

POLICY AND DECISION-MAKING IN THE NORTH:  
THE CASE OF LANCASTER SOUND

by

MARGARET ANNE DAVIDSON

B.A. The University of British Columbia, 1978

A THESIS SUBMITTED IN PARTIAL FULFILMENT  
OF THE REQUIREMENTS FOR THE DEGREE  
OF MASTER OF ARTS

in

THE FACULTY OF GRADUATE STUDIES  
(School of Community and Regional Planning)

We accept this thesis as conforming  
to the required standard

THE UNIVERSITY OF BRITISH COLUMBIA

May, 1981

© Margaret Anne Davidson, 1981

In presenting this thesis in partial fulfilment of the requirements of an advanced degree at the University of British Columbia, I agree that the Library shall make it freely available for reference and study. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by the Head of my department or by his or her representatives. It is understood that copying or publication of this thesis for financial gain shall not be allowed without my written permission.

ABSTRACT

This thesis examines federal government decision-making in the North using the decision process regarding a proposal by Norlands Petroleum Ltd. to drill an exploratory well in Lancaster Sound as a case study. Lancaster Sound is the eastern "throat" of the Northwest Passage, and an area of great potential resource-use conflict. The Sound can be likened to an oasis in the Arctic "desert" because of the variety and abundance of wildlife it supports. The traditional way of life of Inuit people in the region is tied to these wildlife resources. However, in recent years promising geologic structures which may contain recoverable oil have been identified under the Sound. Accordingly, the Department of Indian Affairs and Northern Development (DIAND) issued an Approval-in-Principle for an exploratory drilling proposal by Norlands Petroleum Ltd. in 1974. Norlands' proposal is one of several projects comprising the new and potentially hazardous programme to drill for oil and gas offshore in the Canadian Arctic. As well, arctic mines are being developed and there are plans to use the Sound year-round for shipping minerals and petroleum.

Because of the complex issues involved, federal government decisions for Lancaster Sound affect a wide range of interests. The overall purpose of this study is to analyze the government's policy responses to these issues and to examine the decision process it has employed over a ten year span. Specific objectives include:

- 1) to provide the historical background and policy environment as a context for the Lancaster Sound decision process;

- 2) to provide a detailed chronology of events and decisions from project inception through submission to, and evaluation by the federal Environmental Assessment and Review Process (EARP)
- 3) to analyze this decision process and suggest improvements.

To achieve these objectives, I first derived a framework of criteria for an "optimal" decision process based on common-sense and democratic principles through review of relevant literature. Literature on decision theory was also reviewed in developing my analytic framework.

Information for a historical perspective on the policy environment for northern development was provided through the literature as well. Specific information on the case study was obtained through background documents, personal interviews and correspondence with government and industry representatives, and results of a questionnaire to intervenors involved in the EARP associated with the drilling proposal.

My analysis of federal government decision making in this case reveals a wholly reactive, incremental approach to northern planning and failure to coordinate and integrate policies related to northern development, energy, environmental protection and social concerns. The following summarizes my findings:

- Conflicts between policies were not addressed. Rapid industrial expansion seemed to be the underlying policy for early decisions. As public awareness grew, the government was forced to simply react to other pressures, so that Norlands was alternately encouraged and frustrated in their endeavors.



- In the early 1970's, DIAND, as the regulatory agency, interacted almost exclusively with oil companies. Other legitimate interests were excluded or lacked the necessary information and resources to become involved.
- Because of this narrow approach and the absence of any co-ordinating policy or planning framework, alternatives reflecting a range of values and preferences were not considered.
- The decision process did not provide a constructive role for other government agencies.
- The EARP review provided a loosely-structured, open, interactive forum for an exchange of views on the future of the area. Despite major structural and procedural weaknesses, this review was a catalyst that may change the whole course of events for Lancaster Sound.
- The ethical question of whether southern Canadians have the right to impose their wishes on the Inuit in the absence of any treaty signed by these people was not a factor in the decision process.

Recommendations for improving decision processes for northern development include:

- Formulate clear and coordinated policies so that the public is provided with a rationale or context within which to consider specific development decisions.
- Institute an organisational structure and planning process that assures full participation of the groups affected by decisions regarding an area in determining:
  - a) what are the information needs and what studies

should be undertaken;

b) what alternative plans should be formulated and considered.

- To implement the foregoing, provide resources to those affected interests who would otherwise have great difficulty overcoming the transaction costs of organising to express their views. This will assure that plans are conceptualized and evaluated that take into account their values and perceptions.
- Establish decision rules that will govern the relationship between the Canadian people as a whole and the Inuit in deciding the course of action to be pursued in a specific area.

# TABLE OF CONTENTS

	Page
Abstract	ii
List of Maps	viii
Acronyms and Abbreviations used in text	ix
Acknowledgments	x
 CHAPTER I	
Lancaster Sound: Recognition of the Problem	1
Pivotal Region for Northern Development:	
The Issues	3
Objectives of the Study	10
Methods	10
 CHAPTER II	
Framework for Analysis	12
Need for Policy Studies	12
The Concept of Public Policy	14
Policy-making and Democratic Government	15
The Concept of Participatory Democracy	18
Benefits of Public Participation	21
Evaluative Criteria for a Decision-Making Process	23
Theories of Decision Making	27
Notes to Chapter II	41
 CHAPTER III	
Historical Perspective: The Policy Environment	
for Northern Development	42
Introduction	42
Government in the North	44
Northern Development Policy	46
A Change of Attitude	49
Official Energy Policy	52
Reliance on Regulation	53
Land Acquisition, Exploration, Development and	
Production	54
Environmental Protection Legislation	57
Regulatory Deficiencies	60
Notes to Chapter III	63
 CHAPTER IV	
Lancaster Sound Events and Decisions --	
A Chronology	64
Introduction	64
The Early Years -- 1968-1972	64
Approval-in-Principle -- A Major Decision --	
1973-74	67
The Arctic Waters Oil and Gas Advisory Committee	74
Environmental Studies -- 1975-1976	77
Eastern Arctic Marine Environmental Studies	82
Referral to EARP -- "Special Status" for	
Norlands -- 1977-1978	86
Dissemination of Information	97
EARP Public Hearings	101
The Lancaster Sound Regional Study	114
Summary of Key Decisions	115

CHAPTER V	Characterization and Analysis of the Lancaster	
	Sound Decision Making Process	119
	Relationship of Policy to Decisions	119
	Analysis of the Decision Making Process	131
	Constraints to Achieving the 'Optimal'	
	Democratic Decision Making Process	143
CHAPTER VI	Conclusions and Recommendations	153
	Cited References	159
	Appendix 1	167
	Appendix 2	177
	Appendix 3	213

LIST OF MAPS

		Page
Map 1	Lancaster Sound	5
Map 2	Parks Canada's Area of Canadian Significance and proposed International Biological Programme Sites	8
Map 3	Major Exploration Permit holders in Lancaster Sound region	66
Map 4	Norlands! Proposed Drilling Site	69
Map 5	EAMES Areas	84

ACRONYMS AND ABBREVIATIONS USED IN TEXT

AWOGAC	Arctic Waters Oil and Gas Advisory Committee
BRIA	Baffin Region Inuit Association
CARC	Canadian Arctic Resources Committee
CWF	Canadian Wildlife Federation
DIAND/DINA	Department of Indian Affairs and Northern Development
DOE	Department of the Environment
EAMES	Eastern Arctic Marine Environmental Studies
EARP	Environmental Assessment and Review Process
EIS	Environmental Impact Statement
FEARO	Federal Environmental Assessment and Review Office
ITC	Inuit Tapirisat of Canada

### ACKNOWLEDGMENTS

I would like to express my appreciation to a number of people who contributed to the preparation of this thesis. First, I am indebted to Dr. William E. Rees, my supervisor, for his invaluable advice, encouragement and editorial assistance (and his patience). Second, I am grateful to Professor Irving K. Fox, my second advisor, for giving me the benefit of his experience in his numerous helpful comments. My thanks go as well to the government and industry officials who provided much of the information upon which this study is based. Any misinterpretation, errors or omissions are, of course, entirely my responsibility. Finally, I would like to express my appreciation to the Canadian Arctic Resources Committee (CARC) who supported this research through a grant to Dr. W.E. Rees.

## CHAPTER 1

## Lancaster Sound: Recognition of the Problem

In February, 1978, a panel of experts, in accordance with the Federal Environmental Assessment and Review Process, produced a report on Norlands Petroleum Ltd.'s proposal to explore for hydrocarbons in Lancaster Sound. The Panel concluded that a decision on the drilling proposal at that time would be arbitrary and recommended that ". . . the responsible federal coordinating and planning body (Department of Indian and Northern Affairs) use the time available from a deferment of drilling to address on an urgent basis, with adequate national and regional public input and taking into account the various forces at work, the best use(s) of the Lancaster Sound region" (Federal Environmental Assessment Review Office, 1979, p. 73).

What circumstances had led to the formal public review of this project? Why was it necessary for an independent Panel, at a relatively late stage in project planning, to point out the need for an overview study of the region? As early as 1972, the Department of Indian and Northern Affairs (DINA) had recognized the need for a "rational plan for developing the territories systematically" (DINA, 1972, p. 31). In short, what had been the basis for key decisions leading ultimately to the Environmental Assessment Panel's statement on Lancaster Sound?

This thesis, in addressing these and related questions, analyzes the institutional framework of decision-making in the Canadian North, as it relates to problems of economic development and environmental management



and the application of "policies" for these areas of concern. Lancaster Sound is used as a case study. The process of decision-making is the principal focus of the study; how the Government of Canada organizes itself to formulate policies and make decisions conforming with the public interest. In essence, it is a study of public planning. However, it is not my intention to suggest what should be appropriate policies for the North. Rather, if shortcomings in the institutional framework are revealed in the light of specific criteria of assessment, suggestions for improvement will naturally follow. Such recommendations regarding the policy-making process would imply improved policies.

My study contributes to the growing literature on policy and decision-making, the role of government institutions in the process, and the political and administrative problems involved. As well, I hope to illuminate concerns regarding the North's future and specific problems faced by northern decision-makers as differing needs and aspirations cause ever-increasing conflict.

In order to make an evaluation or judgment of the decision-making process it is necessary to construct first a theoretical framework for analysis. To this end I develop a set of criteria or standards based on democratic principles. These are assumed to underly an "optimal" process for making decisions that accord with the public interest. Democratic principles are considered the most legitimate principles upon which to evaluate decisions because Canada is ruled by a democratic political system and because, in my opinion, these principles afford the best opportunity to make decisions that take into account all relevant interests. However, such an approach risks a seeming naivete if consideration is not given to existing knowledge of individual and organisational characteristics

and behavior in policy-oriented endeavors. Differing theories or models of decision-making which may help to explain the actual decision-making process are therefore presented as a necessary component of a theoretical framework. An assessment of their relevance to decision-making in the North will form part of my overall evaluation and recommendations will be made in the light of these models.

The principal premise of this thesis is that much of the confusion and controversy over the future of Lancaster Sound stems from the federal government's failure to coordinate development, and from conflicting and ambiguous government policy. My assessment does not focus on the actions of individuals but on the institutional and organisational framework within which those actions took place.

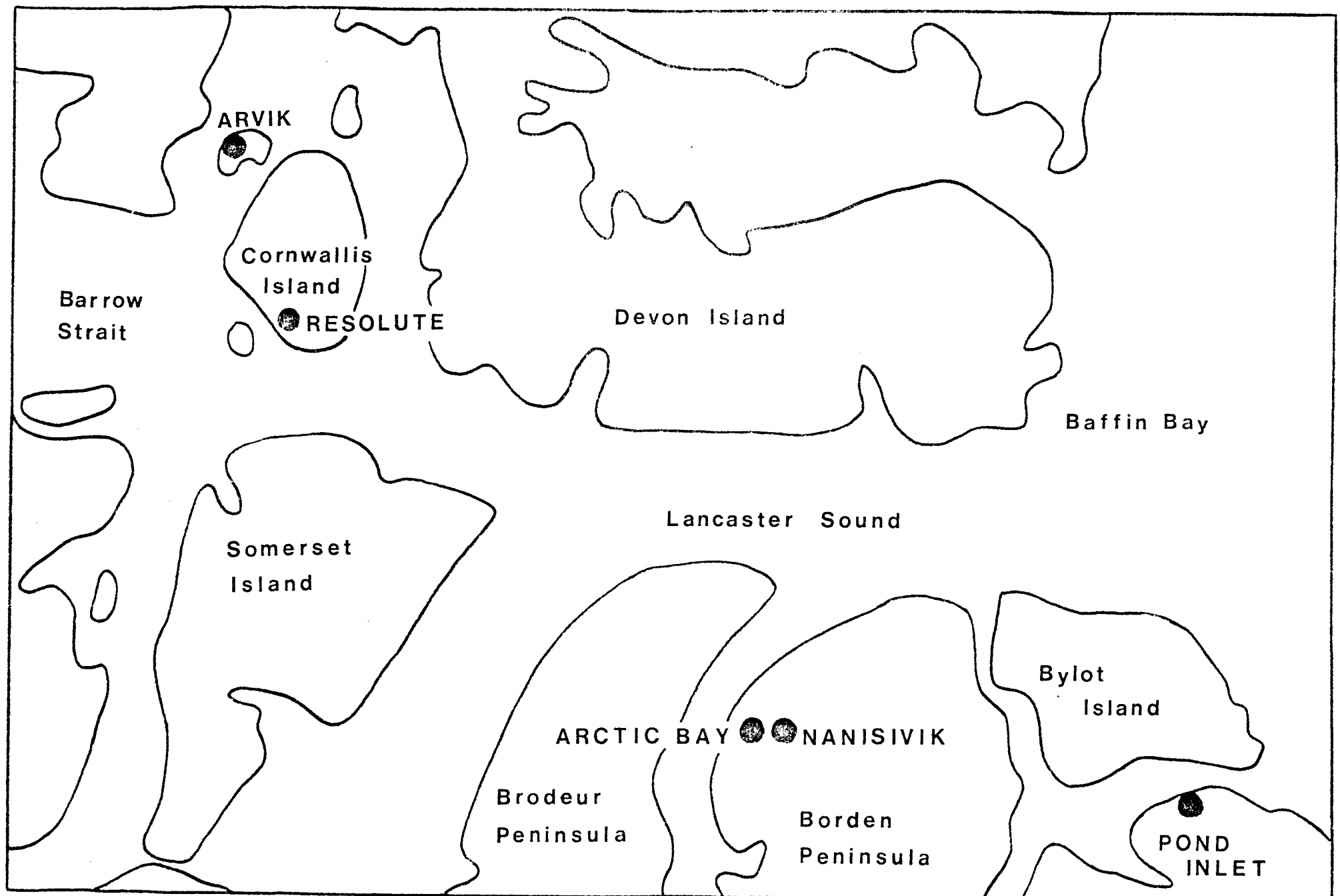
#### Pivotal Region for Northern Development: The Issues

Concern about the pace of development in the North and the problems resulting from development gained prominence in the public consciousness over the last decade (CARC, 1978). Society, particularly western society, began to realize the finite energy and resource limits of the earth as resource uses increasingly conflicted and effected undesirable changes. Today, even though government officials may confidently assert that "the future of Canada lies in the far North" (Trudeau, 1980), many Canadians have become aware that environmental and social impacts are bound to accompany major developments. The Berger Inquiry (1977) was instrumental in drawing attention to these concerns (Rees, 1978). The Inquiry challenged Canadians to re-examine their perceptions of the North as a resource "frontier", focussing more on the North as a "homeland", particularly for

native Canadians (Berger, 1977). But recognition of problems does not necessarily bring us closer to solutions. How have we responded to this challenge in recent years?

Detailed observations on the federal government's basis for decision-making in the North are developed through a study of the Lancaster Sound case. The case is considered interesting for a number of reasons. Lancaster Sound is a narrow body of water at the eastern entrance of the Northwest Passage between Baffin and Devon Islands (74°N and 90°E) (see Map 1). There are major resource use conflicts in this area. First, the Sound is underlain by one of the most promising geologic structures for recoverable hydrocarbons in the eastern Arctic (Milne and Smiley, 1978). In an era of rapidly depleting conventional oil supplies and escalating prices, Canada's future energy needs and sources are a vital concern. Since the formation of the OPEC cartel in the early 1970's and the institution of the oil "embargo" in 1973 with its associated increase in the prices of petroleum and related energy products, the world has slowly recognized that it faces a profound and enduring energy crisis (Nemetz, 1979). One of the Canadian government's responses to this perceived crisis has been to encourage rapid exploration for new reserves and non-conventional supplies so that Canada may become "energy self-reliant". The discovery of a massive oil field at Prudhoe Bay on Alaska's North Slope in 1968, coupled with rising world oil prices making offshore exploration economically viable, spurred exploration efforts in Arctic areas.

Norlands' proposal is one of several projects comprising the relatively new and potentially hazardous programme to drill for oil and gas offshore in the Canadian Arctic. Canada is now looked to as a leader and expert by other northern nations because we have made great progress



**LANCASTER SOUND**  
**MAP 1**

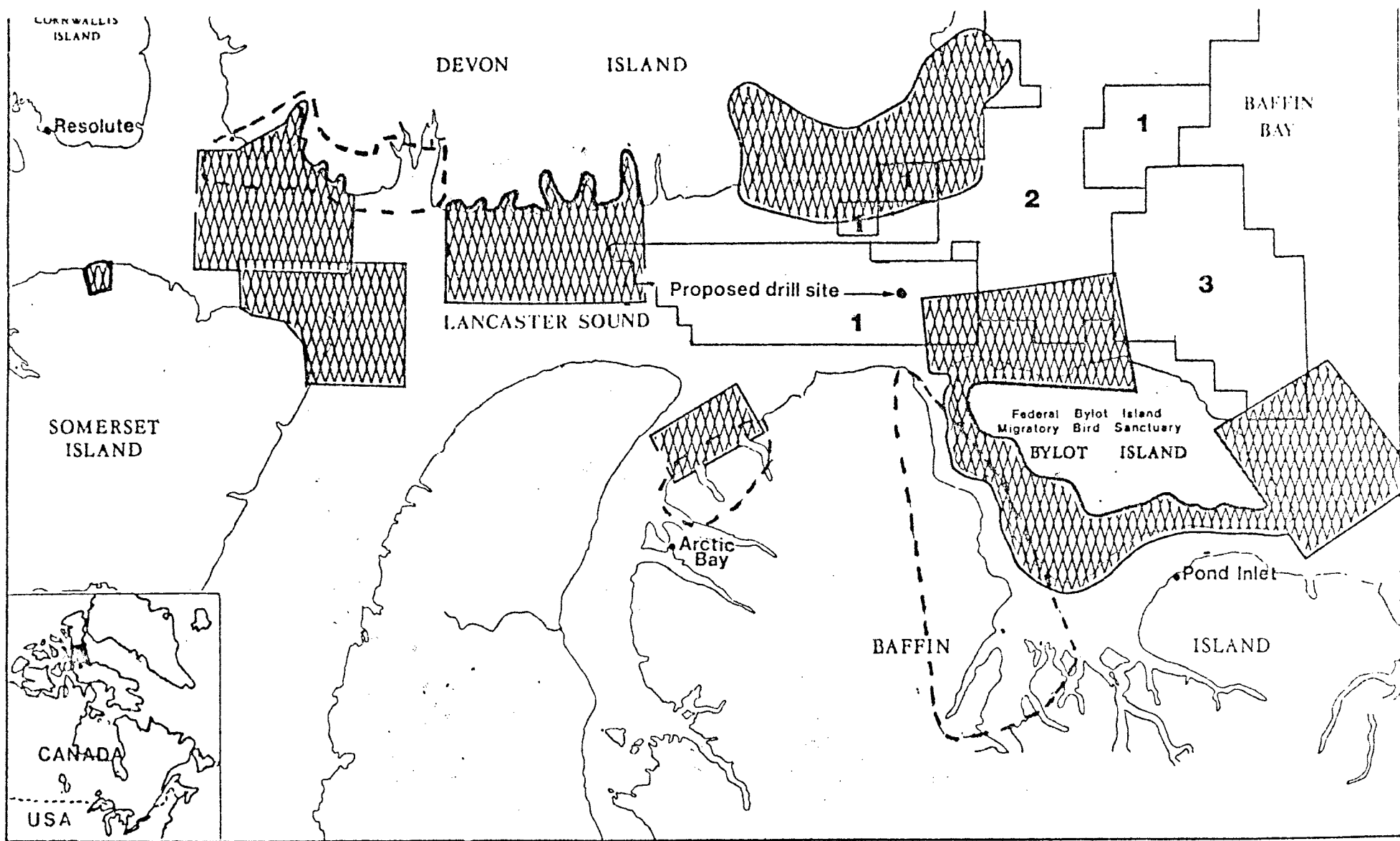
in Arctic offshore drilling technology in recent years. However, as our technological expertise grows, the High Arctic is bound to attract more attention and activity. Need will intensify for decisive government guidance based on comprehensive and far-sighted policies that reflect the public interest.

As well as its geologic potential, Lancaster Sound possesses great ecological significance in the circumpolar region where species abundance is relatively restricted. The Sound has special conditions and characteristics that make it more biologically productive and hospitable than surrounding areas. This bountiful production has developed since the last glaciation 9,000 years ago (Milne and Smiley, 1978). Ocean currents funnel through the narrow waters of the Sound, interacting to produce an apparent upwelling of nutrients that forms the basis for the region's complex food chain (Milne and Smiley, 1978; CARC, 1980). Moreover, water movement creates particular and varied ice conditions that permit an extended open water season. The glaciers, cliffs and fjords flanking the Sound provide nesting and breeding sites for many species of seabirds and marine mammals in close proximity to their feeding grounds (Milne and Smiley, 1978; CARC, 1980). All these factors combine to make Lancaster Sound a major wildlife waterway, staging centre and breeding area. According to some biologists and conservation organisations, the Sound may be critical to the survival of some species (Canadian Nature Federation, 1979). Over fifty-percent of eastern Arctic marine birds, one-third of North America's white whales and possibly eighty-five percent of North America's narwhals as well as harp seals, ringed seals, walruses and polar bears inhabit the Sound at various times of the year (Milne and Smiley, 1978). Not surprisingly, Parks Canada has recently identified several

Natural Areas of Canadian Significance within the Sound and certain sites have also been suggested as World Heritage Areas. The worldwide International Biological Programme (IBP) identified several areas in the Lancaster Sound region as being of international biological significance, warranting special protection (CARC, 1980) (see Map 2). Although no specific action has yet been taken on these proposals, they illustrate the environmental significance of Lancaster Sound.

While the Sound's wildlife resources are important ecologically, they are also vital to the maintenance of the traditional Inuit way of life. The Inuit people living in the region depend on the animals and fish inhabiting the Sound for food, income and cultural identity. These people have lived here and utilized the land, waters and resources of the Sound for thousands of years. Now they claim aboriginal rights to much of the area.

The Inuit's traditional way of life is becoming increasingly threatened by burgeoning industrial activity in the Sound region. Dunbar suggests that "in the whole matter of feasibility of industrial development in the North, the most difficult problems are sociological and cultural, the environmental problems are of lesser difficulty, and the scientific matters the simplest" (Dunbar, 1979, p. 4). The resident Inuit are concerned and alarmed over the pace of development, the changes in lifestyle, and the loss of cultural values that accompany rapid development. Local people wish to be active participants in developments affecting their lives. Because of their concerns and wishes for self-determination, the Inuit have formed a group called the Inuit Tapirisat of Canada to negotiate with the federal government for land claims settlements in the eastern and central regions of the Northwest Territories. They feel that



## LANCASTER SOUND REGION

--- Parks Canada's Areas of Canadian Significance

MAP 2



International Biological Programme Sites (proposed)

Inuit land use not shown

Oil & Gas Permit Area :

**1** NORLANDS

**2** PETRO-CANADA

**3** SHELL

no drilling should be allowed until the land claims issue is settled.

Other factors compound these conflicts. Lancaster Sound has both strategic and geographic importance as marine transportation through Arctic marine channels is becoming technologically feasible. Lancaster Sound is the eastern entrance to the famed Northwest Passage and, as such, is a part of the main shipping corridor in and out of the central Arctic and to the west. It is currently used as a seasonal transportation corridor but plans are underway to ship goods through the Sound all year round (CARC, 1980). Two such proposed projects are shipment of ore from Nanisivik Mine and liquified natural gas (LNG) from Bridport Inlet on Melville Island through the Northwest Passage to eastern Canada. The number and variety of industrial activities steadily increases as do the potential cumulative impacts of these projects.

Finally, Norlands' proposal for Lancaster Sound is of particular interest because it was one of the first offshore drilling projects to be submitted by DIAND to the federal Environmental Assessment and Review Process. EARP, which was established by Cabinet directive in 1974, identifies and assesses the potential environmental impacts resulting from federal or federally-sponsored projects. The term "environment" has been interpreted broadly to include biophysical, economic, and socio-cultural components (FEARO, May 1979). The assessment and review of Norlands' proposal generated a great deal of controversy and is considered a landmark in the evolution of the process (Rees, 1979). A study of events preceding and during the formal review serves both to illustrate the functioning of EARP in the North and to identify areas of dispute. Relationships between government departments, industry and interest groups are brought to light in a close examination of the EARP for Lancaster Sound.



Fairness of EARP procedures and effectiveness of the process are important considerations in the overall evaluation of northern decision-making.

The issues involved in the future of Lancaster Sound are clearly complex and often conflicting. However they are resolved, the international, national and regional implications are immense. The overall purpose of this study is to examine the government's policy responses to these issues and to analyze a specific decision process over a ten year span.

### Objectives of the Study

Specific research objectives include:

- a) provide a historical context and policy environment for a study of decisions regarding Lancaster Sound;
- b) trace the history of events of Norlands' proposal from project inception through submission to, and evaluation by EARP;
- c) develop a set of criteria and accompanying rationale to evaluate government decision-making regarding Lancaster Sound;
- d) apply criteria in a critical evaluation of the government decision-making process including the basis for various decisions relating to Lancaster Sound;
- e) discuss these findings, highlighting issues involved and, where applicable, merits and shortcomings in the process.

### Methods

Chapter II looks at the study of public policy and decision-making from a theoretical perspective. Criteria for "optimal" decisions

based on democratic norms are presented and theoretical models of decision-making are discussed as approaches to understanding the actual process. Chapter III briefly discusses the history of northern development as a large frame in which the specific decisions and events pertaining to Lancaster Sound may be placed. Chapter IV presents a chronological history of those events and decisions. Chapter V evaluates these within my theoretical framework and provides a discussion on this evaluation. Conclusions and recommendations based on these findings are contained in Chapter VI.

Information upon which this thesis is based was obtained from the following sources:

- 1) relevant literature on democratic principles and decision-making theory;
- 2) personal interviews with oil company officials and government officials conducted in August, 1979 and subsequent correspondence;
- 3) background documents made available from industry, government and Canadian Arctic Resources Committee files;
- 4) transcripts of Lancaster Sound EARP public hearings, and
- 5) questionnaires sent to intervenors at the Lancaster Sound EARP public hearings.

## CHAPTER II

### Framework for Analysis

#### Need for Policy Studies

The study of public policy and decision-making processes has received considerable attention from both the academic and government communities in recent years. There are many reasons for this. Aucoin (1979) suggests that social scientists have turned to policy studies both to develop theoretical explanations for public policy and to participate in public affairs as practising professionals. Government-sponsored policy studies, on the other hand, are undertaken in an attempt to improve government's capacity to manage public affairs. Simeon (1976) suggests that the impetus to study policy may stem both from a reaction against the so-called "behavioral revolution", which focussed on the science of politics, and from a growing desire to be more "relevant" in examining contemporary societal problems. "Policy research has also been given urgency by increasing pessimism about the ability of government to cope in an era of 'demand overload' and the 'fiscal crisis of the state' " (Simeon, 1976, p. 548).

This thesis, in focussing on policy and decision-making in the North, continues the general trend of policy research utilizing the case study approach. A "case study" examines an actual situation and thereby provides basic information and insights into the complexity and nuance of decision-making as it operates in the real world. Simeon has charged that "almost every aspect of policy-making in Canada remains shrouded in ignorance, if not mystery" (1976, p. 549). Detailed case studies can,

therefore, make a valuable contribution to our overall knowledge and understanding of decision-making and policy application for energy, environmental management and native concerns north of 60°. A single case study cannot be the sole basis for far-reaching generalizations. However, each case examined contributes to delineation of an overall pattern while revealing the peculiarities specific to the problem at hand.

To infer anything about broader political processes from a specific situation necessarily involves evaluation and judgment. Such an evaluation requires an analytic framework including a set of standards and assumptions. The framework I propose consists partly of criteria drawn from values or norms inherent in a democratic system of government and partly from common sense. These criteria suggest an "optimal" process of democratic decision-making.

The analytic framework is also drawn from certain theories or models of decision-making. There are two reasons for this: first, while such models are obviously simplifications of overall processes, they represent "classes" of events as understood from previous analyses and therefore a structure by which to interpret novel situations. To what extent does the present case conform to existing models and where are the important differences that provide new insights? Second, real-world democratic decisions may be "bounded" by what is actually (i.e. politically) possible. This aspect of the behavior of decision-making systems is often exemplified by the models and tempers our enthusiasm for the theoretically "optimal". Conclusions and recommendations for improvement will be based on these considerations.

It must be emphasized that this study is not intended to test the validity of certain theories. Theory is utilized only to further our

understanding of the actual process. While it has been observed that "the essence of ultimate decisions remains impenetrable to the observer -- often, indeed to the decider himself . . . . There will always be the dark and tangled stretches in the decision-making process -- mysterious even to those who may be most intimately involved" (Kennedy, quoted in Allison, 1971, p. vi), I hope, using this framework, to illuminate certain features of the process as it functioned in Lancaster Sound. The following discussion is essential to development of this framework.

### The Concept of Public Policy

Governments today are increasingly called upon to make decisions regarding common property resources. These choices are social choices in that they involve the collective preferences or goals of society (Haefele, 1973). The principal task of government is to formulate and implement policies that reflect the desires of society, or that accord with the elusive "public interest". Governments have been given this role because market-oriented organisations tend not to make decisions that take external costs and benefits into account. Non-market interventions are intended to ensure that all relevant costs and benefits enter into the decision-making process (Downs, 1966).

While public policy was at one time felt to encompass only the stated "objectives" of a government or the formal "strategies" it adopts to achieve its objectives, there is now widespread agreement that this definition is too narrow (Aucoin, 1979, Simeon, 1976). Rather, all activities undertaken by a government, whether or not the government's objectives are explicit or congruent with those activities, must be included. As Dye states, "Public policy is whatever governments choose to do or not to do" (1972, p. 1). Aucoin notes that our concept of public policy must

also include the impacts which result either from a government's actions or from a lack of action because "governing is essentially the continual choice between preserving or altering the status quo (or particular conditions thereof) and therefore governments must accept responsibility for the extent to which their actions affect the status quo" (1979, p. 2).

## Policy-Making and Democratic Government

### Normative Principles

The political system we employ in Canada to form and effect public policies is a democratic system. There is no agreed upon definition of a democracy. Indeed, attempts to formulate a single definition are resisted by defenders of all types of regimes labelled democracies. I shall adopt Mayo's (1960) usage. According to Mayo, a democratic system is one that is marked by many popular disagreements and disputes about policies, where all policies are made in the context of political freedoms, and where final decisions of a government are made by representatives freely elected with a wide, usually universal suffrage.

Because ours is a democratic government the most appropriate values upon which to base criteria for evaluating government decision-making processes are those underlying the operating principles of a democracy. To view the concept of "government or rule by the people" we begin by establishing the principles of organisation according to which political decisions are made, and the moral or other justifications for these principles. Mayo identifies four distinguishing working principles; each has a normative as well as an operational component. Democratic values can thus be inferred from these principles.

The first principle is the popular control of policy makers. In a modern democracy policy makers or representatives are chosen at free, periodic elections. Voters do not generally decide the policies to be adopted at elections; their control over policy derives from the fact that representatives can be removed from office if policies do not accord with the will of the majority. The norm associated with this principle is that decision-makers should be accountable to the electorate.

The second principle of the Canadian democratic system, derived from the first, is that of political equality. Each adult citizen has one vote so a citizen's share in the control over decision-makers is equal. This principle may be broken down into two elements: universal adult suffrage and votes that count equally. The norm associated with this principle is the Christian ethic of basic equality among individuals as "children of God" in matters of rights and justice (Griffith, 1962).

The third principle is a corollary of the first two. It may be stated as effectiveness of popular control in terms of political freedoms. These latter include the right of citizens to meet and act together to further their own viewpoint, the right to be heard by decision-makers, and the right to freely choose among intelligible, relevant and genuinely different alternatives without coercion, through secrecy of the ballot (Plamenatz, 1973). These freedoms ensure popular control of decision-makers at elections and open channels for legitimate influence.

The fourth principle, as identified by Mayo (1960), is that of majority rule. This principle is linked to the preceding ones in that equality of voting, in a free state, will commonly result in a majority of representatives chosen by a majority of the voters. Decisions of the majority in the legislature are thus legitimized. In normative terms, the

majority rule should prevail because it represents the popular majority of political equals.

However, we must temper this principle by considering the moral component of political decisions. In a democratic system, the rights and interests of minorities must be safeguarded against the "tyranny of the majority". This norm is underlain by our interpretation of justice. According to Rawls (1967), the democratic conception of justice is that all have an equal liberty and none should gain from the basic inequalities of the social system except in ways that further the advantage of the less fortunate. This idea is expressed as a democratic norm by Swainson: "the least advantaged members of our society should not be further disadvantaged in the interest of enlarging the aggregate good" (1976, p. 8). The norm here contrasts with the utilitarian conception of justice that subordinates individuals to the common good, or to the end of attaining the greatest net balance of satisfaction.

As Eyre (1979) has noted, the operation of a given political system must be viewed from the cultural context of the relevant country. Values underlying Canadian democracy can therefore also derive from Canadian culture. Eyre identifies three interrelated factors relevant to the Canadian political system: the importance of the individual, the pluralism or diversity of Canadian society, and Canada's unique history. To these must be added the influence of geography, a major factor in shaping the Canadian mosaic.

The importance of the individual finds expression politically in the values of political equality and political freedoms, previously listed as normative features of a democracy. But underlying these values is the pervasive belief that all human beings are entitled to basic rights and



personal freedoms. In discussing basic rights and freedoms we are concerned with the relationship between the individual or group and the state. This belief is, of course, not confined to Canada, rather, it has a long history and a wide application, especially in the western world. The concept of natural law and natural rights is a well-established philosophical political tradition originating with the early Greek philosophers.

Belief in fundamental rights of individuals led the United States to enshrine basic rights within their Constitution. The General Assembly of the United Nations was established to safeguard basic human rights (Van Boven, 1979). In Canada, discussions over entrenching fundamental rights in our constitution reflect a long-standing concern for these rights and personal freedoms. Indeed, in 1960, Parliament enacted the Canadian Bill of Rights in an effort to protect individual liberties.

Cultural diversity in Canada exists as a result of our unique historical development. Both have been greatly influenced by our geography. As a land first sparsely populated by native peoples, then colonized and settled in an east-to-west wave of European immigrants, and with official recognition of bicultural status, Canada's growth and national identity is the product of many cultures. Geographical features have been an overriding factor in the creation of distinct regions with cultural differences. The richness afforded by cultural pluralism is publicly acknowledged and valued by Canadians who support the expression and preservation of minority group culture.

#### The Concept of "Participatory" Democracy

As noted above, Canada's claim as a democratic state has traditionally been reflected through representative democracy. However, the

belief that Canada should modify her democratic system to include mechanisms for "participatory" decision-making has grown over the years for several reasons:

1. a majority of representatives may be elected by a minority of the electorate therefore policy decisions may not accord with the will of the majority (Mayo, 1960);
2. a voter must accept the whole package of political policies, whether or not he agrees with all of these endorsed by a representative;
3. representatives must often guess at what the electorate wishes on specific issues as they are usually given only broad policy directions. As well, majorities supporting different policies may shift according to the issues involved, making it difficult to ascertain whether there is a popular majority for each specific policy adopted by representatives;
4. universal suffrage, while a democratic ideal, may tend to discourage the average voter who sees his vote as only one of thousands or millions;
5. the political division of labour has meant that administrative or judicial officials, while playing an important role in decision-making, are insulated from elected representatives and from the public and thus from the electorate's influence. Concentration of decision-making power in the bureaucracy, and its characteristic secrecy are therefore seen as further eroding the ordinary citizen's influence.

6. In certain areas of Canada there is another problem.

Native people have not become fully integrated into political processes and may feel that their interests are not properly represented by elected officials (Fox, 1978)

7. Finally, there is increasing pessimism over government's ability to cope with the multi-faceted demands and activities with which it must deal.

The demand for greater participation in decisions is characterized by the emergence of new interest groups in the U.S. and Canada as a result, for example, of the "environmental crisis" of the late 1960's (Heberlein, 1976). Heightened concern over environmental quality and belief that a narrow technical approach to decisions was contributing to overall environmental deterioration prompted the formation of these groups. Lacking established communication channels with resource-oriented government agencies, groups began demanding more direct means of voicing their concerns to decision-makers. In the U.S. especially, political and legal structures have been amenable to these demands, as the National Environmental Policy Act, the Freedom of Information Act, and recent court cases exemplify (Heberlein, 1976). In Canada too, government procedures are being altered to facilitate these demands. For example, the federal Environmental Assessment and Review Process includes formal public participation in resource use decisions and most provinces are devising environmental assessment procedures that include public hearings. Government agencies too are developing various techniques to directly include the public. But institutional adaptation to the demand for public participation is a slow process and the Canadian legislative framework gives a great deal of undefined discretion to politicians and bureaucrats on environmental matters while

often excluding direct input from the public. Of course, the question remains whether public input has yet had any impact on decisions or whether it serves merely to placate citizen's demands and muffle public outcry.

### Benefits of Public Participation

Public participation must not be viewed as an end in itself but as a means of serving many varied philosophical and practical goals (Thompson, 1979). Two commonly recognized natural rights are the right to be heard and the right to due process of law. If the citizen has a contribution to make to decisions that will affect his life, it may be assumed as only 'fair' that he be given an opportunity to do so.

The most important contribution of public involvement is that it provides useful additional information to decision-makers, especially when unquantifiable values are involved. This suggests that there is value in the application of collective wisdom to a problem, and that to rely on mere technical expertise is to risk losing a fresh perspective. Differing views can mean that more alternative possibilities for dealing with a problem are considered.

Enabling and encouraging participation of all affected interests which would otherwise be unrepresented in a decision will mitigate the problem of "the tyranny of the majority" although it may not be sufficient to prevent it entirely. The rights of disadvantaged groups (the poor, ethnic groups, native people or religious sects) who may incur the greatest costs in a decision will be to some degree better protected (Cook and Morgan, 1971).

