

*Responsibility, and Natural Resource Policy Workshop. May 1-3, Monterey, CA. (pp. 23-28). Corvallis, OR: Oregon State University Press.*

- Jenkins-Smith, H. (1990). *Democratic Politics and Policy Analysis*. Pacific Grove, CA: Brooks/Cole.
- Jessop, R. (1998). The Rise of Governance and the Risks of Failure: The Case of Economic Development. In UNESCO (Ed.), *Governance*. Oxford: Blackwell Publishers Ltd., pp. 29-45.
- Johnston, D.M. (1984). *Canada and the New International Law of the Sea*. Halifax, NS: Royal Commission on the Economic Union and Development Prospects for Canada.
- Johnston, D.M. (1993). Summation. In J.M. Van Dyke, D. Zaelke, & G. Hewison (Eds.), *Freedom for the Seas in the 21st Century: Ocean Governance & Environmental Harmony*. Washington, DC: Island Press.
- Johnston, D.M. and A. Sirivivatnanon, A. (1999). *Systems Compliance in Ocean Management: Summary Proceedings and Selected Papers. Southeast Asia Programme in Ocean Law, Policy and Management*. Bangkok: Innomedia Co. Ltd.
- Jordan, G. (1990). Sub-Governments, Policy Communities and Networks: Refilling the Old Bottles? *Journal of Theoretical Politics*, 2, 317-337.
- Jost Winery. (1990). *In Transcript Submission to the FEARO Public Review Panel*. Charlottetown, PE: Federal Environmental Assessment and Review Office, Volume 3.
- Joyner, C.C. (2000). The International Ocean Regime at the New Millennium: A Survey of the Contemporary Legal Order. *Ocean & Coastal Management*, 43, 163-203.
- Juda, L. (1996). *International Law and Ocean Use Management: The Evolution of Ocean Governance*. London: Routledge.
- Keeney, R.L., D. von Winterfeldt, D. and T. Eppel. (1990). Eliciting Public Values for Complex Policy Decisions. *Management Science*, 36, 1011-1030.
- Kirby, M.J.L. (1982). *Navigating Troubled Waters: A New Policy for the Atlantic Fisheries*. Ottawa: Task Force on Atlantic fisheries.
- Kleindorfer, P.R., H.V. Kunreuther and P.J.H. Schoemaker. (1993). *Decision Sciences: An Integrated Perspective*. Cambridge: Cambridge University Press.
- Knopp, T.B. and E.S. Caldbeck. (1990). The Role of Participatory Democracy in Forest Management. *Journal of Forestry*, 88, 13-18.
- Kooiman, J. (1993). Social-Political Governance: Introduction. In J. Kooiman (Ed.), *Modern Governance*. London: Sage, pp. 1-9.
- Kooiman, J. and M. Van Vliet, M. (1993). Governance and Public Management. In K. Eliassen & J. Kooiman (Eds.), *Managing Public Organizations*. London: Sage.



- Kurlansky, M. (1997). *Cod: A Biography of the Fish that Changed the World*. Canada: Alfred A. Knopf.
- Lawrence, R.L. and S.E. Daniels. (1996). *Public Involvement in Natural Resource Decision-Making: Goals, Methodology, and Evaluation*. Corvallis, OR: Forest Research Laboratory Publication, Oregon State University.
- Lawrence, R.L., S.E. Daniels and G.H. Stankey. (1997). Procedural Justice and Public Involvement in Natural resource Decision-Making. *Society and Natural Resources*, 10, 577-589.
- Levy, J.P. (1993). A National Ocean Policy: An Elusive Quest. *Marine Policy*, 17, 75-80.
- Lindquist, E.A. (1992). Public Managers and Policy Communities: Learning to Meet New Challenges. *Canadian Public Administration*, 35, 127-159.
- Loucks, L., A.T. Charles and M. Butler. (1998). *Managing Our Fisheries, Managing Ourselves*. Halifax, NS: Gorsebrook Research Institute, St. Mary's University.
- MacDonald, C. (1997). *Bridging the Strait: The Story of the Confederation Bridge*. Toronto: Dundurn Press.
- Machiavelli, N. (1997). *The Prince*. Trans. O.E. Detmold. Ware, Hertfordshire: Wordsworth Editions Ltd.
- MacLean, B.C. and J.A. Wade. (1992). Petroleum Geology on the Continental Margin South of the Islands of St. Pierre and Miquelon Offshore Eastern Canada. *Bulletin of Canadian Petroleum Geology*, 40, 222-253.
- Macnab, R. (1994). *Canada and Article 76 of the Law of the Sea: Defining the Limits of Canadian Resource Jurisdiction Beyond 200 Nautical Miles in the Atlantic and Arctic Oceans*. Atlantic Geoscience Centre, Geological Survey of Canada Open File 3209. Geological Survey of Canada, Dartmouth, Nova Scotia, 15 May, 1994.
- MacNeil, T. (2002). *Commissioner's Report: Results of the Public Review on the Effects of Potential Oil and Gas Exploration Offshore Cape Breton*. Halifax, NS: CNSOPB.
- Mandale Consulting, CanMac Economics Ltd., North American Policy Group, Dalhousie University. (1998). *Estimating the Economic Value of Coastal and Ocean Resources: The Case of Nova Scotia*.
- Mandale Consulting. (2000). *Economic Value of the Marine Resources in New Brunswick*.
- Mann-Borgese, E. (1995). *Ocean Governance and the United Nations*. Halifax, NS: Centre for Foreign Policy Studies, Dalhousie University.
- Marine Atlantic. (1990). *In Transcript Submission to the FEARO Public Review Panel*. Charlottetown, PE: Federal Environmental Assessment and Review Office, Volume 2.
- Marine Atlantic. (1992). *Report #R05*. Moncton, NB: Marine Atlantic.

