

Royal Commission on Renewing and Strengthening Our Place in Canada

New Arrangements for Fisheries Management in Newfoundland and Labrador

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Abstract

This report develops a statement of objectives for fisheries policy concerning the use of, and benefits from, the fishery resources adjacent to the province of Newfoundland and Labrador along with the recommended mechanisms to enable the province to realize these objectives through adequate participation in management regimes. The consultants began by examining the fisheries management system before Union with Canada and the changes that took place subsequently within the context of management actions taken by two governments operating independently. The consultants undertook a survey of the objectives that the two levels of government appear to have adopted over three broad post-Union periods. This survey documents a serious disconnect, leading to widespread failure of fisheries policy in the context of the collapse of groundfish and other stocks and the precarious present dependence of the province's fishing industry upon two shellfish species, one of which is abundant (shrimp) but whose contributions to margins are low, while the other (snow crab) is declining in abundance but whose better margins have created a high measure of dependence.

The strengths and weaknesses of the existing management regime and division of powers have been assessed, leading to the conclusion that major changes are required to integrate policy decisions and to achieve policy coordination. The consultants conclude that the climate currently is not favourable for constitutional change, notwithstanding the compelling case for a realignment of fisheries management powers. Instead, they recommend firstly that a joint, federal-provincial policy board be established which would examine the current state of fisheries management and establish stock rebuilding goals for all major stocks, along with measures for restoration of the fisheries habitat and eco-system to the level which prevailed before massive overfishing of major groundfish stocks took place. The consultants recommend to the Royal Commission a major restructuring of fisheries management, with the creation of a federal Atlantic Fisheries Management Commission, a joint Canada/Newfoundland and Labrador Licensing and Allocations Authority, along with a joint federal-provincial policy board.

The report also proposes a new set of policy objectives for management of the fishing industry. These would place first priority on conservation while also providing for a balanced and viable industry that respects the rights of First Nations and the claim to priority of access by people in adjacent fishing communities. They provide a greater place for the values and aspirations of women participants. This industry would have a level of overall participation that provides for competitive enterprises producing reasonable levels of incomes and overall returns. It would not be a rent maximizing industry but one that provides for specific socially desired values without ongoing operating or capital subsidies. It would allow for greater private sector decision-making through continued evolution toward market-based approaches, which will allow self-rationalization in the processing and harvesting sectors.

The report recommends that measures be taken to rebuild depleted stocks, including predator reduction, a moratorium on capelin harvesting and pilot projects to explore the benefit of recolonization of depleted groundfish stocks.

This report also recommends institutional changes within the province to build a strong conservation ethic and an informed awareness of fishery management issues. These recommendations call for action to be taken by the House of Assembly, the highest deliberative body in the province, by the primary and secondary school system, by the University, by the

provincial Department of Fisheries and Aquaculture and by fishing industry participants. The consultants recommend that women be given a greater voice in all fisheries management functions, in recognition of their commitment to the industry and the potential contribution that they can make to policy development and industry management.	

Contents –

Executive Summary and Recommendations	91
Division of Powers	
Fisheries Management Since Union with Canada	92
Apparent Policy Objectives	
Alternative Policy Objectives	
Strengths and Weaknesses	95
Delivery of Central Functions	96
Summary of Recommendations	98
Alternative Fisheries Policy Objectives	98
Fisheries Management Mechanisms	100
Provincial Institutions, Public Policy and the Conservation Ethic	100
Other	101
Introduction	103
Terms of Reference	103
Purpose	103
Past and Present Canada/Newfoundland Fishery Management Systems	
The Newfoundland Fishery Management System	
The Pre-Confederation Period	
Post-Confederation	108
The Canadian Fishery Management System	111
The Division of Powers	111
The Pre-1949 System	113
The Post-1949 System	114
The Apparent Objectives of Fishery Management	120
Provincial Fishery Policy 1949-74	
Federal Policies 1949-1974	122
Provincial Policy Objectives - 1974 to 1992	124
Federal Policy Objectives 1974-1992	127
Provincial Fishery Policy Objectives 1992 - 2002	129
Federal Fishery Policy Objectives 1992-2002	130
Conclusion	134
Alternative Fishery Management Policy Objectives for the Future	137
The Inter-related Fishery System	
The Policy Path to the Present	
The Theoretical Basis of Policy Optima	
The Alternatives For Future Fishery Policy Objectives	142
The Role of Individual Transferable Quotas (ITQs)	145
Strengths and Weaknesses of the Current Management Regime and	
Division of Powers	151
Policy Integration	
Strengths of the Existing System	
Ability to Pay	

Conduct of International Relations	153
Resolution of Interprovincial Conflict	154
Insulation from Undue Political Pressure	154
Weaknesses of Existing System	155
Inadequate Role of Province	155
Lack of Provincial Vision	155
Lack of Bilateral Policy Coordination and Integrated Decision-making	
Mechanisms	156
Influence of Union and Industry	156
Exercise of Ministerial Discretion	
Ministerial Control over Fisheries Science	157
Political Control over Fisheries Management	157
Too Much Influence by Stakeholders	158
Inadequate Community Involvement	158
Women in the Fishery	159
Conclusion	159
Alternative Fishery Management Systems and Arrangements	161
Division of Fisheries Powers	
Other Federal Arrangements	
Canadian Constitutional Discussions on Fisheries Management	
Federal Proposal for Licensing and Allocation Boards	
Wildsmith's Proposal for Constitutional Change	
Asymmetrical Federalism	
The Prospect of Constitutional Change	
Options for Exercise of Existing Powers	
Individual Core Functions	
Stock Assessment	
Setting the Level of Catch	
Fisheries Licensing and Allocations	
Processing Licences and Controls	
Fisheries Enforcement	
Joint Delivery Options	
Summary of Proposed Management Arrangements	
Delivery of Ancillary Functions	
Other Special Considerations	
Creation of a Public Capacity for Fisheries Policy	
Pro-active Stance on Stock Re-Building	
Provincial Conservation Ethic	
Conclusions	183
Endrates	105
Endnotes	185 193
Neierences	1 7.1

Executive Summary and Recommendations

The purpose of this paper is to examine the place of the province of Newfoundland and Labrador in the management of the fishing industry of the province. This examination addressed the adequacy of the powers exercised by the province in the management of the industry and concluded that there is a strong case for changes in management arrangements to provide for a higher measure of participation through a sharing of functions with the federal government. It also calls for societal change within the province to build the strong conservation ethic that is required to rebuild the resources which were our legacy and which we have allowed to be degraded. Unless we make this commitment the legacy we will pass on to future generations will be but a pale shadow of what was bequeathed to us. In this chapter, the conclusions and recommendations of the report are brought together in summary form.

Division of Powers

Before Confederation, Newfoundland had virtually full control over its fishery, except for the involvement of the Government of Great Britain in international relations during the period of Responsible Government. Upon Union with Canada, the provincial government assumed relatively modest powers compared with those of the federal government. The Constitution Act of 1867 assigned exclusive legislative powers to the Parliament of Canada with respect to "sea coast and inland fisheries", and to the provinces with respect to "property and civil rights". The federal government's powers to regulate have been interpreted by the courts to cover management for social and economic matters as well as conservation.

To discharge these functions, the Department of Fisheries and Oceans carries out the core functions of stock assessment and fisheries science, licensing of vessels and fish harvesters and allocation of the resource, along with fisheries enforcement and international negotiations. The federal government also regulates international and interprovincial trade in fish products. Other ancillary functions include the inspection of fish, marine safety, and search and rescue. The federal government is responsible for establishing policies with respect to the management of highly migratory species and for stocks that straddle the 200-mile fishing zone. The federal government deals with other countries and participates in international organizations such as the Northwest Atlantic Fisheries Organization (NAFO) to place conservation limits on foreign fishing activity.

Canadian provinces have regulatory powers with respect to the processing sector, covering, *inter alia*, the licensing of plants, processing requirements and quality control. The general laws of the provinces, such as those relating to occupational health and safety, also apply to the fishing industry, as do specific laws such as the Fishing Industry Collective Bargaining Act in the province of Newfoundland and Labrador. This province manages the development of the aquaculture industry, along with the licensing of sports fishing in rivers and ponds. The province also discharges a broad fisheries development mandate to diversify the fishery and to strengthen its economic role as part of the overall economic development strategies of the provincial government. In light of its economic and social responsibilities, the province also

participates in a wide range of federal-provincial consultative mechanisms to advocate on behalf of provincial stakeholders and the broad provincial public interest.

Fisheries Management Since Union with Canada

Since Union with Canada, the management of the fishery has undergone dramatic change. In the 1950s and early 1960s, conservation activities tended to be limited to the nearshore area and much of the attention was focussed on marketing, quality control and fisheries development. In the late 1960s the resource came under intensive pressure from overfishing, leading to the introduction of quotas, controls upon fishing effort and to the 200 mile limit in 1977. Removal of foreign fishing and the introduction of TAC controls also came to the fore in the 1970s. In 1992, with the Northern Cod and other groundfish moratoria, the policy focus shifted even more heavily toward conservation, to rebuilding of stocks, and fisheries adjustment programs to reduce the number of participants. Fishing activities shifted from groundfish to shellfish with the blooming of the snow crab and shrimp resource, as their principal predators experienced a dramatic reduction in abundance. Reductions in both harvesting and processing capacity became a dominant policy concern for both federal and provincial governments.

Apparent Policy Objectives

In the first two decades or so after Union with Canada, there was a high level of agreement on fisheries policy objectives between the two levels of government. At that time, the resource was seen as highly abundant and resilient. Governments focused their attention on modernization, quality control and marketing. There also seemed to be a willingness to increase economic viability through measures to develop year-round offshore harvesting and processing operations as well as strategically placed regional plants. Policy objectives became more divergent as extension of jurisdiction proceeded, with the province encouraging expansion of fishing fleets and processing capacity and the federal Minister cautioning a more gradual pace.