Participation will also deter the domination of powerful elite interest groups who may otherwise have a disproportionate influence on

decisions. In this way, majority interests may be better served. The perceived openness of a participatory decision process enhances the accountability of political and administrative decision-makers and may foster public confidence in government processes (Lucas and McCallum, 1975). However, one problem experienced with participation mechanisms to date is that the powerful groups with the most resources may still tend to dominate the process. This problem can most probably be solved by varying the form of public involvement until the most effective mechanism is found.

So far I have discussed the values of public participation as a means to "better" decisions. But other benefits deserve mention. Participation can be an important factor in human growth and development by increasing a person's sense of his capacity to effectively manipulate his environment through political involvement (Cook and Morgan, 1971). This helps to overcome the individual's sense of alienation and powerlessness when confronted with complex, indifferent bureaucratic processes. As well, direct involvement will foster the acquisition of information on public affairs so that participants become aware of possible alternative solutions to problems and are better equipped to make a rational selection of policy means among goals.

Public participation is by no means a new idea in government decision-making processes. Some form of participation has been encouraged in democratic systems since the Athenians instituted direct democracy. I am not suggesting however that representative government in Canada should be abolished for direct democracy or participatory democracy involving dispersion of authoritative decision making allowing the public to assume the role of elected representative. Rather, I believe that representative

democracy can be beneficially extended by making government decision making processes more accessible through limited forms of participation. However, in certain cases it may be desirable to alter institutional arrangements in order to give a measure of self-determination to people whose lives may be irrevocably altered by an adverse decision - such as native people. This will be explored more fully in a later section.

### Evaluative Criteria for a Decision-Making Process

The foregoing discussion of democratic norms and participatory benefits establishes a theoretical basis for broad criteria to evaluate government decision-making. It must be noted that these criteria do not fall into neat, separate categories. They are interrelated and overlapping. Consequently, an assessment of one criterion will provide important insights for others. Subsequent analysis will determine the extent to which the criteria were met in the decision-making process regarding Lancaster Sound.<sup>1</sup>

#### a) Representation of interests

The first and most basic criterion evident from the previous discussion is that there must be representation of affected interests. The notion of making decisions in the "public interest" has been mentioned. In classical representative democratic theory, elected officials are able to represent the interests of the polity as a whole in formulating public policies. However, as society has grown increasingly more complex and pluralistic it is recognized that elected officials cannot hope to represent adequately all the diverse interests, values and preferences of those who may be affected by decisions. As previously noted, this recognition has prompted the demand for "participation" in decisions, at least to the extent that views can be heard and incorporated into decisions. Representa-

tion of interests is necessary so that decisions can be made with better knowledge of the distribution of public preferences or needs in society.

The degree to which this criterion is met will provide a measure of the accountability of decision makers. Accountability will be enhanced if decisions are perceived as made with full knowledge of the distribution of public preferences for relevant alternatives. If various interests have been represented and there is no indication of this in the rationale provided for a decision, the decision maker can be called to account for his reasons. Representation of interests can thus provide a check on a decision maker's discretion.

#### b) Accountability

Conceivably, accountability could be considered a separate criterion although measures of accountability can be derived through an analysis of how well the process meets the other criteria listed. Accountability as it relates to public administration may be broadly defined as the extent to which decision makers are held responsible for their actions before the public. In theory, politicians as representatives are accountable to the electorate through the ballot box (Thompson, 1976). In simpler times, when the range of interests represented by a politician was somewhat narrower, this was perceived as a very effective channel for redress.

However, there are reasons why this notion of accountability must be expanded or altered. The scope of public administration has widened so much over the years that non-elected officials now must make many important decisions. Accountability of civil servants or bureaucrats can only be possible if there exist clear channels of responsibility from

non-elected to elected officials. Non-elected officials can be held accountable for decisions they make that are not perceived as in the public interest by being punished (e.g. fired) by their superiors.

Accountability therefore has the potential to influence the behavior of both politicians and civil servants. Because of the possibility of being held accountable for actions disliked by the public, politicians and bureaucrats may develop tactics to avoid responsibility. Such tactics might include phrasing policy statements so vaguely or ambiguously that decisions cannot be specifically compared or linked with policy. As well, secrecy can be a major impediment to accountability. Elected decision makers may be unwilling to release information on a decision to the public while bureaucrats may not provide information to either the public or the Minister to whom he is accountable.

The notion of specific responses to the possibility of being held accountable relates directly to major "public choice theory" assumptions that actors in the decision process act in their own self-interest and that they act rationally. The theory and its assumptions are discussed more fully in a later section of this chapter. It is, however, worthwhile to note that tactics to shirk responsibility for decisions where major uncertainties are involved may be employed by politicians and bureaucrats acting rationally to preserve their status and job security.

#### c) Consideration of alternatives

The very fact that decision-making involves social choices suggests that there are a number of alternatives. Institutional arrangements should not inhibit or prevent a choice by dismissing valid alternatives without consideration. The range of alternatives considered should reflect the concerns of significant affected interests.



Of course, adequate information on each alternative must be generated. The effects of alternative courses of action must be identified and communicated so that those involved can understand it. 'Good' information should include feedback from experience in the decision-making process and the results of feedback external to it (Fox, 1976). Good information is necessary to illuminate as much as possible the costs and benefits of various alternatives.

d) Interaction among interests

There is a need for structured open forums allowing an exchange of views and resolution of conflict. The opportunity for interests to interact should be available through all stages of the decision-making process, from conceptualization of the problem, through generation of alternatives and information, to implementation. This will afford both openness and balance to the process, as well as increasing accountability.

e) Effectiveness

There is, of course, no agreed-upon definition of 'effectiveness' of a decision-making process. However, effectiveness must be considered a basic concern of any analysis. Therefore, for the purposes of this study, 'effectiveness' of the decision process regarding Lancaster Sound is taken to mean the extent to which objectives of stated policies were met and the level of satisfaction obtained by participants. A key consideration here is the outcome of decisions. If the outcome of a democratic decision-making process is not seen as satisfactory by many of the participants, then the effectiveness of the process can be questioned. Of course, the degree to which stated objectives, if these exist, are fulfilled in the

outcome of a decision connotes a measure of effectiveness. However, consideration of effectiveness must be extended beyond 'outcome' to all stages of the process. A measure of effectiveness may also be based on the degree to which previous criteria were met as applied to implementation.

#### f) Efficiency

'Efficiency' of a decision-making process is again something that must be arbitrarily defined. Generally the term is used to mean the ability to produce a desired effect with a minimum of effort, expense or waste. Often, a measure of efficiency is provided in a benefit/cost analysis. However in this case no such analysis was carried out. Therefore, information on costs and benefits is extremely limited. As well, many of the costs and benefits are so-called 'intangibles' and, as such, are unquantifiable. Thus, in considering whether the process was efficient we must consider the process in more general terms of effort, especially duplication of effort. The institutional design may cause duplication of effort implying waste. However, such overlap, while inefficient, may promote other benefits such as increased opportunity for participation. This will be considered in my analysis.

### Theories of Decision-Making

#### The Rationalistic Approach

In considering theory regarding the decision process, it is important to understand the purposes of such theory. As previously mentioned, decision theory first tries to explain why systems function the way they do. This is the descriptive capacity. Moreover, theory may suggest ways in which systems might be modified to meet criteria for optimality. This

is the prescriptive capacity. The descriptive qualities of several popular theories are discussed below, followed by a discussion of the prescriptive aspects of public choice theory.

Many analysts have assumed that governments operate according to some kind of rational decision-making or scientifically administered plan (Allison, 1971; Aucoin, 1979). The extremely simplistic decision process outlined in Bross (1953) exemplifies this understanding of decision-making. Bross states that "science and statistical decision share a common outlook, a way of looking at the curious and complex phenomena which comprise the real world" (p. 18). This theory sees a decision-maker as a machine and the process as a series of discrete logical steps:

Into the machine flows information; out of the machine comes a recommended course of action. The mechanism consists of three basic components. The prediction system deals with alternative futures. The value system handles the various conflicting purposes. The criterion integrates the other two components and selects an appropriate action. It is emphasized that the pragmatic principle is basic for the construction and comparison of Decision-Makers.

(Bross, 1953, p. 32)

Other authors have also identified the basic steps of the process:

1. Goal setting (defining a complete set of ends);
2. Prediction (determining all possible outcomes or alternatives);
3. Valuation (ranking in order of preference each possible set of consequences that might result from a particular action); and
4. Choice (selecting that alternative whose consequences rank highest in the decision-maker's payoff function).

(adapted from Allison, 1971)

The "decision-maker as machine" functions like a classical cybernetic system. Deutsch claims that this "represents a shift in the center of interest from drives to steering, and from instincts to systems of

decisions, regulations, and control, including the noncyclical aspects of such systems" (1966, p. 76). In the simple cybernetic model outlined by Deutsch, the beginning concept is that of a "self-modifying communication network or 'learning net'. Such a 'learning net' would be a system characterized by a relevant degree of organisation, communication and control, regardless of the particular processes by which its messages are transmitted and its functions carried out -- whether by words between individuals in a social organisation, or by nerve cells and hormones in a living body, or by electric signals in an electronic device" (pp. 80-81). Deutsch derives certain notions and concepts from this. The most important is the notion of information, which "consists of a transmitted pattern that is received and evaluated against the background of a statistical ensemble of related patterns" (p. 84). Information can thus be stored, processed and applied to different situations.

Another important concept, according to Deutsch, is that of 'feedback'. This concept involves a "communications network that produces action in response to an input of information, and includes the results of its own action in the new information by which it modifies its subsequent behavior" (p. 88, original emphasis). If the feedback is well designed, the result will be a dwindling series of under- and over-corrections converging on the goal. However, complex learning entails self-modifying or goal-changing feedback.

The movements of messages through complex feedback networks may involve the problem of 'valuation' of different alternatives. Generally, there are operating rules that decide the relative preferences and priorities for information received. In individuals or groups, these

operating rules are 'values'. Operating rules in complex systems may also be modified by feedback but the network will be subject to internal conflict as a result.

According to Deutsch, the degree of plasticity inherent in the human mind and in the channels that make up human cultures and social institutions allows the operating rules to change under the impact of experience. In other words, learning can take place.

The concept of man-as-rational-machine functioning as a cybernetic system underlies all models of decision making. However, as it is concerned with the behavior of individuals or single groups the cybernetic model does not explain the behavior of the social system as a whole. The latter is made up of many groups and organisations. While each may function as a cybernetic system, together they function as an interactive system and decisions that result are often the unpredictable consequences of such interaction.

### Public Choice Theory

The main theory explaining the behavior of organizations in a interactive system is called "public choice" theory. Because the decision process regarding Lancaster Sound is an interactive process, it is appropriate to consider this process in the light of public choice theory. Public choice theory is "essentially a theoretical formulation for the explanation of public policy that is focussed on the decision-making of individuals who participate in the collective decisions of a policy. . . . Politicians, bureaucrats, members of interest groups, and even the electorate are encompassed by this theory on the assumption that those occupying these roles make choices in accord with their interests on one hand, and incentives on the other" (Aucoin, 1979, p. 7). Public choice theory

seeks to provide a more explicit account of the political economy of the multiple interests involved in public policy. However, the theory still derives its logic from the two major assumptions of the "cybernetic" theory:

- 1) that all actors in the decision process act in their own self-interest; and
- 2) that they act rationally.

The emphasis of public choice theory has been on designing institutions "which would lead self-seeking bureaucrats or politicians to generate public welfare in the same sense that the market leads some self-interested businessmen to produce a social surplus" (Tullock, 1979, p. 32). Downs expands upon this assumption of self-interest:

. . . It may seem strange to assert that most officials (of government) are significantly motivated by self-interest when their social function is to serve the public interest. . . .

Although many officials serve the public interest as they perceive it, it does not necessarily follow that they are privately motivated solely or even mainly by a desire to serve the public interest per se. If society has created the proper institutional arrangements, their private motives will lead them to act in what they believe to be the public interest, even though these motives, like everyone else's, are partly rooted in their own self-interest. Therefore, whether or not the public interest will in fact be served depends upon how efficiently social institutions are designed to achieve that purpose. Society cannot insure that it will be served merely by assigning someone to serve it.

(Downs, 1967, p. 87)

Specific formulations of public choice theory vary from writer to writer but it may be asserted that these basic elements described underly most studies in the field of public policy. For example, the concept of "self-interest maximization" has enabled Mancur Olson (1965) to develop

useful hypotheses about the behavior of individuals in joining and supporting the policies and organisations. Olson argues that even if individual members will benefit by acting as a group to achieve a common objective, because they are rational and self-interested they will not do so unless the group is small or unless there is coercion or some other incentive device. This hypothesis accords with the basic tenets of public choice theory.

Olson's "logic" of collective action depends on certain principles of collective goods and large organisations. He states:

Though all the members of the group . . . have a common interest in obtaining this collective benefit, they have no common interest in paying the cost of providing that collective good. Each would prefer that the others pay the entire cost, and ordinarily would get any benefit provided whether he had borne part of the cost or not.

(Olson, 1965, p. 21)

Olson lists three separate but cumulative factors that keep larger groups from furthering their own interests:

First, the larger the group, the smaller the fraction of the total group benefit any person acting in the group interest receives. . . . Second. . . the smaller the share of the total benefit going to any individual . . . the less the likelihood that any small subset of the group, much less any single individual, will gain enough from getting the collective good to bear the burden of providing even a small amount of it. . . . Third, the larger the number of members in the group, the greater the organisation (required) and thus the higher the hurdle that must be jumped before any of the collective good at all can be obtained.

(Olson, 1965, p. 48)

These properties lead to the conclusion that "however valuable the collective good might be to the group as a whole, it does not offer the individual any incentive to . . . bear in any . . . way any of the cost of the necessary

collective action" (Olson, 1965, pp. 50-51). Thus, Olson argues that for large voluntary groups to be effective in the arenas of public policy, it is necessary that the mechanisms of coercion or incentives (and probably both) be applied to individual members (Aucoin, 1979). "The willingness and capacity of various 'voluntary' associations to employ these instruments is related to their political impact on public policy" (Aucoin, 1979, p. 8). This can be one of the major drawbacks to achieving meaningful public participation.

In this light it is reasonable to hypothesize that inputs into policy-making processes will be often weighted in favour of small special-interest groups who are able to exert more influence in the decision process. Individuals or groups with vested interests can afford to expend more effort and resources on the decision process. Olson refers to members of the general public as "latent groups" because they are not specifically represented as are vested interests. Even when organized, these "inclusive" interests face difficulty in gaining information and access to decision-makers and in formulating viable policy alternatives. Of course even some vested interest groups may have great difficulty in gaining adequate information to ensure their meaningful participation. Mitchell (1979) modifies some of Olson's assumptions to explain the seemingly aberrant behavior of individuals belonging to environmental lobbies. Lowi (1979) interprets Mitchell as follows:

. . . under certain conditions a utility for environmental good will motivate member contributions and that these contributions are compatible with behavior of the egoistic, rational, utility-maximizing kind because the cost is low, the potential cost of not contributing is high and the individual has imperfect information about the effectiveness of his or her contribution in obtaining the good or preventing the bad.

(Lowi, 1979, p. 100)



Public choice theory has also developed insights into bureaucratic decision-making behavior. Downs (1967) explains bureaucratic decision making on the premise that government officials are significantly motivated by their own self-interests and seek to attain goals rationally. Downs provides a formal explanation for the hypothesis that a bureaucrat seeks at least to retain, if not to maximize his power, income, prestige, convenience, and security. It follows from this that bureaucrats will seek to increase their budgets, staff, status, and relative power with respect to other agencies. Downs suggests several "laws" regarding bureaucratic behavior (p. 262). For example, the "Law of Self-Serving Loyalty" states that "all officials exhibit relatively strong loyalty to the organization controlling their job security and promotion" and the "Law of Inter-organizational Conflict" states that "every large organization is in partial conflict with every other social agent it deals with". Such characterizations may in fact provide realistic clues to the interpretation of decision-making case histories.

Fox (1978) has outlined several additional factors that influence behavior of organisations. For example, an individual's perceptions of what is intended by a policy, programme or general law will be determined by that person's experience, particularly their education or professional training. This will be reflected in his agency's performance. Secondly, it may be found that "an organization tends to develop objectives which serve the interest of members of the organization rather than the interest of society generally" (Fox, 1978, p. 8). Finally, the organization will also be influenced by the clientele or interest group with which it most frequently interacts -- its programmes tend to be adapted to the wishes of the interest group. Of course, other agencies and interest groups will also

have a lesser influence on the agency's policies.

Obviously, the assumptions of rationality and self-interest maximization that Downs (and all other public choice theorists) operate under must be modified somewhat by consideration of attitudes and perceptions. As White (1966) notes, the term "attitude" may be used interchangeably with "belief" or "opinion" to describe a preference held by a person with respect to an object or concept. Attitudes are the result of a valuation process. When a preference is applied to an aspect of the environment it requires perception of that environment, based on social experience. It follows that there can be no thoroughly objective perception of the environment. White states:

There seems no doubt that an individual manager of a sector of the environment takes into account in some fashion the range of possible uses, the character of the environment itself, the technology available to him for using the environment, and the expected gains and losses to himself and others from the possible action. His perception and judgement at each point is bound to occur in a framework of habitual behavior and of social guidance exercised through constraints or incentives. When the decision is lodged in an organisation there is added the strong motivation of its members to seek equilibrium and to preserve the organization while accommodating its structure to changes required by shifts in preferences, environment or personnel.

(White, 1966, p. 108)

In White's interpretation, attitudes enter into decisions in three ways: the personal attitudes of people sharing the decision, their opinions as to what others prefer and their opinions as to what others should prefer. These three need not, and indeed rarely do coincide, although there probably is a tendency for personal and normative attitudes to merge.

Recognizing the influence of perceptions, attitudes and other human limitations on the decision process has caused many public choice

theorists to express caution with the basic assumption of rationality. For example, Downs lists the following limitations to rationality:

- 1) each decision-maker can devote only a limited amount of time to decision-making;
- 2) each decision-maker can mentally weigh and consider only a limited amount of information at one time;
- 3) the functions of most officials require them to become involved in more activities than they can consider simultaneously; hence they must normally focus their attention on only part of their major concerns, while the rest remain latent;
- 4) the amount of information initially available to every decision-maker about each problem is only a small fraction of all the information potentially available on the subject;
- 5) additional information bearing on any particular problem can usually be procured, but the costs of procurement and utilization may rise rapidly as the amount of data increases;
- 6) important aspects of many problems involve information that cannot be procured at all, especially concerning future events; hence many decisions must be made in the face of some ineradicable uncertainty. (Downs, 1967, p. 75)

Such concerns led Simon (1957) to argue that only within certain boundaries of skills, values and knowledge can an individual's choices be rational or goal-oriented. Such "bounded" rationality causes administrative man to "satisfice" instead of "maximize". He simply cannot examine all possible alternatives and understand the "interrelatedness" of even those factors known to be important to a decision.

#### Prescriptive Public Choice Theory

Lindblom (1968) takes this concern with limits to rationality one step farther. He hypothesizes that public policies result from a decision-making process in which decision makers "muddle through" a limited number of closely related, incrementally rather than radically different alternatives without attempting to evaluate all possible consequences (Lindblom, 1968;

Aucoin, 1979). This common observation may withstand empirical testing but Lindblom goes on from merely describing a process to actually prescribing "disjointed incrementalism" as a strategy for decision-makers. However, Lindblom's prescription has been subject to considerable criticism for perpetuating the "science" of "muddling through" (Aucoin, 1979). Dror charges that it cannot but serve "as a ideological reinforcement of the pro-inertia and anti-innovation forces prevalent in all human organizations, administrative and policy making" (Dror, 1967, p. 155).

Taking our cue from Lindblom, we move now to public choice theorists who have chosen not only to describe institutional behavior but to prescribe changes that would permit more democratic decision-making. For example, Haefele sees the expansion of administrative decision making attacking the basic tenets of democracy. He argues that elected representatives are the proper authority to make decisions in matters of public policy:

. . . when true social choices are at stake, nothing less than legislatures making these choices will suffice in our system of representative government. The spectacle of executive personnel attempting to assess the public interest through public hearings or to divine appropriate actions through committees 'representing' all interests from housewives to steel mills is an outrage in the pure sense -- it does violence to our system of government.

(Haefele, 1973, p. 20)

Haefele proposes certain changes in government to increase accountability. One change would increase representative government structures at the regional level to properly deal with environmental issues. He advocates forcing environmental issues into partisan politics at every level of government, rather than leaving the solutions for controversial issues to administrative agencies. Haefele believes that general purpose representatives to represent citizens at the local level will "make the question of

priorities, of goals, and resolution of conflicting goals, manageable" (p. 133).

Haefele's proposals are aimed at fettering administrative discretion. A major requirement of his model is separation of the legislative and administrative functions of government, giving the administration only a limited technical and advisory role. However, administrative power has grown over the years in response to definite needs arising from increased societal complexity. Thus we may question Haefele's proposals on grounds of impracticality.

One theorist who takes this view is Ostrom (1973), who believes that bureaucracies form an essential part of collective decision making structures. He argues that a truly democratic administration should have substantial overlapping of jurisdictions and fragmentation of authority in order for all legitimate interests to participate in policy processes. In short he advocates increasing administrative pluralism but curtailing individualistic choice by creating decision rules appropriate to the community of interests associated with the management of a common property:

Fragmentation of authority among diverse decision centers with multiple veto capabilities within any jurisdiction and the development of multiple, overlapping jurisdictions are necessary conditions for maintaining a stable political order which can advance human welfare under rapidly changing conditions.

(Ostrom, 1973, p. 112)

For Ostrom, each agency or level of bureaucratic organisation should be able to check the power of other agencies or levels.

Similarly, Sproule-Jones (1974), in his discussion of the organisation and operation of Canadian federalism, advocates activism at lower levels of the civil service. He also notes that Canadians have generally been more inclined than Americans to allow elected officials to establish

the preferred state of affairs. However, one potential flaw of this normative approach is that it would make a decision process so unwieldy as to prevent any decisions being taken. Certainly this is already a major factor behind the 'constitutional crisis' between federal and provincial powers in Canada today.

While the above arguments are concerned with pluralism in bureaucratic organisations, both Ostrom and Sproule-Jones also promote public participation as a means of extending pluralism to ensure more democratic decisions:

No one can know the preferences or values of other persons apart from giving them opportunities to express their preferences or values. If public agencies are organized in a way that does not allow for the expression of a diversity of preferences among different communities of people, then producers of public goods and services will be taking action without information as to the changing preferences of the persons they serve. Expenditures will be made with little reference to consumer utility. Producer efficiency in the absence of consumer utility is without economic meaning.

(Ostrom, 1973, p. 62, original emphasis)

Sproule-Jones agrees that fragmentation of authority combined with participation will be more democratic:

Overlapping authority and concurrent powers among a variety of collective agencies affords an opportunity for an individual to obtain a preferred policy from some institutional structure, and for remedies to be found for the imposition of harmful indirect consequences from the preferred policies of other individuals, acting either on their own or through some collective agency.

(Sproule-Jones, 1974, pp. 118-119)

We have now moved from a discussion of the descriptive aspects of public choice theory and modifications of its assumptions to specific applications of this theory in normative models. After analyzing the actual decision making process regarding Lancaster Sound and evaluating it

in terms of democratic criteria, this body of theory can be drawn on to explain the existing process, to arrive at suggestions for changes in organisation and to justify conclusions.

Notes to Chapter II

1. Criteria based on democratic principles are adapted in part from I. K. Fox, "Institutions for Water Management: A Changing World", Natural Resources Journal, 1976, pp. 743-758 and N. Swainson, "Defining the Problem", Managing the Water Environment, (N. Swainson, ed.), University of British Columbia Press, 1976, pp. 1-30.



## CHAPTER III

Historical Perspective:  
The Policy Environment for Northern Development

## Introduction

The role of natural resources is paramount in Canadian economic history. Indeed, resource exploitation has been such a continuous and pervasive feature of our economy that H.A. Innis and his disciples developed a 'staples theory' to explain Canadian economic growth. Innis characterized this growth as that of a colony supplying more advanced industrial areas with a succession of staple exports.<sup>1</sup> The pursuit of such staples as fish and fur, timber and wheat, and then minerals and hydrocarbon resources has led to ever-new frontiers for exploration and has supported one regional economy after another (Gertler and Crowley, 1977). The consequences for Canada have been profound. According to Innis:

Concentration on the production of staples for export to more highly industrialized areas in Europe and later in the United States has broad implications for the Canadian economic, political and social structure. Each staple in its turn left its stamp, and the shift to new staples invariably produced periods of crises in which adjustments to the old structure were painfully made and a new pattern created in relation to a new staple.

(Innis, 1948, quoted in Watkins,  
1977, pp. 84, 99)

While Innis' theory paints an incomplete picture of the growth forces shaping the modern Canadian economy, it is directly applicable to the resource-dominated growth of the northern economy. The Science Council of

Canada states that "the basically colonial character of the northern economy has remained fundamentally unchanged since Europeans first explored the area" (June, 1976, p. 7).

The land north of the 60th parallel comprises about 40% of Canada's total land mass. Portions of it have been inhabited periodically for 25,000 to 50,000 years by people of Dene and Inuit origins (Naysmith, 1975). About 500 years ago, European explorers and fur traders began to visit the North. In 1670 Britain granted most northern lands to the Hudson's Bay Company and two hundred years later, in 1870, the North Western Territories and Rupert's Land officially became part of Canada and hence subject to the Canadian Parliament (Environment Canada, Lands Directorate, 1979).

Since the 19th Century, the pursuit of staples in the North has taken place in a series of 'rushes'. Fur, gold and whales have all become a focus for exploration and exploitation at different points in history (Lotz, 1970). The present 'rush' to discover and develop the storehouse of petroleum reserves and metallic minerals that lies under the frozen lands and oceans of the Arctic is the most recent in this series. But interest in a single resource for maximum return over a short period of time has inevitably produced "periods of crises" and "painful adjustments" characterized by Innis as outcomes of a reliance on staples.

The North has typically experienced growth (i.e. an increase in the productive capacity of the economy) without development (Rea, 1976). The present rush to find and produce petroleum and mineral reserves may well be another round of the 'boom and bust' cycle of growth, common to frontier economies. This cycle can be described very simply. For

example, during the gold rush, large numbers of white southerners bent on making a quick fortune flocked to northern areas. Roads and railways were built, towns established and services provided, all in a very short time period. When the rush was over much of this was abandoned. The clash between southern white culture and traditional native culture brought inevitable hardships to natives who could not assimilate rapid change. While the government has become increasingly involved in the approval and implementation of projects designed to exploit non-renewable resources, 'booms' and 'busts' are still a problem. Economic growth is for the most part determined by outside forces, mostly by demand for resources in the industrial regions of Canada, the U.S. and western Europe. Private foreign enterprise is the principal agent of resource extraction, often aided to a great extent by the federal government (Science Council, 1976).

The 'boom and bust' cycle can have profound impacts on native peoples. Because resource extraction projects are usually large-scale and short-lived, they are often accompanied by environmental degradation and disruption of existing communities (Dickinson, 1978). Employment and income problems, as well as cultural anomie, result for natives who become dependent on wages from such projects. While southern companies leave an area once it is no longer productive for them, the native people must live with the consequences of rapid, unplanned development.

#### Government in the North

Before World War I, the federal government's role in the North was mainly regulatory: to maintain peace and order among residents, to support fur trade and mining developments, to conduct surveying and mapping,

and to control transportation (Environment Canada, Lands Directorate, 1979). While supporting resource exploitive industry, the government retained a 'laissez-faire' policy toward the traditional native economy until the 1940's (Rea, 1976). With employment and income benefits of the primary industries accruing to affluent, often transitory immigrant workers, and a lack of social programmes, the resident, mainly native population, remained in relative poverty. In the 1940's a 'welfare state' approach to social policy was taken with important consequences for the North (Rea, 1976). Health, education and welfare services were provided to native people, resulting in a sharp increase in birth rates and a reduction in mortality. However, no serious effort was made to integrate native people into the wider economy. Therefore, a higher population growth rate has over time created greater unemployment problems and regional disparities so that welfare services have had to be expanded. This expansion has meant that the service sector is now a very important factor in the modern northern economy with most services being administered from Ottawa.

In 1905 the NWT Amendment Act established a Commissioner and Council form of territorial government. This government, located in Yellowknife, NWT, carries out duties regarding education, game management, regulating fur exports from the Territories and other "housekeeping" responsibilities (Environment Canada, Lands Directorate, 1979). However, the Territory has not been given responsibility for lands, mines, minerals or royalties as are the provinces by the British North America Act. Under the NWT Act, the federal government retains responsibility for land and natural resources. Because it controls lands, non-renewable resources and the revenues received from them, the federal government effectively controls northern development. As well, the Commissioner is accountable to the

Minister of the Department of Indian Affairs and Northern Development (DIAND) and this Minister can withhold assent to legislation passed by the Territorial Assembly (Environment Canada, Lands Directorate, 1979).

In 1948 the Advisory Committee on Northern Development, composed of Deputy Ministers from relevant federal departments, was established to promote economic growth and resource exploitation (Rees, 1978). The Department of Northern Affairs and National Resources (DNA) was created in 1952 to oversee resource use and plan long-term northern development. In 1966 the Department of Indian Affairs and Northern Development Act established the present department whose mandate includes responsibility for the economic and social welfare of native people, protection of the environment, and economic development north of 60°. Because it has such a broad scope of responsibilities, the department exercises essentially "province-like" authority over lands and resources (Rees, 1978).

#### Northern Development Policy

Up to the late 1950's, DNA simply pursued its traditional policy of supporting industry and supplying welfare services to northern people (Lotz, 1970). However, when John Diefenbaker was elected in 1958, he began to promote resource exploitation much more actively. Diefenbaker's "Vision of the North" as a resource frontier with endless opportunities for wealth was translated during the 1960's into an intensive resource industry assistance programme (Pimlott et al., 1976). This included "Roads to Resources", improved geological mapping and surveying, tax incentives and write-off provisions for developers. Support of large-scale,

monopolistic enterprise in the North also took the forms of granting exclusive operating rights to firms, often combined with a policy of non-intervention in the internal affairs of the territory controlled by firms, and by investing in infrastructure such as transportation and power facilities (Rea, 1976).

The Diefenbaker government made a crucial decision to release Arctic lands for oil and gas leasing under the Canada Oil and Gas Regulations in 1961. Through the 1960's major oil companies, largely foreign-owned, acquired exclusive exploration rights with very generous terms to most geophysically attractive lands and large areas offshore. These hydrocarbon exploration permits gave the holder exclusive rights and obligations to do exploration work on behalf of the Crown as mineral owner (C.A.R.C. Submission to Lancaster Sound EARP Hearings, 1978). The permits, valid for twelve years, were issued by DIAND.

While DIAND pursued an exploration and exploitation programme actively in the 1960's, the department seemed unable or unwilling to formulate and implement a long-term resource use and development policy. One reason was that administration was complicated due to the involvement of numerous departments and agencies. Dosman contends that:

Decisions were fragmented among a host of jurisdictions and were made on an ad hoc basis, responding to the broad range of issues affecting the individual departments and at different times. No overall objectives and priorities were established; there was no explicit framework of development in the North. A myriad of (sic) federal activities had grown but no underlying rationale had even been thought out.

(Dosman, 1975, p. 3)

In 1968, a massive oil field was discovered at Prudhoe Bay on Alaska's North Slope. The strike implied similar deposits in the Canadian Arctic, spurring a vigorous exploration effort. According to Dosman (1975),

who has extensively documented the turmoil following this event, the federal government was completely unprepared to deal with repercussions in Arctic Canada. Two factors were paramount in determining subsequent events: one was the perceived threat to Canadian oil and gas exports as a result of Alaskan discoveries, the other was the real threat to Canadian sovereignty, particularly Canadian jurisdictional claims over Arctic waters (Rees, 1978). In response a Task Force on Northern Oil Development, consisting of Deputy Ministers from various involved departments and the Chairman of the National Energy Board, was formed. Dosman charges that the Task Force became the central body for determining northern resource policy but that it acted essentially as "a transmission belt for industry initiatives requiring speedy approval by Cabinet" (1975, p. 24). Task Force deliberations were highly classified, giving a very few individuals enormous influence over northern affairs. Promotion of an oil or gas pipeline through the Mackenzie Valley, linking Alaskan supplies with U.S. midwestern markets was established as their highest priority (Rees, 1978). However, by the end of the decade it was clear that lack of coordinated planning and policy formulation for the North gave an enormous amount of leverage to industry. The Canadian public, including Northerners directly affected, was not involved in, or even informed of, major decisions. Native demands for land claims settlements before major land use decisions were made were ignored and the government appeared to show little concern for native people's fears of loss of their traditional lifestyle. Environmental concerns, too, were downplayed although little was known about northern ecosystems and no significant research had been undertaken (Pimlott, 1973; Rees, 1978). Dosman states that "the pattern was one of elite diplomacy, secret negotiations, and crisis decision-making" (1975, p. 87).

### A Change of Attitude?

However, at the same time as interest in the non-renewable resource potential of the North was growing, the "environmental movement", sweeping the continent in the early 1970's, began to influence this pattern. The public, especially environmentally and socially-oriented public interest groups, grew increasingly concerned about their lack of opportunity to influence northern decisions, the amount of foreign ownership in the North, the damage to sensitive ecosystems and the severe social costs of large resource projects. Partly as a result of this movement, native groups were encouraged to organize and express their concerns regarding the social consequences of rapid resource exploitation. They became vociferous in articulating grievances over unsettled land claims, and in demanding participation in major decisions that affected them. It was with these concerns and criticisms in mind that the government began to review its northern development policy in the early 1970's.

According to one DIAND official, the government underwent a change of attitude in an environmentally and socially conscious direction (Snow, pers. comm., Aug. 14, 1979). Several government actions appear to support this suggestion. For example, a number of pieces of legislation were promulgated at this time. In 1970 the Territorial Land Act was amended and proclaimed in 1971 when the Territorial Land Use Regulations came into effect. Also, in 1970 the Northern Inland Waters Act and the Arctic Waters Pollution Prevention Act were enacted and proclaimed in 1972. Another hopeful development was the creation of a Department of the Environment (DOE) in 1970-71.



Unfortunately, these environmental safeguards encountered problems in application that call to question the government's sincerity. The intended scope of the Territorial Land Use Regulations, for example, was limited in that they did not apply to mining operations in the Yukon. Cumming (1973) charges that "the Regulations were devised only as the mechanism to ameliorate and minimize damage to the environment, in the context of otherwise unmitigated development". In other words, the whole question of best use of the land and need for the project was ignored. As well, even though these regulations do not govern mining operations in the Yukon, they were used by DIAND in 1972 to license the construction of artificial islands for drilling purposes offshore in the Beaufort Sea. The islands were simply classified as land operations (Pimlott et al., 1976). On another level, Dosman has criticized the Arctic Waters Pollution Prevention Act, contending that:

The legislation arose neither from a belief within government that the environmental protection of the Arctic basin was a first priority, nor a well-researched and documented position. Rather, it was introduced as a policy instrument to protect Canadian jurisdiction in northern waters.

(Dosman, 1975, p. 158)

One of the most serious problems has been the minor advisory role taken by the Department of the Environment in protecting the northern environment. DOE was not given even a joint mandate to administer the Arctic Waters Pollution Prevention Act or the Northern Inland Waters Act, also passed in 1970. DIAND has progressively weakened DOE's mandate in the North so that it may in most circumstances only act in an advisory capacity. Unfortunately, no mechanism exists to ensure that its advice is heeded (Pimlott et al., 1976).

As a further response to the controversies erupting in the early 1970's, DIAND published Canada's North: 1970-1980 in 1972. In this document the department states its policy for the decade, in the form of national objectives for the North. This statement asserts that "the needs of the people of the North are more important than resource development, and . . . the maintenance of ecological balance is essential". Accordingly, the objectives for the North are listed in order of priority as:

- 1) to provide for a higher standard of living, quality of life, and equality of opportunity for northern residents by methods which are compatible with their own preferences and aspirations;
- 2) to maintain and enhance the northern environment with due consideration to economic and social development;
- 3) to encourage viable economic development within regions of the Northern Territories so as to realize their potential contribution to the national economy and the material well-being of Canadians.

The latter objective is further explained by three priorities:

- a) to encourage and stimulate the development of renewable resources, light industries, and tourism, particularly those which create job and economic opportunities for native northerners;
- b) to encourage and assist strategic projects (key to increased activity in the region or Territory with solid social and economic benefits) in the development of non-renewable resources and in which joint participation by government and private interests is generally desirable;
- c) to provide necessary support for other non-renewable resource projects of recognized benefit to northern residents and Canadians generally.

The statement also calls for "a rational plan for developing the territories systematically" and voices a concern for "consultation" with native people. This document continues to be the central statement of the government's official policy for northern development (DIAND, 1978-79 Annual Report, 1979).

Nevertheless, several contemporary government decisions seem to suggest official disregard for these laudable objectives. For example, Prime Minister Trudeau's announcement of the construction of an all-weather Mackenzie Highway in April, 1972 was made without benefit of any environmental research (Dosman, 1975). As well, plans for a Mackenzie Valley Pipeline to carry Alaskan and Canadian gas were in an advanced stage by 1972 although little was known about the cumulative impacts of such a huge project on society and ecosystems and there had been little, if any, public consultation. In spite of the expressed need for a "rational plan" to develop the North there has been to date only one attempt at even regional-scale planning. This was the abortive Mackenzie Delta Regional Planning Exercise that collapsed because of its purely reactive and contingency nature (see Rees, 1978).

#### Official Energy Policy

The federal Department of Energy, Mines and Resources is responsible for developing an overall energy policy for Canada. From the preceding, it is evident that federal energy policy for oil and gas in the 1960's was predicated on development of our energy reserves and encouragement of exports. Canada exported oil from Alberta to the U.S. while importing oil for the eastern provinces. However, by the early 1970's, world events, notably the Middle East war and the formation of the Organization of Petroleum Exporting Countries (OPEC), had contrived to raise oil prices. Prices have continued to increase since that time. The rapid increase in international petroleum prices created new pressures on the federal government to explore Canadian supplies of petroleum and other

energy resources in order to minimize the extent to which Canadians rely on imported oil. Consequently in 1976, Energy, Mines and Resources published an energy strategy for Canada which has the objectives of energy self-reliance (Energy, Mines and Resources, 1976). One of the elements of this strategy was to encourage exploration and development:

With respect to oil and natural gas it will be necessary to increase exploration activities in order to provide the information that will be required to make appropriate decisions. . . . It is important that a high level of activity be maintained, particularly in the frontier regions of Canada. . . . One of the most serious problems facing the federal government in its efforts to elaborate appropriate energy policies, is the substantial degree of uncertainty that remains with regard to ultimately recoverable resources in the frontier area of Canada. In the Beaufort Sea, and in the offshore areas of the Arctic Islands and eastern Canada, large geological structures which may contain substantial reserves of hydrocarbons have been identified. It is difficult to plan efficiently without knowing whether these structures are full or empty, and this knowledge can be obtained only by drilling.