- Massachusetts Fishermen's Partnership (MFP). (1999). *In Transcript: Submission to the Georges Bank Public Review Panel*. Halifax, NS: CNSOPB.
- Matland, R. (1995). Synthesizing the Implementation Literature: The Ambiguity-Conflict Model of Policy Implementation. *Journal of Public Administration Research and Theory*, 5, 145-174.
- Matthews, D.R. (1993). *Controlling Common Property: Regulating Canada's East Coast Fishery*. Toronto: University of Toronto Press.
- Mayer, T. (1990). *In Transcript Submission to the FEARO Public Review Panel*. Charlottetown, PE: Federal Environmental Assessment and Review Office, Volume 2.
- McDorman, T.L. (1995). The West-Coast Salmon Dispute: A Canadian View of the Breakdown of the 1985 Treaty and the Transit Licence Measure. *Loyola of Los Angeles International and Comparative Law Journal*, 17, 477-506.
- McGeoghegan, M. (1990). *In Transcript Submission to the FEARO Public Review Panel*. Charlottetown, PE: Federal Environmental Assessment and Review Office, Volume 1.
- McMillan, T. (1988). *The Fixed Link*. Charlottetown, PE: Notes for an address to The Kiwanis Club of Charlottetown Inc., CP Prince Edward Hotel.
- McRae, D. and G. Munro. (1989). *Canadian Ocean Policy: National Strategies and the New Law of the Sea*. Vancouver: University of British Columbia Press.
- Miles, E.L. (1989). Concept, Approaches and Applications in Sea Use Planning and Management. *Ocean Development and International Law*, 20, 213-238.
- Miles, E.L. (1999). The Concept of Ocean Governance: Evolution Toward the 21st Century and the Principle of Sustainable Ocean Use. *Coastal Management*, 27, 1-30.
- Miles, M.B. and A.M. Huberman. (1994). *Qualitative Data Analysis: An Expanded Source Book, 2nd Edition*. London, New Delhi, Thousand Oaks: Sage Publications.
- Millar, C. and G.M. Winder. (1999). Tragedies in the "Resource Cycle" Rhetoric: A Response to R.A. Clapp. *Canadian Geographer*, 43, 323-327.
- Mitchell, C.L. (1998). Sustainable Oceans Development: The Canadian Approach. *Marine Policy*, 22, 393-412.
- Mullally, J., S. Holtz and R.H. Loucks. (1999). *Georges Bank Review Panel Report*. Halifax, NS: Natural Resources Canada and Nova Scotia Petroleum Directorate.
- Mullan, D.J. (2001). *Administrative Law*. Toronto: Irwin Law.
- Nichols, S., D. Monahan and M. Sutherland. (2000). *Good Governance of Canada's Offshore and Coastal Zone: Towards an Understanding of the Marine Boundary Issues*. Presented at Coastal Zone Canada 2000, St. John, NB, September 2000.
- Nissani, M. (1997). Ten Cheers for Interdisciplinarity. The Case for Interdisciplinary Knowledge