During the 1974 to 1992 period, a high level of tension developed between the province and the federal government, initially focussed upon provincial aspirations for rapid development of harvesting capacity. The federal refusal to agree to this led to demands for increased provincial powers in several rounds of constitutional discussions starting in the late 1970s. By the late 1980s, the euphoria had disappeared, and concerns shifted to the precarious state of the resource. Conflict arose with respect to allocations in the early 1990s, centring upon declining quotas, particularly for Northern cod.

In the period from 1992 to the present, there has been a reduced level of conflict with respect to conservation issues. Notwithstanding federal and provincial concurrence to limit financial support, licensing and access policies at both levels have led to a rapid escalation in capacity and a precarious dependence upon crab and shrimp. Allocation policies continued to be controversial, with the focus shifting from Northern cod to Northern shrimp. In the late 1970s, the province had contended this resource was adjacent to Newfoundland and Labrador

and that all 11 original Northern shrimp licences should be awarded to provincial stakeholders. In recent years, an allocation of 1,500 tons of shrimp from 3L to PEI interests led to a high level of acrimony and to the appointment of the Independent Panel on Access Criteria. The recommendations of that Panel were deemed less than felicitous by the province, in light of the perceived diminution in the weighting it recommended be given to the adjacency principle.

The current (unranked) objectives of the fisheries management policy of the Government of Newfoundland and Labrador appear to be as follows:

- To create regional balance between harvesting and processing capacity;
- To maximize employment in the fishing industry;
- To sustain rural communities and regional economies on the basis of incomes and employment from the fishery and to modulate necessary adjustments;
- To reject the notion of strategic regional plants in favour of a multiplicity of plants in many communities;
- To advance the claim of fishers in adjacent communities to be the principal beneficiary of adjacent fish stocks;
- To maximize the share of adjacent resources harvested and processed in the province and, thereby, the benefits accruing to the province from the industry;
- To establish stable industrial relations and equitable sharing of the benefits between processors and harvesters from the sale of products from the fishery;
- To achieve a greater voice in the management of the fishery through changes in the province's relationship with the Government of Canada.

The corresponding (unranked) apparent objectives of fishery policy for the federal government appear to be as follows:

- To maximize employment in the industry, subject to the constraint of reasonable earnings;
- To build and maintain an ecologically sustainable resource base;
- To build the scientific capability to minimize the uncertainty attached to scientific estimates along with the management skills to operationalize scientific estimates of risk and uncertainty;
- To allocate fish resources on an equitable basis to various competing user groups;
- To minimize the impact of resource and market changes upon fishing people and communities;
- To maintain Canadian control and to maximize the benefits to Canadians of fish harvesting and processing; and
- To reduce capacity and facilitate adjustment out of the fishing industry.

The lack of congruence or consistency in fishery management objectives between the two levels of government has led, predictably, to a general failure in fishery policy. The overall result of fisheries policies since Union with Canada, combined with the activities of industry, has been a sharp decline in bio-diversity. Groundfish stocks now comprise a much smaller share of the resource base and there is mounting evidence that capelin stocks have greatly

declined. Crab stocks have been placed under so much pressure that they also are in decline in some areas; only the Northern shrimp resource still appears to be healthy.

Alternative Policy Objectives

The considerable body of literature on objectives of fisheries policy encompasses a wide range of diverse perspectives that defies any attempt to distil what might be identified as a consensus of expert opinion. Governments may choose to place social objectives at the top of their agenda or they may elect to manage the fishery for economic objectives. Governments normally face financial constraints that force them to examine the trade-offs among policy objectives and to measure the economic cost of achieving social policy objectives. Usually, the choice of economic and social objectives is mutually exclusive. It is unrealistic to expect governments to use the fishery to maintain a large number of stable communities and keep employment levels high, while at the same time achieving an economically viable industry that maintains a high level of reinvestment and can compete internationally. Before a rational choice is made governments need to know the price to be paid for achieving social objectives, a price measured both in terms of cost to the Treasury and in lost economic returns to the industry.

It is our view that the linkages between income support measures, particularly employment insurance, and fishery management should be subject to further review to ensure that the success of the fishery is not compromised by the unintended consequences of a well-meaning and firmly established program that injects new funds into the province. This review should examine the unintended consequences of Employment Insurance, including growth in, or even maintenance of, capacity. It should also examine the impact on the education of the young school-age people of the province who could still be drawn out of school by the lure of qualifying for benefits. It should recognize the positive contribution that employment insurance makes to the economy of the province and that, in its absence, and in the absence of a successful program of economic diversification, the level of incomes in the province would be significantly curtailed.

The report also proposes a new set of policy objectives for management of the fishing industry. These would place first priority on conservation while also providing for a balanced and viable industry that respects the rights of First Nations and of people in adjacent fishing communities. They provide a greater place for the values and aspirations of women participants. This industry would have a level of overall participation that provides for competitive enterprises producing reasonable levels of incomes and overall returns. It would not be a rent-maximizing industry but one that provides for a wider range of socially desired values without ongoing operating or capital subsidies.

The decision as to the weights to be assigned to conservation, economic efficiency and social factors is the prerogative of government. Any views we might express must be understood to reflect our personal values. However, conservation is both an objective and an overriding principle. We would not see conservation compromised in any way to promote economic or social objectives. We believe that the fishery can make its greatest contribution if government intervention is kept to the minimum that is required to mitigate the social impact of necessary

economic adjustments. Only in this way can governments expect the fishing industry to make the most suitable contribution to society.

There has been an evolution toward a rights-based system in the fishery of Newfoundland and Labrador. This has the potential to allow for more self-regulation and reduced reliance on government intervention. Full and immediate adoption of an individual transferable quota (ITQ) system is not recommended but it is recommended that transferable quotas be pursued both in the harvesting and processing sectors, subject to appropriate safeguards to avoid undue concentration and to protect against other adverse effects. The next step in the evolutionary process in the harvesting sector would be enhanced ability to combine enterprises within management areas, along with greater flexibility in vessel replacement. There should be a high level of consultation and participation by all stakeholders to enable further evolution in the current system of individual quota holdings through vessel combination and vessel replacement.

Strengths and Weaknesses

These objectives were used to examine the strengths and weaknesses of, and to provide a framework for examination of alternatives to, the current management regime and the existing division of powers for fisheries adjacent to Newfoundland and Labrador.

The existing system has certain strengths. One is the much greater ability of the federal government to pay for such expensive functions as fisheries science, conservation and protection, enforcement, search and rescue and marine safety. The federal government, also, is best placed to manage international fisheries matters and to resolve interprovincial conflict. The federal government is further removed from immediate political pressures than is the provincial government. Some argue that the province lacks a vision for the fishery or does not have the fortitude to make tough decisions that bring negative political consequences. The federal government's control of the major policy instruments is a strength of the present highly centralized fishery management system.

The existing system suffers from the following major shortcomings:

- There is no mechanism to achieve policy coordination and to integrate decision-making affecting the processing and harvesting sectors.
- The Constitution of Canada makes provision for provincial ownership of natural resources only where such resources are on land. The Atlantic Accord of 1985 provides certain powers to the province with respect to hydrocarbon resources on the continental shelf. For sea coast fisheries, this principle of natural resource ownership and/or management does not apply.
- Stakeholders generally have a large amount of influence and the public interest at large is not well represented in the management process. The harvesters' union and the fish processing industry have greater influence with the federal government than provincial authorities.
- There is too much ministerial discretion at both levels.

- There is inadequate involvement at the community level, where much of the impact of fisheries decisions is felt.
- Women have an inadequate voice in the management of the fishery and of the fishing industry generally.

Delivery of Central Functions

We assessed alternative arrangements for the central fisheries management functions in the context of the proposed objectives. While we recommend the functions of fisheries science and fisheries enforcement remain with the federal government, we have concerns about the level of funding for fisheries science, stock assessment in particular, as well as overall fisheries enforcement. While the level of funding for the federal fisheries operations does not appear to have declined in total, there are fewer resources in real terms to carry out core fisheries management functions because of internal re-allocation to new initiatives and annual inflation.

We have examined various mechanisms to strengthen the powers of the province in the management of the fishery. Our conclusion is that constitutional amendment does not offer a realistic prospect for change in the short or medium term. New arrangements to strengthen the province's place in the management of the fishery are needed to achieve the proposed policy objectives. These arrangements should promote participation in conservation decisions for rebuilding depleted stocks and the restoration of bio-diversity and of the fishery habitat. These arrangements, to be acceptable, must either be neutral in their impact on other provinces or, preferably, be seen to be advantageous to all.

The first step should be the creation of a joint federal-provincial fisheries policy board that would report publicly to both fisheries ministers. This board would provide policy advice as requested by either the federal or provincial governments or else on the motion of the board itself. The initial tasking of this board should be to formulate the policy framework for the creation of a joint licensing and allocations authority, as recommended below, because such an authority can work only if there is congruence of policy, covering both the harvesting and processing sectors.

The province should press the federal government for the creation of a quasi-judicial commission to set TACs and manage interprovincial access and allocations. The commission would be similar to the Canadian Radio-Television and Telecommunications Commission (CRTC) and the National Energy Board (NEB). This commission, acting at arms-length, would make major conservation (TAC) decisions based upon a transparent process of receiving evidence from a variety of sources and rendering decisions in the public view. The mandate of this independent board would also apply to new interprovincial allocation decisions caused by such factors as changes beyond pre-specified thresholds of change in a TAC, a quota for a new species fishery or the re-opening of a long-closed fishery. Existing sharing arrangements would otherwise remain in place on a permanent basis.

A third proposed institutional change is the creation of a joint Canada-Newfoundland and Labrador licensing and allocations authority, whose mandate would encompass the harvesting and processing sectors through delegated administrative powers from the province and the federal government. This authority would report to both fisheries ministers and operate under a policy framework agreed between both governments. There would be a provision for joint decisions by both ministers in pre-determined circumstances. Intraprovincial access and licensing decisions would be made based upon interprovincial allocations decided by the federally-appointed fisheries management commission.

Appointments to these three agencies should reflect gender balance, comprising knowledgeable and independent people. The policy board and the allocations and licensing authority will be appointed by both governments, with an equal number appointed by each of the two ministers and with the selection of the chair by mutual agreement.