(Energy, Mines and Resources, 1976,  
pp. 25-26)

This national "need to know" energy policy was an overriding factor in decisions regarding exploration in Arctic waters until it expired in 1978.

#### Reliance on Regulation

Because DIAND has taken a largely reactive approach to northern development, in spite of stated intentions to the contrary, it has tended to rely heavily on regulation to control land use and resource development. Even in 1980 this attitude prevails. The background notes for a recent (14 February 1980) meeting of deputy ministers to review Dome Petroleum's plan for Beaufort Sea petroleum development state that " . . . a fundamental

decision to be taken is whether the government:

- 1) wishes to continue to react to the specific project proposal when it comes forward formally from the proponent and address the policy and regulatory decisions after the application has been filed, or
- 2) takes the lead in advance of the actual submission of the application to set out criteria that the application must meet and indicate conditions that will apply."

What is the nature of the regulatory framework for offshore drilling in the High Arctic? Lucas, MacLeod and Miller (1979) review the regulatory framework relevant to High Arctic development and marine transportation, and provide a wealth of information on this subject.<sup>2</sup> For the purposes of my study only highlights of this overview need be presented.

#### Land Acquisition, Exploration, Development and Production

As previously mentioned, the Diefenbaker government released Arctic lands and offshore areas for exploration in 1961. This was done through the mechanism of the Canada Oil and Gas Land Regulations (SOR/61-263). These regulations set out the conditions governing the acquisition and utilization of petroleum lands. Also in 1961, the Canada Oil and Gas Drilling and Production Regulations (SOR/61-253) were promulgated to set technical standards for drilling and production practices (Lucas et al., 1979). Both sets of regulations were authorized by virtue of the Territorial Lands Act (sec. 4) which gives the Governor in Council power to "sell, lease or otherwise dispose of territorial lands". The Territorial Lands Regulations (SOR/61-1) give the Minister of DIAND authority to enter into agreements to sell land or lease territorial lands for a period of thirty years, with a potential extension of thirty

years and provided the basis for the regulation of land acquisition in the North (Lucas et al., 1979). When these regulations were promulgated there was no public involvement in their formation. According to Lucas et al.:

. . . the regulations were primarily a creation of the oil industry, who was asked by the government of the day 'to write the kind of regulation that would create incentives for northern development'. This situation has led to a lenient system of oil and gas right allocations.

(Lucas et al., 1979, p. 102)

The federal government's petroleum leasing policy for northern lands was straightforward -- private companies simply had to apply to obtain an exploration permit. This permit and leasing system has since been criticized as "a resource giveaway unparalleled in any country in modern times" (Thompson and Crommelin, 1973).

In May, 1970 the Canada Oil and Gas Land Regulations were suspended while the government contemplated revisions that would make the regulations applicable to rapidly changing conditions. After suspension of the regulations, no new permits were issued. However, the old regulations still applied to existing permits because the government felt that permit holders had "vested rights" entitling them to operate under the same terms and conditions which had existed when the permits were first issued (Thompson and Crommelin, 1974). Industry protested vigorously against suspending the existing regulations, claiming that a climate of uncertainty would be created regarding investments.

The Oil and Gas Land Regulations were finally amended in 1977, at which time the concept of the exploration agreement was introduced to replace the exploratory permit in the case of future land acquisitions. However, since no exploration agreements have been made as yet, the effect of this is not yet known. As well, in 1977 Bill C-20, the proposed Canada

Oil and Gas Act, was presented, although it has not yet been passed. The main feature of Bill C-20 is that it sets out new leasing ground rules in which the old free entry system is replaced by a bidding procedure. The government has thereby taken control over the first stage of oil and gas exploration, thus enabling account to be taken of environmental, social and economic factors in decisions regarding issue of oil and gas rights. However, there is no mention of procedures to do so. Lucas et al. (1979) suggest that the major thrust of the proposed act is still to promote rapid exploration and development of the petroleum resources in frontier regions north of 60°, primarily through fiscal incentives. Although the new bid system will, in theory, permit assessment of environmental and social impacts in the issue of hydrocarbon rights, Crommelin (1977) concludes that:

The new regime, for all its changes, remains strikingly similar to the old in this vital respect: it condones vast holdings by private operators as long as some exploration is conducted. This approach to resource management retains overtones of the endless frontier, of limitless expansion and of continuous development -- surely a philosophy called into question by the events of the seventies.

(Crommelin, 1977, quoted in Lucas and Peterson, 1978, p. 69)

We are now at the threshold of oil and gas development and production in the North. The Territorial Lands Act, the Public Lands Grants Act and Gas Production and Conservation Act, all of the early 1960's, still form the statutory basis for development and production of hydrocarbons on land and offshore. Drilling activity, particularly in offshore regions, is controlled by the new Canada Oil and Gas Drilling Regulations (SOR/79-82), promulgated under the authority of the Canada Oil and Gas Production and Conservation Act. This act provides for orderly and safe production of oil and gas resources and reduces or eliminates wasteful operations (Lucas

et al., 1979). The new drilling regulations, promulgated in 1979 are concerned with exploration and drilling activities, as well as conservation provisions. According to Lucas et al., they "represent a synthesis of provisions that have, until now, been included as conditions of approval for many frontier drilling programmes" (1979, p. 112). The Canada Oil and Gas Drilling and Production Regulations have largely been superseded by the more extensive and detailed Drilling Regulations, especially for offshore operations.

#### Environmental Protection Legislation

Statutes in place for wildlife and environmental protection may affect any stage of a resource project. For example, the Canada Wildlife Act, promulgated in 1977, is aimed at preserving, in a natural state, endangered species of wildlife and their habitat. Under the Act (sec. 4), the Minister of Environment has powers relating to "administration, management and control of public lands". Because the Act is so new, its potential effect on land acquisition for exploration and survey is unknown.

The Fisheries Act (1970) could also affect offshore drilling operations. It is aimed at preventing the destruction of fish, including shellfish, crustaceans, and marine mammals, and the loss of their habitat. However, as Lucas et al. (1979) point out, although the act is comprehensive its ultimate import depends on conscientious enforcement.

The Arctic Waters Pollution Prevention Act (administered by DIAND), the Migratory Bird Convention Act and the Ocean Dumping Control Act (administered by DOE) also bear on wildlife and environmental protection.

The above discussion outlines certain legislation that may be applied to offshore exploration, development and production in the Arctic.



As well, guidelines and assessment procedures exist which in theory supplement these requirements. For example, for offshore drilling, Approval-in-Principle for a project or programme must be obtained from DIAND. The Approval-in-Principle to drill has conditions attached which must be met prior to issuance of authority to drill. Applications are submitted to the Arctic Waters Oil and Gas Advisory Committee (AWOGAC) in Yellowknife. This Committee, formed in 1973, is composed of federal and territorial inter-departmental representatives. It is responsible for drawing up environmental terms and conditions which are attached to offshore drilling permits north of 60° (Pimlott et al., 1976; Lucas et al., 1979). In establishing these conditions, the Committee is guided by the Arctic Waters Pollution Prevention Act, which prohibits the dumping of waste in Arctic waters except as might be specified by Regulations made under the Act. The Approval-in-Principle is valid for three years during which time environmental study conditions must be met, as specified by the Chairman of AWOGAC.

DIAND, in 1977, made a decision regarding offshore developments in the Eastern Arctic. Areas for potential development would be reviewed by the federal Environmental Assessment and Review Process (EARP) to obtain regional clearance. Individual projects would be subsequently reviewed by DIAND. EARP was instituted by Cabinet directive in December, 1973 and revised in 1977. The directive charges the Minister of the Environment, in cooperation with other ministers, to implement a process with the objective to ensure that federal departments and agencies:

- 1) take environmental matters into account throughout the planning and implementation of projects, programs and activities initiated by the department or agency, or for which federal funds are solicited or for which federal property is required;

- 2) undertake or procure an assessment of potential environmental effects on time before commitments or irrevocable decisions are made for all projects which may have an adverse effect on the environment;
- 3) submit the assessments made for all major projects that will have a significant effect on the environment to the Department of the Environment for review;
- 4) incorporate the results of environmental assessments and reviews in the design, construction, implementation and operation of projects, giving environmental problems the same degree of consideration as that given to economic, social, engineering and other concerns.

(Federal Environmental Assessment Review  
Office, April, 1978)

The EARP process is based on the concept of self-assessment by initiating departments, and involves essentially two phases:

1. The preliminary screening of projects by the initiating department or agency to determine whether there are likely to be "significant" adverse effects.

This phase may include an Initial Environmental Evaluation (IEE) which must be undertaken if the extent of potential impacts is unclear. If the initiating department decides that potential impacts are significant the project is submitted to formal review.

2. Formal review of major projects, administered by the Federal Environmental Assessment Review Office (FEARO), includes the preparation of a comprehensive environmental impact statement (EIS) by the initiating department or associated proponent under guidelines issued or approved by a panel of experts appointed by FEARO and the Minister of the Environment. The EIS is subsequently reviewed by the panel and regulating agencies to determine its completeness and acceptability. The panel obtains information and opinions from other federal departments, interest groups, and the general public. Public hearings are generally held as a formal channel

for public input. After the hearings the panel evaluates the information and makes recommendations regarding the project to the Minister of the Environment. This Minister and the Minister of the initiating department decide whether or not to accept the panel's recommendations.

"Environmental" effects in an EARP review have been broadly construed to include socio-economic impacts. This is evident in the amendment to the EARP process in 1977 which includes a definition of "Environmental Evaluation Reports" as consisting of "an appraisal of the effects that the proposed project might have on the biological regime and the physical and socio-economic environment" (FEARO, April 1, 1978, Annex "A" - Definitions).

A major criticism of EARP to date is that it has no statutory basis (Emond, 1978; Rees, 1978; Rees, Feb., 1981). However, Lucas et al. (1979) suggest that it is no longer clear that EARP is a non-statutory process, immune to judicial review. They contend that the Government Organisation Act, and specific proposed amendments, which provide authority for the Minister of the Environment to establish the FEARO office and the EAR process is a statutory basis, at least sufficient to establish EARP panels as statutory bodies for the purpose of judicial review. However, these provisions do not provide statutory structure, powers, or procedures against which EARP's performance may be measured in judicial review applications.

#### Regulatory Deficiencies

Lucas et al. conclude that legislative requirements for High Arctic development, "both specific (establishing compliance standards) and non-specific (requiring assessment and exercise of discretionary powers by regulatory authorities) . . . appear(s) to be ample and comprehensive"

(1979, p. 134). However, reliance on regulation to control northern development begets a number of problems. First and foremost is that, without clear policy objectives and consideration of regional planning issues, it is difficult to ascertain whether proposed projects are in the Canadian interest. This was a major criticism of the proposed Mackenzie Valley gas pipeline. Lucas et al. contend that "with certain exceptions, none of the departments and agencies discussed have clear jurisdiction to consider and make recommendations, much less determine the fundamental question of need" (1979, p. 140). Rees (Feb., 1981) argues that, because of a lack of unambiguous government policy, this burden has tended to fall on EARP panels who may be ill-equipped to deal with it. EARP appears often to operate in a policy vacuum, where a lack of context tends to weaken the credibility and force of project-level assessments. Events surrounding Norlands' proposal for Lancaster Sound are one of the most dramatic illustrations of this problem.

Another problem is that overlapping and fragmentation of authority to enforce standards and to assess various elements of northern project proposals, in the absence of clear policy objectives and decision rules, causes confusion and uncertainty and adds to time and costs. For example, Dome Petroleum applied to DIAND for dredging permits for Mckinley Bay/Tuktoyuktuk Harbour in June 1979. Although regional committees advised against issuing the permits without applying the EARP process because of outstanding environmental concerns, they were instructed by Ottawa to interpret their mandates in the narrowest sense. This resulted in confusion, confrontation and circumvention of the environmental regulatory process. The case of Mckinley Bay is also a vivid example of

DOE's emasculated role in protecting the public interest north of 60° (see Rees, 1980 for full documentation of this remarkable series of events).

Similar problems were encountered at Lancaster Sound.

Problems exist also in the areas of public participation and native claims. There are still few opportunities for public involvement in decision making processes. Opportunities that do exist, such as during EARP formal reviews, have deficiencies regarding procedural fairness and other matters, so much so that the Canadian Arctic Resources Committee, the Committee for Original People's Entitlement and most recently, the Yukon Conservation Society have now refused to take part in such reviews. Native rights in the absence of native land claims settlements may not be properly taken into account in the present regulatory system.

In short, while certain positive statements and efforts have been made, the overall historical trend of relying on rapid resource exploitation to 'develop' the northern economy has continued. Application of 'policy' for the North continues to be largely reactive, regulatory and negative. Examples such as the fruitless Mackenzie Delta Regional Plan, which was dropped as soon as plans for the pipeline collapsed, the fiasco over Dome/Canmar's massive dredging projects and, most recently, the meeting of Deputy Ministers where a fundamental decision to be taken was whether the government wishes to continue to react to specific project proposals highlight the need for planning in the North. As the following analysis shows, all these major weaknesses play a significant part in events relating to the Lancaster Sound drilling proposal.

Notes to Chapter III

1. See Easterbrook and Watkins, Approaches to Canadian Economic History (1967) for an in-depth treatment of the staple theory of economic growth.
2. See also Environment Canada, Lands Directorate, 1979.

## CHAPTER IV

Lancaster Sound Events and Decisions --  
A Chronology

## Introduction

This chapter outlines ten years of events and decisions regarding a proposal to drill an exploratory well in Lancaster Sound. The decision-making prior to referral to the federal Environmental Assessment and Review Process was not carried out publicly. Copies of government-industry correspondence, background documents and personal interviews and correspondence provided the information for this reconstruction of events and decisions. However, many details of decisions regarding complex issues could not be elicited or have simply blurred in officials' minds over time. Thus some information gaps are inevitable.

The major participants in the decision-making process regarding Lancaster Sound are described in Appendix 1. The nature and degree of their involvement is apparent from the chronicle that follows.

## The Early Years -- 1968-1972

In 1968-69, exploration permits for approximately 14 million acres of offshore areas in the eastern High Arctic were acquired by twelve independent companies active in the Canadian petroleum and mining industry. These permits were issued by the Northern Non-Renewable Resources Branch, DIAND on a "first come - first serve" basis, under the Canada Oil and Gas Land Regulations. The permits were valid for twelve years. Terms and conditions of tenure included in the permits were designed to get exploration work

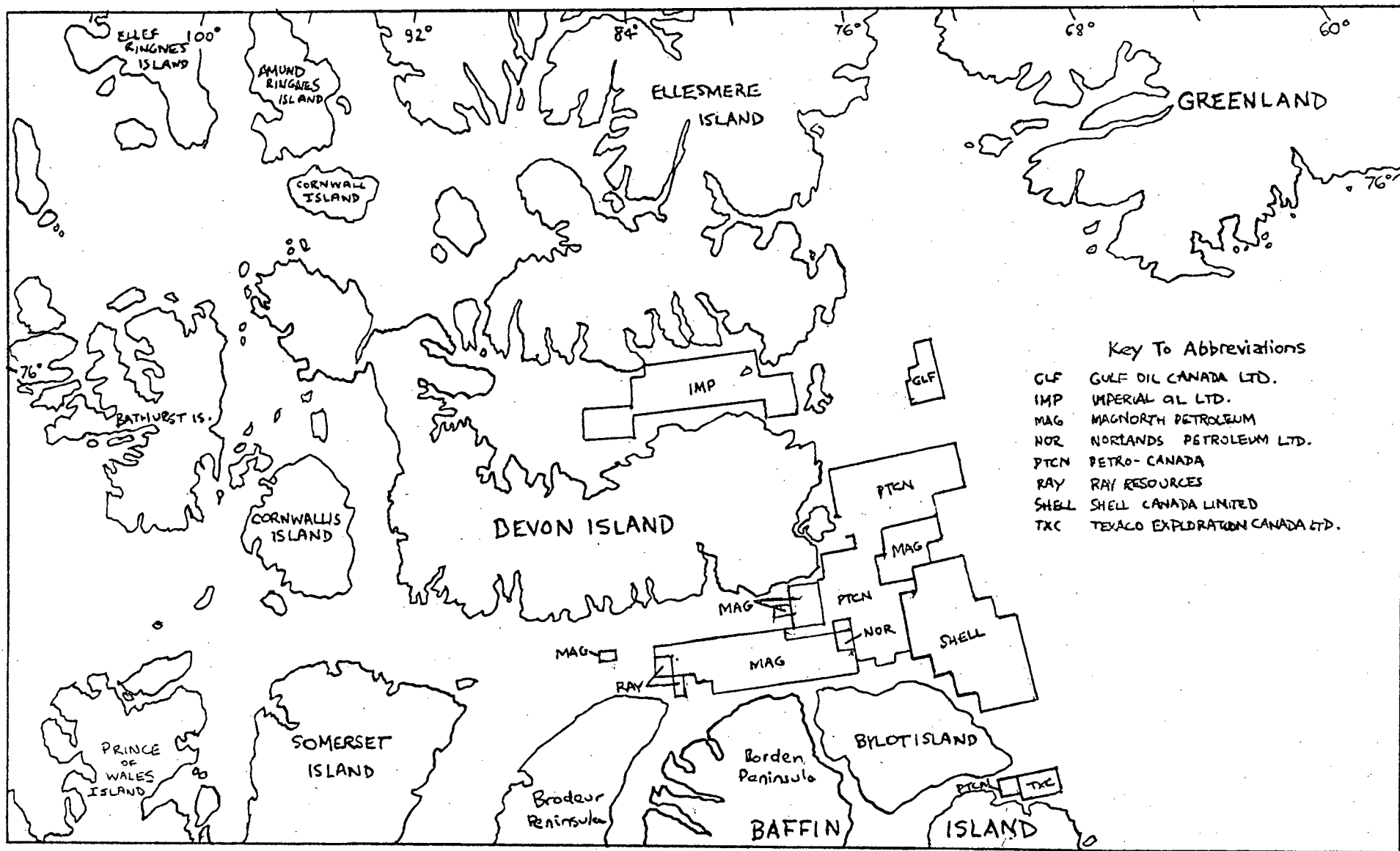
done. The major condition of tenure was that a certain amount of money was spent every year in an escalating charge over the period (work obligations over the twelve year life of the permit total \$2.65/acre).

The manner of exploration was left up to the individual companies because exploration was at this time not thought to have any environmental impacts (Sullivan, pers. comm., Aug. 16, 1979). The 1961 regulations were designed to encourage northern exploration with the idea that northern people would benefit from development of communications and transportation facilities and economic opportunities. At the time these permits were issued, no environmental expenses were identified as mandatory and no environmental studies were required.

In 1970 the twelve companies decided to pool their permits and resources to incorporate Magnorth Petroleum Ltd. Magnorth became the most active land holder in the Northwest Passage holding approximately 14.4 million acres in exploratory permits in the Arctic Islands, mostly offshore in the Northwest Passage (see Map 3). In 1971 an exploratory agreement was entered into between Magnorth Petroleum Ltd. and Northern Natural Gas Co. of Omaha Ltd. Northern would be entitled to an individual 25% working interest in Magnorth lands if 9.8 million dollars was spent by Northern on exploration on these permits over a five year period. Northern agreed to spend approximately \$2 million a year during a period of five years beginning on January 1, 1973 (Magnorth Petroleum Ltd./Norlands Petroleum Ltd., March, 1980).

During the summers of 1971 and 1972 Magnorth continued a marine seismic exploration program. In 1972, Norlands Petroleum Ltd., replaced Northern Natural Gas Co. in the Joint Operating Agreement. Norlands is a wholly-owned subsidiary of Northern and had been incorporated in 1970.





AREA UNDER PERMIT IN LANCASTER SOUND

MAP 3

At that time Magnorth transferred its exploration operations to Norlands for certain areas. During 1973 Norlands commenced a multi-year exploration programme in the Northwest Passage. This exploration programme consisted of some 16,000 miles of seismic work, ocean bottom sampling and field geology. Norlands identified promising geologic structures within Lancaster Sound and began preparing an application for Approval-in-Principle to drill in this area.

#### Approval-in-Principle - A Major Decision - 1973-74

In June 1973, the federal Cabinet was asked by DIAND to consider the question of oil and gas exploratory drilling in offshore Northern Canada. Cabinet concluded that the existing legislation was adequate for the appropriate administration and control of anticipated industrial activity (DIAND, January, 1976). At this time Cabinet decided to establish the Arctic Waters Oil and Gas Advisory Committee (AWOGAC), an interdepartmental body whose purpose was to review drilling applications, facilitate evaluation of environmental impact resulting from industrial activity, and recommend terms and conditions for the granting of Drilling Authorities. According to "Offshore Drilling, Northern Canada":

It was additionally concluded that the risks of pollution and impairment of the Arctic environment cannot be reduced to zero, but the risks are considered to be so low as to be acceptable in consideration of the national and regional benefits to be derived.

(DIAND, Jan. 1976, p. 5)

These benefits were not described in the 1976 background paper. Nevertheless, in July 1973 Cabinet agreed:

- a) to accept the terms and conditions [as proposed by DIAND] for Arctic offshore drilling operations as proposed in a very detailed format of Approval-in-Principle and Application

for Drilling Authority.

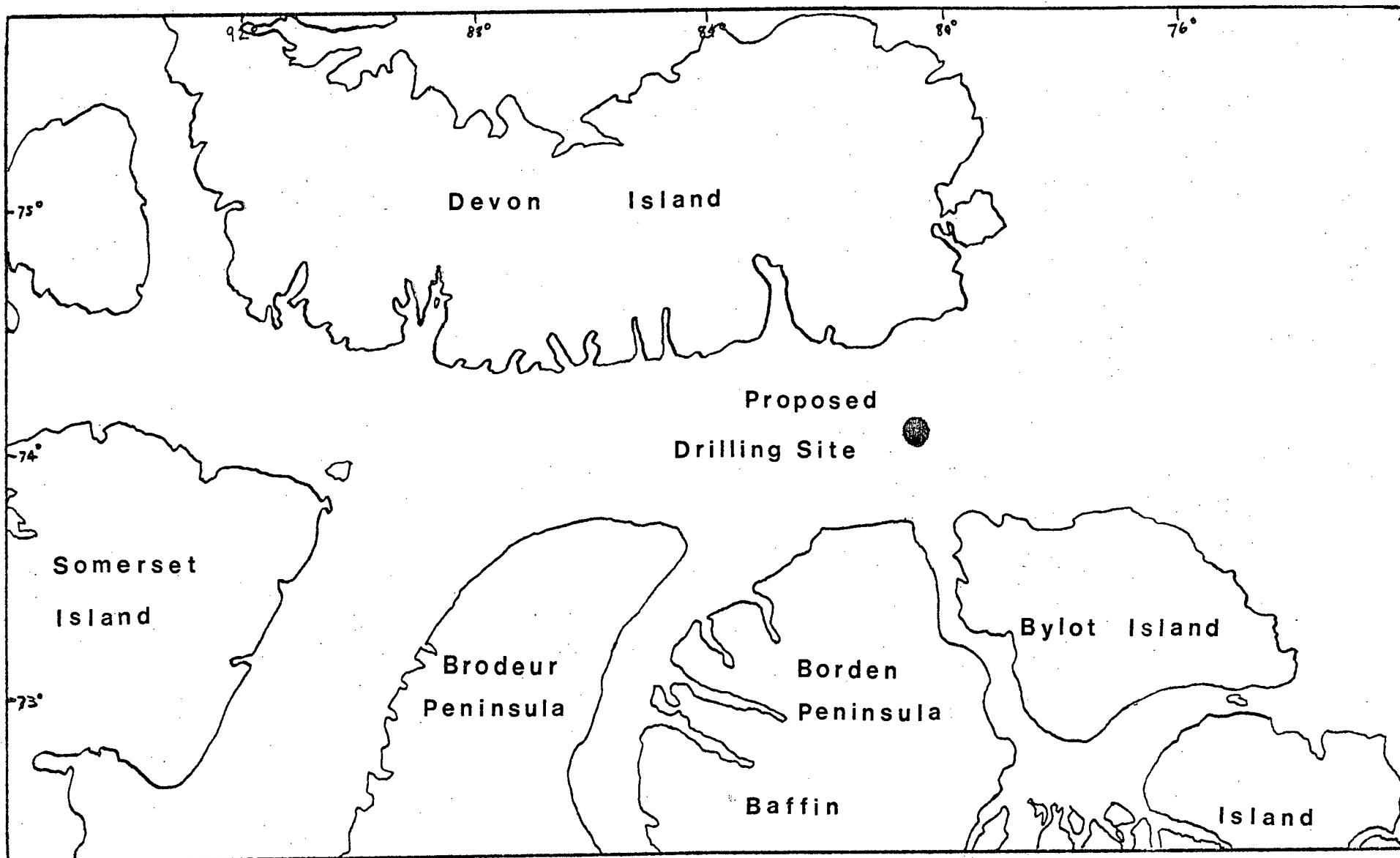
- b) that studies of potential environmental problems associated with the exploratory program be hastened so that principal observations and conclusions would be available before drilling commences.

(DIAND, Jan. 1976, p. 6)

Norlands applied to DIAND for Approval-in-Principle for a drilling programme in Lancaster Sound on February 6, 1974. They proposed to drill a single expendable exploratory well, utilizing a dynamically-positioned, ice-strengthened drillship. The well would supply necessary stratigraphic knowledge and determine the reservoir and hydrocarbon potential of the largest structure in Lancaster Sound. The proposed well was to be drilled in 3000 feet of water, a depth to which no well, worldwide, had yet been drilled. It was located at the eastern end of Lancaster Sound, approximately midway between Bylot and Devon Islands ( $74^{\circ}05'38''\text{N}$ ,  $81^{\circ}15'30''\text{W}$ ) (see Map 4) (Lucas, June 11, 1974; FEARO, 1979). In spite of the great water depth, short drilling season and difficult ice conditions, Norlands proposed to DIAND that drilling begin in 1975.

The application was accompanied by the result of a Foundation of Canada Engineering Corporation (FENCO) study of conditions in the Northwest Passage relating to offshore operations in an effort to obtain all relevant oceanography, sea bottom and ice data, including temperature, wind, wave, current and seabed core measurements. As well, Westburne Engineering Co. had done a technical and economic feasibility study of the proposal and F. F. Slaney Co. had made an initial assessment of the potential environmental effects associated with the drilling system (Daae, pers. comm., March 13, 1980).

Norlands received Approval-in-Principle on August 9, 1974, in a letter from A. D. Hunt, then the Assistant Deputy Minister, Northern Affairs



**MAP 4**

Programme, DIAND (Hunt, 1974). This approval was valid for three years from that date and was subject to certain conditions attached to the letter and "to such other conditions as may be attached to the Drilling Authority by the District Oil and Gas Conservation Engineer, under the advice of the Chairman of the Arctic Waters Oil and Gas Advisory Committee." Advance conditions attached to the letter included submission of a description of the overall program schedule, program costs, overall operating plan, documentation of new technology, details of proposed sub-sea equipment, an operating procedures manual for the drilling vessel, and a list of the backup drilling equipment. As well, Norlands was to comply with all shipping legislation and requirements of the Arctic Waters Pollution Prevention Act and Regulations. Initial conditions for environmental protection required Norlands to comply with all environmental legislation and to conduct studies designed to provide data in the following areas:

- 4.5.1 baseline environmental and resource data on fish, marine mammals and birds in or utilizing the Lancaster Sound area and in any areas that might be affected by the drift of an oil slick;
- 4.5.2 detailed ocean current studies in Lancaster Sound;
- 4.5.3 description of shore-based installations and an evaluation of their impact on the terrain and local environment;
- 4.5.4 monitoring for environmental changes before, during and after drilling operations.

Details regarding the scope of the studies, the development of appropriate methodologies and investigational procedures, and the delineation of study areas shall be established by the operator in consultation with and to the satisfaction of the Chairman of the Arctic Waters Oil and Gas Advisory Committee in Yellowknife. Monitoring of the studies shall be coordinated by the Arctic Waters Oil and Gas Advisory Committee and shall be substantially completed before operations commence.

(Hunt, 1974, Attachment 1, p. 7)

Other requirements included an oil spill contingency plan and a blowout control contingency plan. According to DIAND officials, the focus of the Approval-in-Principle for Lancaster Sound was not to clear the whole region for drilling but was site-specific (Snow, pers. comm., Aug. 14, 1979; Glazier, pers. comm., Aug. 13, 1979).

DIAND claims that the Approval-in-Principle was issued to Norlands following an interdepartmental review. Certainly the Approval-in-Principle and attached initial conditions was circulated within the Department of the Environment. In May, 1974, the Assistant Deputy Minister of the Environmental Protection Service, DOE, recommended to A. D. Hunt that the Approval-in-Principle be deferred (Edgeworth, 1974). This letter listed the deficiencies of Norlands' proposal and DOE's environmental concerns. Apparently, Norlands had stated in their application that the biological productivity in Lancaster Sound was low, a statement to which DOE took strong exception.

In June, the Senior Assistant Deputy Minister of Fisheries and Marine Services, DOE, K. C. Lucas, sent a memorandum to the Minister of the Environment expressing his concern over Norlands' application. This exemplifies the department's apprehension of a lack of authority to enforce their mandate to protect aquatic ecosystems in the North:

While much baseline data on the aquatic ecosystem of Lancaster Sound is lacking, we can state that the environmental consequences of an oil spill to the massive bird populations (Canadian Wildlife Service tells us that 50-60% of all seabirds in the Eastern Canadian Arctic are in Lancaster Sound), fish and marine mammals of the area would be beyond compensation.

Because of the water depth proposed and the lack of an adequate real-time environmental hazard prediction system for weather, icebergs and ice floes, DOE

considers the risk of an oil spill from this operation to be significantly increased above more conventional operations.

Were a release of oil to occur as the result of a blowout during the later part of the drilling season, the proposed backup system (off Labrador) would not be able to drill a relief well and contain the blowout until the following drilling season. In addition, there is at present no oil spill clean up technology, either within government (MOT) or industry, which would be adequate for application in Arctic waters.

For these reasons, it was recommended to DINA that Approval-in-Principle be deferred until conditions which would address our environmental concerns were met. The completion of the Beaufort Sea studies in 1976 may enable some of these conditions to be met . . . .

I understand that DINA wishes to make a decision imminently. We are concerned that our advice may be ignored. If this happens, and an oil spill subsequently occurs with what would certainly be disastrous environmental consequences, DOE would be subject to strong criticism.  
(Lucas, June 11, 1974)

Two days after this memorandum was written, Lucas wrote to Hunt, suggesting that the proponent submit his environmental program for meeting the conditions of the Approval-in-Principle to the federal Environmental Assessment and Review Process (EARP). This process, as previously mentioned, was instituted by Cabinet directive in 1973 in order to ensure that environmental impacts are taken into account in the planning and implementation of federal or federally-sponsored projects.

If DINA does choose to issue Approval-in-Principle at this time, I would suggest and recommend that the proponent submit his environmental program for meeting these conditions to the recently formed federal government Environmental Assessment Review and Protection (EARP) process. This would, of course, be in addition to mechanisms of control such as the Arctic Waters Oil and Gas Advisory Committee.  
(Lucas, June 13, 1974)

From such correspondence and DOE position papers, it is apparent that DOE officials believed that Norlands' proposed project had potential significant impacts, warranting an extremely cautious approach to decision-

making. Nevertheless DIAND issued an Approval-in-Principle only two months after DOE's advice that it be deferred until their concerns could be met.

As one DOE official commented:

There seems to me to be an overall overwhelming attitude of 'gung ho' about both the Norlands proposal and the DINA decision to give approval-in-principle at this time. It appears that Norlands, their consultants, and DINA have nowhere sought or listened to adequate oceanographic advice.

On another question, why can't these people be asked to demonstrate that they can move pieces of ice around with tugs before they are given permission to assume that they are going to be able to behave in this fashion?

It seems extraordinary that the very first test well in the world at such a depth should be contemplated in so hostile an environment as the Canadian Arctic. Shouldn't they have to wait until either they or someone else demonstrates (practically, not theoretically) that the technique is indeed feasible?

(Stewart, 1974, original emphasis)

While this may illustrate the overall lack of acceptance by DIAND of DOE's role in the North, the approval was also granted without consulting native organisations or Inuit communities which might be affected by the project. Indeed, six months earlier, Dome Petroleum Ltd. had received a similar Approval-in-Principle from DIAND for its drilling programme in the Beaufort Sea. A news release issued by the Committee for Original People's Entitlement (COPE) shortly afterwards stated:

balanced, long-term development . . . is being sacrificed for immediate profit and a panic reaction to the energy crisis. . . . It is appalling that neither COPE, Inuit Tapirisat of Canada (ITC), Settlement Councils, nor hunters' and trappers' associations in the region have been consulted.

(cited in Pimlott et al., 1976, p. 20)

What exactly did Approval-in-Principle mean? When questioned by Dome officials at a Northern Canada Offshore Drilling Meeting in December,



1972, a DIAND official stated:

After all aspects of the proposal have been assessed and we have determined that the operation could proceed with due regard for safety and for the environment, the Oil and Minerals Division will recommend to the Minister of the Department that an Approval-in-Principle be granted. An Approval-in-Principle granted to an operator would provide reasonable assurance that an Application for a Drilling Authority would be approved for a particular well in a specified area in the interval of time specified when the system is ready to begin operations.

(cited in Pimlott et al., 1976, p. 15)

At the same meeting another DIAND official, when pressed, stated "Approval-in-Principle is approval in principle by the government of Canada and that implies therefore some pretty definite agreement that the system can and will be allowed to be used". Much later, after DIAND had been criticized by DOE and native groups, Approvals-in-Principle were regarded by DIAND officials as much less binding on the government (Pimlott et al., 1976). In fact, according to two DIAND officials, DIAND regretted granting Approvals-in-Principle and tried to phase them out by not issuing any new approvals or renewing expired ones (Glazier, pers. comm., Aug. 13, 1979; Løken, pers. comm., Aug. 15, 1979). However, in 1980 the system of granting Approvals-in-Principle is being used once again.

#### The Arctic Waters Oil and Gas Advisory Committee

As previously mentioned, the Arctic Waters Oil and Gas Advisory Committee (AWOGAC) was formed to incorporate environmental terms and conditions into offshore drilling permits north of 60°. According to Pimlott et al., DIAND formed an ad hoc version of this committee in February, 1973. "Its purpose was to assist in researching environmental aspects of offshore drilling in the Arctic for the memorandum

DINA was preparing for its Minister to submit to Cabinet" (Pimlott et al., 1976, p. 19) regarding permission to grant Approval-in-Principle. After receiving permission from Cabinet the Minister established the permanent committee to be based in Yellowknife. AWOGAC had members from DIAND and from DOE (then the Department of Fisheries and the Environment) and was chaired by a DIAND official. When Approval-in-Principle was issued to Norlands, the chairman of AWOGAC was Murray Morison, the regional official responsible for non-renewable resources.

Under the Approval-in-Principle, the committee was responsible for setting up a program of studies required to meet conditions to be fulfilled prior to the issuance of final drilling authority. The details of these environmental studies were therefore only generally defined at the time Approval-in-Principle was granted.

Norlands began meeting with members of the AWOGAC shortly after receiving Approval-in-Principle. In an October, 1974 meeting the company apparently stated that it and Magnorth found the condition of required environmental studies onerous and would prefer to conduct such studies in the future if they received authority for a large drilling program in Lancaster Sound and Baffin Bay. This was because they estimated the chance of finding oil or gas at the Lancaster Sound site at only 20% (AWOGAC, Oct. 29, 1974). Norlands had also decided to postpone drilling from 1975 to 1976, presumably because of the study requirements and because it was too late to order equipment for the 1975 drilling season. Later, the President of Norlands Petroleum complained to the then Minister of DIAND, Hon. J. Buchanan:

... we view these conditions as very onerous and all encompassing. Norlands is not an unlimited funding company for every conceivable environmental study for the eastern Arctic.

(Raleigh, 1975)

Though their Approval-in-Principle would expire in August, 1977, Norlands did not receive details of the environmental study requirements from AWOGAC until March 21, 1975, seven months after receiving the Approval-in-Principle. It is difficult to ascertain the reason for this delay. After all, time was needed to make up guidelines for Lancaster Sound, since Norlands' proposal was the first the government had encountered for this area. AWOGAC was at that time trying to define the study area as narrowly as possible because there was only one small company involved (Glazier, pers. comm., Apr. 6, 1981). Possibly, Norlands did not press for early details because they did not believe the studies to be important or because they disagreed with AWOGAC's initial requirements and the reasons for such studies. In any case, when the final definition of study requirements was made available to Norlands, the Chairman of AWOGAC stated:

I should make clear that these are minimum requirements based on the concept of a single well drilled within the area defined in your application. Any major change in the well location will require a further assessment by the Committee.

In conclusion, I am sorry about the delay in getting this information to you, and will make every attempt in the future to speed up the process.

(Morison, March 25, 1975, emphasis added)

It is clear from this letter that a regional-scale development in Lancaster Sound was still not being considered by either AWOGAC, the relevant federal departments, or Norlands. A single, site-specific approach was taken regarding Norlands' proposal. Indeed, from the study requirements attached to the letter, it is obvious that the Committee used the word "environment" in its narrowest possible sense, referring only to biophysical baseline data. There was no requirement to consider the social or economic impacts of the project. Item 4.5.3, which might be

construed as relating to this, required "description of shore-based installations and an evaluation of their impact on the terrain and local environment", but had been deleted upon Norlands' decision not to establish a shore base (AWOGAC, Oct. 29, 1974).

Nevertheless, these study requirements were substantially more than those required of other operators in the High Arctic (Snow, pers. comm., Aug. 14, 1979). For example, Panarctic had not been required to do detailed environmental studies although it had been engaged in a very active exploration programme from 1969 through 1974 in the Arctic Islands. Dome Petroleum, which had received a similar Approval-in-Principle six months earlier than Norlands, was issued Drilling Authorities in 1976, after a crash Beaufort Sea Project was instituted to look at environmental issues. According to the director of this project, A. Milne:

Studies were hastily assembled and were carried out in a scant two years . . . . A 'Preliminary Environmental Assessment' (or synthesis report) was produced by the late 1975 deadline, before many of the study reports had been completed and evaluated. . . . The decision to permit exploratory drilling and the environmental operating conditions applied were based on the Preliminary Assessment.

(cited in C.A.R.C., Northern Perspectives, Vol. VIII, No. 6, 1979, p. 2)

#### Environmental Studies--1975-1976

In April, 1975, Norlands apparently decided not to plan a drilling operation for 1976 and so chose not to initiate the environmental studies required by AWOGAC until September 1, 1975 (Morison, April 30, 1975). As a Norlands official stated:

The programme involved a study of plankton, marine mammals, polar bears, sea birds, ocean currents surface winds, water sampling at varying depths, including oceanographic work and ice studies.