- and Research. *The Social Science Journal*, 34, 2, 201-216.
- Nozick, R. (1981). *Philosophical Explanations*. Cambridge: Harvard University Press.
- O'Riordan, T. (1992). *The Precautionary Principle in Environmental Management*. Norwich: Centre for Social and Economic Research on the Global Environment, CSEGE Working Paper 92-03.
- Offshore Technology Association of Nova Scotia (OTANS). (1999). Let's Move Forward. *Ocean Resources*, 17, Editorial, Apr, 1999.
- Osborne, D. and T. Gaebler. (1992). *Reinventing Government*. Reading, MA: Addison-Wesley.
- Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge: Cambridge University Press.
- Ostrom, E. (1992). Community and the Endogenous Solution of Common Problems. *Journal of Theoretical Politics*, 4, 343-351.
- P. Lane & Associates Ltd. and Washburn & Gillis Associates Ltd. (1988). *Generic Initial Environmental Evaluation of the Northumberland Strait Crossing Project*. Halifax, NS: Prepared for Public Works Canada.
- Pagden, A. (1998). The Genesis of Governance and Enlightenment Conceptions on the Cosmopolitan World Order. In UNESCO (Ed.), *Governance*. (pp. 7-15). Oxford: Blackwell Publishers Ltd.
- Pal, L.A. (1999a). Shape Shifting: Canadian Governance Toward the 21st Century. In L.A. Pal (Ed.), *How Ottawa Spends 1999-2000: Shape Shifting: Canadian Governance Toward the 21st Century*. Toronto: Oxford University Press, pp. 1-19.
- Pal, L.A. (1999b). Wired Governance - The Political Implications of the Information Revolution. In R. Boyce (Ed.), *The Communications Revolution at Work: The Social, Economic and Political Impacts of Technological Change*. (pp. 11-37). Montreal: McGill University Press.
- Paquet, G. (1999). Tectonic Changes in Canadian Governance. In L. Pal (Ed.), *How Ottawa Spends 1999-2000: Shape Shifting : Canadian Governance Toward the 21st Century*. Toronto: Oxford University Press, pp. 75-111.
- Paquet, G. (2000). *The New Governance, Subsidiarity and the Strategic State*. Hanover: OECD Forum for the Future Conference on the 21st Century Governance: Power in the Global Knowledge Economy and Society.
- Paquet, G. and K. Wilkins. (2002). *Ocean Governance – an enquiry into stakeholdering*. Centre on Governance, Ottawa: University of Ottawa.
- Perry, J. and E.L. Vanderklein. (1995). Environmental Problem Solving in an Age of Electronic Communications: Towards an Integrated or Reductionist Model. In J. Lemons (Ed.), *Scientific Uncertainty and Environmental Problem Solving*. (pp. 345-376). Cambridge: Blackwell Science Inc.

- Pfaffenberger, B. (1990). *Democratizing Information: On-Line Databases and the Rise of End-User Searching*. Boston: G.K. Hall.
- Pitcher, T.J. (1999). *Rapfish, A Rapid Appraisal Technique for Fisheries and its Application to the Code of Conduct for Responsible Fisheries*. Rome: FAO, FAO Fisheries Circular No. 947.
- Pollitt, C. (1995). Management Techniques for the Public Sector: Pulpit and Practice. In B.G. Peters & D.J. Savoie (Eds.), *Governance in a Challenging Environment*. Montreal and Kingston: Canadian Centre for Management Development and McGill-Queen's University Press.
- Porter Dillon Ltd. (1987). *Fishery/Environmental Resources for the Northumberland Strait Crossing Project. Volume I: Bridge Option - Final Report*. Prepared for Public Works Canada.
- Prince Edward Island Tourism Industry Association (PEITIA). (1990). *In Transcript Submission to the FEARO Public Review Panel*. Charlottetown, PE: Federal Environmental Assessment and Review Office, Volume 2.
- Prince, M.J. (1987). The Mulroney Agenda: A Right Turn for Ottawa? In M.J. Prince (Ed.), *How Ottawa Spends 1986-87: Tracking the Tories*. (pp. 10-11). Toronto: Methuen.
- Prince, M.J. (1988). *How Ottawa Spends 1987-88: Restraining the State*. Toronto: Methuen.
- Procter, R.M., G.C. Taylor and J.A. Wade. (1984). *Oil and Natural Gas Resources of Canada - 1983*. Geological Surveys of Canada, Paper 83-31.
- Pross, A.P. (1986). *Group Politics and Public Policy*. Toronto: Oxford University Press.
- Pross, A.P. and S. McCorquodale. (1990). The State, Interests and Policy Making in the East Coast Fishery. In W.D. Coleman & G. Skogstad (Eds.), *Policy Communities and Public Policy in Canada: A Structural Approach*. Mississauga: Copp-Clark Pitman Ltd., pp. 34-58.
- Pureza, J.M. (1999). International Law and Ocean Governance: Audacity and Modesty. *International Law and Ocean Governance*, 8, 73-77.
- Renaud, M., P. Wiggin, P. and J. Charron. (2002). Social Sciences in Canada: Changing Landscapes, Changing Challenges. *Canadian Journal of Policy Research*, 3, 96-104.
- Rhodes, R. (1996). The New Governance: Governing Without Government. *Political Studies*, 44, 652-667.
- Rice, J.C., C. Morry, T. Sephton, G. Selbert, S. Messieh, B. Hargrave and R.D. Alexander, R.D. (1989). *A Review of DFO's Concerns Regarding Possible Impacts of a Fixed-Link Crossing of Northumberland Strait*. Canadian Atlantic Fisheries Scientific Advisory Committee (CAFSAC), CAFSAC Research Document 89/16.
- Rice, J. (2002). Sustainable Uses of the Ocean's Living Resources. *Canadian Journal of Policy Research*, 3, 80-87.