There is widespread acknowledgement that improved mechanisms are needed to promote greater provincial participation in the major decisions that will shape the fishery of the future. We have just described some of these possible federal-provincial mechanisms. However, other deep-seated societal issues also must be addressed. These issues relate to what we perceive as a deficit in the conservation ethic in this province. This is a deficit shared by stakeholders in the fishing industry, the public and the government of Newfoundland and Labrador. There are too few exceptions to the prevalence of this conservation deficit. For example, we are encouraged by the local actions taken by lobster harvesters in the Eastport area to maintain a sustainable resource for future generations through good husbandry. However, it is all too often the case that when reduced harvests are advised, widespread questioning of the science immediately takes place to rationalize maintaining harvest levels.

We offer some suggestions to address the questions posed by this conservation deficit in a number of ways but believe this issue deserves more attention than we have been able to give it. The public policy issues surrounding the fishery and the collapse of major components of it have not attracted sufficient, if any, informed and objective debate. Such a debate requires a populace much better informed concerning fishery issues.

In addition to this, Memorial University has a vital role to play in fisheries management. The province should support the University in building upon its existing research capacity in fisheries management. This capacity includes the Chair in Fisheries Conservation at the Marine Institute of Memorial University, which is presently supported by the Province. The aim should be to build a strong interdisciplinary group at Memorial University that includes fisheries science but embraces other disciplines as well, including social sciences, education, business and engineering.

The provincial Department of Fisheries and Aquaculture has an important policy role in building a vision of the fishery of the future. Our suggestion is that the role of the Department be reassessed to ensure that it is sufficiently empowered and staffed to advise on important public policy issues and to commission research in anticipation of major issues that are likely to arise.

It is our considered opinion that "the mechanisms that would allow Newfoundland and Labrador adequate participation in the management regimes of fisheries resources adjacent to Newfoundland and Labrador" go beyond federal-provincial arrangements and, indeed, beyond fisheries management, *per se*. These mechanisms include fundamental elements of the society of the province and its institutions.

In this regard, our suggestion is that the House of Assembly play a role in shaping the fishery policy of the future. This could be accomplished by mandating an all-party select

committee to examine the fishery from a number of perspectives. The scope of such an allparty committee might include the following issues:

- What lessons should be learned from the collapse of Northern cod and of other major groundfish stocks?
- What innovative techniques can be introduced to resolve conflict in fisheries management?
- How can a stronger conservation ethic be promoted?
- What role can women play in building this conservation ethic?
- How can the schools play a more effective role in educating the general public on the past and future of the fishing industry?
- How can the University play a more prominent role in undertaking applied and objective public policy research in defining the policy options for rebuilding stocks, restoring biodiversity and fisheries habitat and other key components of fisheries management?
- What other societal changes will support a stronger conservation ethic to promote decisions that will benefit present and future generations?

Summary of Recommendations

The following is a summary of the recommendations contained in this report. Further detail on these recommendations is to be found earlier in this summary as well as in the main report. In this summary, we will first list the proposed fishery policy objectives, the new mechanisms whose recommended roles bear directly upon fisheries management functions and then the recommendations that pertain to existing provincial institutions and society.

Alternative Fisheries Policy Objectives

1. Resource conservation must be the dominant objective, including the restoration of bio-diversity and fishery habitat. Management should be highly precautionary; with TAC levels set at the lower end of the range advised by scientists and include a buffer to allow additional assurance against overexploitation. Ecological sustainability cannot be built upon the ecosystem that currently exists, with its degraded biodiversity and a precarious dependence upon historically exceptional levels of shellfish abundance. Concrete objectives for stock rebuilding need to be established for all major demersal, pelagic, estuarial and shellfish stocks. These objectives should include target levels of fishable biomass for stocks such as Northern cod (i.e., 2J3KL), cod on the southern Grand Banks (3NO) and on the St. Pierre Bank (3Ps), cod in the Northern Gulf (4RS3Pn), American plaice and yellowtail, redfish, turbot and capelin. It is not sufficient to establish annual management plans for major species. There should be medium and long-term management plans aiming toward specific levels of stock restoration. One approach for consideration by the Royal Commission is to rebuild the

- species diversity and abundance that existed at the time of Union with Canada or else restore the situation that existed prior to massive overfishing.
- 2. The rights of aboriginal people must be respected in all allocation decisions.
- 3. Fishery resources must be managed and allocated so that those closest to them derive the maximum benefits. Allocation decisions must recognize the resource-use aspirations of adjacent coastal communities.
- 4. The industry must generate a competitive return including a premium for the high level of risk involved in fishing. Harvesting and processing enterprises should be allowed sufficient returns to make them viable, allowing a return to labour and capital comparable with returns in other industries where risk is similar.
- 5. Within the preceding objectives, the level of employment should be optimized, not maximized. This means the aim should not be to maximize employment, nor to achieve the level of employment that would result from maximizing the economic rent. However, employment levels should allow enterprises to be globally competitive and should not impair the viability of harvesting and processing enterprises. When regulatory decisions are taken to add capacity and employment, governments should attempt to measure the impact of such decisions on the viability of existing enterprises. The economic data to allow such measurement should be compiled by government and such data should be readily accessible from harvesting and processing enterprises, on a confidential basis, as necessary information to facilitate the management of a public resource. The federal government has used this type of approach from time to time when evaluating the wisdom of issuing a new licence to prosecute the Northern shrimp resource.
- 6. Rights-based management systems should continue to evolve for both the harvesting and processing sectors, with appropriate safeguards to ensure that transferability of production and harvesting quotas does not create undue concentration or compromise other objectives of fisheries management. Measures should be taken to improve the ability of enterprises to combine quotas and to allow greater flexibility in vessel replacement.
- 7. We are proposing the promotion of a multi-species eco-system approach through increasing emphasis on the factoring in of species interactions, predator-prey relationships and habitat considerations in future management measures. This would also echo the Canada *Oceans Act* approaches of *sustainable development* of the oceans and their resources; conservation, based on an *ecosystem approach* and the wider application of the *precautionary approach* to the conservation, management and exploitation of marine resources in order to protect these resources and preserve the marine environment.
- 8. Measures to promote restoration of depleted stocks must be considered, including a planned reduction in the number of predators, particularly seals, a moratorium on capelin harvesting, and experiments to determine the impact of enhancement and recolonization.

Fisheries Management Mechanisms

- 1. A federal-provincial fisheries policy board should be established. This board would advise both governments on policy upon the request of either, as well as upon its own motion. This board would recommend as well on management plans for major species and on the allocations that should be made to the province's fleets. It would be the first agency to be established and it would be assigned the task of preparing a plan for the creation of a federal-provincial licensing and allocations authority.
- 2. The federal government should establish an Atlantic Canada Fisheries Conservation Commission (ACFCC) for making major conservation decisions. This would be a federal commission whose policy direction would come from the federal minister. It would receive conservation advice from the Fisheries Resource Conservation Council and allocation advice from the federal-provincial fisheries policy board. It would make decisions on interprovincial access and allocations.
- 3. The province and the federal government should establish a Canada-Newfoundland and Labrador Fisheries Management Authority (CNLFMA), within an agreed policy framework. This authority would be given delegated powers from both the federal and provincial governments and its mandate would, in essence, be coordinated management of the harvesting and processing sectors. It would make allocation decisions within the framework of provincial fleet shares set by the federally appointed fisheries management commission.

Appointments to these agencies should be gender balanced, comprised of knowledgeable and independent people.

Provincial Institutions, Public Policy and the Conservation Ethic

- 1. The province should review the curriculum of primary and secondary schools to ensure that the history and future prospects of the fishery, along with fisheries biology and basic fishery management, are core components.
- 2. The province should support the creation of a stronger applied and objective multidisciplinary public policy research capacity at Memorial University, covering all aspects of fisheries science and fisheries management.
- 3. The province should review the role of the Department of Fisheries and Aquaculture to determine whether its policy role and capability is commensurate with the magnitude of the province's long-term interest in the fishery as a core component of the provincial economy and social structure.
- 4. The Department, working with DFO and the University should convene an international conference on the rebuilding of cod and other groundfish stocks, with full participation by women.
- 5. The House of Assembly should create a select committee to examine central aspects of the fishery in Provincial society, including management issues and the role of provincial institutions in enhancing a stronger conservation ethic.

6. The Professional Fish Harvesters' Certification Board should examine measures, including more local availability of training opportunities, to promote the accreditation and professionalization of fish harvesters who are women.

Other

1. It is our recommendation to the Commission that the linkages between income support measures, particularly Employment Insurance, and fishery management be subject to further review to ensure that the success of the fishery is not compromised by the unintended consequences of a well-meaning and firmly established program that injects new funds into the province.

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Introduction

This report is structured in accordance with the terms of reference provided to the consultants. In preparing the report the consultants reviewed relevant academic research and government publications. We also held personal discussions with a number of industry representatives, university professors and government officials, including the Minister of Fisheries and Aquaculture for the province. We also met with a number of individuals who had previously been involved in the fishery, either in industry or in government, including a former Minister of the Department of Fisheries and Oceans.

The terms of reference given to the consultants are as follows. The chapter of the report that addresses each component is identified.