Aerial transects were carried out on a bi-weekly basis beginning in the fall of 1975 and during the spring, summer and falls of 1976. We also chartered the M.V. 'Theta' for a seventy day work season during the summer of 1976. It was equipped with a laboratory for studies to be carried out by biologists, other scientists and various technicians.

Both DINA and the Arctic Waters Oil and Gas Advisory Committee approved the programme that we outlined and considered it to be satisfactory in order to cover the requirements that were outlined. In other words, we did meet the requirements as set out in the March 21, 1975, Environmental Study document before the Approval-in-Principle expired, and all of the environmental study reports giving the results of the programme were submitted to DINA by early 1977 (Daae, 1980).

The company was also required by AWOOGAC to intensify their seismic surveys during 1976 (Milne, 1976).

Because Norlands was a small operator, and had no one with environmental expertise on their staff to co-ordinate and oversee these studies, the company contracted out the work to consulting firms and relied heavily on the advice of scientists reporting to AWOOGAC. According to a Norlands official, the company had spent two million dollars on environmental research by 1976. A DIAND official estimated that the environmental studies required of Norlands would cost 10% of the company's activity costs in 1974 dollars. This was a significantly higher cost than any oil company had had to bear for work of this nature to date (Snow, pers. comm., Aug. 14, 1979). Norlands deserves credit for accepting these requirements. As well, the studies that were produced were praised by various government officials from DIAND and DOE as being "classic" in their thoroughness, done in a "cadillac" manner with top consultants, and "models of how it should be done" (Snow, pers. comm., Aug. 14, 1979; Milne, pers. comm., Mar. 24, 1980). It is interesting, however, that the AWOOGAC study requirements did not require Norlands to perform an evaluation of their studies from the perspective of environmental risk and that Norlands was still

planning to drill in 1977.

During 1976 and 1977 public awareness was growing regarding the risks inherent in offshore drilling. Several government initiatives at this time indicate a gradual change of attitude toward recognizing the environmental implications of such ventures, and the need for more than a site-specific approach to assessments. Of course, not all departments or branches within departments were awakened to the same degree. According to one DIAND official, a five year moratorium on drilling in order to study the eastern Arctic was proposed at this time (presumably by DOE) but was turned down by the Department of Energy, Mines and Resources as being contrary to the "need to know" energy policy (Snow, pers. comm., Aug. 14, 1979).

On the other hand, there was a major restructuring within DIAND during 1976 indicating that senior officials were beginning to realize wider concerns. The Northern Programme was then established with Dr. M. Ruel (who had been Assistant Director of the earlier Renewable Resources Branch) [see Appendix 1] as Director General. The new Northern Programme had various divisions and a Northern Environmental Protection Branch. Environmental concerns (including socio-economic) of northern development were removed from the usual regulatory process and the responsibility was given to this Branch. The Oil and Minerals Division was shifted to become part of the Northern Policy and Programme Planning Branch.

In June 1976, Dr. R. Stewart, the Assistant Deputy Minister, Ocean and Aquatic Sciences, DOE, asked Dr. A. Milne to examine the state of knowledge respecting the environmental impacts of Norlands' drilling proposal for Lancaster Sound. Dr. Milne was then the head of the Arctic Marine Group, Ocean and Aquatic Sciences and Project Manager of the Beaufort Sea Project, and had written an overview of environmental hazards associated

with drilling in the Beaufort with his colleague, Brian Smiley. Dr. Milne reported to Dr. Stewart after his examination of the AWOGAC files on Lancaster Sound:

There seems to have been a preoccupation in government with the adequacy of environmental baseline studies without consideration of the future necessity to evaluate these studies and provide an assessment of the threat to the environment. In fact, throughout the correspondence it has been stated in several places that the proponent should not conduct an evaluation of the baseline data. This may have been a result of the 'arms length approach' . . . . No agency appears to be planning to evaluate the environmental studies in order to determine the magnitude of the threats.

Recognizing the key problem it would appear that at the end of the environmental studies being conducted this year there will be a neat stack of reports on the shelf with no evaluation having been made. It seems that the ball has been dropped, perhaps by DOE. . . . Possibly a very strong pitch through the Arctic Waters Oil and Gas Advisory Committee should be made to ensure that an evaluation of the above threats (of a blowout) is in fact carried out prior to the granting of a drilling authority.

It appears that there may be some confusion about the application of the EARP process to Norlands in that an approval-in-principle has already been granted. It appears clear that there will be no assessment made of the threat to the environment as things stand at present and that DINA is not about to be the initiator in the EARP process unless pressure is applied either through AWOGAC or by higher management in DOE.

(Milne, 1976, emphasis added)

Two days later, Dr. Stewart wrote to Mr. Gerry Glazier, then chairman of AWOGAC:

My understanding is that there is some possibility that Lancaster Sound drilling may be subjected to EARP. However as I understand the position no definitive decision has yet been made and we do not have any date when such a decision might be made.

I therefore propose that the Arctic Waters Oil and Gas Advisory Committee, on its own initiative, set in motion an examination of the existing data on Lancaster Sound and of data now being collected . . . .

I believe that such an effort should be put in place as quickly as possible. If it is determined later that Lancaster Sound will be subject to EARP or

to any other procedure, the results of this study can only contribute to whatever other procedure is determined upon. I believe that if we wait for other decisions to be made and other procedures to be put in place, we may find that events will overtake us.

(Stewart, 1976)

Dr. Stewart, Mr. Glazier and Dr. Milne apparently convinced DIAND of the necessity of an overview review of Lancaster Sound in October, 1976:

DOE and DINA agree to jointly carry out an Environmental review of the proposed drilling operation by Norlands Petroleum in Lancaster Sound. The work will be done as a joint undertaking making use of the best scientific expertise and resources available in each organization . . . . The final report will be submitted to the Chairman, AWAC for development of terms and conditions to be attached to the drilling authority.

(Ruel, 1976)

A tentative completion date for this report was set for August 1, 1977. Milne and Smiley were contracted by Dr. Ruel to write the report and DIAND contributed \$25,000 plus printing costs to producing it. Norlands' environmental studies were used as background for this report.

Meanwhile, Magnorth and Norlands applied in 1976 to DIAND for a moratorium on their permit requirements. In other words, the companies wanted permission to retain their permits without paying the annual rent. Uncertainty because of the delay in promulgating new Canada Oil and Gas Land Regulations (which, as noted in Chapter III, had been withdrawn in 1970 causing lease applications to be held in abeyance) was one factor prompting these companies to apply for a moratorium. According to Norlands' officials, after the 1961 Regulations were withdrawn, industry was operating in a vacuum and so, being unsure of their rights in the land, they were unwilling to pay the annual rent (Daae, pers. comm., Aug. 13, 1979). The companies' application was denied by Hon. J. Buchanan, then Minister of DIAND, on April 21, 1976, there being no precedent for such a request



(Magnorth Petroleums Ltd./Norlands Petroleum Ltd., March, 1980). Magnorth therefore surrendered ten million permit acres (in less promising areas) due to the pressure of escalating work requirements for which they did not want to commit funds. The company retained approximately four million acres in Lancaster Sound/Baffin Bay, which were considered to have potential hydrocarbon-bearing structures.

#### Eastern Arctic Marine Environmental Studies, 1977

By far the most indicative of DIAND's shift in policy in a more environmentally conscious direction was the establishment of the Eastern Arctic Marine Environmental Studies programme (EAMES). A month after Dr. Stewart approached AWOGAC with Dr. Milne's proposal for an environmental overview for Lancaster Sound drilling the Minister of Indian and Northern Affairs, Hon. Judd Buchanan, announced that offshore drilling in Baffin Bay and Davis Strait "will not be permitted until a comprehensive environmental assessment has been conducted" (DIAND, July 26, 1976). This announcement, made in response to concerns expressed by the Baffin Region Inuit Association over environmental impacts of offshore exploration, triggered the planning of the EAMES programme in the fall of 1976 (Løken, 1979).

The main objective of the EAMES programme was to provide sufficient environmental data to prepare an Environmental Impact Statement (EIS) for submission to the Environmental Assessment and Review Process (EARP). No offshore drilling proposals had been submitted to EARP prior to this announcement so in effect the announcement of EAMES was also a policy statement regarding EARP. EAMES studies were to include consideration of socio-economic impacts. Mr. Buchanan promised that studies would be developed in consultation with native people in the local communities. The EAMES

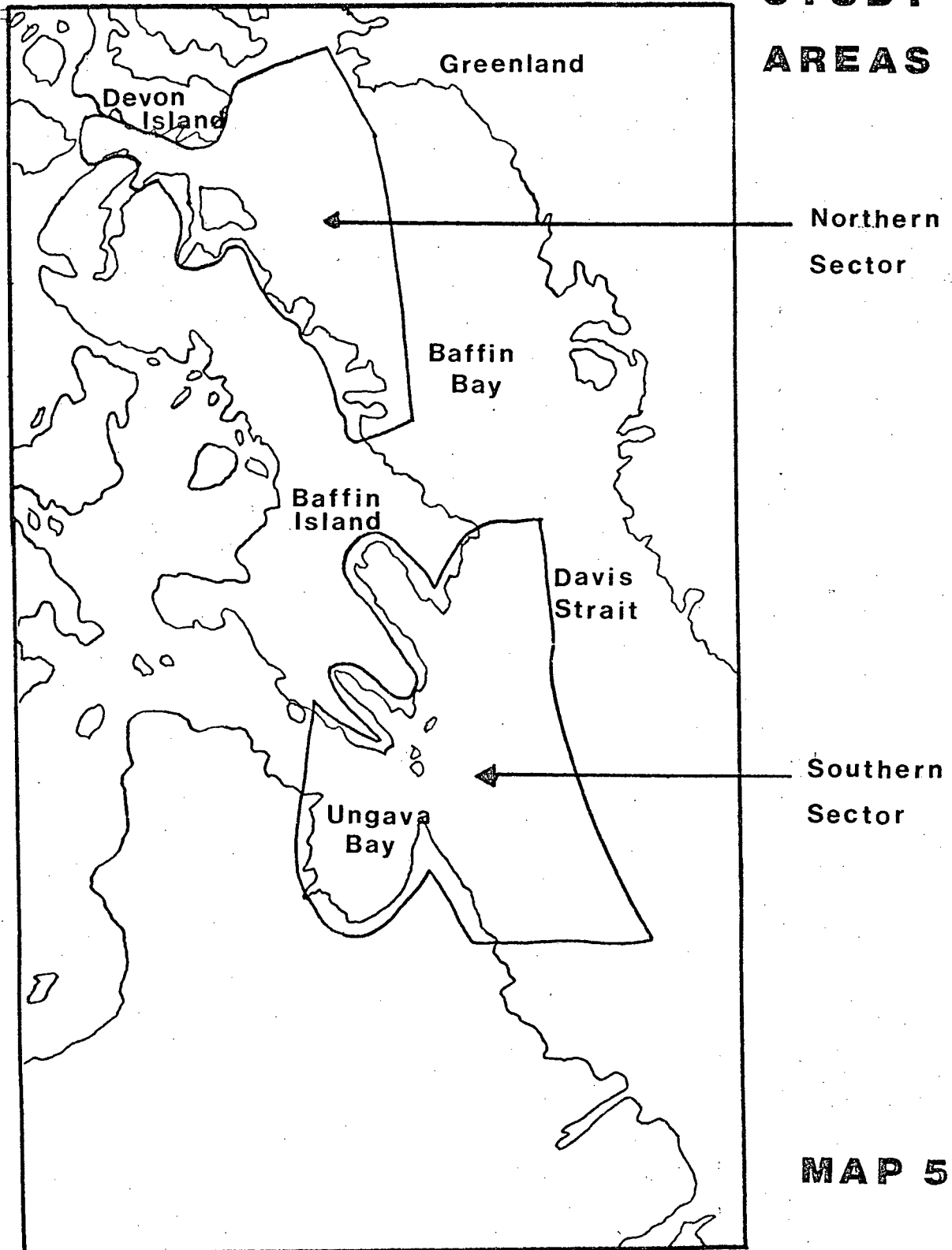
studies were to "cover all of Lancaster Sound, Baffin Bay and Davis Strait, will take place over four years and will cost about \$13 million" (Faulkner, Nov. 17, 1977).

The area under consideration was divided into two sections -- north and south of Cape Dyer (see Map 5). Two years of studies were planned for each sub-area with the area to the south receiving greater priority. The programme was to be managed by a joint government-industry-native management committee, with much of the programme carried out by the oil industry and their consultants. The area south of Cape Dyer (in Davis Strait) was already the subject of an environmental programme sponsored by Imperial Oil Ltd., representing a number of companies holding permits in the area.

The programme was to be jointly funded by government and industry with industry paying for the major portion of the studies. Government was to be responsible for \$2.0 million and so the programme had to be approved by the Treasury Board before it could be implemented. DIAND's submission to the Treasury Board describes the intention of EAMES:

Several oil companies have declared their intention to carry out exploratory drilling on the acreages presently held under exploration permits in the offshore regions of the Eastern Arctic, before these permits expire within the next five years. In view of the concerns expressed over the Beaufort Sea drilling operations, it is judged that exploratory drilling may have significant environmental impacts and the exploratory drilling will therefore be submitted to the Environmental Assessment and Review Process (EARP). The Eastern Arctic Marine Environment Study Program (EAMES) is proposed to collect the information required for an Environmental Impact Statement (EIS) for consideration by the EARP Panel . . . . The proposed approach to EARP differs from the usual procedure in that rather than submitting each drilling application for review, all drilling activities within parts of the region will be assessed at the same time. This is proposed because much of the assessment for one well will also be applicable to others in the

# EAMES STUDY AREAS

**MAP 5**

region; furthermore an assessment done on a regional basis will be more comprehensive than if it was done on a well-by-well basis and the cumulative impact can be more readily assessed.

(DIAND, June 17, 1977, p. 3, emphasis added)

EAMES was considered unique for a number of reasons. Faulkner's official announcement of the programme states:

- It is the first time these studies will have been carried out before any authority to drill is granted.
- It will involve northern residents, particularly Inuit, both functionally in the conduct of the studies and on an advisory board to the management committee with representation from 10 communities in the Baffin region.
- It is the first time we will have looked at potential effects of exploration on a broad regional ecological rather than site-specific basis.

(Faulkner, Nov. 17, 1977)

According to Løken (1979, p. 2), oil companies actively interested in the EAMES area were "well aware of government thinking and adjusted their plans accordingly". Løken was here referring to Imperial Oil Ltd. and Aquitaine, neither of which had received an earlier Approval-in-Principle for their drilling plans in Davis Strait. Norlands apparently did not exhibit the same interest, although they attended a meeting of Eastern Arctic permit holders and DIAND officials on April 15, 1977, during which a draft outline of EAMES was presented. Løken goes on to state:

It is important to note that there was no compulsion on the part of Norlands to modify their plans because EAMES did not have T.B. (Treasury Board) approval until September, 1977 and was not formally announced until November, 1977. Norlands carried out only very limited studies in 1977 and made no attempt to meet the data objective implicit in the developing EAMES program.

(Løken, 1979, p. 3, original emphasis)

Apparently, because of Norlands' prior Approval-in-Principle and because of the studies they had done, the company considered itself exempt

from EAMES requirements, even though Lancaster Sound was within the EAMES study area. Moreover, DIAND officials did not specifically ask them to comply with the EAMES program in order to obtain regional clearance for Lancaster Sound even though the original studies required by AWOGAC would not have met the EAMES requirements. However according to one DIAND official, they should have realized that rules affecting their plans had changed (Snow, pers. comm., Aug. 14, 1979). This official went on to describe Norlands as "a company which adopted a different approach -- when other oil companies deal with the government they make great attempts to find out what all the requirements will be -- Norlands did not". A DOE official stated "the proponent, Norlands (had) clearly assumed that by paying for them (the environmental studies) the necessary hoops were being hopped through and that would be that" (Milne, pers. comm., Mar. 24, 1980).

Although EAMES was first announced and planning begun in summer, 1976, Treasury Board did not approve the programme until fall, 1977. A DIAND official suggested that Norlands may not have taken EAMES seriously because it had no official status until then (Løken, pers. comm., Aug. 15, 1977). Ultimately, approval was granted only with substantial reduction of government funding (Fleischmann, Sept. 29, 1977). This meant that industry's share of costs would be even greater.

#### Referral to EARP - "Special Status" for Norlands -- 1977-1978

By early 1977 DIAND had apparently adopted the policy of referring all exploratory drilling proposals for the eastern Arctic to the federal Environmental Assessment and Review Process (EARP). Certainly by June, 1977 when the EAMES program was submitted to Treasury Board for approval, this new policy was made explicit. However, when questioned as to why DIAND had waited until 1977 to refer Norlands' proposal to EARP when DOE had

suggested this as early as 1974, a DIAND official admitted that the department wished "to keep it (the project) under the self-assessment umbrella" because EARP was still evolving and standard procedures hadn't yet been established (Løken, pers. comm., Aug. 15, 1979). While it is true that EARP was (and is) still evolving, DIAND's response may indicate the department's wish to guard its autonomy in the North.

In the meantime, Norlands' Approval-in-Principle was to expire August 9, 1977. On May 3, Mr. Raleigh, the President of Norlands, wrote to Ewan Cotterill, Assistant Deputy Minister, DIAND asking for information regarding the Lancaster Sound exploratory drilling proposal:

As Norlands has fulfilled the Approval-in-Principle requirements ahead of the time frame contemplated, we are anxious to proceed toward the drilling phase so that we can contribute effectively to the 'national need to know' about our frontier hydrocarbon resources. Would you please advise what requirements are necessary, if any, over and above those described under Article 7, 'Drilling Authority' of the attachment to the above letter (Approval-in-Principle, 1974). As you know, we have held preliminary discussions with regard to drillship contracting for the summer of 1978 which we discussed with you at our meeting on April 28, 1977. Now, it is imperative that we proceed quickly to formalize all our contractual arrangements for drilling in the summer of 1978.

(Raleigh, May 3, 1977)

Norlands never received a reply to this request (Daae, pers. comm., Mar. 4, 1981). Presumably pressured by the imminent expiry of their Approval-in-Principle, Norlands then applied for a drilling permit to "drill a surface hole in the Lancaster Sound ocean bottom to a depth of about 1600 feet" in the drilling season of 1977 (Rutgers, June 8, 1977). This request was denied by DIAND (Cotterill, 1977) because the company had apparently not met two of the requirements of the Approval-in-Principle. One was item 4.5.2 -- detailed ocean current studies in Lancaster Sound -- and the other was

item 4.8 -- a detailed oil spill contingency plan. Cotterill's letter states:

I have been advised by my officials that current studies undertaken in Lancaster Sound are not yet complete and have therefore concluded that a realistic contingency plan cannot be finalized at this time. . . . It is therefore my opinion that it is unrealistic to anticipate a drilling authority being issued for Lancaster Sound this season, even at the planned shallow depth you have outlined. In our view, 'drilling to whatever depth is drilling' and complete data is essential to assess the program before a drilling authority can be issued. Furthermore, I would like to stress that a contingency plan for drilling in northern waters should include an action plan to deal with oil wherever it might migrate to. Therefore, we cannot deal only with site-specific plans, but must take into account the ultimate possibility of oil movements through the region.

(Cotterill, June 20, 1977)

However, the company's understanding was somewhat different:

This decision was reached despite the fact that Westburne Engineering had prepared an Oil Spill Contingency Plan for Norlands in 1974, also a new contingency plan had been finalized by Tri-Ocean Engineering in 1977 which was modelled on the best produced by industry at that time. Norlands had advised DINA that once authority to drill had been received a detailed oil spill contingency plan would be initiated and completed prior to the actual drilling. It was stressed that a detailed oil spill contingency plan required the commitment of substantial funds which Norlands was not willing to sanction without some assurance that they would be permitted to drill once all government conditions had been met. This approach was taken by other companies who were permitted to drill in the Davis Strait, such as Imperial. We also informed the government that we would utilize the resources of British Petroleum's World Wide Oil Spill Contingency counter measures expertise which is recognized as technically the best in the world.

(Daae, pers. comm., March 21, 1980)

After receiving Cotterill's reply, the company appealed to the Minister of Indian and Northern Affairs, claiming that the test well they wished to drill could not possibly contain oil and therefore an oil spill

contingency plan was unnecessary. The company was obviously confused over changing government policies:

On June 8, 1977, Norlands Petroleum Ltd. formally applied to drill a surface hole in Lancaster Sound as a continuation of our eight year exploration program in the Arctic. This was a response to the government stated policy of early assessment of potential frontier reserves. . . . Last week the Hon. Allistair Gillespie spoke in Calgary outlining changes in federal land proposals in order to try to stimulate additional frontier exploration. We trust that your department will not cause us to decide to terminate our long term exploration plans in the Canadian Arctic.

(Raleigh, June 27, 1977)

Their request for reconsideration of their application was denied for the original reasons, and because the department did not accept the certainty expressed that a shallow well was entirely without risk of pollution.

Norlands subsequently requested an extension of the Approval-in-Principle from August 9, 1977 to August 9, 1979 in order to fulfill the terms and conditions of the Approval-in-Principle. The company, in view of the substantial amount of money invested in the area, wanted tangible assurance instead of vague promises:

Furthermore, in view of the financial burden of this exploration program with expenditures which could not be anticipated in the early years of our activities in the Arctic, we are in need of your explicit reassurance that once the conditions mentioned above are met we will be allowed to drill in the 1978 open water season.

(Rutgers, July 12, 1977)

These requests were also denied by the Minister:

It is not the department's intention to issue any new Approvals-in-Principle for offshore drilling in waters of the eastern Arctic or to extend beyond the termination dates Approvals-in-Principle which have been issued in the past. No drilling authority will be issued until a full environmental impact assessment has been carried out. As you know, the question of offshore drilling in the eastern Arctic



has been referred to the Environmental Assessment and Review Process (EARP). At the department's request, the chairman of EARP has agreed to give the Lancaster Sound area special attention and priority in view of the fact that an Approval-in-Principle was issued previously. A panel will be formed and it will issue in the near future guidelines for the Environmental Impact Statement. An Environmental Impact Statement is being prepared and will be sent to the Panel early this fall.

(Allmand, July 27, 1977, emphasis added)

Seemingly, Norlands was to receive special attention and priority from EARP. As well, an EIS was already being prepared even though the panel had not yet been formed or guidelines for the EIS issued. Apparently, when it was determined that all offshore drilling proposals in the eastern Arctic should be referred to EARP, Dr. Ruel of DIAND decided in the spring of 1977 that the overview of environmental hazards being prepared for Lancaster Sound by Milne and Smiley would be considered an EIS for Norlands' proposed drilling. In March, 1977, he informed Norlands that DIAND would be responsible for preparation of the EIS (Daae, pers. comm., August 13, 1979).

Norlands wrote to Allmand on August 9, 1977, the day their Approval-in-Principle expired, requesting a two year relief period without exploratory work or obligations for all the Magnorth-Norlands permit areas. As noted earlier, conditions of tenure for permits required that a certain amount of money was either spent on exploration or paid directly to the government each year.

. . . We now see May, 1978 as the earliest date a drilling authority can be issued to us. This creates, however, a new problem regarding the permits we have been exploring. We must utilize our limited funds in the best possible way. The permits expire at their anniversary date in 1981, 1982 and 1983. These funds have been dedicated to drilling before those expiry dates as all preliminary exploration work has been done. Your predecessor, the Honourable Judd Buchanan implied in a letter of April 21, 1976 to

Magnorth Petroleum's President, Mr. C.L. Fiesel, that in the past relief from work requirements was given for environmental prohibitions of work. We feel that this delay in obtaining a drilling authority falls under this category of 'environmental prohibition to work'.

(Rutgers, Aug. 9, 1977)

The company received its reply to this request on August 26, 1977:

Although your disappointment at the delay of your project is understandable, the lifting of the permit terms and conditions cannot be supported at this time. The Regulations provide sufficient methods for relief in the form of 'carry-forward' of under-expenditures and the broad application of environmental assessment work as an allowable expenditure'. Your efforts toward maximizing the limited funds available to you for exploration are made somewhat more complicated by a corresponding requirement to see to it the costs of environmental and social impact studies are kept to reasonable levels. However, you may recall that the operators in the Beaufort Sea faced much the same problems between 1973 and 1975 and were able to use the regulatory devices to accomplish very similar objectives during that period.

(Cotterill, Aug. 26, 1977)

This reply seems both conciliatory and yet not at all helpful. After all, there was more than one operator in the Beaufort Sea, environmental concerns were not taken as seriously at this time (before the EARP policy was accepted) and as a DOE official suggested, Dome Petroleum Ltd., the principal operator, had more political contacts (Lewis, pers. comm., Aug. 15, 1979).

On August 29, Ruel wrote to Norlands informing the company that the Milne/Smiley report would be considered the EIS. According to this letter, Mr. Klenavic of the federal Environmental Assessment and Review Office (FEARO) had agreed to this plan:

For Lancaster Sound the following scenario has been developed by Mr. Klenavic. The review of the environmental data now being carried out by Dr. A. Milne et coll. on behalf of the Arctic Waters Advisory Committee will be considered as the

Environmental Impact Statement. In the absence of any formal EARP guidelines, the guidelines outlined in the EAMES proposal will be used. The EARP office will make public the EIS when received sometime early this fall and prepare a deficiency statement while receiving public comments. The deficiency statement is expected two months after receipt of the EIS and will be forwarded to you immediately. Public and community hearings, as required, will be held around March 1 and the Panel will submit its report to the Minister of Fisheries and the Environment by May 1, 1978. The dates referred to above are tentative and changes may be required, but my Minister has assured you that we will do what we can to meet the May 1, 1978 deadline.

(Ruel, Aug. 29, 1977)

The "deadline" referred to here was a tentative date set by DIAND for the EARP review so that Norlands could drill in the 1978 open water season if approval was granted.

Although officials in DIAND had decided that the Milne/Smiley report would become an EIS, according to one DIAND official who preferred not to be named, Milne and Smiley had no intention of writing an EIS. They were not even informed of this change until the report was half finished. This is certainly corroborated by Dr. Milne who states:

At the outset, Brian (Smiley) and I foresaw that an EIS might be required; however an EIS must include details of shore bases, economic and social factors. The latter was beyond our expertise and details of Norlands shore based operations had not been devised. Consequently we stated that the report was a 'contribution toward an EIS'.

(Milne, pers. comm., March 24, 1980)

The report itself when released in February 1978 is explicit on this:

This report provides that evaluation and constitutes a major component of an Environmental Impact Statement which the Initiator (the Department of Indian and Northern Affairs) may submit to an Environmental Assessment and Review Panel.

(Milne & Smiley, 1978, p. 3,  
emphasis added)

In a letter to Mr. Raleigh, President of Norlands, dated September 30, 1977,

Ruel seems to contradict his earlier statement that the Milne/Smiley report would be considered as the EIS, stating that "the above document (the Milne/Smiley Environmental Overview of Lancaster Sound) is to form the basis of the Environmental Impact Statement to be submitted to the Federal EARP late this year" (Ruel, Sept. 30, 1977).

The general impression among government officials in both DIAND and DOE and other oil company officials is that Norlands Petroleum Ltd. was very naive to allow the government to prepare an EIS. The company "put a lot of trust in bureaucratic mechanisms" and "came across as a neophyte operator" (source withheld on request, pers. comm., 1980). According to one DIAND official, Norlands simply refused to do more studies to address wider issues even though some DIAND officials had recognized that the Milne/Smiley report would not do for an EIS (Snow, pers. comm., Aug. 14, 1979). However, Norlands did write to DIAND asking for clarification of the 'special status' they had been given:

You also mention the Lancaster Sound having 'special status'. It is however, not quite clear to us from your letters of August 29 and September 30, 1977, what 'special status' precisely involves. Does it mean it will get priority in as far as we will get an answer by May 1, 1978 as stated in your letter of August 29th, or does it mean that the guidelines outlined in the EAMES proposal will be adhered to and severe deficiencies in our environmental study are still a probability?

If you would kindly clarify our position in regard to these possibilities we would be glad to assist you and concur with your utilization of our data.

If however, this would lead to new requirements by other governmental departments we would be unable to proceed along these lines as further environmental work can not be economically justified in view of the very long time lapse between the drilling of the first well and its doubtful success as an oil discovery, and the eventual production many years later.

(Raleigh, Oct. 13, 1977)

They received this reply from Dr. Ruel on October 27, 1977:

The 'special status' of the Lancaster Sound area refers to the fact that it will be dealt with by the federal EARP as the number one priority EAMES area rather than as part of the second priority area, as it was when EAMES was originally formulated.

This revised ranking, the fact that no new specific guidelines are being required, together with the fact that the criteria developed for EAMES and the Approval-in-Principle will be used in the EARP review, as agreed to by the EARP chairman, will expedite the process.

It is not possible to guarantee that there will be no deficiencies as a result of the Federal EARP, in fact to attempt to do so would obviate any such review process. . . I am monitoring the process of the EIS preparation, however, and it seems highly unlikely at this time that any deficiencies will be 'severe', i.e. it would seem that no further large-scale environmental studies will be required. I therefore request again your concurrence that the data be used for the purposes set out in my letter of September 30, 1977, since without the data, the EIS will be totally inadequate and the deficiencies identified by EARP would indeed be 'severe'. Without an acceptable EIS it would not be possible to grant a Drilling Authority at all, let alone by May 1, 1978.

(Ruel, Oct. 27, 1977, emphasis added)

In this letter, Ruel assures Norlands that the EIS will not likely be severely deficient, even though Milne and Smiley knew they were not qualified to write an EIS and were only making a contribution toward an EIS. Norlands is asked for the baseline environmental data they produced to be used in an Environmental Impact Statement and Ruel implies that their cooperation in this regard is all that is needed.

However, according to another DIAND official, Norlands should have been notified that the Milné/Smiley report would be inadequate as an EIS (Snow, pers. comm., Aug. 14, 1979). DIAND was apparently aware that social and economic impact studies and consultation with native people living in the area should precede an EARP review. For example, AWOGAC had held community meetings in the Beaufort Sea area using the Milne/Smiley report on the Beaufort Sea project. Moreover this was one of the major objectives of the EAMES program, which included

Lancaster Sound in its study area. According to a member of AWOGAC, DIAND had considered holding preliminary hearings on socio-economic implications of Norlands' proposal but this was not done (Glazier, pers. comm., Aug. 13, 1979).

Surprisingly considering the weight attached to their study, Milne and Smiley had not been given terms of reference by either DIAND or AWOGAC but had devised their own at the outset (Milne, pers. comm., March 24, 1980). The EAMES criteria and those developed for the Approval-in-Principle were not used explicitly by Milne and Smiley but were apparently assembled into EIS guidelines for offshore drilling by DIAND with the EARP panel's approval in January, 1978. By this time, the EIS for Davis Strait drilling had already been prepared and submitted to DIAND. Moreover, the Milne/Smiley report was at the printer and was therefore not altered in light of these guidelines. It was submitted to DIAND in February 1978.

Over the winter of 1978, Norlands had grown increasingly concerned over delays in the preparation of this report and over DIAND's response to it. The company was in touch with DIAND every week as to progress on the EIS (Daae, pers. comm., Aug. 13, 1979). After the report was finally submitted to DIAND, it was subjected to a critique based on the hastily assembled EIS guidelines. As one DIAND official commented, "this was not fair to Norlands but the criteria were the only thing available that the public would be aware of at the EARP hearings" (Løken, pers. comm., Aug. 15, 1979). On April 21, 1978, Norlands received both the Milne/Smiley report and the deficiency statement prepared by DIAND. Significantly, the covering letter does not refer to the report as an EIS as in previous letters and states:

The document (Offshore Drilling in Lancaster Sound -- Possible Environmental Hazards prepared by A. R.

Milne and B.D. Smiley of the Institute of Ocean Studies) was reviewed in terms of the Guidelines for the Preparation of Environmental Impact statements for Offshore Drilling in the Eastern Arctic published January, 1978. While we appreciate that your studies were initiated prior to this date, we expect that public hearings will none the less compare the Statement to the Eastern Arctic Offshore Drilling Guidelines, and therefore, the identified deficiencies will have to be addressed.

The deficiencies are basically of two types:

- lack of identified project description
- shortage of baseline data and, in certain cases, inadequate analyses of the available data.

It is our intention, with your approval, to forward immediately the Milne/Smiley report and the deficiency statement to FEARO for review; but we consider it unlikely that they will proceed to the public hearing stage without your company having responded to the deficiency statement.

(Ruel, April 21, 1978)

There is no mention in the statement of deficiencies attached to this letter of socio-economic impact studies although the guidelines clearly state that such studies were necessary (FEARO, Feb. 1979, p. 122).

However, one deficiency was that the report does not allow consideration of regional clearance of the area. Of course, neither Norlands nor Milne and Smiley were told by DIAND that regional clearance for the area was at issue. On the contrary, Norlands had been explicitly directed to carry out site-specific studies and these had been forwarded to Milne and Smiley for their use. Although the EAMES programme had been instituted to obtain regional clearance, Norlands was not explicitly required to comply with its broad study requirements.

At this time, FEARO had selected panel members for the Lancaster Sound EARP review, but public hearing dates had not been finalized, presumably because of delays in the preparation of an EIS. The panel chairman was J. Klenavic of the Federal Environmental Assessment Review Office. Panel members included D. Marshall of FEARO, C. A. Lewis of DOE, M. Morison of DIAND and K. Yuen of the Department of Fisheries and Oceans. A

socio-economic observer, D. Gilday of the Government of the Northwest Territories, sat with the panel in an advisory capacity.

When Norlands received the Milne/Smiley report and statement of deficiencies they were confused. They had trusted DIAND to prepare an EIS for them that would conform with EIS guidelines. According to one DIAND official who did not wish to be named, when Norlands was first informed by him that the Milne/Smiley report was not an EIS, Norlands' replied, "But Dr. Ruel says it is and he's your boss!" However, after reviewing the report and deficiency statement, the company decided to prepare its own EIS. The Milne/Smiley report and deficiency statement were therefore not sent to FEARO for review.

Norlands produced an EIS in an incredibly short time, only two months after receiving the Milne/Smiley report and DIAND's list of deficiencies. However, because DIAND had continually changed the rules throughout their association, Norlands had a very difficult time comprehending what was expected of them, though this was partly due to their own naivete. One DIAND official who did not wish to be named admitted that DIAND had used delaying tactics so that Norlands' Approval-in-Principle would expire before DIAND was forced to make a decision on the company's proposal.

#### Dissemination of Information - February-September, 1978

Information on distribution of background material and the EIS to northern communities and relevant interest groups over the spring/summer of 1978 is sparse, pieced together through personal communications.

Although their EIS was not completed until the end of June, 1978, Norlands sent 100 copies of background studies to the Northern Environmental



Protection Branch, DIAND in February, 1978 for distribution to other government departments, public interest groups and local communities (Daae, pers. comm., Feb. 27, 1981). Though FEARO primarily has the responsibility to ensure that interested groups receive information, DIAND and FEARO agreed to be jointly responsible for Norlands' information. FEARO promised Norlands that copies of their background technical reports would be given to all affected Inuit communities by March, 1978. However, these studies did not reach the communities until late August, 1978, a few weeks prior to the EARP public hearings.

Information from several sources indicates that the delay occurred because of misunderstandings and lack of communication, plus bureaucratic inertia. The reports were sent promptly from DIAND in Ottawa to DIAND's District Manager in Frobisher Bay who also acted as the secretary of the EAMES Advisory Board (Snow, pers. comm., Mar. 25, 1981). It was the Ottawa department's understanding that the reports would be distributed to each community through the mechanism of the EAMES Advisory Board. This Board, composed of native representatives for the ten communities in the EAMES study area, was set up to monitor the programme and supply information regarding it to their communities. Initially, FEARO had planned to send the information directly to the communities but were advised by DIAND that the EAMES Advisory Board would be a better vehicle for this purpose (Marshall, pers. comm., Mar. 24, 1981). Fourteen copies of each background technical study were thus sent to Frobisher Bay for distribution by the native representatives but were apparently held up in DIAND's office instead of going out to the communities. Several reasons were suggested for this. First, DIAND's District Manager apparently felt that it was the responsibility of the Chairman and Vice-Chairman of

the EAMES Advisory Board to decide what to do with the reports (Marshall, pers. comm., Mar. 24, 1981; Gainer, pers. comm., Mar. 9, 1981). The District Manager felt that it was not his responsibility but Ottawa's to inform the Inuit representatives of Ottawa's wishes so he informed the EAMES Advisory Board that the reports were for their personal use (Snow, pers. comm., Mar. 25, 1981). Ottawa had not included a letter of transmittal with instructions in each package. As well, the District Manager decided to withhold the material that had come in until the EIS and Inuit translation were available so that the natives would have a better understanding of what the reports were for. (These were highly technical reports and had not been translated into Inuktitut.) The fact that the summer hunt was being carried out at this time so that many natives were away from their communities, coupled with the fact that information for the EARP hearings for South Davis Strait, which were held in Frobisher Bay on September 13 and 14, 1978, was arriving at the same time may have caused additional delays (Gainer, pers. comm., Mar. 9, 1981).

The problems that were encountered appear to have been caused by a combination of a lack of communication and misunderstanding, competing interests, and the fact that too many people were involved.

Because it was assumed that reports were being distributed through the mechanism of the EAMES advisory board, DIAND also took responsibility for conveyance of any additional information (Gainer, pers. comm., Mar. 9, 1981). FEARO was apparently relieved not to have this responsibility. Reports and documents were continually being forwarded to Frobisher Bay from the Northern Environmental Protection Branch, Ottawa over the spring and summer but all were delayed at Frobisher.

Norlands visited affected northern communities for the first time at the end of May, 1978. At that time the company began explaining its proposal to the native people. Mr. Dave Marshall, a FEARO representative, also visited local communities in May to explain the EAR process, to discuss the EAMES programme and to give communities a description of Norlands' proposal (Marshall, pers. comm., Mar. 3, 1981). Norlands learned in May that communities had not received its background reports but were promised by DIAND that the oversight would be rectified immediately. Nevertheless, as noted, the communities did not receive these or the EIS (which had been in DIAND's possession since early July, 1978) until late September when Mr. Marshall visited the communities for the second time and personally distributed copies of the background reports, the EIS, and its executive summary, including an Inuit version.

FEARO itself had not received the EIS until the end of July, when presumably other government departments responsible for reviewing the EIS also received it. Thus government departments had only two and a half months to review Norlands' material and prepare a response. However, FEARO has a policy that these reviews should be made available sixty days prior to the hearings to assist the public in their interventions. While this "rule" was not followed in this case, if it had, only two or three weeks would have been available for departmental reviews. Needless to say, even two months is not considered adequate time while carrying out other departmental duties (see Dafoe, Sept. 21, 1978). The review by the Department of Fisheries and the Environment was not completed until Oct. 4, 1978, two weeks prior to the first set of hearings. Consequently it and other reviews were of little use to communities and interest groups in preparing their own briefs.