- Rocher, F. and M. Smith. (1995), *New Trends in Canadian Federalism*. Peterborough, Ontario: Orchard Park, NY: Broadview Press.
- Rosenau, J.N. (1992). Governance, Order, and Change in World Politics. In J.M. Rosenau & E.-O. Czempiel (Eds.), *Governance Without Government: Order and Change in World Politics*. Cambridge: Cambridge University Press, pp. 1-29.
- Rosenau, J.N. (1995). Governance in the Twenty-First Century. *Global Governance*, 1, 13-43.
- Rosenau, J.N. and E.-O. Czempiel. (1992). *Governance Without Government: Order and Change in World Politics*. Cambridge: Cambridge University Press.
- Runnalls, D. and F. Bregha. (2002). The Canadian Record Since Rio. *Canadian Journal of Policy Research*, 3, 57-64.
- Russell, P.H. (1985). The Supreme Court and Federal-Provincial Relations: The Political Use of Legal Resources. *Canadian Public Policy* 11:2, 161-170.
- Sabatier, P.A. (1987). Knowledge, Policy-Oriented Learning, and Policy Change: An Advocacy Coalition Framework. *Knowledge*, 8, 649-692.
- Savoie, D.J. (1992). *Building an Island Economy: Strengths, Opportunities and Challenges*. Charlottetown, PE: Government of Prince Edward Island.
- Savoie, D.J. (1994). *Thatcher, Reagan and Mulroney: In Search of a New Democracy*. Pittsburgh: University of Pittsburgh Press.
- Schattschneider, E. (1975). *The Semisovereign People*. Hinsdale, IL: Dryden Press.
- Scholte, J.A. (1999). *Global Civil Society: Changing the World?* Coventry: Centre for the Study of Globalisation and Regionalism, University of Warwick, CSGR Working Paper #31/99.
- Schrecker, T.F. (1985). *Political Economy of Environmental Hazards*. Protected Life Series, Law Reform Commission of Canada. Minister of Supply and Services Canada.
- Sears, P.B. (1954). Human Ecology: A Problem in Synthesis. *Science*, 10, 959-963.
- Shaw, D.G., J.W. Farrington, M.S. Connor, B.W. Tripp, B.W. and J.R. Schubel. (1999). *Potential Environmental Consequences of Petroleum Exploration and Development on Georges Bank*. Boston, MA: New England Aquarium.
- Shaw, D.G., J.W. Farrington, M.S. Connor, B.W. Tripp, and J.R. Schubel. (2000). The Role of Environmental Scientists in Public Policy: A Lesson from Georges Bank. *Marine Pollution Bulletin*, 40, 727-730.
- Shaw, T. (1998). Island Governance in the New Millennium. Unpublished paper prepared for the ISLE Island Governance Workshop. Halifax, NS. Dalhousie University.
- Shindler, B. and K.A. Cheek. (1999). Integrating Citizens in Adaptive Management: A Propositional Analysis. *Conservation Ecology*, 3, 9.