Terms of Reference

Purpose

The purpose of this project is to develop options and make recommendations on (1) the objectives that should define fisheries policy governing the use and benefits of fisheries resources adjacent to Newfoundland and Labrador and on (2) the mechanisms that would allow Newfoundland and Labrador adequate participation in the management regimes associated with realizing such objectives. To this end, the paper should:

- Document the fishery management system in place in Newfoundland and Labrador prior to Confederation and how it changed when Newfoundland and Labrador became a province, outlining the existing scope and nature of federal, provincial and international (e.g., through Northwest Atlantic Fisheries Organization (NAFO)) jurisdiction and responsibility for key aspects of resource management. (Chapter 2)
- Provide a brief summary assessment of the apparent policy objectives applied to the management of fisheries resources and of policies applied to the broader industry by the federal and provincial governments since the entry of Newfoundland and Labrador into Confederation, describing broad trends, without covering every successive administration. This is to cover the principal fishery resource management functions of scientific advice, allocations, quota management and enforcement (i.e., the resource management functions currently exercised by the Department of Fisheries and Oceans) as well as processing sector management policies. The treatment of secondary processing, marketing arrangements, fisheries development, labour relations, occupational health and safety (on sea and on land) and port market price determination will be much more cursory. (Chapter 3)
- Discuss and outline the chief alternative approaches to setting policy objectives for the fisheries in the future (e.g., maximizing economic rent, maximizing employment, maintaining an inshore fishery) with reference to real world experience and to the fisheries economics and other resource management literature. (Chapter 4)

- Provide a brief summary assessment of the strengths and weaknesses of the current management regime and division of powers for the fisheries adjacent to Newfoundland and Labrador, based upon the principal policy objectives arising from the fisheries economics and other resource management literature. (Chapter 5)
- Examine the central functions of scientific assessments and setting of catch limits as well as resource, access and allocation management, and assess whether they can best be conducted at the federal or provincial level or through some shared process; also, similarly review other related fishery management functions (broadly defined to include functions that may not be exercised by either federal or provincial fisheries departments but rather by other federal agencies such as Transport Canada (marine safety) or the provincial Department of Labour (collective bargaining and labour standards). (Chapter 6)
- Outline and discuss potential alternatives to the current management regime in terms of the division of fisheries management functions and the policy framework for undertaking those responsibilities, including joint arrangements, concurrent powers and asymmetrical federalism. (Chapters 6 and 7)
- Where appropriate and available, the analysis should take into consideration the perspectives of both women and men on the policy framework for fisheries. (All)
- Draw conclusions and make specific recommendations among the policy and management regime options for the consideration of the Royal Commission. (Executive Summary and Recommendations and Chapters 6, 7 and 8)

Past and Present Canada/Newfoundland Fishery Management Systems

In this chapter, we examine the fisheries management system that has existed for the Newfoundland fisheries from the time before Confederation until the present. We will document the fishery management system in place in Newfoundland and Labrador prior to Confederation and how it changed when Newfoundland and Labrador became a province and outline the existing scope and nature of federal, provincial and international (e.g., through NAFO) jurisdiction and responsibility for key aspects of resource management.

A brief examination of what is encompassed by the term "Fisheries Management" would be useful before documenting and describing the fisheries management system that has evolved from the time of Newfoundland's Confederation with Canada. It is used by many interests in a variety of ways to cover almost anything pertaining to the fishing industry on a local or national basis. In its broadest sense, it is used to include all aspects of fisheries policy, whether the subject of discussion is harvesting, processing or marketing of fish and fish products. In its narrower sense it refers to the control and direction of the factors of production engaged in the actual catching of an individual species or the totality of species harvested by a specific fishing fleet or in a certain geographic area. In that case it can also be used as diversely as the term "fishery" itself, which is often used to signify the total fishing activity in a country or the operation of a specific vessel class in a given geographical area and every activity in between.

In this paper, we shall endeavour to distinguish, when required, whether it is the management of fishing activities or the management of the complete fishing industry that is under reference. Sometimes we will use that term to refer to the regulation of the harvesting sector, and in that context, we will distinguish the "Core" or "Central" fisheries management functions from those we consider of a more ancillary nature. We will refer to the Core or Central functions as the ones most directly connected to the management of the primary fishing or harvesting operations. These primary functions are those of, directly or indirectly, setting the level of annual harvest (conservation); determining who, as individuals or groups, are permitted to participate in the annual harvest in some specified or authorized manner (access) and establishing the extent or level of shares of the annual catch (allocation). These are the primary functions performed by the central fisheries management authority or shared to some degree with other levels of authority. In the Canadian case, except for the determination of who participates in inland sports fishing activities, these functions are vested in the federal government. In the case of marine fisheries, these primary functions have been those invariably at the centre of disputes between levels of government and between the central management authority and industry participants.

Similar confusion exists around the term "fisheries policy" or "policies". This is often used as a generic term encompassing all matters pertaining to the government's involvement with the industry. In reality, several levels of policy can be specified: from broad and general governmental aims or intentions for the overall industry to detailed approaches to the operation of a single specified fishery. The latter can range from a national or regional level activity (e.g., the Atlantic groundfish fishery) to one that is confined to a small group in a restricted geographic

area (e.g., cod gillnet fishery by under 35 ft. vessels in NAFO Unit Area 3Ka). In the later section on the objectives of fisheries management, "policy objectives" will normally be used to refer to the highest-level initiatives or intentions of the management authority. It is not possible in the space permitted here even to mention all the myriad statements of a policy nature for all the individually managed fisheries or activities that now exist. The recent DFO publication "Fisheries Management Policies on Canada's Atlantic Coast" uses the term "policy" 13 times in a listing of 24 "policies, acts and agreements in effect on September 30, 2001..." We will indicate later that these detailed statements of policy or objectives for individual fisheries are now largely the consensus results of continuous consultations with license holders and other industry interest groups, including provincial governments.

The Newfoundland Fishery Management System

The Pre-Confederation Period

During the Responsible Government period, a (Newfoundland) Fisheries Royal Commission in 1888 proposed a centralized bureau devoted to fisheries research and assistance to address problems it identified in the area of "uncoordinated resource planning and development".² An independent Fisheries Commission, established in 1889 with a small administrative and scientific staff, was the start of Newfoundland's statutory regulation of the fishery.³ (Acts of the British Parliament were passed for the regulation or control of the Newfoundland fishery at least as early as 1788.)⁴ Mr A. Nielsen became the first Superintendent of Fisheries under the Fisheries Commission. Before he returned to Norway in 1897, he had established a fish hatchery, proposed rules and regulations for the proper management of the fishery, prepared reports and suggestions for the proper curing of fish and established a Bait Intelligence Service.⁵ The first separate department devoted to fisheries matters, the Department of Marine and Fisheries, was established in 1898. This was something Nova Scotia and New Brunswick would not do until the 1960's.⁶ The government established the first fisheries research station at Bay Bulls in 1931. This was the predecessor of the Fisheries Research Board of Canada activities in Newfoundland.

In 1934, Commission of Government took over the colony and fisheries administration became part of the Department of Natural Resources along with mining, forestry and agriculture. In 1936, the Newfoundland Fisheries Board was established to oversee all aspects of the catching, processing and marketing of fish and fish products. The Board reported to the Commissioner of Natural Resources but was in effect a separate fisheries administration. On Newfoundland's entry into Confederation, a provision in the Terms of Union provided for the remaining in force of all orders, rules and regulations made under Newfoundland Fisheries Laws for at least five years or until altered by the Parliament of Canada.

In the half-century or so leading up to Confederation, the primary concerns and activities of the various fisheries administrative bodies involved the control and/or development of production and marketing in the salt fish industry. There were no catch quotas or other conservation-directed measures except for some purely local fishing rules. The main focus centred on the fluctuating, and often low, levels of export earnings from the un-disciplined

marketing of usually poor and inconsistent quality salt fish. Indeed, the general intention of government over much of this period (and even into post-Confederation years) was to maximize export earnings from the fishery so that surplus labour could be thereby accommodated.9 Other fisheries initiatives were undertaken to develop new processing activities (fish freezing), improve the quality of products from other species such as herring and modernize fishing vessels and gears. Regulations were developed over the 1900-49 period to control local cod and salmon fishing through a series of measures that eventually included minimum mesh sizes, rules to conduct random berth draws, minimum mesh sizes for cod traps and cod nets, spacing from previously set gear, and closed areas for specified gears. 10 While some of these regulations had the indirect effect of limiting access on a localized basis, there was no consideration given to limiting the total numbers participating in the overall fishery or to directly limiting catches of any species. Nor were there any attempts to restrict harvesting or processing capacity. Lobster regulations were also developed that included closed seasons, minimum lath spacing and carapace size, as well as licensing requirements for processors and exporters for the purpose of quality control and improved marketing.¹¹ There is a reference to "developing local cod fishing regulations" in the Board's 1937 Annual Report and to "hopes of instituting an efficient system of lobster conservation" in its 1938 Annual Report. However, there is nothing else in these 13 annual accountings of the Newfoundland Fisheries Board from 1937 to 1949 to indicate any ongoing priority of regulating the fish catching activities of the colony.¹² These annual reports are primarily accounts of the year's salt fish production and market results as well as data on the final product quantities and values of other fishery production such as pickled and cured herring, pickled turbot, canned and fresh salmon, fresh and canned lobster and frozen groundfish fillets.

The array of fisheries legislation enacted by the Commission of Government reveals an involvement with a wide range of fisheries matters, primarily in the areas of processing and marketing. The following, while not necessarily a complete list of the various fisheries acts in force during the 1934-49 period, indicates the extent of this involvement: the Natural Resources Act, Export of Herring Act, Salt Codfish Act, Newfoundland Fisheries Board Act, Whaling Industry (Regulations) Act, Bank Fishermen Protection Act, Game and Inland Fisheries Act, Fish Oil and Meal Act, and the Shipbuilding Assistance Act. There were also numerous sets of specific regulations related to the processing, culling, packaging and export of salted cod; canning of cod and other species; production and export of pickled turbot, dried squid, pickled and cured herring.

In the Responsible Government period, Newfoundland could legislate to manage or control any aspect of its domestic fishery activities. There do not appear to have been any problems with the British Government's disallowing any Newfoundland legislation in this area. However, in the case of its efforts to control certain foreign fishing activities it was less independent of London. The Bait Acts of 1886 and 1887 were disallowed as passed by the Newfoundland Legislature because of objections from Canada and France, and those of 1904-05 because of complaints from the United States. In the latter case the British Government also refused to ratify the Bond-Hay Convention of 1902¹³ and reached its own understanding (on trade and fishing arrangements in respect of Newfoundland) with the Americans.¹⁴

Under Commission of Government, London was directly in charge of all Newfoundland's international affairs or diplomatic initiatives. In such a situation, it is unlikely that any fishery legislative proposal considered inimical to British interests (or those of its major allies) would

have succeeded. Throughout much of that period, actions similar to the Bait Acts, that had been aimed at reducing fishing competition by foreign countries, did not seem to have been considered necessary; American and Canadian fisheries (especially during the War years) were seen to be less of a threat to Newfoundland's overseas markets and even less to its small North American outlets. At that juncture in history, the types of territorial seas and fishing zone extensions that would develop some three decades later were not even contemplated.