Because of delays in receiving information, a meeting sponsored by the Baffin Region Inuit Association and attended by other native groups was held in Pond Inlet between Sept. 25 and 29, 1978. As a result of this meeting, telexes were sent to the Ministers of DIAND and DOE expressing disapproval and requesting postponement of the public hearings, initially scheduled for only two days, Oct. 18-19, 1978. The Ministers compromised by asking FEARO to arrange a two-staged public hearing to give communities time to review the EIS and supporting documents (Magnorth Petroleum Ltd./Norlands Petroleum Ltd., March, 1980).

#### EARP Public Hearings

Public hearings are a major component of the information and consultation programme undertaken by FEARO. However, the EARP panel often decides to hold meetings to hear a community's concerns and familiarize themselves with the issues prior to the formal hearings. In the case of Lancaster Sound, informal meetings were held in the Inuit communities of Pond Inlet, Arctic Bay, Resolute Bay, Grise Fjord and Creswell Bay from Oct. 13 through Oct. 17, 1978. The purpose of these meetings was to provide native people with an opportunity to express their views on Norlands' proposal and ask questions. Norlands officials also attended these meetings. Unfortunately, the proceedings were not recorded. However, these communities later sent participants to the formal hearings in Pond Inlet to express community concerns.

#### THE FIRST HEARINGS - OCTOBER 18-19, 1978

The purpose of the first phase of the formal public hearings was to allow the proponent, members of government departments, interest groups and native people to express initial responses to Norlands' proposed

project. Detailed discussion of specific topics was planned for the second phase of hearings, when participants would have had adequate time to study the EIS and supporting documents and prepare responses.

The lack of a legal basis and thus purely advisory role of EARP in the decision process was made clear at the outset of the hearings. In his opening remarks, the Chairman, Mr. Klenavic explained:

I should point out that this process is the result of a Cabinet decision and it is not a legal process. We are here as an aid to preparing a report to the Minister of the Environment. In our report we will tell him what we think of the project and whether or not it should proceed. It is the responsibility of the Minister of the Environment to decide if the report should be made public and if he agrees with our recommendations. If he does he will then discuss with the Minister of Indian and Northern Affairs how our report will be followed. The final decision to let the project proceed or not rests with the Minister of Indian and Northern Affairs.

(Environmental Assessment Panel  
Transcripts, Vol. I, p. 4)

This first phase of hearings revealed several critical problems, both with Norlands' proposal and with the EARP process itself. The first major difficulty was a conflict between the regional clearance requested by DIAND and the narrow, project-specific nature of Norlands' EIS. Even though DIAND had initially referred Norlands' proposal to EARP as a proposal to drill one exploratory well in Lancaster Sound in 1979 they appeared to change their frame of reference at the hearings to one more in keeping with EAMES objectives. In fact, in explaining the EAMES programme at the hearings, Dr. Snow of DIAND stated that the programme was intended "to allow the environmental clearance of a relatively large offshore area rather than to undergo costly and time-consuming ineffective reviews on a well-by-well basis. The program is therefore, in essence, a baseline data

gathering to provide the necessary information upon which the industrial proponent can base his Environmental Impact Statement" (Environmental Assessment Panel Transcripts, Vol. I, p. 8). However, DIAND had not asked Norlands to comply with EAMES study requirements. As noted, EAMES was a four year programme of studies that had been approved by Treasury Board only a year prior to EARP hearings for both Lancaster Sound and South Davis Strait. Thus even though EAMES was intended to facilitate preparation of EIS's for different sub-regions the programme was barely underway by the time two EIS's had been prepared by proponent oil companies and presented to EARP for review. The brief presented by the Canadian Nature Federation is critical of DIAND's actions:

. . . it was envisioned that studies would take five years but one year after the Minister's announcement, before the completion of the EAMES programme, one assessment is completed and another is before us today. It seems to the Nature Federation that this haste must make it very difficult for the various advisory committees set up under the EAMES programme to complete their work.

(Transcripts, Vol. I, p. 98)

When this apparent contradiction was more thoroughly probed, Dr. Snow explained that:

. . . in view of the fact that Norlands at that time had an Approval-in-Principle that they had in fact carried out a fairly large environmental study program prior to the formal commencement of EAMES; also the fact that these studies would be the . . . same type of study that would be required under the EAMES program, it was considered that they would be adequate to clear the Lancaster Sound region in the area where there were drilling interests.

(Transcripts, Vol. II, p. 132)

This, however, was in spite of the fact that EAMES was also to assess socio-economic impacts of exploratory drilling and strong emphasis was placed on ensuring functional involvement of local people and on establishing effective flows of information. As well, when questioned about Norlands' Approval-in-

Principle, Dr. Snow admitted that the Approval-in-Principle had expired and the government was under no further obligation regarding it. Even one of the panel members viewed DIAND's insistence on regional clearance as taking a shortcut that bypassed the intent of their own EAMES programme (Lewis, pers. comm., Aug. 15, 1979).

This divergence between the proponent company and the "initiating" or sponsoring department caused confusion among the intervenors and underscored the faulty communication that had taken place between DIAND and Norlands prior to the hearings. As one intervenor admitted in a personal interview, "things weren't done above board -- the government did not treat Norlands with good faith". According to this participant, who preferred not to be identified, this was the predominant sentiment among government and industry officials. Another intervenor commented to me that "Norlands/EAMES/DIAND should have gotten together to postpone the public hearings until there was more agreement" (Glazier, pers. comm., Aug. 13, 1979). On the second day of hearings, one of the panel members, Mr. Marshall asked:

. . . throughout the community hearings and last night it was expressed to the panel (that) the decision of a project acceptance was being rushed. What are the major reasons why Norlands desires to drill in 1979?

(Transcripts, Vol. II, pp. 128-129)

Norlands' answer reflects the company's frustration with DIAND and fear of losing everything which had prompted them to push for some definite decision to guide their actions.

. . . we believe we have fulfilled the environmental requirements set out by the government and that we have performed in a prudent way . . . the permits are expiring at the beginning of 1981 and 1982 and this is also a great consideration. . . we have tried unsuccessfully to have extension in the past on some of our commitments and we have been unsuccessful with the permits expiring in the 1980's. We think the

risk is quite great that we could get no favourable treatment.

(Transcripts, Vol. II, pp. 129-130)

Most subsequent interventions concentrated on the unique properties of Lancaster Sound and its biological importance, the significance of the Sound locally, nationally and internationally, deficiencies in the proponent's EIS, and in the length of time spent on studies. It was noted by both environmentalists and natives that certain environmental data simply cannot be collected in rapid and short term studies. Norlands' studies, however 'good' they were, were simply inadequate for an environmental impact assessment because critical areas had not been studied over time. The need for wider planning was emphasized by intervenors and the question of whether any development should take place in Lancaster Sound was raised repeatedly.

The Canadian Arctic Resources Committee representative, Mr. D.

Gamble, took the opportunity to criticize EARP itself:

The federal Environmental Assessment and Review Office (FEARO) is appended to the Department of the Environment with no legislated mandate and with no legal status. The EARP office and this panel have only an advisory function. . . . In conducting the review process this panel has no power of subpoena, no rules of evidence, no clear onus of proof, and no fixed procedures. Hence there is no assurance of procedural fairness. . . . The inadequacies of this process have become evident to us in even the most rudimentary ways. FEARO was unable to enforce its own rule that government departments produce their reports on Norlands' EIS sixty days before this hearing. . . . CARC asked FEARO for a list of the government reports dealing with the Lancaster Sound area. . . . The office was unable to produce the list.

(Transcripts, Vol. 1, p. 52)

Mr. Gamble also took exception to the presence of Mr. Morison on the panel because he "works for the initiating department in the section that granted Norlands their . . . permit, and has the main responsibility of facilitating drilling" (Transcripts, Vol. I, p. 55). Because Mr. Morison was the



chairman of AWOGAC when study requirements for Norlands were formulated, this was seen as a reasonable apprehension of bias (Transcripts, Vol. I, p. 54). As well, Mr. Gamble noted that "in many cases even the panel members' own workload prohibits them from being fully advised of the details of the proposal, the scope of the issues at stake and the policy conflicts" (Transcripts, Vol. I, p. 56). This observation was confirmed by one of the panel members who confessed to reading the EIS for the first time on the plane enroute to Pond Inlet, because of lack of time prior to this (Lewis, pers. comm., Aug. 15, 1979).

The lack of firm procedures was clearly evident during these first hearings. For example, at the outset of the hearings, the chairman asked that intervenors limit their speeches to fifteen minutes. Intervenors had not been made aware of this rule prior to the hearings -- in fact, the CARC representative had been assured that he would have unlimited time. Mr. Gamble (who had prepared a forty page brief) was continually interrupted and finally forced to omit and summarize part of his speech. Indeed, throughout these hearings an impression of haste, incomplete discussion of issues and answers to questions, ill-prepared agendas and last minute availability of information was fostered. As well, the lack of a funding mechanism was repeatedly mentioned as a major constraint to concerned groups who wished to attend the hearings.

Inuit speeches were very emotional, dominated by their fears that development in Lancaster Sound would destroy the wildlife on which they depend for subsistence, income and cultural identity. A plea for the right to self-determination (or control over their lives) was made explicit. Inuit's fears that their way of life was threatened by encroaching development were heightened by industry's and government's failure to include them or even inform them of plans. The representative from the Inuit

Tapirisat of Canada charged that:

. . . even with the EARP process in mind and the ultimate recommendations that will result, there has been no provision for the assessment by Inuit of these recommendations and also including the Environmental Impact Statements. This renders the EARP process as unilateral and arbitrary with pretentious overtones of consultation . . . . Most of you may not realize that these hearings conflict and are contradictory to the process of comprehensive claims and negotiations now in progress between the Inuit Tapirisat and the Government of Canada.

(Transcripts, Vol. I, pp. 105-106)

Land claims settlements, while not a direct concern of the EARP hearings, are no doubt weakened if piecemeal development proposals are approved for the Arctic. The panel chairman also criticized industry's and government's efforts to inform and involve local communities:

. . . nobody ever talks to them about what is going on. I think that the panel is suggesting to both the industry and the government that if they do get approval to go ahead . . . that both the government and industry should talk to the local people and try to find out where do the priority areas lie in protection, and then the local people would be in a far better position to tell them than the people who do not know the areas.

(Transcripts, Vol. II, p. 215-216)

This first phase of hearings ended with the participants more informed about major issues and different points of view but with many important questions unresolved.

#### THE SECOND HEARINGS - NOVEMBER 28-30, 1978

In the five weeks between hearings, local communities and other interested groups had an opportunity to study the EIS and background material in depth and prepare detailed responses. Many of the questions raised at the first hearings were dealt with at the November hearings. In

the interim period the panel published an agenda of subject areas and major issues to be discussed during the second phase. The November hearings were chaired by Mr. D. Marshall because the original panel chairman, Mr. Klenavic, had been called away to chair another panel.

The first intervenor at the November hearings introduced Parks Canada's activities and interest in Lancaster Sound. He stated that Parks Canada has "identified two natural areas of Canadian significance (areas which encompass great biological, geologic, physiographic and oceanographic diversity), one natural site of Canadian significance, and possibly two others and . . . (identified) Lancaster Sound and its adjacent coastal reaches as a World Heritage candidate" (Transcripts, Vol. III, p. 340). It was felt that drilling and other developments may prejudice the value of Lancaster Sound for these purposes. Subsequent intervenors stressed many of the same concerns that had been brought out at the October hearings.

Mr. Harvison, a representative of the Baffin Region Inuit Association, expressed his views on the panel's interpretation of the scope of their authority. In reference to remarks made by the panel chairman at the October hearings, he stated:

It is my feeling that this panel has greater powers and responsibilities than those interpreted by Mr. Klenavic; particularly in the way of obtaining information, because by virtue of their mandate to explore the issue of environmental assessment of this particular proposal and other proposals, it can refuse to make a determination of those issues until information is forthcoming.

(Transcripts, Vol. III, p. 393)

Procedural difficulties continued to plague the hearings. Last-minute information became a problem for both intervenors attempting to respond and panel members. At one point, the chairman noted that "there has been an awful lot of new information that has been presented so far

today, and a lot of us have not been able to see that information until today (Transcripts, Vol. III, p. 396). When copies of Norlands' presentation were requested, Norlands could not comply. The president of Norlands explained:

. . . unfortunately, Mr. Chairman, so much of our presentation has been altered, changed and pencilled in over the past day or so -- in fact some of it even at lunch. I know, for example, my own notes are, I am sure, completely illegible to anyone other than myself.

(Transcripts, Vol. III, p. 483)

Such last-minute introduction of new information causes extreme difficulty for intervenors who want to respond in a meaningful and well-prepared fashion.

The issue of regional clearance was again raised for further clarification at these hearings. DIAND's representative, Dr. Snow, made it quite clear that the department was indeed asking for regional clearance and had identified data deficiencies on that basis for the panel. However, Norlands' officials maintained that their request was for approval of a small area, which was termed "sub-regional clearance". In spite of confusion expressed by numerous intervenors over this lack of agreement, the chairman decided not to pursue this issue:

. . . we could talk at length on this, as you just mentioned. I feel that the panel right now is aware of both submissions and will take that into account accordingly in their deliberations.

(Transcripts, Vol. III, p. 496)

Norlands' presentation reflected the company's restricted approach to development. The company stressed that the major impacts resulting from drilling would be those associated with a blowout and oilspill. The odds of this occurring were assumed to be very low. However, most intervenors had a much more long-term perspective on impacts of drilling, one that went

far beyond even DIAND's request for regional clearance. Most intervenors underscored the need for planning for such major activity because there are many other proposals for using the resources of Lancaster Sound. For example, Mr. Milne of the Department of Fisheries and Environment stated:

. . . we need to consider very seriously the other impacts of the drilling operation. This is in respect to the normal operation of the drillships, the supply boats, the helicopters, the shore bases, the increase of population and, of course, subsequent escalation into production into the future. The impacts associated with these are certain, not just some low probability. So I would stress that we not be preoccupied with the blow out problem because of its relatively low probability, but more preoccupied with the escalation of the activity itself in Lancaster Sound and what the future will hold.

(Transcripts, Vol. IV, p. 587)

Lack of information in the EIS about impacts of modern technology on native lifestyles was seen as a major deficiency of Norlands' proposal. The company was criticized for their shortsightedness in failing to establish a community education programme or a community relations base in 1974 when Approval-in-Principle had been granted. Norlands asserted however that it would undertake a socio-economic study before drilling in 1979 if they received approval.

At 11:30 p.m. on the last day of the hearings, Norlands chose to leave the hearings because of early meetings in Calgary the following day. However, important issues on the agenda, such as socio-economic concerns, had not yet been thoroughly discussed. The company's actions highlighted the panel's perceived lack of authority because they were powerless to ask them to stay. Though several intervenors complained that the company's action subverted the spirit of the hearings, Norlands' officials assert that their premature exit had the chairman's sanction (Daae, pers. com., Aug. 13, 1979).

In their summary statements to the panel, intervenors, especially native people, were eloquent in their pleas for a more circumspect approach to development in Lancaster Sound. Many intervenors believed that enough evidence had accumulated to show that drilling should not take place. Inuit representatives asked for more time to learn to cope with changes:

. . . we need a chance to prove ourselves, to solve the problems that have already hit us as a result of southern influence, and to strive towards a future for ourselves that we can share with the rest of Canada. Give us a chance to move forward at our own pace and in our way, and give the oil companies a chance to improve their technology in drilling and in clean-up facilities and then I think it might be time to discuss drilling.

(Transcripts, Vol. VI, p. 1116)

Results of a questionnaire sent to intervenors in the Lancaster Sound hearings and a discussion of these are contained in Appendix 2. Participant's comments and suggestions in these questionnaires highlight the problems and reinforce views expressed during the hearings.

#### THE PANEL REPORT

The panel report for Lancaster Sound drilling, containing recommendations to the Minister of Environment, was issued in February, 1979. The panel concluded that, because of the hazards associated with drilling in the deep waters of the Sound, an "ultra-conservative" approach should be taken. Thus, the panel recommended that drilling be deferred until deficiencies in the proponent's proposal be satisfactorily dealt with. However, the major conclusion arrived at by the panel was that:

. . . a much broader review is required of the present and future uses of Lancaster Sound, in order to avoid committing Canada to a course of action prejudicial to the optimum conservation and utilization of all resources in the area. The questions of conflicting resource uses must be identified and thus the desire of the local residents to participate in the development of

resource use strategies must be recognized. The Panel supports their participation and recommends that a comprehensive review be carried out as soon as possible of potential resource uses of the Lancaster Sound area.

(FEARO, February, 1979)

The report highlighted a number of general issues indirectly related to the project. Such concerns as long-term cumulative impacts, need for a balanced approach with coordinated government policies, international considerations, and recognition of aboriginal rights led the panel to expand its consideration beyond Norlands' proposal to drill one exploratory well. Because of these concerns the panel concluded that:

. . . acceptability requires a relative assessment and comparison of the benefits and disbenefits of all policy options, followed by a conscious decision to accept some benefits at the cost of others. This fundamental question of whether there should be hydrocarbon development at all in Lancaster Sound is clearly a matter for government to decide.

. . . The panel recommends that the responsible federal coordinating and planning body (DINA) use the time available from a deferment of drilling to address on an urgent basis, with adequate national and regional public input and taking into account the various forces at work, the best use(s) of the Lancaster Sound region. The panel stresses that socio-economic considerations must be included as a major factor in this determination.

(FEARO, Feb., 1979, p. 73)

Regarding DIAND's request for regional clearance of the area, the panel recommended that:

. . . approval be withheld at this time and that any future request for regional clearance should be supported by a comprehensive regional assessment.

Other recommendations included major expansion of government science programs in the northern areas where development is proposed, guidance and assistance from initiating departments for a proponent's public information programme, a mechanism for public funding of intervenors attending hearings and a

mechanism to monitor the degree to which the Panel's recommendations are accepted and implemented.

The panel's report appears to be an excellent summary of the issues and concerns raised during the public hearings. Recommendations go far beyond those contained in other panel reports and their farsightedness is laudable. However, the panel does not mention the discrepancy between the objectives of the EAMES programme and the apparently premature EARP hearings. This point was made several times by intervenors during the hearings and was not adequately responded to by DIAND officials. For example, Mr. Arvaluk, a member of the EAMES advisory Board, stated that:

. . . in January of 1977 the representatives of the Department of Indian Affairs travelled to the settlement to explain their proposal, the EAMES proposal. The government officials stated that after the first two years of studies are completed another two years will be spent studying the waters north of Cape Dyer and the Lancaster Sound. . . . Mr. Chairman, in my mind this means that the studies would be undertaken in the future. . . the Department representative stated that the Inuit must be involved in the studies. How can we be involved in something that has already happened?

(Transcripts, Vol. VI, p. 1123-1124)

Specific concerns such as those regarding the apparent undermining of the EAMES programme are not addressed in the report. However, one intervenor noted that the panel had been placed in an extremely difficult position regarding EAMES because a negative or positive recommendation would have jeopardized the programme (Wallace, pers. comm., Aug. 13, 1979). A DIAND official explained that for the panel to give an outright no would be an apparent contradiction of other government policy, for example, energy policy (Snow, pers. comm., Aug. 14, 1979).



## The Lancaster Sound Regional Study

Although DIAND had itself noted the need for systematic planning on a regional basis in 1972, an independent panel of experts in 1979 was recommending a course of action that can only be described as "regional planning" for Lancaster Sound. The department, however, even at this time still had to be prodded to seriously consider instituting a planning programme for the area. According to a DOE official who did not wish to be named, after receiving the panel report, Dr. Andrew MacPherson, the Regional Director of DOE, approached the Northern Environmental Protection Branch of DIAND with this recommendation. DIAND's initial response was negative. However, when told that if they did not undertake a resource use study of the area, DOE would either take on the responsibility itself or fund the Canadian Arctic Resources Committee to conduct the study, DIAND officials changed their minds. Accordingly, the Lancaster Sound Regional Study was initiated in July, 1979. The overall goal of the study is to:

... produce a compilation and assessment of the characteristics, resource potentials, and competing uses of the Lancaster Sound region and to recommend development options based on the identification of optimum allocations of land and marine areas, for the array of current and potential uses.

(Dirschl/Løken, 1979)

Specific objectives are as follows:

- 1) to summarize the physical, biological and socio-economic characteristics of the area;
- 2) outline present and potential uses of the region and their biophysical and socio-economic implications;
- 3) identify a range of options for management and use of the area.

These objectives are broad in scope and can be viewed as a vital component to "planning". However, initially DIAND seemed reluctant to admit that the study might be the basis for planning: "the green paper exercise will not directly result in the design of a regional plan for Lancaster Sound" (Cotterill, 1979).

The study consists of three phases: Phase I includes the compilation of information listed in the objectives and preparation of a "green paper report", Phase II involves distribution to interested groups and members of the public for comments and Phase III involves revision of the report in response to critiques, and development of recommendations for Ministerial decision in a "white" or policy paper.

The official Draft Green Paper, The Lancaster Sound Region 1980-2000, was released to the public in February, 1981. Comments are currently being solicited from concerned organisations and individuals. However, an examination of this effort, while tempting, is beyond the scope of this thesis.

#### SUMMARY OF KEY DECISIONS

- 1961        The Diefenbaker government decides to release Arctic lands for oil and gas leasing under the new Canada Oil and Gas Regulations.
- 1968-69    Exploratory permits were issued by DIAND to 12 independent companies which later formed a consortium, Magnorth Petroleum Ltd. Permit areas covered substantial portions of Lancaster Sound.
- 1973        The federal Cabinet approves the issuance by DIAND of Approvals-in-Principle for oil and gas exploratory drilling in Arctic

waters. At this time Cabinet decided to establish the Arctic Waters Oil and Gas Advisory Committee to oversee drilling applications.

- 1974 DIAND grants Norlands Petroleum Ltd. Approval-in-Principle on August 9, 1974 to drill in Lancaster Sound. Attached to the Approval-in-Principle were general environmental conditions but specific environmental studies were not outlined at this time.
- 1975 Details of environmental study requirements, designed by the Arctic Waters Oil and Gas Advisory Committee, were given to Norlands on March 31, 1975. These requirements were based on a single, site-specific approach regarding Norlands' proposal.
- 1976 Dr. A. Milne was asked by Dr. R. Stewart, Assistant Deputy Minister, DOE, in June 1976, to examine the state of knowledge respecting the environmental impact of Norlands' drilling proposal. This examination culminated in the preparation of the Milne/Smiley report, a joint DOE-DIAND environmental review. Dr. M. Ruel, Assistant Director, Northern Natural Resources and Environment Branch, DIAND, commissioned the report in October, 1976.
- 1976-77 In July 1976 the Minister of DIAND, Hon. J. Buchanan, announced that no offshore drilling would take place in Baffin Bay and Davis Strait until a comprehensive environmental assessment had been conducted. This statement triggered the planning of the Eastern Arctic Marine Environmental Studies Programme (EAMES) in the fall of 1976. EAMES was approved by Treasury Board on September 23, 1977. DIAND's submission to Treasury Board on

June 3, 1977 stated that exploratory drilling in the Eastern Arctic would be submitted to the Environmental Assessment and Review Process (EARP).

1977 In March 1977, Dr. Ruel, Assistant Director, Northern Natural Resources and Environment Branch, DIAND, advised Norlands that the Milne/Smiley report would be considered an Environmental Impact Statement (EIS), a requirement of EARP.

Norlands' application to DIAND for authority to drill a shallow surface hole before their Approval-in-Principle expired, was denied on June 24, 1977 because of incomplete current studies and contingency plan.

In July 1977 Norlands' proposed drilling project was formally referred to EARP for review.

On August 9, 1977, Norlands' Approval-in-Principle lapsed. The company was denied a two year extension to enable them to meet outstanding requirements. However, the Lancaster Sound area was given special attention and priority by EARP in view of their prior Approval-in-Principle.

1978 The Milne/Smiley report was completed and submitted to DIAND in February, 1978. It was sent to Norlands along with a statement of deficiencies in April, 1978. Norlands subsequently decided to reject this report and prepare their own EIS.

EARP public hearings were held in October and November, 1978. FEARO decided to hold a two-staged hearing after receiving complaints from native organisations and communities that

there was insufficient time to review the EIS and supporting documents.

1979 In February, 1979 the EARP panel report was released. The panel decided that the decision of whether or not to drill should be deferred until a broad review of the resources of Lancaster Sound and the best uses of the region was conducted by DIAND.

In July, 1979 the Minister of DIAND announced that a Green Paper on the Lancaster Sound area would be prepared, to be followed by a policy decision by the Minister (or Cabinet).

1981 In February, 1981 the draft Green Paper was published and public comment invited.

## CHAPTER V

Characterization and Analysis of the  
Lancaster Sound Decision Making Process

## Relationship of Policy to Decisions

The two preceding chapters discussed the content and chronology of the decision process regarding Lancaster Sound drilling. The evidence points to an incremental approach to northern development and failure to coordinate policies; in short, a lack of comprehensive planning. Although the breadth of concerns considered in the EARP public hearings and subsequent panel report was unprecedented, events leading up to the hearings illustrate that both government and industry took an extremely myopic view of development in the Lancaster Sound area.

Because in the last decade resource use conflicts in the North gained increasing prominence in the public eye, this "politicization" of the decision making environment forced the rapid evolution of policy within DIAND. Nevertheless, the department did not manage to keep abreast of events. One result was that Norlands, themselves not astute enough to sense the current of change sweeping the North was alternately encouraged and then frustrated by DIAND.

What can we learn about the decision process for Lancaster Sound drilling viewed within the framework of analysis established in Chapter II? Consider initially the overall policy context for northern development. The 'staple tradition' of reliance on resource extraction to open the northern 'frontier' is not merely an historical trend but was translated into policy and actively pursued by the government of the 1950's and 1960's. Little was known about the environmental impacts of non-renewable resource projects and it was simply assumed that benefits in the form of infrastructure

and employment would outweigh environmental and social impacts. In 1971 this attitude still prevailed within DIAND:

. . . the natural resources of Canada north of 60° are now being revealed. It is a breathtaking, exciting and challenging sight. The riches discovered so far are immense. As the turn of the drill, the scoop of the shovel, uncover yet more wealth, the full size and value of these resources can only be imagined. . . . the frontier opportunities north of 60° are unlimited, no matter what field of endeavor.

(DIAND, cited in CARC, 1978, p. 10)

However, when public appreciation of the North changed, DIAND was forced to adjust its approach. Canada's North: 1970-1980 was the government's first apparent commitment to this change. In theory, the first priority in the North now became to further the interests of northern people in a manner consistent with their own "preferences and aspirations". Regional, social and economic implications of major development projects were to be fully assessed before decisions were made:

Because of the immaturity of the economy in most of the regions and the disruptive effects . . . of major development programs, the absorptive capacity of the regional economy concerned must be carefully assessed to determine what needs to be done to prepare the region and its people for public or private projects contemplated. . . . Though their problems of social adjustment will vary from generation to generation and from region to region, even from community to community, the native peoples should derive early and tangible benefits from economic development and be seen to benefit.

(DIAND, 1972, pp. 31-32, original emphasis)

The department's apparent position on the environment was that, while a balance among social, environmental, and economic development considerations was needed, efforts "to maintain and enhance the natural environment, through such means as intensifying ecological research, establishing national parks, ensuring wildlife conservation" (p. 29) would

be given priority over efforts to encourage and stimulate renewable and non-renewable resource exploitation projects. As noted in Chapter III, the need for a "rational plan for developing the territories systematically" (p. 31) was also recognized in this document.

Significantly too, Cabinet, in 1973, established the EAR process to ensure that environmental and social impacts of major projects were fully assessed before project approval and before other irrevocable decisions had been made. EARP was also a government response to increasing public pressure.

However commendable these policy elements are, DIAND's actions in the treatment of Norlands' proposed project indicate that they were not taken seriously, at least until the proposal was referred to EARP in 1977. In fairness, while much of Canada's North: 1970-1980 stressed the government's concern for social and environmental factors it also noted that "in major terms that can affect the overall wealth of Canada, the economic future of the North lies in the ground" (p. 14). Clearly this is a much more accurate expression of DIAND's policy in practice than are the social and environmental priorities. In retrospect, this confusing document appears to represent a superficial response to increasing ecological and social concerns of the public while providing the basis for business as usual on the development front.

Part of the problem here seems to be that the relationship between northern development policy, environmental policy and energy policy has never been addressed. Recall the Energy, Mines and Resources 1976 document An Energy Strategy for Canada: Policies for Self-Reliance. This made explicit the government's energy policy for the 1970's placing emphasis on the "need to know" our energy reserves and encouraging frontier exploration,



especially offshore, by providing tax benefits and related investment incentives. The inherent conflicts between the goals of the energy policy and DIAND's stated priorities were not reconciled or even acknowledged. Instead, the "need to know" occupied the preeminent position in the minds of decision makers in the early to mid 1970's. Subsequently, however, as native and environmental groups began to insist on recognition of the social and ecological priorities, DIAND officials reacted in a disjointed, ad hoc manner, continually backtracking and changing the terms and conditions under which Norlands operated. Norlands, of course, in correspondence with DIAND, was quite explicit that the "need to know" policy guided their actions. This policy would accord with a private company's objective to maximize the return on invested capital.

Let us now briefly examine decisions taken prior to referral to EARP to determine their relationship to stated policy. Cabinet's decision in July, 1973 to give DIAND permission to grant Approvals-in-Principle for Arctic offshore exploratory drilling was made in the belief that existing legislation was adequate for the appropriate administration and control of industrial activity. This decision stemmed from the realization that Canada would become increasingly dependent on unconventional oil and gas supplies in the future and appeared to be taken in a mood of extreme optimism regarding risks to the Arctic environment.

Industry, while not directly involved in the Cabinet decision, was in a very strong position as far as input into the decision was concerned. After all, their interests were closely aligned with government's Permits for exploratory drilling purposes had already been granted and in some areas exploratory drilling was already taking place (recall that construction of artificial islands for offshore drilling in the Beaufort Sea had been

approved under the Territorial Land Use Regulations in 1972). Also in December 1972 a government/industry seminar had been held to explore how government and industry would interface regarding offshore oil and gas exploration and development (DIAND, Jan. 1976). Industry was given the opportunity to outline their assessment of, and propose solutions, to problems that might occur.

How did this relate to DIAND's social and ecological priorities for the North, also expressed in 1972? There was no doubt that exploratory drilling projects and development that might follow would have major socio-economic effects as well as environmental impacts. These concerns seem, however, to have been a peripheral factor in Cabinet's decision. Native people were not given the opportunity to participate in seminars and express their views, nor were they even informed of possible plans. No studies had yet been done to assess the significance of either social or environmental impacts. Seemingly, these elected officials assumed that positive effects would be significant and negative effects minimal, if DIAND ensured that appropriate requirements were written into subsequent Approvals-in-Principle and Drilling Authorities. Thus Cabinet, with minimal information, delegated to DIAND officials the responsibility to ensure that concerns be taken into account in specific decisions in accordance with their own objectives for the North.

However as this analysis shows, despite the extent and severity of potential social and environmental costs and DIAND's own stated priorities, DIAND issued the Approval-in-Principle for Norlands' project in 1974 with a minimum of deliberation. In so doing they ignored DOE's advice that the decision be deferred, at least until the results of the ongoing Beaufort Sea

studies were available to provide related background information.

Native people in local communities were neither informed nor consulted. There was no initial requirement that Norlands undertake a comprehensive assessment of the probable social or ecological effects nor had DIAND undertaken so much as a baseline study prior to this decision. Meanwhile, Norlands, in their application, had demonstrated their lack of knowledge of potential environmental effects by stating that the biological productivity of the Lancaster Sound area was low.

It is true that DIAND had earlier recognized the importance of the environment to the Inuit's traditional economy and culture:

The wildlife of the North is an important attribute of the region which must be preserved, not only because it contributes to our understanding and enjoyment of nature, but also because it forms an integral part of the traditional way of life of the people of the North. To protect these animals we must protect their habitat.

(DIAND, 1972, p. 3, cited in  
Gibson, 1978, p. 256)

Similar statements are, of course, contained in the 1972 official policy document. It was also recognized both by Cabinet, in considering the matter of Approvals-in-Principle and DIAND, in their policy statement, that existing baseline data for the northern environment was inadequate and that research efforts should be intensified.

Events make clear that in practice these concerns were more façade than substance. However, the Approval-in-Principle did contain terms and conditions for environmental studies that were more stringent than those required of other operators in the Arctic. Indeed in the prevailing climate it is probable that Norlands would have considered any further requirements such as a social impact assessment or ecological studies on a regional scale extremely onerous, since they already found the narrowly-defined

studies that were required of them excessive. As a small company they could not be expected to bear the cost of what reasonably could be argued was a government responsibility. Either DOE or DIAND should have undertaken environmental (including socio-economic) baseline studies on Lancaster Sound prior to a decision to grant Approval-in-Principle, especially when the technology of the proposal was as yet untried in such deep waters and under such hazardous conditions.

Importantly, DIAND's decision seems to have subverted the intent of the December, 1973 Cabinet directive establishing the EAR process. DIAND initially showed a marked reluctance to accept this policy and apply it to projects under their authority. DOE advice that Norlands' proposal be referred to EARP before granting Approval-in-Principle was ignored with no reasons given even though the decision to grant Approval-in-Principle committed DIAND to supporting the project.

The impression that DIAND initially treated the matter of oil exploration in Lancaster Sound in a rather cavalier manner is heightened when one realizes that the project was not considered within the context of existing or other proposed uses of the Sound's resources. Thus, the multiplicity of activities involving government grew over the years with little consultation or coordination and with no comprehensive planning of resource uses.

Decisions after 1974 stem directly from this initial hasty decision to grant Norlands Approval-in-Principle. Events and decisions indicate confusion and lack of communication between various branches of DIAND. When Norlands applied for permission to drill, the structure of DIAND headquarters was very simple (see Appendix 1). The Northern Natural Resources and Environment Branch was responsible for the major renewable and non-renewable

resources of the Territories. Norlands' application was processed through the Oil and Minerals Division whose mandate was to facilitate and promote orderly exploitation and development of petroleum reserves. After Approval-in-Principle was granted, Norlands dealt almost exclusively with this Division and with AWOGAC. As mentioned, the formulation of environmental study requirements became this committee's responsibility.

The officials in the Oil and Minerals Division and the AWOGAC gave Norlands "good support" (Daae, pers. comm., Aug. 13, 1979). This is understandable because the interests of the company and the government officials dealing with it were closely aligned. However, when attitudes began to change and the department was restructured in 1976, Norlands' Approval-in-Principle began to be seen as an embarrassment and support was gradually withdrawn. DIAND's internal changes are an important clue to understanding subsequent decisions. DIAND cannot be considered as a unitary participant in the decision process but should be looked upon as one entity before 1976 and another after 1976, although many of the old problems of conflicts between divisions with differing mandates remained.

The major indication of the government's attitude shift was, as mentioned, the establishment of EAMES. It was now realized that drilling proposals could not be considered in isolation because there would be ramifications for the whole region. Of course it must be remembered that EAMES was a direct response to pressure from native groups. DIAND was not willing to undertake large research programmes on their own volition even though the need for wide research studies had been recognized in the early 1970's. While EAMES was a valuable concept, it lost much of its force because 1) native people and environmental groups were excluded from planning the programme, 2) while involvement of native people was encouraged,

they were allowed only an advisory role and 3) industry was responsible for paying for the programme and thus wielded a great deal of influence over how it would be carried out. Recall that Treasury Board ultimately turned down DIAND's application for their share of the costs. This shifted the cost burden even more to industry with the result that industry insisted that they take charge of the project. Consequently, the programme was shortened to conform with deadlines of the companies participating.

At the same time as EAMES planning began, Dr. Milne, at DOE's request, was examining the AWOGAC files on Lancaster Sound. He found that no overall evaluation of Norlands studies to determine environmental hazards was being undertaken and so arranged to do this.

DIAND was still unwilling to submit Norlands' proposal to EARP at this time even though EAMES was being planned to provide information on offshore drilling for an EARP review. According to Dr. Milne, "at the outset DIAND, I believe, felt that EARP could be sidestepped simply because of commitments made to Norlands (Approval-in-Principle, etc.) and Norlands very expensive research studies" (pers. comm., Mar. 24, 1980).

DIAND's decision to authorize an overview of environmental hazards associated with offshore drilling in Lancaster Sound was a progressive step but did not go far enough. The Milne/Smiley report was extremely informative but, as the authors recognized, was not what was needed -- an EIS. The proposal was not fully described, no new data were generated, socio-economic concerns were not considered (although the Inuit's traditional use of the Sound's wildlife was noted), and native people were not informed or consulted during the study.

Norlands was an anomaly, being the only operator in the eastern Arctic with a prior Approval-in-Principle. Because Norlands had already

spent a great deal of money on very specific studies, only some of which met EAMES requirements, and because EAMES did not receive Treasury Board approval until September, 1977, DIAND was loath to ask the company to comply with the more comprehensive EAMES requirements. DIAND officials merely hoped that the company would realize that attitudes toward drilling approvals had changed and would adjust the focus of their proposal to take the wider implications of Lancaster Sound into account. This was unfair to Norlands. The company should have been made explicitly aware of new requirements that would affect them. It is difficult to ascertain if this action reflects an evasion of responsibility on DIAND's part or only a confused response to a rapidly changing policy environment. However, DIAND did apparently use delaying tactics through 1977 so that Norlands' Approval-in-Principle would expire without a decision having to be made. As one official admitted, the company was not treated with good faith by DIAND.

The president of Norlands wrote in May, 1977 to the Assistant Deputy Minister of DIAND informing him that Norlands had fulfilled the Approval-in-Principle requirements and enquiring if there would be additional requirements. This letter was not answered. Norlands made a formal application in June, one month before the expiry of their Approval-in-Principle, for permission to drill a shallow test well. Permission was denied because the Approval-in-Principle requirements had not been fully met. This appears to be the first time that DIAND informed the company that the work they had done was unacceptable. The communication problem between DIAND and Norlands is obvious but may also indicate the lack of coordination and communication within DIAND. The Oil and Minerals Division and AWOGAC had not acquired the same degree of concern for environmental and social effects of offshore exploration as had the other branches of the Northern Programme and were

still encouraging Norlands' efforts. DIAND subsequently denied Norlands' request for an extension of their Approval-in-Principle to permit them to meet the outstanding requirements. This denial indicates DIAND's weakening commitment to the project and may also indicate that Norlands' Approval-in-Principle had become a political embarrassment in the face of considerable pressure from native and environmental groups.