- Silverman, D. (2000). *Doing Qualitative Research: A Practical Handbook*. London: Sage Publication.
- Singleton, S. and M. Taylor. (1992). Common Property, Collective Action and Community. *Journal of Theoretical Politics*, 4, 309-324.
- Soares, M. (1998). *The Ocean, Our Future. The Report of the World Commission on the Oceans*. Cambridge: Cambridge University Press.
- Stoker, G. (1998). Governance as Theory: Five Propositions. In UNESCO (Ed.), *Governance*. (pp. 17-26). Oxford: Blackwell Publishers Ltd.
- Strait Crossing Inc. (SCI). (1992). *Draft Environmental Management Plan for the Northumberland Strait Crossing Project*. Prepared for Public Works Canada.
- Strait Crossing Inc. (SCI). (1993). *Environmental Management Plan for the Northumberland Strait Crossing Project*. Prepared for Publics Works Canada and the Environment Committee.
- Strong, D., P. Gallagher and D. Muggeridge. (2002). *British Columbia Offshore Hydrocarbon Development: Report of the Scientific Review Panel*. Victoria, BC: BC Ministry of Energy and Mines.
- The Living Webster Encyclopedic Dictionary of the English Language*, English Language Institute of America, 1975.
- Toner, G. and T. Conway. (1996). Environmental Policy. In G.B. Doern, L.A. Pal, & B.W. Tomlin (Eds.), *Border Crossings: The Internationalization of Canadian Public Policy*. Toronto: Oxford University Press, pp. 108-144.
- Vallega, A. (2001). *Sustainable Ocean Governance: A Geographical Perspective*. New York: Routledge.
- Van Dyke, J.M., D. Zaelke and G. Hewison. (1993). *Freedom for the Seas in the 21st Century: Ocean Governance & Environmental Harmony*. Washington D.C.: Island Press.
- VanderZwaag, D. (1983). *The Fish Feud*. Toronto, Ontario: Lexington Books, D.C. Heath and Co.
- VanderZwaag, D., B. Davis, M. Haward and L.K. Kriwoken. (1996). Getting National Ocean Acts Together. In L.K. Kriwoken, M. Haward, D. VanderZwaag, & B. Davis (Eds.), *Ocean Law and Policy in the Post-UNCED Era: Australian and Canadian Perspectives*. The Hague: International Environmental law and Policy 38, Kluwer Law International, pp. 419-422.
- von Moltke, K. (1999). The Dilemma of the Precautionary Principle in International Trade. *Bridges (ICTSD)*, Vol. 3, No. 6 (July – August, 1999). Available on the internet at <http://www.iisd.org/pdf/precaution.pdf> (Accessed December 19, 2002).
- Wade, J.A., G.R. Campbell, R.M. Proctor and G.C. Taylor. (1989). *Petroleum Resources of the Scotian Shelf*. Geological Survey of Canada, Paper 88-10.
- Wapner, P. (1995). Politics Beyond the State: Environmental Activism and World Civic Politics. *World Politics*, 47, 311-340.

- Waterman, M. 1991. *The Gulf of Maine Action Plan, 1991-2000*. Gulf of Maine Council on the Marine Environment.
- Weale, D. (1990). *In Transcript Submission to the FEARO Public Review Panel*. Charlottetown, PE: Federal Environmental Assessment and Review Office, Volume 3.
- Webster, F. (1994). What Information Society? *Information Society*, 10, 1-23.
- Wells, P.G., R.A. Duce and M.E. Huber. (2002). Caring for the Sea - Accomplishments, Activities and Future of the United Nations GESAMP (the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection). *Ocean & Coastal Management*, 45, 77-89.
- Wilson, E.O. (1998). *Consilience: The Unity of Knowledge*. New York: Vintage Books, a division of Random House, Inc.
- Wondolleck, J.M. and S.L. Yaffee. (2000). *Making Collaboration Work*. Washington: Island Press.
- Yin, R.K. (1989). *Case Study Research: Design and Methods*. Newbury Park, CA: Sage Publications.
- Young, O.R. (1989). *International Cooperation: Building Regimes for Natural Resources*. Ithaca, NY: Cornell University Press.
- Young, O.R. (1998). Institutional Uncertainties in International Fisheries Management. *Fisheries Research*, 37, 211-224.