By the end of, indeed for most of, the Commission of Government period Newfoundland had in its Fisheries Board "one of the best fisheries services of that time". However, as will also become evident from the ensuing section on the Canadian fisheries management system, measures to ensure conservation of ocean resources still were not considered necessary. The later issues of overcapacity and overcapitalisation were still not recognised as requiring the application of specific fisheries management measures. Such conservation-oriented measures as were implemented were directed at coastal fishing activities, sedentary species or those that had a sport fishing usage such as salmon. In the first of these cases, the various rules and regulations were really "rules of the road", more related to orderly fishing than to conservation or control of total fishing effort and catches. The main preoccupation of government was industry modernization and development to ameliorate the economic difficulties that always seemed to characterize its saltfish-dominated industry. That was largely where the colony still found itself on the eve of becoming a province of Canada, where it would no longer have the wide range of powers of an independent Dominion (except for international matters) to legislate for all aspects of its fishing industry.

Post-Confederation

Within months of Newfoundland's becoming a province of Canada, the government reestablished a separate fisheries department with the creation of the Department of Fisheries and Cooperatives in December 1949. Section 9 of the Department of Fisheries and Cooperatives Act states: "The duties, powers and functions of the Minister shall extend to and include all matters relating to the management generally of fisheries and cooperatives and fishing and cooperative development in Newfoundland, over which the Legislature of Newfoundland has jurisdiction "16. Around the same time the Fisheries Loan Act provided for the establishment of a body (Fisheries Loan Board) to make loans directly to fishermen, cooperatives or companies engaged in the general fish business. ¹⁷ By 1951, most of the major pieces of fisheries legislation that were then considered necessary at the provincial level were in place. These included activities over which the province had the right to legislate, ¹⁸ including fish inspection, payment of a bounty on repair and rebuilding of fishing vessels, sale and distribution of salt, production of oil and meal and general fisheries development. ¹⁹

The provincial government embarked on initiatives to develop and modernize the fishery during the 1950s, 1960s and most of the 1970s. Some of the early activities included the setting up of a Fisheries Development Authority within the Department of Fisheries and Cooperatives. It would have a higher profile than the department for the next two decades. A Division of Fisheries Education was also established early on and was followed in 1958 by travelling schools for fisheries training. These fisheries educational program initiatives culminated in the formation of the College of Fisheries, Navigation, Marine Engineering and Electronics in 1964. Some of the specific fisheries development initiatives undertaken included bounties

for construction of fishing vessels, financial assistance to establish freezing plants and acquire offshore trawlers, construction of new government-owned processing plants and assistance to local shipyards.²⁰

The government also initiated a series of Royal Commissions, Committees and special Conferences that were designed to provide solutions to various problems in the fisheries. These included the Fishermen's Convention of 1951 that resulted in the formation of the Newfoundland Federation of Fishermen, the Walsh Commission (the joint federal-provincial Newfoundland Fisheries Development Committee) of 1953, the South Coast Commission of 1957, the provincial National Fisheries Development Proposal of 1963 and the 1967 Royal Commission on the Economic State and Prospects of Newfoundland and Labrador.²¹ All these called for a variety of measures, including marketing boards and revitalisation of the inshore fisheries, most of which were not adopted. In spite of its own similar initiatives, many of these efforts were aimed at changing federal policies considered anti-inshore/saltfish and in favour of capital-intensive freezing operations supplied by year-round offshore vessels.²²

The inclination to expansion of the fisheries continued unabated into the 1970s and early 1980, especially after extension of Canadian fisheries jurisdiction in 1977. The provincial government continued assistance in the form of loan guarantees to processing operations and actively supported increases in the number of larger fishing vessels. In addition, the first federal/provincial general development agreement was signed in 1975, ushering in a new era of joint funding (usually 90 per cent Federal) of fisheries development activities. The establishment of the Canadian 200 mile limit spawned a combined (Nova Scotia, Newfoundland and Prince Edward Island) provincial fleet expansion proposal to the federal government.²³ The federal rejection of this proposal led to a campaign by Newfoundland and Labrador to acquire increased fisheries jurisdiction, which will be detailed in later pages.

In 1971, the province took one significant step in exercising powers within its jurisdiction when it gave Newfoundland fish harvesters the right to unionize and to bargain collectively with fish buyers through passage of The Fishing Industry Collective Bargaining Act. This put Newfoundland well in front of other Atlantic Provinces in giving such rights to fish harvesters. The late 1970s and the 1980s saw a redevelopment and enlargement of the provincial fisheries department and the adoption of a more proactive role in defining positions on fisheries policies. This period saw the province produce "a very considerable number of well researched and articulate White Papers, Policy Statements and special studies.... Most of these documents were aimed at economic development questions".²⁴

In the middle of these developments came the collapse of most major fish processing companies in the Atlantic Provinces and the subsequent restructuring of the offshore sector of the industry. In Newfoundland, this resulted in the formation of Fishery Products International from the remnants of Fishery Products Ltd, the Lake Group and the Newfoundland holdings of H. B. Nickerson. This was accomplished at a cost to governments of some \$200 million: a cash infusion of \$167.6 million over four years (1984-87) by the federal government and a conversion of debt to equity of \$31.5 million by the Newfoundland government.²⁵

The ensuing years of the 1980s and the 1990s would see the province take an increasingly proactive role in managing the size and shape of its processing sector. Licensing polices were developed, and reflected in regulations passed under the Provincial Fish Inspection Act of 1954 (and amended), to control entry to the processing sector by requiring licences for different types of processing activities. Processing plant licences were first required in 1975 and became

limited by main species in 1979. A general freeze on numbers of licences and imposition of capacity controls followed in 1981. This policy was modified in 1997 to take account of the new raw material situation by adding a concept of Core and Non-Core licences.²⁶ By the end of the 1990s, this had resulted in direct control by provincial authorities of the number and types of fish plants permitted to operate.

The provincial government also intervened in the processing sector through its various quality enhancement initiatives in the latter half of the 1990s. Standards for handling, storage and transport of raw material were instituted as well as mandatory grading systems for crab, shrimp and cod. These were incorporated in Collective Agreements for those species.²⁷

The approach to fisheries development, which had long been the major provincial activity, changed in several ways over these last two decades as well. The early attempts at regional development tended to be a series of individual initiatives or programs under the Fund for Rural Economic Development (FRED) and then the Agricultural and Regional Development Administration (ARDA). The formation of the federal Department of Regional and Industrial Expansion (DRIE) resulted in the beginning of the general development agreement (GDA) approach which involved formal cost-shared agreements delivered jointly by the two levels of government. Initially these were between DRIE and the province directly, but soon involved the federal fisheries department as the co-deliverer on the federal side. However, by the mid-1980s, direct operational and capital subsidization would also go by the wayside, as would development of additional catching capability for traditional species. By the end of the 1990s, fisheries development would be aimed more at conservation enhancing fishing activities and increased utilisation of a reduced raw material base.

Although the provincial initiatives to obtain an increased role in marine fisheries jurisdiction failed, the two levels of government did reach an agreement on management of aquaculture. The Canada/Newfoundland Memorandum of Understanding (MOU) on Aquaculture, signed in 1988, put aside the question of jurisdiction over this activity and provided for a provincial lead on the licensing of such operations. The provincial department processes aquaculture licence applications and aquaculture licenses are issued by it after all other regulatory agencies certify that the operation meets their requirements. While this may not be the sort of fisheries management authority the province originally sought, it is a form of shared legislative activity. The other, of more long standing, is that of inland sports fishing where the authority to legislate for conservation is federal and the right to issue fishing licences is provincial. The federal authority determines the conservation measures required through its scientific assessment and consultative activities, the province sets the licence fee and issues the licences and both now conduct enforcement activities.

While the Newfoundland provincial role in management of commercial marine fisheries has not changed much in legal terms since Confederation, more and more of its efforts now complement federal activities. The province, as well as the federal side, no longer directly subsidises the acquisition of vessels, plants or equipment; while boat-building subsidies, guaranteeing of loans to the processing sector and the granting of loans directly to fishermen have all ended. Operationally, the province conducts fisheries development activities in concert with the federal authorities through formal cost-shared agreements that reflect mutually agreed current fisheries management priorities or problems. The province takes part in the extensive federal fisheries consultative arrangements in place provincially and at the Atlantic and national levels. It is a signatory to the 1999 Agreement on Interjurisdictional

Cooperation (See p. 12 below). Its role in respect of the processing sector has gone from one of wholesale encouragement of expansion to one of restricted entry licensing and capacity control. The sections of the Report of the Special Panel on Corporate Concentration dealing with the evolution of processing licensing and associated policies is almost a mirror image of commentary on federal fisheries licensing activities over the past 30 years.

The province passed legislation in 1996 providing for a Certification Board to administer the Professionalization of Fishermen program that is essential to the federal authority's new Core Licensing system. In 1998, the province authorized a pilot project on the use of interest-based bargaining using final offer selection under its Fishing Industry Collective Bargaining Act. The use of this approach was confirmed by an amendment to that Act in 2000.

These initiatives have put the province in much the same situation in respect of its area of jurisdiction, as is the federal government. Both have moved from a development and expansion mode to one that is more concerned with overcapacity and overcapitalization and the consequent effect on social and economic conditions of those engaged in the fishing industry. Both levels of government now seem more intent on achieving some improved measure of economic efficiency in the industry while still accommodating some of the other conflicting wishes of industry proponents.

The Canadian Fishery Management System

The Division of Powers

The division of powers of the federal and provincial governments to legislate for management of the fishing industry is such a critical element of the Canadian management system that a review is warranted before describing the federal system of the past 50 years or so. This is basic to a fuller understanding of why the fishing industries in Canada are managed as they are.