By Spring 1977, DIAND, under its revised policy, had referred Norlands' proposal to EARP. The chairman of the EARP panel had agreed to give the Lancaster Sound area (as one of the EAMES areas) special attention and priority. The sense of haste in the application of EARP was due partly to the fact that Norlands was impatient to have a decision made on the fate of their project since they could not seem to get one otherwise. However, DIAND's treatment of EARP requirements indicates that the department either did not understand the process or did not apply it as seriously as it should have. For example, the arbitrary decision that the Milne/Smiley report would be an adequate EIS showed questionable judgment since formal EIS guidelines had not been issued and it was recognized that in certain important areas the report would clearly be inadequate. Today no proponent participating in the EARP process would allow another agency (even one supposedly "initiating" the project) to prepare an EIS for them. Norlands was ignorant of the process and its requirements and agreed to DIAND's suggestion that the department would be responsible for the EIS because the company was unwilling to commit any more time and money to new studies. However, DIAND, as Norlands' sponsor, should have insisted that EARP requirements be seriously considered. EARP clearly requires that public response to projects be obtained as early as possible. DIAND evaded its responsibility as the initiating agency by not ensuring that the public was informed and by not



advising that Norlands undertake socio-economic impact studies.

As well, even though Norlands was not told to comply with EAMES requirements, which were designed to facilitate the EARP process, Norlands' president nevertheless did enquire if EAMES guidelines would be used to judge their environmental studies in the EARP hearing. Dr. Ruel's reply that 'severe' deficiencies requiring further large-scale environmental studies was highly unlikely was misleading because it implied that EAMES guidelines would not apply. However, it was obvious to other DIAND officials (as it was to Milne and Smiley) that the Milne/Smiley report would be deficient as an EIS.

When EARP panel guidelines were finally assembled, their principal source were the initial AWOGAC, and the subsequent EAMES, requirements. Though EARP panels sometimes consult the public or various interest groups prior to issuing guidelines, this was not done. Thus native people and environmental groups still had little if any information on Norlands' proposal.

DIAND's decision to submit the Milne/Smiley report as Norlands' EIS to a critique based on the EARP panel guidelines which had been made available when the report was at the printer's was unfair to the company. Moreover, the report itself was highly unfavourable to the project since Milne and Smiley had not written it as an EIS and had devised their own terms of reference. Since Milne and Smiley used Norlands' own environmental studies which had been designed to meet the narrowly focussed AWOGAC requirements as background, their report also took a very narrow approach.

DIAND's critique failed to identify the lack of socio-economic impact information as a deficiency of the Milne/Smiley report. Panel guidelines, however, clearly identify such information as required. This

indicates that DIAND still did not wish to accept that socio-economic impacts were a major concern. The critique did suggest that the Milne/Smiley report was inadequate to allow regional clearance of the Lancaster Sound area. Since regional clearance was not at issue when Milne and Smiley undertook to write the report, this seems unjust. This criticism appears to be the first explicit indication that DIAND was asking for regional clearance through the Lancaster Sound EARP. Again, this was not fair to Norlands. The company should have been told that this was what DIAND expected much sooner. Certainly, if the expiry of their Approval-in-Principle changed their status to that of any other operator, then at that time DIAND should have outlined new study requirements.

The capriciousness reflected in this series of decisions shows a bureaucracy with no clear development strategy, constantly reacting to events and outside pressures, dragging a confused and somewhat stubborn oil company in its wake. As seen in the application of democratic criteria below, failure to formulate clear, coordinated and consistent policies at the outset caused the decision process for Lancaster Sound to have major shortcomings.

### Analysis of the Decision-Making Process

Having reviewed the critical events in the context of an evolving policy environment we can now analyse the decision-making process in light of the criteria established in Chapter II.

#### REPRESENTATION OF INTERESTS

For an assessment of this criterion we must first consider who are the legitimate interests which should be involved in decision making regarding offshore drilling in Lancaster Sound. Those who will be clearly

affected by the outcome of a decision are the most obvious legitimate interests. In this case it is the native people living in the Lancaster Sound area and utilizing its resources and the oil companies who wish to explore in the area. However, these are not the only valid interests. For example, many public and private sector organisations intervened at considerable expense at the EARP public hearings in 1978. The major participants of the process have been listed in Appendix 1 and those interviewers who responded to the questionnaire are listed in Appendix 5. But we cannot ignore other interests which may not have had the resources or degree of concern to overcome the transaction costs to organize and make their views known. Recall Olson's discussion of the public as "latent groups" because they are not specifically represented as are vested interests. The general public does have a legitimate interest in the fate of Lancaster Sound, though not as great as those who may directly incur the costs and benefits of a decision.

As indicated previously, there was extremely limited involvement of many legitimate interests until the EARP public hearings in 1978 -- fully ten years after exploration permits were granted for Lancaster Sound. Channels for input into decisions simply did not exist for native groups, local communities and environmental groups who had strong concerns for the fate of Lancaster Sound. The general public was represented only in that certain key decisions were made by elected officials who, in theory, had the public's values and preferences in mind.

Prior to 1976, industry influence dominated the decision-making process. DOE officials, whose mandate is to protect the environment, were able to assume only a minor advisory role and much of their advice was ignored by DIAND officials. Other departments were not substantially involved.

The Territorial government, which certainly has a legitimate interest, was not involved in the decision process. DIAND, as the regulatory agency for oil and gas exploration and development, appeared for the first half of the 1970's to have the same objectives as the oil companies, in contrast to its stated objectives. After 1976, with the direct intervention of concerned native people and the publicity over uncertainties involved in offshore exploration, DIAND officials were forced to alter their objectives to take these concerns into account. This led to the institution of EARP. The range of interests represented in EARP and the values and concerns expressed had a substantial effect on subsequent decisions. One important result of the Lancaster Sound EARP review is the current interdepartmental Lancaster Sound Regional Study. This was planned to allow for the public to be much more directly involved. Views and preferences are now being solicited in the form of community meetings for northern residents, workshops for all interested groups and the opportunity to write letters or briefs.

Thus, this chronology indicates a situation in which one interest dominated the decision process and enjoyed an excessive amount of influence which gradually changed to one of greater opportunity for representation and incorporation of differing values into decisions.

While this is a substantial improvement, DIAND's subsequent actions show the department's reluctance to change its approach radically. For example, as late as July 1980, Beaufort Sea petroleum development was referred to EARP without the benefit of a regional overview and wholly in response to the developer's plans (FEARO, 1980). As Rees (1981) has noted

. . . rather than stumbling backward into the Beaufort, Ottawa should have stayed on the path leading from Lancaster Sound. What we require

is a "Beaufort Sea Planning Authority" with a mandate to guide the overall development of the region and provide the context for environmental assessment.

(Rees, 1981, p. 30, original emphasis)

#### ACCOUNTABILITY

An in-depth analysis of the degree to which this criterion was met in the decision process with suggestions for improving accountability is beyond the scope of this thesis. Nevertheless, a brief discussion is warranted.

First, several very important general decisions for Lancaster Sound were made at the ministerial level. General decisions establishing policies such as the priorities for northern development, the decision to allow DIAND to grant offshore exploration permits and Approvals-in-Principle, the directive establishing EARP, and the "need to know" energy policy are examples here. These decisions have some accountability because they were made by elected officials. However, many of these decisions were made in the absence of public participation. For example, while the data regarding Cabinet's decisions to allow DIAND to grant exploration permits and Approvals-in-Principle for offshore drilling because benefits were assumed to outweigh risks is sparse, it can be argued that this decision had a low degree of accountability because public preferences were not known or tapped in any way, no assessment of risks and benefits was available, and industry was the only group with access to the decision makers.

However, specific decisions regarding Lancaster Sound such as the decision to establish the EAMES programme and apply EARP to offshore drilling projects and the decision to accept the EARP panel's recommendations to defer drilling and institute a regional study were made by the DIAND Minister. These decisions can be regarded as reflecting "accountability"

because they were made by an elected representative at least partially in response to expressed public concerns.

But there are always constraints on Ministers' time which inhibit involvement in many specific decisions. In this case, decision-making responsibility was delegated to senior civil servants within DIAND. Here, the accountability of decisions is much less apparent. Decisions regarding Norlands' proposal prior to EARP public hearings such as granting Magnorth exploration permits for large offshore areas, granting Norlands Approval-in-Principle, the decision on site-specific environmental study requirements, the decision (or non-decision) to exclude Norlands from complying with the EAMES programme, referring Norlands' proposal to EARP as a priority area and subsequent decision to use the Milne/Smiley report as an EIS and requesting regional clearance instead of clearance for one well are all examples of decisions made within DIAND where accountability can be questioned. First, it is not known whether the Minister of DIAND was aware of these decisions or had approved them. Second, many of these decisions were made without benefit of participation by affected groups and key information was not made available. The decision to grant Approval-in-Principle against the advice of DOE officials was perhaps the most obvious example of this. Third, many decisions (especially early ones) did not accord with stated policy priorities and, instead, demonstrated that the real priority was development as quickly as possible. Accordingly, native and environmental groups were forced to exert pressure in order to achieve effective recognition of social and environmental objectives.

Looking at decisions pertaining to Lancaster Sound as a progressive or evolving learning experience suggests an important insight. As the process gradually opened up, decisions by both politicians and bureaucrats

clearly shifted from favouring the interests of the developer to reflecting the wider public interest. This healthy politicization of the decision-making process may represent a genuine desire on the part of decision-makers to act according to newly-perceived public preferences, or merely their fear of ultimately being held accountable for not doing so. Either way it shows that accountability as an operating principle works best when the decision process is accessible to all concerned.

#### CONSIDERATION OF ALTERNATIVES

Alternatives were not considered in decisions regarding Lancaster Sound. Norlands' proposed project was the result of a long historical trend that has greatly inhibited serious consideration of alternatives.

Conceptualizing a broad range of alternatives is a valuable step in a decision process because values and preferences can be incorporated and differing costs and benefits considered (including environmental and social costs). Alternatives to Norlands' proposal might have included:

- 1) maintenance of the status quo;
- 2) establishing the area as a park or ecological reserve;
- 3) establishing a revenue-sharing arrangement (possibly through a lands claim settlement) with local native people who will incur the greatest costs;
- 4) planning a rational strategy for oil exploration in the Arctic offshore regions where the least environmentally sensitive areas are explored and developed first (staging discoveries so that surpluses are not created and more sensitive areas will have the benefit of improved technologies);

- 5) establishing other energy policies (such as conservation)  
to reduce demand;
- 6) developing the tourism potential of the area.

One reason why such alternatives were not considered was that the institutional arrangement was such that affected interests were not present to suggest them. Initially only government and industry shared information so that other valid interests were not able to formulate alternatives that would incorporate their values. Thus decision makers had little information on the ill effects of the proposal on affected interests.

Another reason was that there was no economic or other incentive for the proponent to consider alternatives. While the benefits of their project would accrue to Norlands and Magnorth, the costs would be borne by other interests. Thus the company had no incentive to consider alternatives. Certainly when we realize that most of the other "alternatives" suggested do not involve drilling for oil it is clear that an oil company would have no incentive to consider anything but the most narrow range of alternative technology or possibly location to achieve the same objective.

Behavioral factors likely inhibited the generation of alternatives by constraining the actions of decision makers. We will explore this in a later section.

Information is a key factor in consideration of alternatives. An informed choice among alternatives is only possible with "good" information. While no alternatives to Norlands' proposal were considered, even the information on the proposal was deficient. The company failed to supply adequate information on risks, uncertainties, costs and benefits associated with their project.

The initiative by DOE to provide an overview of the hazards of



offshore exploration in Lancaster Sound helped to fill this gap but did not supply evaluative information on socio-economic concerns, alternative uses of resources, cumulative impacts of development projects, or long term impacts of development. Ideally, DIAND as the initiating agency or DOE as the responsible agency for protection of the environment, should have undertaken the responsibility to gather such information.

The decision on overall need for the project seemed to be simply assumed by DIAND in early years. Thus, information on need for Lancaster Sound oil in relation to its costs was not available. Unfortunately, the generation of large amounts of technical information on large projects has tended to obscure the lack of information on critical assumptions such as need for the project and on alternatives.

Alternatives were not seriously considered even at the EARP hearings, although the Panel was made aware by intervenors of alternatives incorporating differing values. EARP panel guidelines clearly state that alternatives must be outlined in the EIS but this deficiency in Norlands' EIS was not discussed during the hearings, presumably because there were so many information deficiencies identified with the project as proposed that the panel simply had no time for imaginative and full consideration of alternatives, especially when information on various alternatives had not yet been generated.

The decision process clearly failed to generate and evaluate alternatives, for the most part because many legitimate interests were excluded from the process until 1978. Again, the process gradually opened to more interests over time, first with the application of EARP and now with the Lancaster Sound Regional Study.

## INTERACTION AMONG INTERESTS

This criterion is, of course, a corollary of the first two. In order for there to be adequate representation of diverse interests, these interests must have a structured open forum to permit an exchange of views. The EARP community and public hearings provided the first opportunity for interaction among interests other than industry, DIAND and, to a lesser extent, DOE. Because these hearings occurred at such a late stage in project planning this criterion was only partially met. Ideally hearings to provide an exchange of views and information should be held when a project is first proposed and any alternatives are considered.

EARP hearings, when they finally occurred, were perceived by some intervenors to have a number of problems (see Appendix 2). Holding such meetings at a late stage in the planning process, when many key decisions had already been made, was a major impediment because intervenors could only react to the project as proposed. Moreover, lack of funding was continually noted as a block to effective participation and interaction by native and environmental groups who perceived an imbalance in the availability of resources to industry and themselves. The remote location of the hearings (in Pond Inlet) was viewed by some as a barrier to the full participation of some interests. Because all panel members were government officials, private intervenors perceived a possible conflict of interest. Indeed, the panel representative for DIAND had participated in formulating the original AWOGAC requirements for environmental studies! Another major problem at the hearings relevant to effective interaction, was the lack of formal procedures that could be enforced by the panel. Because there are no rules or procedures for the conduct of EARP hearings, inadequate discussion of issues and inadequate responses to questions was accepted,

discussion of issues and inadequate responses to questions was accepted, advisors were under-utilized and the introduction of last-minute information was allowed.

In spite of these structural and functional weaknesses, opening the process up through the EARP mechanism had an enormous impact on subsequent events. The project was deferred and the Lancaster Sound Regional Study was implemented, which while flawed has sought to remedy many of the problems characterizing earlier decision mechanisms. This sequence of events clearly shows the value of open, interactive management procedures.

#### EFFECTIVENESS OF THE DECISION-MAKING PROCESS

There are various ways of defining 'effectiveness'. If we regard effectiveness to mean the extent to which the objectives of stated policies were met, it is difficult to apply this criterion since DIAND's policies were excessively general, contradictory and constantly evolving unsystematically in response to changing external pressures. The original narrow policy, seemingly to discover and develop frontier energy sources as quickly as possible expanded as issues became more visible and public pressure was exerted on decision makers. A more comprehensive approach gradually took shape which in fact accorded more with the social and environmental priorities laid out in DIAND's northern policy statement of 1977 and the federal government's policy to assess the impacts of major projects. It might be said therefore that the process became generally more effective over time in expressing the full range of valid policy objectives.

On the other hand, the more specific objectives of the EARP public review were not necessarily met. Such objectives might reasonably include:

- 1) to provide an 'arms-length' system of review, advice and expertise to the proponent on the impacts of proposed projects.

This objective was not met by either FEARO or DIAND for all the structural and procedural reasons discussed at length previously.

- 2) to provide a timely forum to inform the public of the details of a proposed project and the consequences that may result.

While the public was ultimately informed of the details of the proposed project, the procedures leading to EARP precluded detailed assessment of consequences. Moreover the effectiveness of public involvement was impeded by its phasing late in the process.

- 3) to give the public an opportunity to inform the panel of their own specific concerns regarding a project.

Again this objective was only partially achieved. Isolation of the hearings and functional problems prevented some interests from appearing and late involvement of the public prevented effective discussion of clearly defined issues, positions and development alternatives that might otherwise have emerged.

- 4) to discuss fully all issues considered relevant and, by evaluating this information, to formulate recommendations for the Minister of the Environment.

This fourth objective was clearly not fully met. Intervenors criticized the review as being too rushed to discuss fully even those issues that were raised and the preceding process had prevented other issues and alternatives from being brought forward. On the other hand the panel's recommendations reflected these concerns resulting in a deferral of the project.

In summary we must conclude that the decision process regarding offshore drilling in Lancaster Sound was effective mainly in forcing DIAND

to overhaul its approach to permit the inclusion of other interests besides those of industry and undertake a regional planning study in the area.

#### EFFICIENCY

It is not possible to determine the absolute efficiency of the Lancaster Sound decision-making process in a benefit/cost framework. Many of the benefits (and costs) are simply not quantifiable and the dollar costs are unknown. Nevertheless the decision making process employed here must be judged as highly inefficient. The absence of a systematic planning process meant that the whole decision-making effort was directed at a single development alternative that did not recognize all the values at stake in the region. Other options were not considered and in the early absence of public input much local knowledge and information on public preferences that might otherwise have facilitated later stages of decision-making was wasted.

Because initially ill-conceived priorities shifted in response to public pressure, DIAND constantly changed the requirements that Norlands was asked to fulfill. This led to chaos and much duplication of effort in information gathering. Norlands undertook narrow environmental studies with the understanding that, once these requirements were met, they would receive a Drilling Authority. Milne and Smiley undertook an overview of environmental hazards because they feared that, in the absence of an EIS, no assessment of the project's impacts would be available to decision makers. DIAND first arbitrarily decided that this report would be an EIS then rejected it as inadequate leaving Norlands only two months to prepare an EIS which was subsequently found by the EARP panel to be inadequate. In the meantime, EAMES was designed to permit a more comprehensive approach to offshore drilling but Norlands was not asked to participate in the programme

and then was criticized for failing to meet its requirements. All of these studies indicate overlapping.

The EARP hearings demonstrate inefficiency as well. Essential information that was gathered well ahead of time was not efficiently distributed to native and environmental groups. This meant that a second expensive set of hearings had to be planned to allow time to respond. Attendance at two sets of hearings in a remote location caused considerable costs for these groups and may have prevented the participation of other interests. As well, since many intervenors felt that important issues were not adequately discussed at the hearings there is a question of whether their participation was cost/effective. The panel's main recommendation that a regional overview was necessary before a decision could be made is the most obvious indication that the process was inefficient. After many years and considerable monetary costs to affected interests, the ultimate decision was no decision. Better coordination of all the efforts expended leading to EARP, in a coherent policy framework integrating regional and national concerns might well have permitted a firm decision in 1978 and avoided the subsequent three years of costly catch-up exercises (e.g. the Lancaster Sound Regional Study).

#### CONSTRAINTS TO ACHIEVING THE 'OPTIMAL' DEMOCRATIC DECISION MAKING PROCESS

As is evident from the above, criteria for an ideal decision-making process, derived from democratic theory, were only partially met at best. Let us now turn to decision theory as outlined in Chapter II, to seek explanations.

First, in the early stages industry enjoyed a great deal of success in having their interests upheld by government. Because demand for

energy was growing and foreign sources seen as increasingly unreliable, oil companies operating in Canada assumed a dominant position in the economy and enjoyed substantial power and political leverage. The two broad aims of the oil companies in their relationship with the government might be to preserve a maximum degree of autonomy within which to pursue their own interests and to obtain a maximum level of preferential regulatory treatment and financial benefit. Thus it was to their advantage to maintain a close relationship with the government department regulating them and to exclude as much as possible other interests which might be detrimental to achieving these aims. Public choice theory suggests this is to be expected if the companies are behaving rationally and in their own self-interest.

How do we explain the behavior of DIAND officials whom we rely on to serve the public interest? First, as Downs (1976) has suggested, government officials may perceive themselves as serving the public interest but they are also ruled by private motives. If the institutional arrangements are such that only one interest group is able to make its views known, then a close agency/client relationship will be established that will give the client group a definite advantage. Fox (1978) has pointed out that there is a tendency for regulatory bodies to become captive agencies of the interest group with which they most frequently interact. As well, an official's perceptions of how to best approach a problem will be determined by his education or professional training. If, as usually is the case, government officials are engineers and technocrats they will tend to be sympathetic with oil company officials of similar background, experience and values and may tend to assume that a technological solution can be found for all problems. Thus the organisation will often develop objectives which serve the interest of its members who are sympathetic to the wishes

of the group they regulate rather than the larger interest of society generally. While this was certainly the case in early decisions, gradually these decision-makers were replaced within DIAND by officials more concerned with environmental and socio-economic considerations as public pressure regarding these issues mounted.

In spite of this, industry maintains a distinct advantage because it has information the government organisation needs and in turn will have greater access to government information. This is especially true in the North because information is sparse and extremely expensive to obtain and because DIAND has such complete control over resources. According to one group of observers:

The information network also appears to be a major issue. Industry uses an informal network to circumvent the publicly visible network and is constantly seeking out key government people to tap. . . . These informal liaisons give industry a 'competitive' edge on other actors. Many actors who should have access are excluded. Industry and DINA have 'regularized' informal contacts and share information which is unavailable to environmentalists, native groups, and other actors.

(Keith et al., n.d., p. 158)

There are other reasons why in early years interaction was limited to one government agency and one dominant interest group. Downs' "laws" suggest that officials exhibit strong loyalty to the organisation controlling their job security and promotion and that every large organisation is in partial conflict with other social agents. It follows that DIAND officials would seek to increase the status and relative power of their organisation with respect to other agencies such as DOE or the territorial government. This may help to explain why other agencies were excluded from actual decision making, their advice was frequently ignored and their influence curtailed as much as possible.



Certain affected interests, such as native and environmental groups, were excluded from the decision process in early years partly because of the control maintained over information by government and industry but also because in the 1960's and early 1970's these groups were simply not organized to take part. Language and cultural differences exacerbated the problem for the Inuit, whose decision making systems are entirely different from white mans'. Political awareness and education became necessary prerequisites to organising in order to participate in decisions affecting them. This has taken time. Native input even now is largely anecdotal as opposed to the technical information commanded by industry and government. Remember too that environmental groups generally lacked the financial and technical resources, and political leverage required to function effectively within the decision making process and this has added to the perceived imbalance.

These groups eventually did overcome the considerable difficulties (or transaction costs) of organising to lobby their interests. However, when they were given the opportunity to participate (in EARP hearings) they were placed in the position of merely reacting to plans and information rather than bringing their interests to bear on conceptualizing alternative resource uses. In addition if we accept Olson's description of the general public as "latent groups" because they are not specifically represented as are vested interests then many legitimate interests may not have been represented at any time. Because these "inclusive" groups, even if organized, would have had great difficulty in gaining information and access to decision makers because of the present institutional design, this is a serious drawback to the kind of "participatory" democracy envisioned in Chapter II. Finally, we must remember that even though public choice theory

assumes rational behavior on the part of individuals interacting in the decision making process, there are limitations to rationality which may tend to undermine accountability of decisions. For example, decision makers have limited amounts of time to make decisions and are able to consider only a limited amount of information. As well, decisions must be made in the face of real uncertainties which no amount of additional information can eradicate. The decision to grant Approval-in-Principle is perhaps one example where limitations to rationality caused a 'non-decision' that nevertheless implied government commitment before information was available. This proved a political embarrassment which returned to haunt DIAND in later years.

Turning now from the descriptive to the prescriptive aspects of decision theory, we ask if theory can aid us in suggesting changes in the institutional design which will permit the criteria for 'optimal' democratic decision making to be better met.

First, it must be remembered that the decision process in this case functioned as an interactive system, however much that interaction was limited in early stages. Therefore we would not expect it to follow the rational/cybernetic model of decision making outlined in Chapter II. Instead, the chronology of events and decisions described in Chapter IV resembles the type of decision making process that Lindblom (1968) characterized as disjointed incrementalism. However, Lindblom went beyond merely describing a process to suggesting that "muddling through" should be employed as a strategy for decision making, seeking to adapt decision making to the limited cognitive capacities of decision makers and to reduce the scope and cost of information collection and analysis. To my mind, this would make little prescriptive sense unless the impact of every

incremental decision is carefully monitored as a learning experience and the system continually adjusted as a result of this feedback. Holling et al. (1979) suggest one approach employing this concept in their prescription for "adaptive environmental assessment and management". Thus if feedback is gainfully incorporated, future incremental decisions need not be disjointed. Unfortunately, governments at present show a marked reluctance to monitor systematically the outcome of decisions and incorporate knowledge gained into subsequent "decision increments". In fact, decision making processes are more often characterized by efforts to cover up rather than to learn from errors and sometimes gather a momentum that is extremely difficult to divert even when improved information is available.

Another prescriptive strategy is suggested by Haefele (1973). He has argued that, for decisions to be more democratic, they must be made by elected representatives. Thus he advocates increasing representative government at the regional level rather than delegating authority to administrative agencies who will then be responsible for solutions to controversial issues.

This strategy could do much to strengthen accountability in decision making. We have noted that, for the most part, decision makers involved with Lancaster Sound were civil servants endowed with wide discretionary authority. From the early to mid-1970's, when business interests appeared to dominate the process and wider "public interests" were excluded from effective involvement, the principle of accountability was in doubt. As well, the central government institutions involved (DIAND, DOE and FEARO) lacked a basis of local legitimacy. Native groups, without having a local representative or point of contact, became especially apprehensive about decisions that would greatly affect them. Haefele's approach could do much

to correct perceived imbalances in the process.

However, there are drawbacks to implementing such a decentralizing strategy in the Lancaster Sound region. First, economic development and resource management in the North are issues of national importance affecting the future of Canada as a whole. The central government does have major responsibilities to protect the interests of all Canadians. A regionally elected largely native body with decision-making authority for such crucial concerns may be viewed very unfavourably by the rest of Canada. Recall in Chapter II that, while recognizing the problem of "tyranny of the majority" over minority interests, we also acknowledged majority rule as a distinguishing principle of a democracy.

Second, we have noted that as social issues became more complex, it was necessary over the years to delegate some policy and decision making authority to administrative agencies, simply because there are limits to the number of issues about which an elected representative can make informed decisions, even if they only affect a small region. As well, an elected representative may not adequately represent the diverse preferences of his constituency in decisions. He may be fallible and yield to the pressure of the strongest vested interest. Competent administrative agencies can in these circumstances act as a check on the power of elected officials.

Third, while we must admire the native people for the hardships they have overcome in the last ten years or so to become organized and articulate, in order to participate effectively and competently in the decision making systems imposed upon them by white southerners, they may yet be somewhat politically unsophisticated to achieve full self-determination at this time. Language, education and cultural barriers, as well as isolation from the South present challenges that would argue against

regional decision power. Many native people themselves recognize that time is needed for them to adapt to white man's institutions, decision systems and aspirations.

From the above, we can conclude that a decentralizing strategy for locally-based democratic decisions, such as that proposed by Haefele, may at the present time be somewhat premature. Because the larger interests of Canadians as a whole are also at stake, if local decision making power is ever to be achieved, a shared jurisdiction approach may be preferable. Complicated divisions of authority and responsibility between the central and regional "government" would have to be worked out. Project-specific decisions taken by regional authorities to protect and enhance local interests would have to be taken in the context of clearly articulated national policy priorities and guidelines.

The North may not be ready for radical changes in the present institutional design. However, mechanisms must be developed so that the resident population of the North, those most affected by decisions regarding northern development, and other diverse legitimate interests have an effective voice in those decisions. Ostrom (1973) has suggested a prescriptive strategy in which the role of bureaucracies is enhanced and multiplied. He argues that democratic accountability will be increased by substantial overlapping of jurisdiction and fragmentation of authority because all legitimate interests will then be able to participate in policy processes. Decision rules will control individual authority and each level of administration will check the power of other agencies or levels. Decisions made in such a system will be highly accountable. Sproule-Jones (1974) concurs with this view, suggesting that overlapping authority among a variety of agencies affords better opportunity for an individual to obtain

a preferred policy or find redress for harmful indirect consequences of the preferred policies of others.

Recall Rawl's theory of justice, discussed in Chapter II. This theory states that all have an equal liberty and none should gain from the basic inequalities of the social system except in ways that further the advantage of the less fortunate. The ethical question of whether southern Canadians, while a majority, have the right to impose their wishes on the Inuit, especially when burgeoning industrial development may mean destruction of the traditional native lifestyle, was not a factor in the Lancaster Sound decision process. This was not considered even though these people have never signed a treaty giving away any rights to the land they have lived on for thousands of years. If we accept Rawl's interpretation of 'justice' in a democratic society, a crucial component of any decision process, preceding decisions on individual projects, must be resolution of this moral problem.

I suggest that an institutional design based on a strategy such as that suggested by Ostrom and Sproule-Jones would be highly beneficial for the North at the present time. Such a design would achieve the broad aims of enabling a range of interests to have access to and effective involvement in the decision process, thereby allowing differing perceptions and values to be taken into account in conceptualizing alternatives. This would enhance the overall accountability of decisions and ensure that minority interests, such as those of native people, are safeguarded against the "tyranny of the majority".

However, in order for this to occur, two potential problems must be taken into account in designing such a system. The main one is the present imbalance in resources available to various affected interests. Lack

of resources caused extreme difficulty for some interests to participate effectively and has prevented the participation of other "unorganized" legitimate interests entirely. A mechanism must be found to rectify this situation. As well, there is potential for a more fragmented and overlapping institutional design to become cumbersome, thereby impeding decisions and frustrating participants. Care must be taken so that this situation will be avoided.

While details of such a strategy are beyond the scope of this study, the following chapter recommends changes that could be an effective beginning to achieving the "optimal" decision making process in the North.

## CHAPTER VI

Conclusions and Recommendations

We have examined in detail the decision process regarding a specific northern development proposal over a ten year span. While the Lancaster Sound story may not be typical of all northern development decisions, certain basic realities are revealed which suggest that northern policy and decision making processes could be substantially improved. For example:

- There was a marked discrepancy in the early 1970's between DIAND's stated policy priorities and those evidenced by the department's actions. This seemed to be related in part to conflict with elements of energy policy. Obviously, policy for northern development should be clearly articulated and coordinated with Canada's energy policy, as well as environmental and social policies for the North. Conflicts between policies should be acknowledged and reconciled to the extent that this is possible so that the public will be provided with a rationale or context within which to consider specific development decisions. This will establish lines of accountability.
- Decisions were made in an ad hoc, incremental manner without knowledge of other existing and potential resource uses. This was exacerbated by changing public attitudes toward the environment and native concerns. A more comprehensive approach to resource planning on a regional scale to coordinate the broad goals of overall policies for the North is imperative. The need



for "regional context" was dramatically revealed by the EARP panel's inability to make a decision on Norlands' proposed drilling project in its absence. The current Lancaster Sound Regional Study is a step in the right direction. However, DIAND still seems reluctant to initiate imaginative, systematic planning efforts which take full account of local perceptions, needs and aspirations.

- Until the EARP, interests affected by decisions relating to Lancaster Sound, other than industry and government (whose objectives were similar) were excluded. Public involvement can increase the information available to decision makers by exposing them to the full range of valid social values and perceptions and may reveal alternative development possibilities. Government decision procedures involving the allocation of public resources should make routine provision for effective participation by affected interests.
- Throughout the Lancaster Sound decision making process no consideration was given to the ethical question of proceeding with industrial development proposals without the consent of the Inuit and in such a way that they would receive few if any tangible benefits. This situation prevailed despite explicit policy priorities to the contrary. Clearly, decision rules must be established to govern the relationship between native people and the rest of Canada in deciding upon the course of action to be pursued in developing an area. This dilemma would best be solved through a comprehensive land claim settlement, toward which extra effort is warranted. A satisfactory interim measure might be to give the local residents of an area who must bear

most of the environmental and social costs of resource development a veto power over development decisions.

- While we have noted that in a democratic pluralistic society account must be taken of the values and perceptions of a broad range of interests affected by decisions, organising to voice concerns is extremely difficult. In the North, especially, language, education and cultural barriers plus vast distances compound this problem. Therefore, incentives in the form of government funding should be available to give certain interests the resources they need to be able to respond intelligently. This will guard against decision processes weighted in favour of small vested interest groups with numerous resources at their disposal.
- As previously noted, the decision process regarding offshore drilling in Lancaster Sound was characterized by confused policy and ad hoc decision making mechanisms. Not only was there no provision for inclusion of affected interests outside government but also the administrative framework did not provide a constructive role for other government agencies or territorial governments. Moreover, in spite of the many proposals for the region there is at present no intent to implement a permanent mechanism to guide development. The Lancaster Sound Regional Study is a reactive, temporary measure that DIAND seems unwilling to expand into an overall ongoing planning approach. As well, it has been designed and is administered from Ottawa so that once again there is a failure to establish a basis of local legitimacy. Several authors have suggested alternate ways of

approaching northern planning in order to overcome these problems (see Rees, 1978; 1981 and Fox, 1979; 1980). These generally involve establishment of a "Planning and Development Commission" based in the territorial capitals with the authority to implement planning and development policies within their respective territories. In some instances it might be necessary to establish more locally based regional planning and advisory councils to implement plans in key (or high pressure) development areas (Rees, 1981). Such a hierarchy of institutional arrangements would help ensure that territorial and local values and interests are taken into account in the implementation of major developments in the "national interest".

- Due to frustration with changing terms and conditions, Norlands pressed for an EARP review to provide an unambiguous response to their proposal. Accordingly, DIAND referred the proposal to FEARO and gave it special priority although EAMES studies were incomplete. As the resultant EARP panel recommendations indicate, this referral was premature. An impact assessment procedure such as EARP does have an important role to play in overall planning procedures for northern development. However, in the absence of clear policy objectives and a regional overview, EARP operates in a vacuum in which it is difficult to assess the 'significance' of impacts. Therefore, DIAND should learn from the Lancaster Sound EARP review and begin to develop policies and plans for other areas under development pressure before applying impact assessment procedures. This will provide the "context" for assessment of the consequences associated with

specific development proposals.

- The Lancaster Sound EARP review and subsequent panel report highlighted our incomplete knowledge and understanding of the complex issues surrounding the area. The report recommended major expansion of government science programmes in northern areas where industrial development is proposed. As was noted, the EAMES programme while a progressive attempt to generate information, was hampered by funding problems and, in the case of Lancaster Sound, was essentially sidestepped. Carefully planned research programmes which make information available to all affected interests are a crucial component of long-term management and planning. Unfortunately, support for government research efforts has been gradually diminishing over the years. This trend must be reversed so that major information gaps can be identified and filled where possible.

It must be stressed that we have moved into a new realm in our plans to develop the resources of the North. We are imposing our southern white technology on a pristine environment and a dependent people which have co-existed without interference for thousands of years. The results of these new ventures are unpredictable. The decision process for Lancaster Sound drilling should therefore be regarded as a learning experience. The Lancaster Sound region has an advantage in that the EARP review and subsequent regional study have provided momentum for a changed approach. Events and decisions clearly indicate the need for mechanisms to ensure cautious, orderly, planned development in the Sound region. New institutional arrangements are also needed to incorporate differing legitimate interests into decisions. Such plans and institutional structures should be viewed as a

conscious experiment and thus designed to be adaptable to changes indicated by monitoring results of decisions and incorporating feedback. This type of adaptive management strategy will provide a basis for subsequent institutional designs for other regions of the North undergoing increasing intensity of development.

# CITED REFERENCES

- Allison, G.T. 1971. The Essence of Decision: Explaining the Cuban Missile Crisis. Boston: Little, Brown and Co.
- Allmand, W. Minister, Department of Indian and Northern Affairs. 1977. Telex to Mr. A. T. Rutgers, Vice President, Exploration, Norlands Petroleum Ltd., July 25, 1977.
- Arctic Waters Oil and Gas Advisory Committee. 1974. Minutes of meeting with Norlands Petroleum Ltd., October 29, 1974.
- Aucoin, Peter. 1979. "Public Policy Theory and Analysis" in Public Policy in Canada (B. Doern and P. Aucoin, eds.). Toronto: Macmillan Co. of Canada Ltd., pp. 1-26.
- Berger, Mr. Justice T. 1977. Northern Frontier, Northern Homeland, Vol. 1. Toronto: Lorimer and Co.
- Bross, I. 1953. Design for Decision. Toronto: Collier-Macmillan Canada Ltd. pp. 18-32.
- Canada. Statutes. 1970. "Department of Indian Affairs and Northern Development Act". sec. 4.
- Canadian Arctic Resources Committee. 1978. Northern Transitions, Vol. II. Ottawa: Canadian Arctic Resources Committee.
- . 1978. "Submission to EARP Hearings" in A Compendium of Briefs Presented to the Environmental Assessment Panel on the Proposed Lancaster Sound Drilling Project. Ottawa: Federal Environmental Assessment Review Office. p. 9.
- . 1979. Northern Perspectives, Vol. VII, No. 6. Ottawa: Canadian Arctic Resources Committee. p. 2.
- . 1980. Lancaster Sound: Issues and Responsibilities (E.F. Roots, ed.). Ottawa: Canadian Arctic Resources Committee.
- Canadian Nature Federation. 1979. "Conservationists seek Reserve Status for Lancaster Sound". News Release, February 1979.
- Cook, T. and P. Morgan. 1971. "An Introduction to Participatory Democracy" in Participatory Democracy. New York: Harper and Row Inc. pp. 1-40.
- Cotterill, E. Assistant Deputy Minister, DIAND. 1977. Letter to A.C. Rutgers, Vice President, Exploration, Norlands Petroleum Ltd., June 20, 1977.
- . 1977. Letter to A. C. Rutgers, Vice-President, Exploration, Norlands Petroleum Ltd., August 26, 1977.
- . 1979. Letter to D. J. Gamble, Director, Policy Studies, Canadian Arctic Resources Committee, November 6, 1979.

- Crommelin, M. 1977. "Oil and Gas Rights on Canada Lands: Plus ça change, plus . . ." Northern Perspectives, Vol. V, No. 4. Ottawa: Canadian Arctic Resources Committee.
- Cumming, P. 1973. "Foreword", Land Regulation in the Canadian North. Ottawa: Canadian Arctic Resources Committee.
- Daae, D. 1979. Norlands Petroleum Ltd. Personal communication, August 13, 1979.
- . 1980. Norlands Petroleum Ltd. Personal communication, March 21, 1980.
- . 1980. Norlands Petroleum Ltd. Letter to author, March 24, 1980.
- . 1981. Norlands Petroleum Ltd. Personal communication, February 27, 1981.
- Dafoe, T. 1978. Memorandum to W.J. Bryant, Director, N.W.T. Region, Environmental Protection Service, Yellowknife, N.W.T. Re observations on the EARP Panel Public hearings in Frobisher Bay, September 13 and 14, 1978. September 21, 1978.
- Deutsch, K.W. 1966. The Nerves of Government: Models of Political Communication and Control. New York: The Free Press.
- Dickinson, D. 1978. "Northern Resources: A Study of Constraints, Conflicts and Alternatives" in Northern Transitions, Vol. 1. Ottawa: Canadian Arctic Resources Committee.
- Department of Indian Affairs and Northern Development. 1972. Canada's North: 1970-1980. Ottawa: Information Canada.
- . 1976. "Backgrounder: Offshore Drilling, Northern Canada with Special Reference to the Beaufort Sea". January, 1976.
- . 1976. Communiqué re Environmental Assessment and Native Consultation before Drilling. July 26, 1976.
- . 1977. "Treasury Board Submission: EAMES". June 17, 1977.
- . 1979. 1978-79 Annual Report. Ottawa: Department of Indian Affairs and Northern Development.
- . 1980. The Lancaster Sound Region 1980-2000: Draft Green Paper (H. Dirschl, ed.). Ottawa: Department of Indian Affairs and Northern Development.
- Dirschl, H. and O. Løken. 1979. "Study Outline for Green Paper". Ottawa: Department of Indian Affairs and Northern Development. July 18, 1979.
- Dosman, E. 1975. The National Interest. Toronto: McLelland and Stewart Ltd.