The management of commercial fisheries in the Dominion of Canada commenced with passage of the first Dominion Fisheries Act in 1868. (The first comprehensive fisheries legislation in British North America had been passed by Upper Canada in 1858).²⁸ The authority for the extensive federal powers encompassed in this legislation came from the Constitution Act (BNA) of 1867, Section 91 (12) of which gave the Parliament of Canada exclusive legislative authority over sea coast and inland fisheries. Provinces, on the other hand, were given authority over natural resources within their boundaries, property and civil rights and provincial public lands. The Dominion Fisheries Act of 1868 authorized the Minister to issue (or authorize to be issued) licences or leases for fisheries and fishing anywhere that an exclusive right of fishing did not already exist by law. While "for more than 30 years following Confederation the federal government exercised unchallenged authority in fishery matters",²⁹ the courts would render several judgements that further delineated and clarified the scope of federal versus provincial powers over fisheries.

Parsons³⁰ gives an excellent review of the development of distinctions between federal and provincial powers, which is the basis of much of what immediately follows, unless otherwise noted. The Supreme Court, in the case of The Queen v. Robertson, in 1882 ruled that the

federal Minister did not have the power to issue fishing licences or leases for non-tidal portions of rivers. It also concluded that there existed an exclusive right to fish in such waters that belonged to the provinces. The Privy Council decision in the Ontario Fisheries Reference of 1898, while upholding the authority of the province to legislate on matters of property and civil rights in fisheries, did confirm the exclusive federal power to regulate the fisheries, both coastal and inland, as to the type of fishing gears, catch limits, closed seasons and species and size of fish. In 1914, the Privy Council ruled in the B. C. Fisheries Reference that the province had no jurisdiction over any aspect of fisheries in tidal waters. The Privy Council, in the Quebec Fisheries Reference of 1921, concluded that the federal Parliament had exclusive jurisdiction over fishing in all navigable waters, even when non-tidal, but that fishing with gear attached to the soil did not constitute a public right to fishing and hence was not exclusive federal jurisdiction.

The first delegation of administrative control over inland fisheries occurred in 1898 when the federal government transferred this power to Ontario for both sport and commercial fishing in its waters. At that time, it transferred only control of inland sport fishing to Quebec because of the dispute over management in tidal waters that led to the Quebec Reference of 1920. Following the 1921 decision in that case, and because all fishing in mainland Quebec at that time was by fixed gear, the federal government delegated powers to Quebec in 1922 to administer all fisheries in tidal waters subject to regulation by the federal government as to the conditions under which such fishing is carried out. The fisheries around the Magdalen Islands were not covered by this delegation because of the ways in which they were prosecuted; this delegation did take place in 1943. In 1984 the federal government, rather quietly, re-assumed administration of commercial fisheries management in Quebec.

In its 1930 decision on the (B.C.) Fish Canneries Reference, the Privy Council decided that the federal government had no authority to license canneries as these were within the provincial right to legislate on property and civil rights. Fish caught in tidal waters remain under federal control until landed on provincial territory or taken out of Canadian fishing zones. Fish processed for export are subject to the requirements of the federal Fish Inspection Act. This decision was the final determination of the division of powers in respect of British Columbia and the other coastal provinces. Essentially, the federal authority controlled all fish catching activity while the province could manage non-export processing activities and licence access to sport fishing.

In 1929 and 1930, the Government of Canada entered into agreements with Manitoba, Saskatchewan and Alberta regarding natural resources that provided for the rights of provinces to administer all the rights of fishery subject to the federal legislative jurisdiction over seacoast and inland fisheries, i.e. conservation. When Newfoundland joined Canada the provisions of the British North America Act (BNA) were made applicable and the federal government's exclusive power of legislating for inland and coastal fisheries became effective in the new province. The Terms of Union did provide for all Newfoundland fisheries laws to remain in effect for a period of at least five years or until changed by the Parliament of Canada. The division of powers that had developed to that time came to apply in Newfoundland as well. While the province retained control over inland sports fishing, in 1954 it passed administration of this to the federal government, while retaining the right to issue sports fishing licences. In that case, the situation today is largely unchanged; the federal government sets the fishing rules

as to times, methods and quantities, the province issues the angling licences and both now carry out surveillance and enforcement.

The federal power to legislate for fisheries in tidal and non-tidal waters was initially interpreted to apply to measures intended only for the regulation, preservation and conservation of fish and fisheries. The courts, at the Trial Division level, confirmed this view as late as 1978 in the case of the Interprovincial Cooperatives v. the Queen. Again, the 1984 decision in the Gulf Trollers Association v. the Minister of Fisheries and Shinners case rejected the federal claim to manage for social and economic purposes. As a consequence, the Fisheries Act was amended to give the minister sunset powers to allocate for economic and social benefits. However, before that sunset period ran out at the end of 1987, the Federal Appeal Court had overturned the 1984 trial Judge's decision in 1986. This decision was later upheld in the McKinnon v. Canada case of 1987. The federal government was now clearly empowered to continue the management of fisheries for social and economic reasons as well as conservation that it had begun in the early 1970s.

From the late 1970s and until the early 1990s, a series of proposals were made by Newfoundland to change the division of fisheries legislative or jurisdictional powers. Much of this debate took place as part of the Constitutional discussions of those times. The Newfoundland position was initially a call for concurrency with provincial paramountcy over such matters as allocation of federally set quotas, harvesting plans and licensing of vessels and fishermen. This failed to make it through the various constitutional negotiations that led to the repatriation of the Constitution in 1982 and fared no better in later constitutional negotiations that produced the Meech Lake Accord.³¹ During the ratification period for that agreement, the provincial position changed with a new government to one of joint management along the lines of the Canada/Newfoundland Offshore Petroleum Board. However, this proposal died when the Meech Lake Accord was not ratified, and no progress was made on changing fisheries jurisdiction in the Charlottetown Accord negotiations. When Canadians rejected that Accord in October, 1992, the fisheries jurisdiction issue had already been overtaken by other imperatives such as the groundfish moratoria and subsequent efforts to rebuild stocks and transform the fisheries.

Since that time this has not been a frequent federal/provincial discussion topic. The provinces and the federal government signed an Agreement on Interjurisdictional Cooperation in 1999 that commits all parties to consult on major initiatives or actions and give each other prior notice on changes to policies affecting fisheries, habitat and aquaculture. It also established the Canadian Council of Fisheries and Aquaculture Ministers (CCFAM), supported by a Committee of Deputy Ministers and an Interjurisdictional Working Group of officials. Recently, however, the provincial Special Panel on Corporate Concentration in its report recommended: "A Canada/Newfoundland and Labrador Fisheries Policy Co-ordination Council be established to make recommendations to governments on major public policies relative to the harvesting sector, the processing sector, marketing, quality enhancement and fisheries development opportunities and strategies". 32

The Pre-1949 System

The first Canadian fisheries management administration, the Fisheries Branch of the Department of Marine and Fisheries, was established in 1867. A separate Department of

Fisheries was set up in 1884; but administration of fisheries was again carried out by a Fisheries Branch; first of the Department of Marine and Fisheries from 1892 to 1914, of the Naval Services Department from 1914 to 1920 and again as part of the Department of Marine and Fisheries until 1930. A separate Department of Fisheries again existed from 1930 until 1960 when a Forestry component was added to make it the Department of Fisheries and Forestry. Fisheries management was handled by a Fisheries and Marine Service in the Department of the Environment starting in 1969, and in the Department of Fisheries and Environment from 1976 to 1979 when the current Department of Fisheries and Oceans (DFO) was established.³³

As was true of the Dominion of Newfoundland, the Canadian fisheries management system in the pre-1949 period focused largely on conservation of coastal and sedentary species or those with a sport fishing usage. There are probably two reasons for this: one was the prevalent view that resources of the oceans were plentiful; and the other was that, in any event, countries then could only control fishing activities in a narrow three mile zone. The primary purpose of early fishing regulation was to protect those species considered most vulnerable to fishing pressure, i.e. the fish and shellfish caught close to shore and the freshwater and anadromous species. These were regulated with a variety of measures such as fishing districts, seasons and minimum size limits.³⁴

There was no real regulation of the cod and other groundfish fisheries, other than local fishing rules, before the 1940s, except for a limitation on the number of trawlers permitted in the 1920s and 30s.³⁵ However, this changed by the end of World War II when government concentrated on developing a trawler-supplied frozen fish industry in preference to the salt fish sector.

The Post-1949 System

In the post-war years, fisheries management was really development, expansion and modernization. This thrust continued well into the early 1970s both as a means of expanding the Canadian fleet's operations into other species and as well as competing with the increasing foreign fleets now fishing in the Northwest Atlantic. "This age of innocence" would end with the groundfish resource crises of the late 1960s and early 1970s.

The first groundfish catch quotas were established by the International Commission for the Northwest Atlantic Fisheries (ICNAF) in 1970, followed by herring quotas in 1972. By 1974 all major groundfish in the ICNAF area were under quotas established at the MSY or F_{max} level³⁷ and divided amongst members. While these first tentative steps were taken to control catches, Canada was introducing limits on entry to various Atlantic Coast fisheries, including groundfish and major shellfish and pelagics. In addition, restrictions were imposed on the replacement of fishing vessels, starting with the offshore fleet in 1974. This was the start of what would become a very extensive and continuing set of controls on the numbers of fishermen permitted in different fisheries, the size of vessel they could operate as well as the type and/or amount of fishing gear they were authorized to use.

Before the first industry crisis of the late 1960s, Canada had extended her fishing zone to 12 miles by adding a nine-mile fishing zone beyond the three-mile territorial sea in 1964. A further step in this extending of Canadian fisheries jurisdiction took place in 1972 when a general 12-mile Territorial Sea and Fisheries Closing Lines in the Gulf of St. Lawrence (and Juan de Fuca Strait) were established. These two areas thus became Canadian Fisheries Waters. In 1977,

Canada declared a 200-mile limit in accordance with the new internationally accepted Law of the Sea. NAFO would replace ICNAF in 1978 to assume responsibility for management of groundfish (and latterly shrimp) stocks that straddled or were completely outside Canada's 200-mile limit. NAFO would suffer much the same fate as ICNAF in terms of its ability to effectively manage fish stocks in a multi-lateral setting. Newfoundland fishery interests would subject it to much the same criticisms as its predecessor for ignoring scientific advice in setting quotas and having no effective enforcement capability other than that provided by its more conscientious Contracting Parties.