- Downs, A. 1967. Inside Bureaucracy. Boston: Little, Brown and Co.
- Dror, Y. 1967. "Muddling Through - 'Science' or Inertia?" in Public Administration Review, December 1967.
- Dunbar, M. 1979. "Keynote Address" in Marine Transportation and High Arctic Development: Policy Framework and Priorities. Ottawa: Canadian Arctic Resources Committee.
- Dye, T. 1972. Understanding Public Policy. New Jersey: Prentice-Hall Inc.
- Easterbrook, W. and M. Watkins. 1967. Approaches to Canadian Economic History. Toronto: Macmillan Co. of Canada Ltd.
- Edgeworth, L. 1974. Letter to A.D. Hunt, Assistant Deputy Minister, Northern Affairs Program, Department of Indian Affairs and Northern Development, May 23, 1974.
- Emond, D.P. 1978. Environmental Assessment Law in Canada. Toronto: Emond-Montgomery.
- Energy, Mines and Resources. 1976. An Energy Strategy for Canada (Summary): Policies for Self-Reliance. Ottawa: Ministry of Supply and Services.
- Environment Canada, Lands Directorate. 1979. Land Use Programs in Canada: Northwest Territories. Ottawa: Ministry of Supply and Services.
- Eyre, P. 1979. Institutions for the Optimal Planning/Policy Process: Application to British Columbia. M.A. Thesis, University of British Columbia, School of Community and Regional Planning.
- Faulkner, Hon. H. 1977. "Statement Regarding Eastern Arctic Marine Environmental Studies (EAMES)". Ottawa: Department of Indian Affairs and Northern Development Communiqué, November 17, 1977.
- Federal Environmental Assessment and Review Office. 1978. Detailed Outline of the Cabinet Memoranda Establishing the Federal Environmental Assessment Review Process. Ottawa: Federal Environmental Assessment and Review Office, April 1, 1978.
- 1978. Environmental Assessment Panel Transcripts, Vol. I-VI. Toronto: Nethercut & Co. Ltd., October 18-19-Nov. 20-30, 1978.
- 1979. Report of the Environmental Assessment Panel: Lancaster Sound Drilling. Ottawa: Federal Environmental Assessment and Review Office, February 1979.
- 1979. Revised Guide to the Federal Environmental Assessment and Review Process. Ottawa: Federal Environmental Assessment and Review Office, May 1979.
- Fleischmann, G. Assistant Secretary, Treasury Board. 1977. Letter to A. Kroeger, Deputy Minister, Department of Indian Affairs and Northern Development, September 29, 1977.



- Fox, I.K. 1976. "Institutions for Water Management: A Changing World". Natural Resources Journal. pp. 743-758.
- 1979. Letter to Hon. H. Faulkner regarding water and power planning in the Yukon Territory, February 13, 1979.
- 1980. "Regional Resource Planning in British Columbia", paper presented at Conference of Planning Institute of British Columbia, Prince George, B.C. May 23, 1980.
- Gainer, J. Gulf Canada, Calgary. 1981. Personal communication, March 9, 1981.
- Gertler, L. and R. Crowley. 1977. Changing Canadian Cities. Toronto: McLelland and Stewart.
- Gibson, R. 1978. The Strathcona Sound Mining Project: A Case Study of Decision Making, Science Council of Canada Background Study No. 42. Ottawa: Information Canada.
- Glazier, G. General Manager, Environmental and Social Affairs, Petro Canada Ltd., Calgary. 1979. Personal communication, August 13, 1979.
- Griffith, E. 1962. "The Ethical Foundations of the Public Interest" in The Public Interest (C. Friedrich, ed.). New York: Atherton Press.
- Haefele, E. T. 1973. Representative Government and Environmental Management. Baltimore: John Hopkins University Press.
- Heberlein, T. 1976. Principles of Public Involvement. Madison, Wisconsin: Department of Rural Sociology, University of Wisconsin.
- Holling, C.S. ed. 1978. Adaptive Environmental Assessment and Management. New York: Wiley and Sons Ltd.
- Hunt, A.D. Assistant Deputy Minister, Northern Affairs Programme, Department of Indian Affairs and Northern Development. 1974. Letter to J. Raleigh, President, Norlands Petroleum Ltd., August 9, 1974.
- Innis, H.A. 1948. Empire and Communications cited in M. Watkins. 1977. "From Underdevelopment to Development". Dene Nation: the Colony Within (M. Watkins, ed.). Toronto: University of Toronto Press. pp. 84-99.
- Keith, R. n.d. Northern Development and Technology Assessment Systems. Science Council of Canada Study. Cited in M. Helfinger, M.A. Thesis, Department of Political Science, University of British Columbia.
- Kennedy, J.F. 1963. "Preface" in Decision-Making in the White House: The Olive Branch and the Arrows (Theodore Sorensen). Cited in G. Allison. 1971. Essence of Decision: Explaining the Cuban Missile Crisis. Boston: Little, Brown and Co.
- Lewis, S. Federal Activities Branch, Environmental Protection Service, Department of the Environment. 1979. Personal communication, August 15, 1979.

Lindblom, Charles E. 1968. The Policy-Making Process. Englewood Cliffs, New Jersey: Prentice-Hall Inc.

----- . 1969. "The Science of Muddling Through" in Readings in Modern Organizations (A. Etzioni, ed.). Englewood Cliffs, New Jersey: Prentice-Hall Inc.

Løken, O.H. Department of Indian and Northern Affairs, Renewable Resources Branch. 1979. "Briefing Notes re Magnorth/Norlands Petroleum Ltd. -- Environmental Aspects". July 9, 1979.

----- . Renewable Resources Branch, Department of Indian and Northern Affairs, 1979. Personal interview, August 15, 1979.

Lotz, J. 1970. Northern Realities. Toronto: New Press Ltd.

Lucas, A. and S. McCallum. 1975. "Looking at Environmental Impact Assessment". Environmental Management and Public Participation. Toronto: Canadian Environmental Law Association. pp. 306-318.

Lucas, A.R. and E.B. Peterson. 1978. "Northern Land Use Law and Policy Development: 1972-78 and the Future". Northern Transitions, Vol. II. Ottawa: Canadian Arctic Resources Committee. pp. 63-93.

Lucas, A.R., D. MacLeod and R.S. Miller. 1979. "Regulation of High Arctic Development". Marine Transportation and High Arctic Development: Policy Framework and Priorities. Ottawa: Canadian Arctic Resources Committee. pp. 99-175.

Lucas, K. 1974. Memorandum to the Minister of Environment re environmental responsibilities north of 60°, June 11, 1974.

----- . 1974. Letter to A. D. Hunt, Assistant Deputy Minister, Northern Affairs Programme, Department of Indian Affairs and Northern Development, June 13, 1974.

Magnorth Petroleum Ltd./Norlands Petroleum Ltd. 1980. "Lancaster Sound: Cost of Compliance". Regulation Reference, Appendix 2, Working Paper No. 13. Ottawa: Economic Council of Canada.

Marshall, D. Director, Pacific Region, Federal Environmental Assessment Review Office, Vancouver. 1981. Personal communication, March 3 and 24, 1981.

Mayo, H. 1960. An Introduction to Democratic Theory. New York: Oxford University Press.

Milne, Dr. A. OAS, Pacific Region, Department of the Environment. 1976. Letter to Dr. R.W. Stewart, Director-General, OAS, Pacific Region, Department of the Environment, June 14, 1976.

Milne, D. and B. Smiley. 1978. Offshore Drilling in Lancaster Sound: Possible Environmental Hazards. Ottawa: Department of Fisheries and Oceans.

- Morison, M.J. Chairman, Arctic Waters Oil and Gas Advisory Committee. 1975. Letter to Mr. J. Raleigh, President, Norlands Petroleum Ltd. re environmental study requirements, March 21, 1975.
- Chairman, Arctic Waters Oil and Gas Advisory Committee. 1975. Letter to Mr. Raleigh, President, Norlands Petroleum Ltd., April 30, 1975.
- Naysmith, J.K. 1975. Land Use and Public Policy in Northern Canada. Ottawa: Information Canada.
- Nemetz, P. 1979. "Introduction and Summary". Energy Policy: The Global Challenge (P. Nemetz, ed.). Montreal, Quebec: Institute for Research on Public Policy.
- Olson, Mancur. 1965. The Logic of Collective Action. Cambridge, Mass.: Harvard University Press.
- Ostrom, V. 1973. The Intellectual Crisis in American Public Administration. Alabama: University of Alabama Press.
- Pimlott, D. 1973. "People and the North: Motivations, Objectives and Approach of the Canadian Arctic Resources Committee". Arctic Alternatives. Ottawa: Canadian Arctic Resources Committee. pp. 2-24.
- Pimlott, D., D. Brown and K. Sam. 1976. Oil Under the Ice. Ottawa: Canadian Arctic Resources Committee.
- Plamenatz, J. 1973. Democracy and Illusion. London: Longman Group Ltd.
- Raleigh, J. President, Norlands Petroleum Ltd. 1974. Letter to Hon. J. Buchanan, Minister, Department of Indian Affairs and Northern Development, December 6, 1974.
- 1977. Letter to E. Cotterill, Assistant Deputy Minister, Indian and Northern Affairs, May 3, 1977.
- 1977. Telex to Hon. W. Allmand, Minister, Indian and Northern Affairs, June 27, 1977.
- 1977. Letter to Dr. M. Ruel, Director, Northern Environmental Protection and Renewable Resources Branch, Department of Indian Affairs and Northern Development, October 13, 1977.
- Rawls, J. 1967. "Distributive Justice" in Economic Justice (E.S. Phelps, ed.) Middlesex, England: Penguin Books Ltd., 1973. pp. 319-362.
- Rea, K. 1976. The Political Economy of Northern Development. Science Council of Canada Background Study #36. Ottawa: Information Canada.
- Rees, W.E. 1978. "Development and Planning North of 60°: Past and Future", Northern Transitions, Vol. II. Ottawa: Canadian Arctic Resources Committee. pp. 42-62.

- Rees, W. E. 1979. "Reflections on the Environmental Assessment and Review Process (EARP): A Discussion Paper". CARC Working Paper No.1, ISSN 0226-3416. Ottawa: Canadian Arctic Resources Committee.
- 1980. "Environmental Assessment and Review: the case of McKinley Bay". Northern Perspectives, vol. VIII, No. 2. Ottawa: Canadian Arctic Resources Committee.
- February 1981. "Environmental Assessment and the Planning Process in Canada". Proceedings of a Workshop on Environmental Assessment, University of Melbourne, Parkville, Victoria, Australia, February 17-20, 1981.
- 1981. "EARP at the Crossroads: Environmental Assessment in Canada", Environmental Impact Assessment Review, Vol. I (in press).
- Ruel, M.J. Assistant Director, Northern Natural Resources and Environment Branch, Department of Indian Affairs and Northern Development. 1976. Letter to Dr. Stewart, Director General, Pacific Region, Ocean and Aquatic Sciences, Fisheries and Marine Services, Department of Fisheries and Environment, October 22, 1976.
- Director, Northern Environmental Protection and Renewable Resources Branch, Department of Indian Affairs and Northern Development. 1977. Letter to Mr. J. Raleigh, President, Norlands Petroleum Ltd., August 29, 1977.
- 1977. Letter to Mr. J. Raleigh, President, Norlands Petroleum Ltd., September 30, 1977.
- 1977. Letter to Mr. J. Raleigh, President, Norlands Petroleum Ltd., October 27, 1977.
- 1978. Letter to Mr. J. Raleigh, President, Norlands Petroleum Ltd., April 21, 1978.
- Rutgers, A.T.C. Vice President, Exploration, Norlands Petroleum Ltd. 1977. Telex to Dr. H. W. Woodward, Director, Oil and Minerals Division, Department of Indian and Northern Affairs, June 8, 1977.
- 1977. Telex to Hon. W. Allmand, Minister, Department of Indian Affairs and Northern Development, July 12, 1977.
- 1977. Letter to Hon. W. Allmand, Minister of Indian and Northern Affairs, August 9, 1977.
- Science Council of Canada. 1976. "Northern Development: A paper for discussion", Issues in Canadian Science Policy #3. Ottawa: Information Canada.
- Simeon, R. 1976. "Studying Public Policy" in Canadian Journal of Political Science, Vol. IX, No. 4, December 1976. pp. 548-580.

- Snow, Dr. N. Renewable Resources Branch, Department of Indian Affairs and Northern Development. 1979. Personal communication, August 14, 1979.
- . 1981. Personal communication, March 25, 1981.
- Sproule-Jones, M. 1974. "An Analysis of Canadian Federalism" in Publius: The Journal of Federalism, Vol. 4, No. 4. Temple University, Fall 1974.
- Stewart, R.W. Director General, Pacific Region, Department of the Environment. 1974. Letter to Mr. A. G. Redshaw, Regional Manager, Water, Lands, Forests and Environment, Department of Indian Affairs and Northern Development, September 18, 1974.
- . 1976. Letter to Mr. G. T. Glazier, Chairman, Arctic Waters Oil and Gas Advisory Committee, June 15, 1976.
- Sullivan, P. Department of Indian and Northern Affairs, Non-Renewable Resources Branch, Oil and Gas Division. 1979. Personal communication, August 16, 1979.
- Swainson, N. 1976. "Defining the Problem" in Managing the Water Environment (N. Swainson, ed.). Vancouver: University of British Columbia Press. pp. 1-30.
- Thompson, A. and M. Crommelin. 1973. "Canada's Petroleum Leasing Policy -- A Cornucopia for Whom?" Ottawa: Canadian Arctic Resources Committee.
- . 1974. "Legal Constraints on Petroleum Policy Options in Northern Canada" in The Mackenzie Pipeline: Arctic Gas and Canadian Energy Policy (P. Pearse, ed.). Toronto: McLelland and Stewart Ltd. pp. 80-97.
- Thompson, A. 1979. "A Disciplined Framework for Public Participation". Paper presented to the Second Banff Conference on Public Participation, unpublished manuscript, March 1979.
- Trudeau, P. 1980. Speech at Yellowknife, Northwest Territories, September 22, 1980.
- Tullock, G. 1979. "Public Choice in Practice" in Collective Decision-Making: Applications from Public Choice Theory (C. Russell, ed.). Washington: Resources for the Future Inc.
- van Boven, T. 1979. "United Nations and Human Rights: A Critical Appraisal" in U.N. Law/Fundamental Rights. The Netherlands: Sijthoff and Noordhoff.
- Wallace, R. Aquatic ecologist, Dominion Ecological Consulting Ltd. 1979. Personal communication, August 13, 1979.
- White, G. F. 1966. "Formation and Role of Public Attitudes" in Environmental Quality in a Growing Economy. The John Hopkins Press. pp. 105 - 137

## APPENDIX 1

Participants in the Decision-Making Process

The groups who have interacted either formally or informally can be regarded as the decision-making system for the Lancaster Sound drilling proposal. Some participants have, of course, had a continuous interest and consequently a high profile in this system. Because of their pervasive influence in the process they are regarded as key participants. In this case there are three:

## THE FEDERAL DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

The Department of Indian Affairs and Northern Development Act,  
section 4, states:

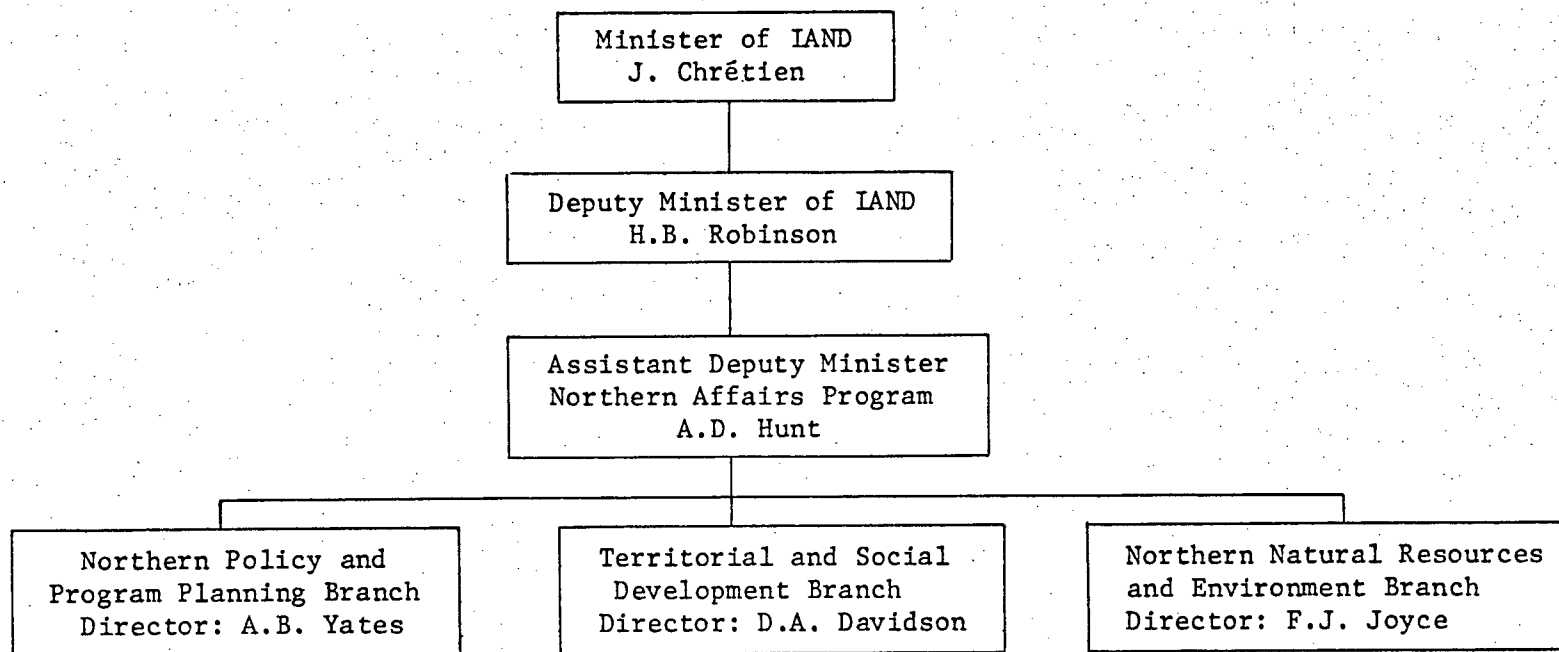
The duties, powers and functions of the Minister of Indian Affairs and Northern Development extend to include all matters over which the Parliament of Canada has jurisdiction, not by law assigned to any other department, branch or agency of the Government of Canada, relating to:

- a) Indian Affairs;
- b) The Northwest Territories and the Yukon Territories and their resources and affairs;  
and
- c) Inuit Affairs

This department has control over the administration of lands, waters, and natural resources in the two territories. It is a huge organisation with various programmes and branches of authority. The programme we are concerned with here is the Northern Affairs Programme. The objectives of the Northern Affairs Programme are "to advance the social, cultural, political and economic development of the Yukon and the Northwest Territories, in conjunction with the territorial governments and through coordination of activities of federal departments and agencies, with special emphasis on the needs of native northerners and protection of the northern environment" (Government of Canada, 1980, p. 270).

The following DIAND organisation charts show the relevant branches of DIAND for the Lancaster Sound decision making process before 1976.

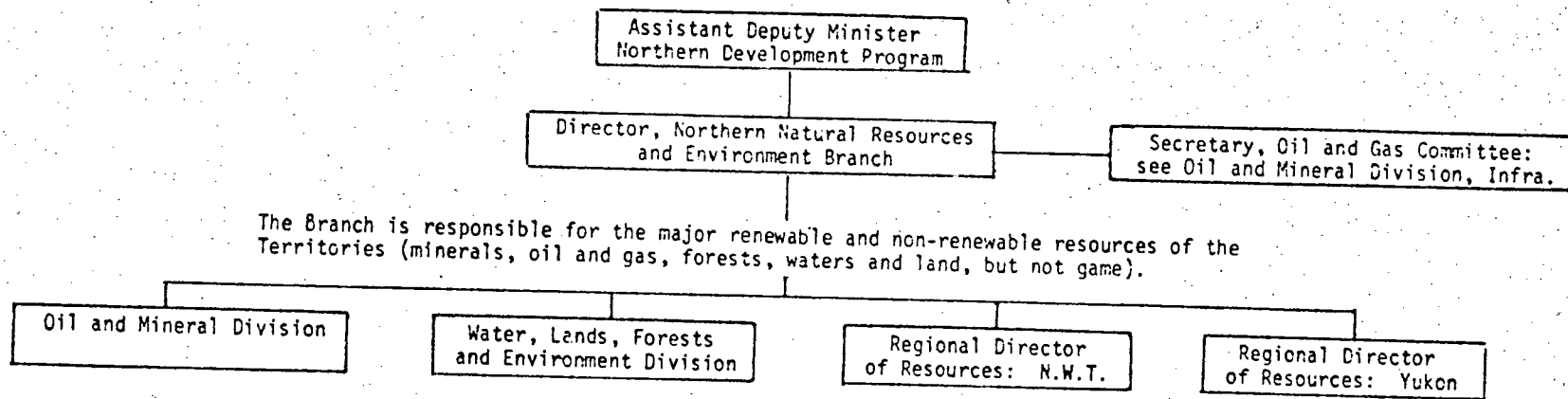
DIAND Northern Affairs Program\*



\* before reorganisation of DIAND in 1976



DIAND Northern Natural Resources and Environment Branch



DIAND Oil and Mineral Division, Northern Natural Resources and Environment Branch

Director, Northern Natural Resources  
and Environment Branch

Oil and Mineral Division

The Division manages the development of non-renewable resources located in the Territorial mainland, the Arctic continental shelf and the Arctic Archipelago (Note: the Resource Management and Conservation Branch, Dept. of Energy, Mines and Resources administers non-renewable resources in Hudson Bay and Hudson Strait and off Canada's east and west coasts, under the legislation presented in this Table: see Table II et. seq.)

The Oil and Mineral Division issues and administers oil and gas exploration permits, leases and royalties under the Canada Oil and Gas Land Regulations, 1961. Promulgation of amended Oil and Gas Regulations, which were prepared in consultation with industry, is expected in the near future. The amendments deal principally with oil and gas royalties, the term of oil and gas leases, and the disposition of Crown Reserves.

The Oil and Gas Drilling Regulations govern such technical matters as excavation, well plugging and the abandonment of wells.

Amended Oil and Gas Drilling and Production Regulations will be promulgated under the Oil and Gas Production and Conservation Act in the near future. This Act was passed in 1969, and amended in 1970 to apply to the east and west offshore areas. It empowers the Governor-in-Council to enact regulations respecting "the exploration and drilling for, the production and conservation, processing and transportation of oil and gas"; contains provisions regarding "waste", unitization and pooling; authorizes DIAND and DEMAR staff as Chief Conservation Officers to enforce the Act and its Regulations; and establishes a

five-member Oil and Gas Committee (2 members of which must have "specialized expert or technical knowledge of oil and gas") under the direction of the Minister of DIAND for territorial lands and Arctic waters, and the Minister of DEMAR for Hudson Bay and Hudson Strait and the other regions administered by DEMAR. The Oil and Gas Committee is empowered to hold investigations and public hearings, and its orders may be made orders of the Federal Court of Canada.\*

By Dec. 1972, 445 million acres were held under oil and gas permit and 4.9 million acres were held under oil and gas lease in the Territories, including the Arctic Islands and Arctic offshore areas. There have been no invitations to tender for oil and gas rights on Crown Reserve Lands since January 1969.

The Oil and Mineral Division also issues and administers prospector's licences, prospecting permits (for NWT), mineral claims, mineral leases and royalties, under the Canada Mining Regulations for the NWT, and under the Yukon Quartz Mining Act and the Yukon Placer Mining Act. Bill C-187 to update the Yukon mining legislation and make the Territorial Land Use Regulations (discussed in Table I-E) applicable to Yukon mining operations, was withdrawn from the House of Commons in 1971. The Canada Mining Regulations also apply to the regions administered by DEMAR.

\* A senior DIAND official has stated that the Oil and Gas Committee is largely responsible for the continued shaping of the growth of the northern oil and gas industry by inquiring into any matter under its jurisdiction, by providing advice to the Minister, and by providing a body to which industry may appeal the orders of the Chief Conservation Officer, who is responsible for the day-to-day enforcement of Regulations under the Act.

DIAND Water, Lands, Forests and Environment Division, Northern Natural Resources and Environment Branch

Director, Northern Natural Resources and Environment Branch

Water, Lands, Forests and Environment Division

The Division is responsible for:

- the administration of surface rights to land in the Territories (except those areas in and near communities that have been designated "Development Control Zones and transferred to the direct administration of the Territorial government);
- the management of renewable resources (except game) in the Territories;
- environmental protection in the Territories (except those aspects that have been statutorily assigned to other federal agencies).

Within the past few years, the federal government has promulgated three legislative measures designed to ameliorate the adverse effects of development on the northern environment. These are:

The Arctic Waters Pollution Prevention Act & Regulations

- Act passed 1970; Act & Regulations came into force in August 1972.
- applies to waters throughout the Arctic Archipelago and 100 miles out to sea from the Canadian land masses.
- responsibility for administration is divided between the M of T (for shipping activities), DEMAR (for non-shipping activities in Hudson Bay and Hudson Strait), DIAND (for non-shipping activities in the remainder of the Arctic).
- the Act specifies safety regulations for the construction of Arctic safety zones for navigation; restricts the dumping of wastes at sea; and imposes liability for cleanup and for damages.
- DIAND is developing an administrative framework for the Arctic waters legislation, as well as policy for the prevention of spills, reporting and clean-up operations. An Arctic Waters Oil and Gas Advisory Committee has been established to advise upon the environmental-protection stipulations that are included in Drilling Authorities.

The Northern Inland Waters Act & Regulations

- Act passed June 1970, proclaimed in force February 1972; Regulations promulgated September 1972.
- the Act is designed to provide a comprehensive framework for the management of Territorial water resources. It requires that a Water Licence be obtained for any activity affecting water rights or water use (with the exception of water for domestic purposes) within designated Water Management Areas. The Licences are issued by statutory Water Boards in each Territory, the objects of which are "to provide for the conservation, development and utilization of the water resources "of the Yukon and N.W.T. (see Table I-F).

The Territorial Land Use Regulations:

- Regulations promulgated in November 1971; promulgation of amendments is imminent.
- designed to permit multiple use of Territorial land and to protect the environment.
- Part I establishes a code for all "land use operations" in the Territories.
- Part II applies to "land use operations" in areas that are designated as "Land Management Zones", within which all operations must be authorized by a Land Use Permit containing environmental protection stipulations.
- Land Management Zones have been designated in the northern Yukon, the Mackenzie Valley, and the western Arctic.
- DIAND has established a Land Use Advisory Committee in each Territory to advise upon these Permits (see Table I-F).
- The Regulations do not apply either to hunting, fishing or trapping by territorial residents, or to activities on land, the surface rights to which have been disposed of by the Minister of DIAND (including disposition by sale, lease, or by right-of-way easement). The definition of "land use operation" contains exceptions that exclude most of the exploration phase of mining activities. The Regulations do not apply to mining activities in the Yukon, for Bill C-187 "the Yukon Minerals Act" was withdrawn from the House of Commons in 1971. The amended Regulations, drafted in consultation with industry, are expected to cover certain of these exclusions.

#### MAGNORTH PETROLEUM LTD.

Magnorth Petroleum Ltd., based in Calgary, Alberta, was formed in 1968-69 and incorporated in 1970. It is a consortium with twelve companies involved, similar to Panarctic Oils Ltd. Magnorth was the principal participant with DIAND in the decision process before 1973. In 1971 Magnorth made a farm-out arrangement with Northern Natural Gas of Omaha, Nebraska. Northern would undertake a \$9.8 million exploration programme over five years beginning in 1973 to earn an undivided 25% interest in Magnorth's working interest in all the permit lands within the agreement. However, in May, 1973, when the formal joint operating agreement was executed, Northern's name was replaced by that of its subsidiary, Norlands Petroleum Ltd.

#### NORLANDS PETROLEUM LTD.

Norlands Petroleum Ltd. has been the principle actor with DIAND in the decision process since 1973. Norlands was incorporated as well in 1970, controlled by Northern Natural Gas of Omaha. Norlands, as mentioned, became Magnorth's partner in 1973, whereupon the company became sole operator of the exploration programme to be conducted on Magnorth lands.

#### Others

There are a number of participants who were not as centrally involved but either interacted and had an influence on the decision process or at least should have been involved. While there are many groups and individuals who no doubt had a peripheral impact on decisions, time and space constraints preclude full discussion of these. Therefore I am

restricting discussion to four classes of participants with brief descriptions of the main participants in each class. Many were not involved in the Lancaster Sound decision making process until Norlands' proposal had been referred to EARP.

#### GOVERNMENT

- a) Department of the Environment (then Department of Fisheries and the Environment)

DOE maintained an advisory role in the decision process but certainly had some impact, especially in later years. DOE was consulted initially by DIAND regarding Norlands' Approval-in-Principle. An environmental overview of the hazards of drilling in Lancaster Sound was prepared through DOE for DIAND. Branches of DOE such as Parks Canada, the Canadian Wildlife Service, and the Environmental Protection Service prepared reviews of Norlands' proposal and made submission at the EARP public hearings.

- b) Federal Environmental Assessment and Review Office

FEARO is responsible for administering the EARP process. The office is administered by a permanent Executive Chairman appointed by the Minister of the Environment. Although FEARO operations are established and controlled by the Minister, the FEARO office itself remains separate from the Department of the Environment. FEARO had the responsibility of appointing panel members for the Lancaster Sound EARP and organising information distribution and public meetings. The panel had the responsibility of issuing guidelines for an EIS to the proponent or initiating agency, reviewing the EIS, obtaining public response, and advising the Minister of the Environment on the acceptability of the project. Norlands' proposal was referred to FEARO in 1977.

## PUBLIC INTEREST GROUPS

### a) Canadian Arctic Resources Committee

Established in 1971, this group works for an informed and balanced approach to northern development. CARC was an intervenor at the Lancaster Sound EARP public hearings.

### b) Canadian Wildlife Federation

The CWF is a national organisation dedicated to the conservation of wildlife. This group was also an intervenor at the public hearings.

### c) Canadian Nature Federation

This is a natural conservation organisation concerned with the protection of Canada's wildlife and wildlife habitat. This group intervened at the public hearings.

## NATIVE ORGANISATIONS

### a) Inuit Tapirisat of Canada

ITC represents the Inuit of Canada. This group was formed to undertake comprehensive land claims with the federal government. ITC was an intervenor in the public hearings.

### b) Baffin Region Inuit Association

This group represents Inuit of the Baffin Region in the Northwest Territories. BRIA intervened as well at the public hearings.

## RESIDENTS OF AFFECTED COMMUNITIES

Local communities were visited by the panel members and Norlands' officials in a series of community meetings prior to the formal public hearings in Pond Inlet. Communities visited were Arctic Bay, Resolute Bay, Grise Fjord, Creswell Bay and Pond Inlet. These communities also sent

representatives to the public hearings to voice their concerns regarding Norlands' proposal.

## APPENDIX 2

Discussion of Questionnaire Results  
Regarding the Lancaster Sound EARP

During the summer and fall of 1979 questionnaires were sent to intervenors in the two sets of EARP public hearings at Pond Inlet. The total number of intervenors at these hearings was 65 (FEARO, February, 1979). Of these, 36 or 55% were sampled. Fifteen intervenors (42%) returned completed questionnaires. The complete results for this study have been included in this Appendix. Care was taken to ensure the anonymity of respondents. A brief discussion of these results may offer insights into the perceived effectiveness of the Lancaster Sound EARP as a decision-making mechanism.

Most of the respondents represented either interest groups or government departments. Many (13 out of 15) had had involvement or experience with EARP besides participating in the Lancaster Sound hearings.

The majority of respondents did not have an opportunity to contribute their views on the project until after the guidelines were issued and the EIS prepared. Most (8 out of 15) believed that the "no-action" alternative was the only one considered. Respondents felt that, on the whole, they did not have the opportunity to consider alternatives until the FEARO office announced dates for the hearings and solicited briefs, or later. One intervenor commented that "no alternate project proposals were presented for consideration. However, we were certainly at liberty to suggest alternatives to the Panel." Another mentioned that "the no-action alternative was the one we urged at the hearing but we felt that this was one that was not being considered by the Panel. It obviously was being so considered much to the surprise (this time) of



the proponent".

Most (13 out of 15) of the respondents were familiar with guidelines issued to the proponent for preparation of the EIS. However, the majority (10) were not given a chance to participate in their formation. Those who did were mainly government officials asked to comment regarding baseline data requirements. Although in some cases FEARO solicits briefs regarding guidelines from interest groups and individuals, this was not done for Lancaster Sound. Native groups and affected communities, especially, were left out of this phase of EARP. One intervenor stated that "despite the EARP statements we have never been able to participate in the preparation of guidelines". One intervenor noted that "with the conditions continuously changing the Proponent could not readily satisfy conditions". Another commented that "in retrospect they (the guidelines) failed to adequately address the question of area clearance versus one well approval". As we have seen, this issued sparked a good deal of criticism at the hearings. The comment was made that "... although impact prediction is required, environmental studies by government or proponent rarely study effects. Studies are merely inventories of biological resources in a particular area. Since knowledge is generally lacking in cause-effect relationships, impact predictions are in many cases nothing more than guesses" (original emphasis).

Presumably because of the two-staged hearing, most respondents (10 out of 15) felt that sufficient time was available to prepare responses after receiving the EIS. The majority believed that background material and departmental reviews were valuable and used the studies that were made available in preparing their briefs.

Opinion on the timing and duration of the hearings indicated that, for the most part, intervenors were satisfied. Location seemed to cause the biggest problem but as one respondent suggested, "the location wasn't convenient but I agree with the principle of holding hearings in the area of a project". Another found that "the location was very inconvenient from the point of view of access and flights. It was poorly arranged, such that we were forced to attend a second session at a later date".

Most of the respondents (11 out of 15) incurred expenses mainly for travel to the hearings. Apparently, the federal government provided most of the funding, since many of the intervenors were government officials. The question of provision of funds to public interest groups met with a favourable response from the majority of respondents, who felt that at least in some circumstances a funding mechanism should be instituted.

Comments on the panel were wide-ranging. One respondent noted that "it would be virtually impossible to constitute a small and effective panel that was representative of the full range of concerns. Another felt that the panel lacked socio-economic expertise even though socio-economic issues were a topic of concern at the hearings, while another stated that "there were no members of the panel with adequate technical background (petroleum and geological engineering) to deal with the technical aspects of such an energy resource project". Most respondents had similar views regarding the role and authority of the panel. They felt that the panel should examine a project in detail in a public arena, allowing the proponent and the public to express their views and then provide informed advice to the government on the potential impacts of a project, recommend means of mitigating these impacts and suggest a course of action. Some

comments indicate that the panel's present role could be extended. For example, one person suggested that "the panel should either become fully briefed on the project and be prepared to take the lead in questioning where necessary or else have someone else do it for them (if they want to appear neutral). A panel secretariat (counsel) could do it. This questioning must be for everyone and not just the proponent". Another wanted the panel to be a quasi-judicial authority, while another wanted the panel "to make a definitive ruling (similar to a court) that cannot be overturned for a minimum period of 12 or 24 months by any one, including the Minister".

The question of conduct of the panel chairman was difficult, owing to the fact that a different chairman had been present for each set of hearings. On the whole, most respondents (12 out of 15) found that the hearings were conducted in a fair and impartial manner. However, the chairman at the first set of hearings received a good deal of criticism. One person noted that "the Chairman at the first stage of hearings appeared to take exception to the representative from CARC - Don Gamble" while another commented that the "chairman at the first session appeared somewhat impatient and issues were skimmed over - perhaps in retrospect it was inevitable with the volume of material to be handled but a somewhat strained atmosphere was created". Others were even more critical: ". . . the first chairman seemed too concerned with the process and not enough with ensuring that all the issues were adequately discussed" and "the chairman did not understand procedure, had no experience with judicial (i.e. fair) hearings and did not bring significant points on the environment to light".

Most respondents (12 out of 15) found the amount of time adequate for presentation of briefs. Two who expressed dissatisfaction commented

that "we were promised unlimited time only to find out just prior to the hearing that we would only have 20 minutes" and "public hearings were short thus preventing intervenors opportunity to a full hearing -- also there were so many intervenors that time was limited for presentations". While 8 of the respondents felt that there had been full opportunity to question the presentations, 6 expressed dissatisfaction. Comments such as "questions were often cut off with incomplete answers" and "the lack of procedures makes questioning a very 'hit and miss' affair" characterize this dissatisfaction.

Further to this point, comments regarding discussion of issues show a high level of dissatisfaction. For example, "the issues never were properly defined and assessed. Time, sloppy procedures and the lack of a participant (like the panel or something like a panel counsel) made the thing very fluffy and easy to drift with the prevailing winds whatever they turned out to be", "It seemed to me that much of the discussion at the hearings was totally irrelevant to the EIS under review. Many areas of the EIS were passed over and were never reviewed as to merits and inadequacies," and "the community did not present adequate briefs (BRIA, ITC, etc.) and were not allowed significant or sufficient access to the proponent". In particular, respondents commented that socio-economic issues were not dealt with satisfactorily.

Respondents had particular suggestions for improving the structure of hearings to permit more effective participation, for example, "1) find a chairman like Tom Berger 2) bring non-government panel members to the hearings, pay them and include members chosen from northern communities to sit on the panel(s)", "perhaps what is needed is a more careful selection of panel members for each EIS being reviewed. Some members who appear to be

on a "power trip" were intimidating to the detriment of the whole public hearing process" and "rethink the role of the panel. If they are to be experts then they should be seen to be bringing their expertise to bear on the issues in a rigorous way and not just sitting there. If they prefer to 'appear' neutral then the secretariat or someone else should assume a panel counsel role. Prehearing conference calls or meetings between intervenors, proponent and secretariat would help in agenda and clear procedures". Two people noted the problem with lack of time to fully present briefs and explore issues.