By 1977, as Canada was preparing to manage a much enlarged fishing zone, measures to control domestic fishing continued to be imposed. All entry to the groundfish fishery was closed except for under 35 ft. vessels; offshore licences had been frozen in 1974 when the size of replacement offshore vessels had also been set; licences for the 35-65 mobile gear fleet were frozen in 1976 and vessel replacement rules introduced for them as well. By this point also, entry to the Newfoundland lobster and crab fisheries was made limited. By the mid-1980s, licences for the fishing of all individual species (except 2J3KL cod by under 35 ft. vessels) would be limited entry.

The first Groundfish Management Plan was established in 1977 to manage the setting and allocation of groundfish quotas among Atlantic fishing fleets. This was the initiation of what would become a complex and often controversial annual process of providing the Minister with advice on Total Allowable Catches (TACs), the sharing of them and a host of other management measures. Coincident with this was the establishment of the Canadian Atlantic Fisheries Scientific Advisory Committee (CAFSAC) to provide scientific advice on management of fisheries in the newly expanded Canadian Fishing Zone. The Atlantic Groundfish Advisory Committee (AGAC) was formed in 1979 to replace the Offshore Groundfish Advisory Committee (OGAC) that had been set up in 1974 when offshore licensing became limited entry. AGAC was the forum for annual consultations on the setting of groundfish TACs and the allocation of them amongst competing fleets across the Atlantic area after identification of surpluses for foreign allocations. This committee, together with the Northern Cod Seminar of 1979 and the Gulf Groundfish Seminar of 1980, would be the vehicles that developed a complex array of groundfish allocations and fishing rules through the 1980s and, indeed, right up to the first groundfish moratorium in 1992. Scientific advice was debated at AGAC, allocations vied for and often conflicting positions remained that had to be decided by the federal Minister. By the late 1980s, this annual process involved follow-up Deputy Minister level discussions of outstanding quota or allocation issues through the Federal-Provincial Fisheries Advisory Committee (FPAFC) and ministerial consultation through the Atlantic Council of Fisheries Ministers (ACFM).

The annual Groundfish Management Plan became the model for development of similar arrangements for all major species across the Atlantic region. The Groundfish Management Plan led the way in developing a multitude of management measures that would eventually be applied to the fishing of most major commercial species. These included sub-allocation of quotas by areas, vessel size classes, gear types, directed and non-directed fisheries, fishing seasons and time-period catch limits and by any combination of the above. A series of important criteria for priority of quota access also grew out of the fishing plan process, including some of the first examples of the principle of adjacency and priority to the inshore fleets in most coastal stocks. Interestingly, at first inshore groundfish fisheries were managed by an allowance

system³⁸ within the overall Canadian quota.³⁹ This changed for all stocks in 1981 except for Northern cod where the allowance approach continued to be applied up to 1991.

By 1981, with another groundfish industry crisis looming, the department adopted the $F_{0.1}$ standard⁴⁰ for the setting of TACs for all groundfish stocks where data availability made such assessment methods possible. In fact, the reference point for setting the Northern cod TAC was adopted as less than $F_{0.1}$ to permit faster rebuilding. As part of the ongoing measures to curtail increases in groundfish catching capacity, entry for all inshore (<65 ft.) vessels was frozen, except for fixed gear operations in 2J3KL by fulltime fishermen. This would continue until 1990 when this last remnant of open entry to a commercial fishery was eliminated.

In 1979 the "Fleet Separation Policy" was introduced under which processing companies were prevented from owning any more fishing licences, for under 65 ft. vessels, than those held in 1979. (Despite several attacks and reviews this policy has survived to the present day.) In 1981, the Full-time/Part-time Categorisation of fishermen was introduced because of the recommendation of the Levelton Report on Atlantic Commercial Fisheries Licensing and the wide support for this concept amongst Newfoundland fishermen. This would be the cornerstone of inshore licensing policy for almost a quarter of a century, until replaced by the concept of Core licensing in 1996.

It was becoming clear that, even with limitation of entry, excess fishing effort could still exist, or be quickly created, to produce disastrous "races to the fish". The next steps in the evolution of effort control measures would be the adoption of Sector Management for under 65 ft. groundfish vessels and the start of non-transferable Enterprise Allocations (EAs) in the offshore groundfish fleets in 1982. The Sector Management policy prevented under 65 ft. groundfish vessels from roaming beyond their homeport DFO region and allowed management of the activities of these fleets to be tailored to local regional resource conditions.⁴¹ It effectively meant that the only Atlantic-wide groundfish licences and allocations would be those held by vessels over 65 ft. This EA approach for such vessels over 65 ft. was based on controlling outputs instead of inputs, thus allowing operators to tailor their fishing activities as they desire by removing the necessity to compete with others. Eventually these offshore EAs gave each offshore company a fixed percentage share of each groundfish quota based on their past fishing history. This measure, together with restructuring of the offshore companies in 1983 and the subsequent groundfish declines of the 1990s, completely eliminated the concept (and the necessity) of individual vessel licensing for offshore trawlers. The offshore trawler fleets have been rationalized by these factors to only a fraction of their numbers before the adoption of EAs.

Other Atlantic fleets would also adopt this approach of individual shares, with the next Newfoundland fleet to do so being the 4R Under 65 ft. Mobile Gear fleet in 1983. While no other inshore fleet would adopt these arrangements before the groundfish moratoria it has since become the preferred approach in virtually all licensed fisheries managed by catch quotas.

Even though this has proven to be a method that produces immediately improved fishing operations management, authorities remain un-convinced of the conservation incentive proponents claim individual shares give to the holders. As a result, these schemes are voluntary on the part of licence holders who must work out sharing formulas and pay for the costs of monitoring such arrangements. To date there are no transferable individual share arrangements in any Newfoundland fishery (except for the cod allocation of the 4R mobile gear fleet), primarily because inshore licence holders are fearful of the possible consequences

(concentration of quota holdings and corporate control of inshore fishing licences). For all these reasons, and a continuing concern, in some quarters, of latent groundfish catching capacity, replacement rules continue for under 65 ft. vessels. For those in the 35–65 ft. category this is now based on a volumetric measure approach that restricts the replacement vessel to a specified maximum overall length and cubic number limit. While a slightly more flexible set of these rules was authorized in 1997 (Supplementary Vessel Replacement Rules) because of the more distant fishing operations in the crab and shrimp fisheries, there is likely no short-term end in sight for such measures. Although, as this is written, DFO has released a discussion document on proposals to revise these rules.

With the imposition of the groundfish moratoria and then the lack of any real recovery in most stocks, the 1990s became a period of adjustment to a new set of realities. It became more and more obvious that the numbers engaged in the pre-1992 groundfish fisheries could not be sustained in a fishing sector that is now almost completely based on shellfish, mainly crab and shrimp. An inshore groundfish licence retirement program began as part of the Northern Cod Recovery and Adjustment Program (NCARP). This was intensified under The Atlantic Groundfish Strategy (TAGS) and the sequels to it. By its termination in 2000 about 50 per cent of the pre-1992 inshore groundfish licences had been removed as well as significant numbers of other licences held by those departing the industry. While this has improved the lot of those remaining, in those areas where cod was the mainstay (parts of southern 3L, northern 3K and Labrador), small boat operators now rely, mainly or solely, on small allocations of inshore crab for their fishery earnings.

In 1992, the department established its Aboriginal Fisheries Strategy (AFS) that was designed to handle the implementation of the Sparrow Decision and the direction of the Supreme Court to consult with Aboriginal groups who might be affected. The Marshall Decision of 1999 would expand the treaty rights of certain First Nations to include earning a "moderate livelihood" from fishing. This caused the department to undertake a new series of negotiations with the affected groups to establish arrangements to accommodate their fishing interests.⁴²

In 1993, the Fisheries Resource Conservation Council (FRCC) was established to broaden the scientific base of stock assessments and to provide the Minister with public advice on the management of groundfish stocks developed in a multi-disciplinary and integrated fashion. This was to remove the perceptions that the Minister often ignored advice of the fishery scientists or was given other private advice that was not disclosed to the industry. The advice of FRCC is made publicly to the Minister who then must similarly accept or reject the advice. This process has been in place for almost a decade. The recommendation of the Independent Panel on Access Criteria⁴³ to expand the mandate of FRCC to other species was deferred on November 8, 2002 by the minister of DFO, as a separate internal review of that mandate is under way.⁴⁴

In addition, in 1993, the minister of the day released a discussion paper on a proposal to establish an independent Atlantic licensing and allocation board. Again, the purpose was two-fold: to remove the thankless burden from the minister of deciding numerous licensing and allocation cases and to put the decision-making on these matters in the public view. The independent board would make licensing and allocation decisions within stated policies established by the Minister. The overall industry reaction was luke-warm and the proposal

died with the change of government. Some additional detail on this proposal appears in the next chapter.

A central part of the post-1992 adjustment measures was the introduction of Core licensing of inshore fishing enterprises in 1996, based on a recommendation of the Cashin Task Force report of 1993. Under this approach, the eligibility to retain and receive licences has moved from a solely individual to a fishing enterprise basis. A fixed group of Core licence holders was created at the enterprise head level from those who met specified fishing history requirements. A person desiring to become a Core licence holder can only do so by acquiring an existing qualified enterprise from someone exiting the fishery. The route to becoming a Core licence holder requires participants to progress through a Professionalization and Certification system that included a combination of sea time and specified educational courses. A certification board created under provincial legislation, and of which almost all members are qualified licence holders, manages this part of the process. The Core enterprises are the only ones who now can receive a licence on transfer from another holder, or on issuance, if new licences are made available.