The majority of respondents (13 out of 15) felt that expert advisors could be used more effectively by panel members and other participants. One person commented that "their role is still a little unclear, I feel better expertise is available in some cases that is not utilized by the panel". Several other comments indicated that advance notice and opportunity to interact between advisors and intervenors would be desirable.

Respondents were emphatic in their support of public reviews of environmental impact assessments as a necessary part of project planning and development. The apprehension that "public reviews prevent both government and proponents from becoming insulated from the concerns, opinions, and often valuable information which comes from the public sector" was echoed in several other comments. Many who commented expressed the wish for broader reviews that allow all concerned Canadians to attend and express their views.

When questioned on the adequacy of existing regulations to protect environmental concerns in the absence of EARP, most (11 out of 15) had a negative response. The piecemeal approach to regulating projects was criticized in comments such as "all other agencies etc. carve up a project

and fail to take it as a whole. Also, no other agency is able to solicit professional critiques from the public service itself for public consumption" and "regulations are designed to address specific situations, often after the fact. The federal bureaucracy is often not sensitive to the needs of the user. The panel review provides an excellent opportunity for public input. This is particularly important in the North."

From the preceding discussion, it is possible to make some general conclusions. An overriding conclusion, judging from these results, is that people welcome public reviews of environmentally sensitive projects, particularly those planned for the North. The concerns, advice and feelings of members of the public are seen as extremely valuable inputs into the decision making process. On the whole, existing regulations to protect environmental concerns are judged to be inadequate in the absence of a broad review which incorporates the views of the public.

However, there were major criticisms of the EARP review as it functioned in the case of Lancaster Sound. One such criticism centered around the lack of public involvement prior to the hearings. It is worthwhile noting that the February 1977 Amendments to EARP direct the proponent or initiating agency to provide information to, and involve, the public as early in the project planning stages as possible. While this adjustment to EARP was made rather late in the planning of Norlands' project, no attempt was made to include the public in preparation of guidelines for the EIS or to become familiar with their concerns until very close to or at the hearings.

Other areas of criticism included the sense respondents had of rushing through the hearings and the lack of rigorous procedures. Because of these problems, respondents felt that there had been inadequate

discussion of relevant issues, particularly those relating to socio-economic concerns. Norlands was criticized for not answering adequately questions raised by participants and the panel was criticized for not ensuring that satisfactory answers be given. The panel was criticized as well for being composed entirely of government officials and for lacking expertise in key areas, use of expert advisors was another area of criticism regarding hearing procedures. Expert advisors, though seen as a desirable addition to the hearings, were perceived as having less effective input than they could have.

Two final comments from the respondents are excellent summaries of what is valuable about the application of EARP and where EARP has problems. One person writes:

What the participants want from an EARP process is an expeditious, efficient, and non-biased evaluation of a proposed project where the panel is not subjected to pressures from either development-oriented groups or environmentally zealous organisations (be they official, public or private). Therefore the structure of the panel should reflect equal representation of all interest groups and, as much as possible, should not be subjected to the authority of any one government agency. Such a panel then, once organized, should define the rules and regulations of the process and advise the proponents early enough, of all necessary requirements prior to holding public hearings.

Another respondent concluded that:

The concept of public participation in matters affecting their environment is essential. However, the guidelines must be clear so industry can proceed in a rational manner, without expending enormous funds on projects that will ultimately be rejected for non-technical reasons (i.e. MacKenzie Valley Pipeline). The present approach only leads to crisis management. Long term regional planning is vital.

## RESULTS - LANCASTER SOUND

1. When involved in the review of this federal project did you represent an organization or yourself as a private Citizen:

Self	1
Organization	15

## Name of Group:

Dept. of Fisheries and Oceans  
 Canadian Arctic Resources Committee  
 DIAND (Northern Programme)  
 Parks Canada  
 Dept. of the Environment  
 Dept. of Fisheries and Oceans  
 Petro-Canada  
 FEARO  
 Energy, Mines and Resources  
 Canadian Nature Federation  
 Baffin Region Inuit Association/CARC  
 Dept. of Fisheries and Oceans  
 LGL Ltd., Environmental Research Assoc.  
 Petro Canada

2. Have you had any other involvement with EARP, besides this project?

No	2
Yes	13

## Comments:

- intervention at Lancaster Sound and (later) Alaska Highway Pipeline hearings. Also ongoing day to day work with FEARO. Am now preparing for Petrocan Arctic Pilot Project hearing. Each one was different.
- representing the initiator for most northern (NWT, YT) projects.
- review of LNG project proposed by Petrocan for shipment of liquid natural gas from eastern Arctic.
- personal contacts with EARP office, review of guidelines (for DOE) for EIS submissions to EARP.
- Davis Strait, Arctic Pilot Project.
- Davis Strait.
- as a member of the Canadian Environmental Advisory Council.
- frequent contact on development projects.
- intervenor in one other project; submitted comments regarding EARP reassessment.



- Davis Strait Project-oil drilling
  - 1) presented departmental position to Panel on offshore drilling
    - S.E. Baffin Island
  - 2) Chairman of Northwest Region RSCC for 3 years. Member for 1 year.
  - Arctic Pilot Project
  - I was involved as a civil servant in screening projects through the EARP process.
3. At approximately what date were you first made aware of the project proposals?
- in 1976, prior to referral to EARP
  - 1975
  - 1976 - A.P.P.
  - 1977 - Norlands
  - 1973-74
  - 1977
  - September, 1978
  - 1974
  - several years prior - but for other reasons
  - Oct. 1978
  - July 1978
  - 2 months before
  - upon completion of proponent's EIS
  - May, 1976
  - July or August, 1978
4. At what stage did you first become aware of the formal panel review of the project?
- |  |   |
|--|---|
| Earlier  | 3 |
| When the panel for the Impact Review was first selected  | 2 |
| When guidelines for the preparation of an environmental impact statement (EIS) were formulated | 3 |
| When the FEARO Office announced dates for the hearings   | 5 |
| Later  | 2 |

## Comments:

## (Earlier)

- When first referred by DINA
- Info. from proponent before selection of panel
- I was involved as a civil servant in the initial processes

## (Later)

- When I joined DIAND
- Special visit by FEARO official to Arctic Bay in summer of 1978.

## 5. How were you informed about the EARP review?

By Proponent		By FEARO Office		Other	
Meeting	2	Meeting	1	Newspaper Announcement	-
Telephone	2	Telephone	3	Public Announcement	-
Mail	-	Mail	7	Radio	-
Other	-	Other	-	Television	-
				Word of Mouth	3
				Not sure	1

## Comments:

- by referring project to FEARO
- Proponent paid a visit to Arctic Bay at about the same time to explain their proposal -- perhaps they were even here first

## 6. At what point(s) were you given an opportunity to contribute your reviews on the project?

I was given this opportunity:

By the proponent early in the project planning stage	3
During consultation in preparation of the EIS guidelines by the panel	2
When the FEARO Office announced the dates for the hearings and solicited briefs	6
During the panel review (public hearing)	8
Other	3
- at start of EAMES, 1977	
- Letter to Ministers of Environment and DINA	
- At time of first arrival of EARP official David Marshall	

- 7A. During the time(s) you had an opportunity to contribute your views, were you also able to consider alternatives to the proposed project?

Yes	9
No	7

Comments:

- for Norlands not really a factor
- minor alternatives for A.P.P.

- B. If yes, when were you given this opportunity?

By the proponent early in the project planning stage for A.P.P.	2
By the panel during consultation in preparation of EIS guidelines	1
When the FEARO Office announced the dates for the hearings and solicited briefs	3
During the public hearings	2
Other (DIAND policy alternative)	1

8. If you were aware of them, please specify the type of alternatives being considered (please check more than one if applicable).

Alternative location for the same project	-
Alternative type of project (technology) to achieve the same goal	2
Alternative use of same site (or resource base) for a different purpose	4
The "no-action" alternative	8

Comments:

- use of alternative sites in same general area for A.P.P. - no alternatives for Norlands
- No alternate project proposals were presented for consideration. However, we were certainly at liberty to suggest alternatives to the Panel.
- No-action is not really an alternative in the present energy "crunch".
- even barring environmental considerations, there was little chance the Norlands project would get approval, due to the high investment Petro-Canada had in the area, and the obvious political repercussions.
- question of allowing drilling in Lancaster Sound

- the no-action alternative was the one we urged at the hearing but we felt that this was one that was not being considered by the Panel (Lancaster Sound). It obviously was being so considered much to the surprise (this time) to the proponent!! The no go alternative was never contemplated for the Foothills Pipeline since government legislation had already decided.

9. Were you familiar with the guidelines for preparation of the EIS?

Yes	13
No	2

Comments:

- they were delivered to us when we said we would intervene.
- was responsible for interim guidelines for Davis Strait (July, 1976).
- during meetings held with the operator - during early stages of project's submission to DIAND - the Renewable Natural Resources Branch (responsible for environmental matters and referral to EARP) made general comments about base data required.
- The Norlands EIS went through a long evolutionary process.
- comments were contributed during the development stage.
- there was some misunderstanding as to whether DINA or the proponent was preparing the EIS.

10. If yes, were you given a chance to participate during formulation of these guidelines?

Yes	4
No	10

Comments:

- they were formulated by government agencies out of public view, I believe.
- this is the responsibility of the Renewable Natural Resources Branch of DIAND.
- this task was carried out by FEARO.
- was responsible for interim guidelines for Davis Strait (July, 1976).
- despite the EARP statements, we have never been able to participate in the preparation of guidelines. In one case we asked why not? (Dempster Pipeline) and were told that we'd get a chance to make our views known during the hearings! So much for that.

## 11. Did you feel that the guidelines were:

Completely adequate	2
Satisfactory	5
Just Adequate	2
Unsatisfactory	3
Totally inadequate	2

## Comments:

- But they were not available until Jan. 1978.
- questions 11 to 14 (inclusive) are not relevant since I am responsible for technical evaluation only.
- (inadequate) due to nature of development.

## 12. Were they:

Very general, allowing proponent too much freedom to structure EIS	1
General but providing sufficient direction to proponent	5
Explicit but providing sufficient scope	3
Explicit but too narrow in scope to cover all relevant issues	-
Too explicit and detailed (e.g. requiring very detailed but potentially irrelevant information)	3

## Comments:

- with the conditions continuously changing the Proponent could not readily satisfy conditions.
- proponent was forced into defending an unrealistic scenario of 60,000 km<sup>2</sup> of oil-covered water.
- The EIS, minus some public relations efforts by the proponent and some efforts to minimize dangers, was a reasonably well written document, at least in the biological review.
- in retrospect they failed to adequately address the question of area clearance vs. one-well approval.
- the structure of guidelines in itself is normally sufficient. The biological information requested is usually too all-inclusive and in many cases is impossible to obtain without years of research in many disciplines. In addition, although impact prediction is required, environmental studies by government or proponent rarely study effects. Studies are merely inventories of biological resources in a particular area. Since knowledge is generally lack-

ing in cause-effect relationships, impact predictions are in many cases nothing more than guesses.

13. Did you read the EIS?

All	10
Some	5
None	-

If you read only some, which parts and why?

- Review of the technical sections was delegated to specialists in the fields concerned. I was familiar with the executive summary and some areas of direct concern to DFE.
- I was charged with reviewing and commenting upon the physical oceanographic aspects of the EIS.
- I have yet to read anyone's EIS completely since it is largely a snow job or just a catalogue of nice but irrelevant information. I scan them and zero in on those parts that I feel are the most critical.

14. In your opinion, were the guidelines followed by the proponent in preparing the EIS?

Yes completely	4
Partially	8
No, not at all	-
Don't know	2

- Depending on who you were and what your interests, you could argue that the guidelines were or were not followed.
- There were deficiencies in the proponent's EIS, thus not satisfying the guidelines.
- Felt the proponent did not effectively explain blow-out effects, dangers, trajectories
  - or did not have sufficient data and research in order to fulfill the guidelines
- It was a much better than average job. The shortcomings were identified in the DFE Position Statement.
- mostly for A.P.P.; Partially for Norlands

## 15. A. How did you obtain or gain access to the EIS?

- sent to me for review
- through the proponent
- prepared most or all of the biological portions
- mailed out by FEARO
- mailed to me - proponent was notified we did not have documents and contacted DIAND
- from FEARO
- through FEARO
- supplied by FEARO
- obtained from Imperial/Aquitaine
- I was on the departmental distribution list.
- through FEARO office
- through the Department (DIAND)
- from proponent
- mailed to me by FEARO
- through EARP for Lancaster Sound and Foothills. Petrocan sent us the documents after we wrote several letters back and forth.

## B. When did you get access to the EIS?

Well in advance of the hearings (more than 4 weeks)	10
Just before hearings (less than 4 weeks)	4
Other	1 (July 78)

## 16. In the box provided below, would you give your summary evaluation of the EIS (check appropriate boxes).

	Excellent	Good	Adequate/ Mediocre	Inadequate	Unacceptable
Background and history (including rationale for project)	1	7	5	1	-
Inventory (description of the resources and environment)	2	3	4	4	1
Analysis of impacts (significance)	1	2	4	3	4
Style of presentation (readable)	1	4	8	1	-
Overall impression of the quality	1	3	3	7	-

Comments:

- Due to the many topics and differences in the quality of material in different sections of a major EIS above boxes are extremely difficult to logically fill out. EIS for A.P.P. was good to adequate in general. Different sections of Norlands EIS ranged from unacceptable to excellent.
- this is my personal opinion of the technical parts of EIS.
- data base inadequate.

17. In your opinion, was the amount of time between receiving the EIS and the public hearings sufficient to prepare your response?

Yes definitely	10
Could have used more time	4
Absolutely not	-

Comments:

- Compared to the South Davis Strait review, in this case the time provided was adequate.
- I am well versed in the subject.
- the EARP panel agreed to a two-stage hearing process which allowed more time to review and prepare for the hearings.
- above question not applicable.



18. With reference to background material (i.e. proponent's studies, consultant's report, government reviews):

	<u>YES</u>	<u>NO</u>
- would such background material and federal departmental reviews have been useful	12	1
- was it made available	11	2
- did you try to obtain this	11	1
- did you use it	12	2
	N/A	1

19. With reference to the public hearings, were they convenient for you?

Timing:	Yes	<u>8</u>	<u>3</u>	<u>2</u>	<u>1</u>	No
Duration:	Yes	<u>5</u>	<u>1</u>	<u>2</u>	<u>2</u>	No
Location:	Yes	<u>2</u>	<u>2</u>	<u>1</u>	<u>1</u>	No

Comments:

- location not convenient but I agree with principle of holding hearings in area of project
- public hearings were held in the Arctic (great expense to most government agencies)
- the timing was not the best, since we are usually involved in operations review at the end of the year. A more convenient place should have been chosen to avoid emotional reactions by some members of the community.
- too long (my submission came at 1:30 a.m. on the third day of long sessions!)
- Pond Inlet, N.W.T. is not an easy location to reach
- considering it was in Pond Inlet
- if the panelists failed to draw out an issue, it was often difficult to return to the point
- the location was very inconvenient from the point of view of access and flights. It was poorly arranged, such that we were forced to attend a second session at a later date.
- both A.P.P. and Norlands held in High Arctic hence location can't be called convenient.

- I believe that technical matters should be heard in the south. It is difficult to present these arguments through an interpreter.

20. Did you or your group incur expenses in appearing before the panel?

Yes	9
No	4

If yes, please provide a rough estimate of the costs incurred.

Travel	2000	4000	4000	800	1000	700	1300	300	3000	800	1200
Legal Advice			3000								50
Expert Advice											2500
Time off Work	2000					600		500			
Office Expenses			200		200						2000
Other				200		100	200		3000		

Comments:

- expenses paid for by proponent
- Professional advice, etc., part of responsibilities of department. Involvement of staff from all across the country in conducting the review would amount to a significant expense.
- reimbursed by DOE as share contribution.

21. What was the source of funding?

Your organization's operating budget	7
Federal government	9
Personal expense	-
Other	1 (Proponent)

- we also had Baffin Region Inuit Assoc. through a DIAND programme get funds for our second visit to the L.S. hearings. A bit of a fiddle but it worked and saved \$2000.

22. A. Should funding be provided to public interest groups?

Yes	3
In some circumstances	11
No	1

## B. If yes, who should provide this funding?

FEARO	6
Initiating Agency	3
Other government agency	1
The proponent	2 (perhaps a portion)
Other	-

## Comments:

- but costs should be recovered from Proponent if the project goes forward

## 23. In your opinion was the panel as a whole

Representative of the full range of concerns	5
Weighted Toward - Environment	3
- Development	2
Neutral (i.e. without vested interest in fate of project)	4

## Comments:

- I believe that the public expects more from EARP than what it set out to accomplish.
- It would be virtually impossible to constitute a small and effective panel that was also representative of the full range of concerns.
- none of above - panel lacked socio-economic expertise even though these topics were covered at hearings.
- There were no members in the Panel with adequate technical background (Petroleum and Geological Engineering) to deal with the technical aspects of such an energy resource project. I also believe that it would be fair to include a member representing Industry on the Panel.
- many panel members were in my opinion totally incapable from a professional point of view to deal with the EIS under review. Professional expertise did not match EIS under review.
- Norlands Panel was not representative of the full range of concerns.

## 24. During the hearings did the panel generally conduct itself in a

Neutral manner	11
Manner biased toward development	1
Manner biased toward the environment	2

## Comments:

- Norlands Petroleum Panel conducted itself in a manner unacceptable to civilized man.
- The Chairman at first stage of hearings appeared to take exception to the representative from CARC - Don Gamble.

25. A. What in your view, should be the purpose of the EARP hearing?  
(Indicate order of importance)

## Review and discussion of technical aspects of project

First	1
Second	3
Third	4
Fourth	1

## Review and discussion of ecological impacts

First	10
Second	2

## Review and discussion of socio-economic impacts

First	1
Second	6
Third	4

## Forum to identify "gut" community response for or against project

Third	3
Fourth	7

## Others (Please specify)

First	2
-------	---

## Comments:

- review and discussion of technical aspects of project shouldn't be part of EARP
- All of above are equally important
- doesn't have a purpose
- all are equally important
- technical aspects of project not relevant to EARP hearings.



their assessment of such projects. It is the authority and the responsibility of the panel to weigh all evidence and give recommendations that are in the best interest of Canada.

- quasi-judicial
- to arrive at and give an impartial recommendation to the Minister of the Environment.
- to assess and bring to light all relevant information on the proposal and the potential nature and magnitude of impacts.
- don't agree that the panel is necessary
- to make a definite ruling (similar to a court) that cannot be overturned for a minimum period of 12 or 24 months, by anyone including the Minister.
- to assess significance of impacts and advise Minister.
- to examine in detail the project in a public arena; to examine the proponents in detail on specific topics and to be well researched and supported in that effort by back-up staff, then to allow public to examine proponent on concerns which it feels might have been overlooked.
- to provide informed advice to Government on the potential impacts of the project, to recommend means of mitigating or reducing these impacts and to suggest a course of action
- Role: review and discussion of ecological, socio-economic and "gut" community response for or against project.  
Authority: As is.
- I think they are structured and should remain as an environmental panel. This is hard to separate from socio-economics in the North so it should be expanded accordingly.
- to review and evaluate concerns of public interest groups and individuals regarding the effects of the Project if it was approved. Its authority should only extend to making recommendations to the responsible Minister.

27. Did the panel chairman conduct the hearings in a fair and impartial manner? (check on position on the scale).

Yes                      5      7      —      2      2      No, not  
Definitely                      at all

If your response is negative, please explain the basis of your opinion.

- Chairman at first session appeared somewhat impatient and issues were skimmed over -- perhaps in retrospect, it was inevitable

with the volume of material to be handled, but a somewhat strained atmosphere was created.

- the Chairmanship changed between sessions. The first chairman seemed too concerned with the process and not enough with ensuring that all the issues were adequately discussed. The second chairman did a very good job.
- the floor was monopolized by people currying public favor with little concept of national well-being.
- the chairman did not understand procedure, had no experience in judicial (i.e. fair) hearings and did not bring significant points on the environment to light.
- the individual who chaired the first Norlands hearing belongs in a zoo (or the Senate).

28. Was the amount of time you were given to present your brief adequate by your standards? (check one position on the scale).

Yes   8   4   \_\_\_\_\_   1   1   No

If your response is negative, please explain the basis of your opinions.

- we were promised unlimited time only to find out just prior to the hearing that we would only have 20 minutes. By that experience, we became "EARP-wise" and made sure we had exactly right (from several sources) what the hearing procedures would be.
- public hearings were short thus preventing intervenors opportunity to full hearing -- also there were so many intervenors that time was limited for presentations.

29. Were you given an opportunity to question the presentations made by other groups, including the proponent?

Yes, full opportunity	8
Some opportunity but not	
adequate (please elaborate)	6
Not at all	-

- I did not require such an opportunity
- questions were often cut off with incomplete answers.
- talk is for lawyers and politicians -- who has the time?
- the time was somewhat limited.

- so many intervenors that there was not enough time to direct questions to everyone.
- Again, the lack of procedures makes questioning a very "hit and miss" affair.

30. Do you think that there was sufficient discussion of the issues raised at the hearings?

Yes	7
Some issues only	6
No	2

Please specify any dissatisfaction with this aspect of the hearings.

- the issues never were properly defined and assessed. Time, sloppy procedures and the lack of a participant (like a Panel or something like a Panel Counsel) made the thing very fluffy and easy to drift with the prevailing winds whatever they turned out to be.
- It seemed to me that much of the discussion at the hearings was totally irrelevant to the EIS under review. Many areas of the EIS were passed over and were never reviewed as to merits and inadequacies.
- the reference to pollution to the offshore areas concentrated on "tanker accidents" while we were dealing with an offshore drilling system. These two phases of the industry were confused together and there should have been more time given to experts in this field to elaborate on such distinction between the two items.
- I attended the first of two hearings at which a number of issues were raised but the discussion of most was postponed to the second hearing.
- the community did not present adequate briefs (BRIA, ITC, etc.) and were not allowed significant or sufficient access to the proponent.
- too much talk
- The proponent was not particularly responsive. However, the project put forward by the initiator, namely clearance of Lancaster Sound, was far more extensive than requested by the proponent.
- socio-economic issues were truncated at end of hearing
- hearings should have been longer -- socio-economic issues were dealt with but not in any great depth.
- too technical, to detriment of environmental and social concerns.



31. A. Were you given prior notice of any changes in agendas of hearings, panel composition, or changes in presentations where copies had previously been distributed?

Yes	10
No	2
Not applicable	3

If no, please elaborate:

- not much notice concerning actual replacement of the chairman - although notice was given that it might happen.
- Yes, but only barely
- Yes, but very short notice
- changes happened on the spot.

- b. In your opinion, was the amount of advance notice adequate?

Yes	11
No	3

If no, please elaborate:

- time was not permitted to assess the professional capabilities of the Panel
- some changes were announced less than 24 hours before hearing
- didn't feel it caused any alteration in the issues to be resolved

32. A. Did you find the structure of the hearings to be

Very formal - intimidating	-
Appropriate for a meaningful exchange of information	11
Very informal - no rigour	5

- B. Have you any suggestions for improving the structure of the hearings?

- This is difficult to answer since the type of community in which the hearings are held would have to determine the appropriate format and degree of formality. There is always going to be the difficulty of diplomatically dealing with disruptive and time-wasting intervenors.

- somewhere between the latter 2 - I'm quite content to see the demise of lawyers in the process provided that issues can be carefully examined. Often, what would appear to be small issues would arise in the Proponent's discussion, but these issues would not be fully explored, owing to the subtle pressure to complete the hearings and the difficulty one had in obtaining access to a microphone.
- civil servants should be under oath, or some similar mechanism, as there was an obvious tendency to spout the party line, particularly by experts for the initiator.
- 1) find a chairman like Tom Berger  
2) bring non-government panel members to the hearings, pay them and include members chosen from northern communities to sit on the panel(s).
- the main difficulty seemed to be a very tight schedule which did not allow full expression of opinion. Some intervenors after having incurred considerable expense to be at the hearing, were told that they only had 10-15 minutes to present their views. This led to argument and more waste of time. Better planning of programmes would help.
- Senior personnel representing the initiating department (at the Director General level) should be present at the hearing to explain the results of their evaluations to the panel.
- perhaps what is needed is a more careful selection of panel members for each EIS being reviewed. Some members who appeared to be on a "power trip" were very intimidating to the detriment of the whole public hearing process.
- rethink the role of the panel. If they are to be experts then they should be seen to be bringing their expertise to bear on the issues in a rigorous way and not just sitting there. If they prefer to "appear" neutral then the secretariat or someone else should assume a panel counsel role. Prehearing conference calls or meetings between intervenors, proponent and secretariat would help in agenda and clear procedures.

33. Have you read the panel report that was issued after the hearings?

Yes, fully	12
In part	3
No, but aware of contents	
from discussion	-
no, not aware of contents	-

34. Do you feel that your concerns were fairly represented in the panel report?

Yes	11
No	4
Not at all	-

Please specify any dissatisfaction:

- I do not believe the Panel adequately dealt with the imposition of operating conditions or allowed for the possibility of PROJECT expansion.

35. Were expert advisors brought in by FEARO during the hearings?

Yes	11
(Some)	2
No	1

- some experts (e.g. F. Bercha Assoc. who deal with blowout risk analysis) should have been invited.

36. Was their presence announced in advance of the hearings to permit the preparation of specific questions for them?

Yes	5
No	8

- yes and no. Some experts were reviewing issues which required listening to before formulating questions.

37. Did you make use of these advisors.

Before the hearings	3
During the hearings	6
Not at all	6

- They felt they couldn't advise me and the panel at the same time since they were party to all panel deliberations.

38. In your view, could advisors be used more effectively by panel members and other participants?

Yes	13
No	2

Explain:

- How much is enough? The panel did ask for expert comment frequently.
- Their role is still a little unclear. I felt better expertise is available in some cases that is not utilized by the Panel.
- possibility of more expert advisors to supplement expertise of panel.
- advisors should brief panel members on issues to be resolved -- documents could be made available to all.
- advance notice and permission to co-operate with intervenors would be desirable.
- the potential benefits of carrying out the project were not presented at all.
- they could be required to table their input in advance of the hearing so groups could have access and prepare for rebuttals of questions.
- greater opportunity for interaction between advisors and intervenors.
- advisors in offshore drilling technology could have been very helpful to panel members
- professional expertise should be consulted by the Panel members prior to public hearings.
- The advisors should act through someone as the final check on everyone's evidence. They should be seen to intervene as a single "public interest" entity as commission counsel and its battery of advisors in the Berger Inquiry.

39. In your opinion are public reviews of environmental impact assessments a necessary part of project planning and development?

Yes	14
No	1

Explain:

- Government and industry need a check. The public provides it -- almost free of charge.
- all Canadians should be allowed to comment on projects which may have an impact on the environment and on their individual lifestyles. We do live in a so called democratic society. Also much expertise exists outside of government and this should be drawn upon to facilitate sound review of projects.

- reviews should cover all aspects of a project -- not only the environmental aspects. However FEARO and DOE are not the proper agencies for carrying out such broad reviews.
- social concerns that would otherwise not be looked at by Government or Industry are identified through this process.
- for major projects or projects in sensitive areas. If in doubt, have a preliminary review (such as courts have preliminary hearings to see if there is sufficient evidence for court case).
- It forces the proponent to consider more carefully the consequences of ill-considered or dangerous courses of action.
- most especially in Arctic Canada and Southern urban/recreational areas affected by proposals.
- there are better avenues for communication with local groups.
- public reviews prevent both government and proponents from becoming insulated from the concerns, opinions, and often valuable information which comes from the public sector.
- a serious deficiency in hearings I've participated in is that they were held in remote northern locations leaving little opportunity for most of the Canadian people to attend. Hearings for large projects that will undoubtedly affect Canada as a whole should also be held in southern population centres.
- I think the public should have the opportunity for input but I believe that we expect too much from them. How can so many people ever believe in a project?
- people are affected by projects; there are winners and losers; the potential losers must have a chance to voice their concerns so that their losses are minimized should approval be given.

40. Do you think that public reviews of impact assessments make any difference in the decision-making process?

Yes    9    3    1    1    1    No  
    Don't  
    Know

Explain:

- knowing that a project will be reviewed in public will force a proponent to respond to potential concerns; public interest groups can have significant impact on ministerial responses.

- very little and I don't think that's wrong
- politics may in some cases bring intense pressure on the panel for inappropriate recommendations.
- lots of publicity can influence outcome
- No, but they should!
- expensive, unnecessary and time-consuming
- bureaucrats don't like to make decisions in the view of the public. Therefore these decisions will be responsible ones.
- not always, but at least in the Lancaster Sound hearing, the public airing of the proposal inadequacies led at least to a postponement of the issuance of a drilling permit.
- some differences, although many decisions made are primarily for political considerations.
- public organisations and communities affected by a project can sometimes identify very important issues that should be properly addressed prior to granting approval to proponents.
- in this case, the answer is probably no -- but I am not sure.

41. In the absence of EARP do you feel that existing regulations of protective agencies such as the Department of the Environment and the Department of Fisheries and Oceans would be sufficient to protect environmental concerns?

<u>      </u>	<u>  1  </u>	<u>  1  </u>	<u>  2  </u>	<u> 11 </u>
Yes		Undecided		No

Explain:

- All other agencies etc. carve up a project and fail to take it as a whole. Also, no other agency is able to solicit professional critiques from the public service itself for public consumption.
- these agencies do not pursue their mandate to the full. I believe an agency is required which will be responsible to the public in all major envir. projects.
- mainly DIAND is responsible for implementing envir. protection in the North.
- I believe the public is better served when given the opportunity to present its views on such matters.

- available regulations and laws provide for asking for plans and info. but too much red tape and time using these processes only.
- there may be enough regulatory power in the hands of protective agencies but who would make the appropriate assessment?
- 1) inadequate enforcement of existing legislation  
2) inadequate impact research in Canada (pre- and post-development)
- EMR and DINA provide adequate protection.
- the process should be independent of government
- don't feel DOE is a very powerful force at all
- regulations are designed to address specific situations, often after the fact. The federal bureaucracy is often not sensitive to the needs of the user. The panel review provides an excellent opportunity for public input. This is particularly important in the North.
- they certainly haven't been effective in the past
- without back-up by strong public support, no department can operate successfully, particularly "up-stream".

42. Are you generally satisfied with the present application of the assessment review process including the public hearings?

<u>      </u>	<u>  2  </u>	<u>  7=  </u>	<u>  3  </u>	<u>  3  </u>
Yes		Moderately		No
		So		

Explain:

- the process needs to be all-inclusive of major projects throughout the country
- preliminary screening processes are sometimes not effective in determining which projects should be referred to EARP.
- the process is evolving to meet changing needs. However, it is restricted to specific projects and fails to address the impact of policies and programmes.
- feel the panelists should more rigorously examine the proponents -- a feature which would balance off with the informality of the hearings -- of course, the same examination would apply to the opponents of a project.

- more rigor needed from Step 1
- EMR and DIAND provide adequate protection
- the process has recently started and it is changing with each new project. Both the industry and the regulatory agencies are learning from previous mistakes, I hope.
- the "rules of the game and guidelines" should be clearly identified and made available to all parties at an early stage in the evaluation process of each project.
- EARP is too narrow to cover all aspects of a project proposal.
- I feel EARP is improving quite remarkably as it goes along. Every hearing seems different.

43. Overall, what would you consider to be the greatest strengths of EARP?

- getting public servants to make professional statements of opinion in public so that people can see their tax dollars being put to good use!!
- the effective, yet fairly informal public review
- all concerns are discussed in public
- panelist expertise, objectivity
- providing a forum for industry and public concerns to put forward their points of view
- the public input
- increased public awareness
- public review of some projects
- 1) Minimizing the role played by lawyers enables "experts" to have a go at one another.
- 2) good EIS guidelines and enforcement of them can enable a reasonably good basis of discussion to be developed.
- it has so far avoided being too judicial and thus retained access to the average individual.
- increased public awareness and therefore pressure for more logical decisions.
- it gives the public a chance to say what they believe in and to be involved.



- the process encourages the maintenance of public interest groups by providing them with a forum for action.

The greatest weaknesses?

- not being all inclusive - too many gaps in its application.
- it takes decision-making into a rather enclosed arena in the minds of developers as well as being a delay mechanism.
- 1) subject to political pressure
- 2) subject areas are getting so broad and diffuse that all subjects cannot be adequately covered.
- the self-assessment by departments without any satisfactory means of monitoring internal decisions on the potential impact of projects.
- 1) Lack of access to data, info. -- There are no assurances that info. will be forthcoming.
- 2) Lack of penalties for telling falsehoods or concealing the true nature of things.
- not all projects are available for public review
- govt. interference
- the concept that satisfying the EIS will constitute approval
- expensive, time-consuming and unnecessary
- the bureaucratic representation on panels (i.e. conflict of interests, improper training)
- not empowered to call independent and expert witnesses.
- duration of hearings, lack of powers to demand truth
- the panel does not properly represent all intervening groups and it also seems apprehensive of its public image.
- it focusses on environmental concerns -- it should be broader.
- lacks wide range of professional expertise to make informative decisions on EIS for many projects.
- lack of rigour in proceedings.

44. If you wish, use this space to suggest improvements or alternatives to the existing EARP.

- 1) broadening of panel expertise is definitely required
- 2) public animators should make up panel staff for public hearings

3) a public relations function is required to improve dialogue between panel members and public

- broaden the scope beyond environmental and socio-economic and attach it to e.g. Presidential? Privy Council and not to Min. of Environment.
- I would change it by giving it more power especially in the field of obtaining independent and expert testimony in addition to the public hearings aspect, which is of course a valuable exercise. I think the old saying applies: "The process must seem to be fair in addition to being fair."
- cut off federally-managed energy sources for one month before hearings.
- I would suggest that initial screening decisions and IEE be conducted in a more formal manner, with one copy placed on record with FEARO. This should be available for public scrutiny as required. It is not just the major projects that are referred to panels that have adverse impacts but the much larger number of smaller projects. Taken together they can have a significant impact if screening is not adequately conducted. Despite the intent of EARP we still do not know how effective it really is.
- delete technical (engineering) aspects from hearings except where they are relevant in env. or socio-econ. issues
- its more universal application will establish its credibility as an accepted procedure for rational development. Those criticizing EARP for causing delays generally do not anticipate its application to them; proponents are slowly learning.

45. Would you consider a more legalistic approach (requiring lawyers, subpoenas, etc.) to be better to the less formal EARP procedures?

Yes	1
In some circumstances	4
Undecided	2
Probably not	3
No	5

#### Comments:

- I have been at the Berger-Mackenzie Valley Pipeline Hearings, which were legalistic and at an EARP review which was not. I prefer the latter, generally more friendly and understanding format.
- reasonable access to information must be assured to participants in the process. Keep the lawyers out as much as possible -- they should act as expeditors -- to ensure information is available, that proper argument and expertise is available but should play a secondary

rather than primary function at the hearings themselves.

- No, however the decision of the panel should be binding.
- help!
- subpoenas for expert witnesses, not lawyers
- If very complicated case or major impact concerned. Involvement of lawyers should not be on a per diem basis, to speed up hearings.
- In such a formal atmosphere, the process is delayed and many of the concerns are not discussed openly.
- the present flexibility is a great advantage -- adjustments can easily be made to suit each case. The more rigid U.S. approach is not preferable.
- the "seat of the pants" approach now used is dandy for small straight-forward ventures. However, when the going gets rough on a multibillion dollar venture, EARP will need muscle just to do its job.

Is there anything else you would like to tell us about your views on the Environmental Assessment Review Process? If so, please use this space for that purpose.

Also, any comments you wish to make that you think may help us in an effort to understand what participants want from the EARP process will be appreciated, either here or in a separate letter.

Comments:

- What the participants want from an EARP process is an expeditious, efficient, and non-biassed evaluation of a proposed project where the panel is not subjected to pressures from either development-oriented groups or environmentally zealous organisations (be they official, public or private). Therefore the structure of the panel should reflect equal representation of all interested groups and, as much as possible, should not be subjected to the authority of any one govt. agency. Such a panel then, once organized, should define the rules and regulations of the process and advise the proponents early enough, of all necessary requirements prior to holding public hearings.
- I have been involved in EARP from both the government and proponent side and feel it has improved considerably with time and experience. It does provide the opportunity for the public to voice their concerns but leaves the final decision to the Minister and in many cases Cabinet which is the democratic process.

APPENDIX 3

## Interviews

- Baker, R. Federal Activities Branch, Environmental Protection Service, Department of Environment, Ottawa, August 15, 1979.
- Barrett, J. Land Manager, Oil and Gas Rights Section, Northern Non-Renewable Resources Branch, Department of Indian and Northern Affairs, Ottawa, August 16, 1979.
- Daae, D. Manager of Exploration, Norlands Petroleum Ltd., Calgary, August 13, 1979.
- El Defrawy, J. Northern Non-Renewable Resources Branch, Department of Indian and Northern Affairs, Ottawa, August 16, 1979.
- Gainer, J. Gulf Canada, Calgary, March 9, 1981 (telephone interview).
- Gamble, D. Director, Policy Studies, Canadian Arctic Resources Committee, Ottawa, August 14, 1979.
- Gerin, J. Assistant Deputy Minister, Department of Environment, Ottawa, August 17, 1979.
- Glazier, G. General Manager, Environmental and Social Affairs, Petro Canada, Calgary, August 13, 1979.
- Jones, A. Chief, Water Resources Division, Northern Renewable Resources Branch, Department of Indian and Northern Affairs, Ottawa, August 17, 1980.
- Klenavic, J. Associate Executive Chairman, Federal Environmental Assessment and Review Office, Ottawa, August 16, 1979.
- Lewis, S. Federal Activities Branch, Environmental Protection Service, Department of the Environment, Ottawa, August 15, 1979.
- Løken, O. Northern Renewable Resources Branch, Department of Indian and Northern Affairs, Ottawa, August 15, 1980.
- Marshall, D. Director, Pacific Region, Federal Environmental Assessment and Review Office, Vancouver, March 3 and 24, 1981 (telephone interviews).
- Milne, A. Department of Environment, Ottawa. Letter to the author, Mar. 24, 1980.
- Ruel, M. Director-General, Northern Environment, Department of Indian and Northern Affairs, Ottawa, August 17, 1979.
- Snow, M. Northern Renewable Resources Branch, Department of Indian and Northern Affairs, Ottawa, August 14, 1979.

Sullivan, P. Northern Non-Renewable Resources Branch, Department of  
Indian and Northern Affairs, Ottawa, August 16, 1979.

Wallace, R. Dominion Ecological Consulting Ltd., Calgary, August 13, 1979.

Yuen, K. Department of Fisheries and Oceans, Ottawa, August 16, 1979.