The Canada Oceans Act entered into force in 1997, expanding the responsibilities of the department and the minister to include management of Canada's oceans as well as the fish in them. This new initiative did not receive incremental funding but is being implemented by the department through internal re-allocation. The objectives of this Act, in addition to addressing social, economic and environmental objectives in the three oceans, involve codifying principles of conservation and sustainable development through an ecosystem and precautionary approach and integrated management. The department is still developing a system of integrated oceans management to coordinate decisions about the many competing uses of the oceans.⁴⁵

In 2000, the Department began its Atlantic Fisheries Policy Review exercise. It has now finished the stage of consultations on a discussion paper for possible future management approaches. The next step is the release of a paper on more definitive new approaches for future management. Because this has been discussed only with the External Advisory Group to date, there is nothing definitive enough to warrant further attention here.

On December 11, 2001, the United Nations Fish Agreement (UNFA) came into effect with the obligatory 30 nations having signed. This Agreement requires nations to cooperate in the management of straddling and highly migratory fish stocks. Canada is obliged to ensure that the 12 principles of the Agreement are enshrined in its own fisheries management system. It also calls for high seas enforcement through Regional Fisheries Management Organizations (RFMOs), e.g. NAFO, and a binding dispute mechanism for members of RFMOs. It calls for compatibility between measures to conserve stocks that straddle national zones such as Canada's.⁴⁶

In March 2002, the report of The Independent Panel On Access Criteria was completed.⁴⁷ This Panel had been formed primarily because of the furor that arose in this province over the allocation of Northern shrimp to PEI interests. In essence, the Panel proposed a series of access criteria for stocks with significant increases in abundance and newly emerging fisheries that are little more than a sanctioning of almost all practices to date. (See page 67 below). In recognising the sometimes impossibility of reaching a consensus on access to fish resources it recommended an Atlantic allocation and access advisory committee instead of a decision-making board that was dropped as an option almost a decade ago. On November 8, 2002 the DFO minister did not accept this recommendation for an advisory board, but did accept the

criteria for deciding on allocation of access.⁴⁸ This leaves the issue of allocation of incremental access, still one of the most controversial fishery management matters, in the hands of the federal minister, where it has been since 1867.

In summary, the Canadian fisheries system has developed from one that did not focus much on management of fishing activities in the first 105 years of Confederation, except for some coastal fisheries and freshwater species. The post-World War II years to the early 1970s were a period of modernization, development and expansion. In the early 1970s, attention turned more to conservation and direct management of fishing activities. From a relatively laissez-faire system has developed a complex of management arrangements that now focus on stock conservation and the social/economic state of those engaged in the harvesting sector. The latter is reflected in the many measures and special policies that now exist to control or reduce fishing capacity and protect the resource. The system for management of the fishery is anachronistic in many ways, particularly the enormous discretionary power that is vested in the minister, with respect to the establishment of quotas, fishery allocations and licences.

Current federal activities in the whole area of fisheries management are much broader than they were a few decades ago. While available data do not indicate a decline in funding levels for DFO in the last four years, neither do they show any real total increase in basic operating expenditures when Grants and Contributions are removed. In that timeframe, the department has received some increased funding for specific purposes but it also has assumed certain new responsibilities, such as Oceans Act administration, without incremental funding. We feel safe in concluding that the effective capacity of the department to conduct its core fisheries management activities has eroded in recent years from this combination of unfunded new initiatives, internal re-allocations and general inflationary pressures. We cannot quantify the absolute extent of it.

The Apparent Objectives of Fishery Management

In this section, we will describe the major trends in the fishery objectives of both the federal and provincial governments since Confederation with Canada. We will conclude with an assessment of the apparent objectives of contemporary fishery policy as they exist in 2002. The policies that apply at any point in history are a product both of policy evolution and of current circumstances forged by market forces, the natural environment and human fishing activity. The historical record of past fishery policies is found in various sources including federal and provincial commissions and task force reports and sometimes in official government documents.

No attempt will be made to inventory the policy objectives of each successive government administration but broad trends will be outlined. It is clear that policy objectives have altered remarkably over the past 52 years, and their evolution reflects a shift from resource abundance to severe resource depletion, as well as from incomplete market development to mature marketing systems. Most frequently, the objectives have not been clearly identified. While there have been many reports recommending policy changes, and many of them quite dramatic revisions, governments have not always endorsed these documents nor stated clearly the actual policy direction they have adopted as a result. Fisheries management embraces objectives that relate to science, conservation and enforcement, fisheries allocation, occupational safety, collective bargaining, regional economic development and community preservation. These objectives are often conflicting, adding to the complexity of fisheries management. Over the last five decades, this complexity has been exacerbated by a serious decline in the groundfish sector that, until recently, had been the dominant component of the fishery in the province of Newfoundland and Labrador.

This discussion of fishery policy objectives will be organized around three time periods. The first is from Union with Canada up to 1974, when the inshore catch of Northern cod reached its historical low point of 35,000 tons. The second time period is from 1974 to 1992, when the Northern cod moratorium was declared. The third period is from 1992 until the present (December 2002). We will discuss the implicit or explicit policy objectives of, first, the provincial government and then the federal government, in each of these three periods.

Provincial Fishery Policy 1949-74

In the post World War II period, the Newfoundland fishery was relatively strong, dominated by the salt fish industry but with a movement toward frozen groundfish production, mostly for the American marketplace. The Commission of Government encouraged the transition from production by household enterprises drying and salting cod to industrial firms producing frozen groundfish products. The Commission had encouraged improved marketing and better quality of all fish products through the Newfoundland Fisheries Board that controlled licenses for the export of fish products. The NORDCO Report of 1981 states "the centralization of onshore processing was a prime objective for fisheries development." The Commission wanted to

concentrate new processing facilities in about 15 centres. This was seen as an instrument to influence the dispersed settlement pattern and thereby reduce the cost of providing public services.

After 1949, the newly created provincial government was not disposed to overturn this policy direction. The province continued the policy thrust in favour of private sector production of frozen groundfish to be marketed within North America. Government was prepared to support this direction by lending money to Newfoundland firms and viewed the federal government as a source of financing for this reorganization and revitalization of the fishery. The Walsh Commission report envisaged a greater concentration of the fishery into fewer communities. The improvements in efficiency that came with modernization would create the need for alternative employment for people leaving the fishery. Increased capital investment would be needed from industry and from governments to provide the necessary port and plant facilities, along with the development of larger fishing vessels. The provincial government appeared willing to support this new direction.

However, the Federal Government was not prepared to support such a large-scale public investment in the fishery. Miriam Wright concluded that "Although the Canadian government was becoming more involved in the economy in the postwar years, the 1953 Walsh Report proposed a much greater degree of intervention than Ottawa was prepared to undertake....The Canadian state of the 1950s was not as interventionist as it would become in the 1960s and 1970s." In the absence of the recommended investment program, the inshore fishery stagnated while fishery policy appeared to favour the newly emerging offshore sector, with its vertically integrated structure of deep-sea fleets and modern freezing plants.

Wright also documents the extent of provincial financial involvement with the processing sector, including the offer of provincial loans to Fishery Products to build and operate plants at five communities on the Northeast Coast.⁵¹ Fishery Products was not the only company to receive support. Between 1950 and 1964, the number of frozen-fish plants doubled and the number of fish-plant workers increased from 1,107 to 7,427. By 1957, three firms (Fishery Products Limited, Bonavista Cold Storage, and Gaultois Fisheries Limited) accounted for 60 per cent of Newfoundland's frozen-fish exports, with Fishery Products Limited producing slightly over half of that total."⁵²

In addition to the support of large integrated companies in their efforts to build plant and trawler capacity, the Province built a number of plants and leased them to private operators. These plants included those located at La Scie, Rose Blanche and Harbour Breton. The Newfoundland Fisheries Development Authority also built and operated a shipyard at Marystown to service the trawlers owned by the Newfoundland processing companies.⁵³ This period when the government promoted and assisted the move to freezing plants and offshore trawlers was also a time when other major operators appeared from outside the province, such as Atlantic Sugar Refineries in Marystown, Booth Fisheries in Fortune, B.C. Packers in Hr. Breton, Ross-Steers in St. John's and Birdseye in Hr. Grace. The 1960s also saw the introduction of the Community Stage program under which many future inshore freezing or filleting plants were built under federal winter works programs.

A number of other policy documents were developed subsequent to the Walsh Report. The Report of the South Coast Commission⁵⁴ questioned the viability of communities based on inshore fishing and salt-fish production. The Commission recommended that only certain areas be selected for fishing investment. This lent impetus to the policy of resettlement.

The Royal Commission on the Economic State and Prospects of Newfoundland and Labrador of 1967⁵⁵ encouraged the offshore fishery and stressed the need to plan for economic decline in inshore communities. It welcomed the trend toward greater centralization and suggested that a select number of communities be chosen for large-scale development. "The policy for declining areas was to reduce the number of people dependent upon the inshore fishery and increase the specialization and productivity of those remaining. Surplus labour would be encouraged to move under group resettlement programmes to the offshore sector, other sectors of the Newfoundland economy or labour-short areas in other parts of Canada."⁵⁶

The Moores administration undertook a review of fisheries policy in 1972-73. A fisheries task force prepared a planning document that recommended that the province establish a greater capability to harvest Northern cod. It argued that the Government of Canada should allocate resources based upon the demonstrated or planned capacity of Canadian fleets to harvest them. The objective was to obtain an increased share of the TACs within the ICNAF area for the Province. The Task Force recommended that a trawler fleet be designed with the capability of harvesting a wide range of groundfish resources, including Northern cod. In addition, it recommended that the inshore longliner fleet be modernized to take new species, with greater mobility to extend the season of operation. The number of inshore fishermen should be reduced.⁵⁷

The primary policy objective during this period was the modernization of the fresh and frozen fish sector. The apparent overall policy objective was to increase harvesting and processing capacity. Resettlement was a means of reducing the number of people in the inshore fishery and to encourage the growth of the offshore sector. The effort to industrialize during the Smallwood administrations also reflected a policy to provide employment outside the fishery. During this period, the offshore sector grew but the inshore fishery, particularly for Northern cod, went into deep decline with the lowest level of landings on record occurring in 1974.

Federal Policies 1949-1974

While the Federal Government was not prepared to subscribe to the large scale infusion of capital recommended by the Walsh Report, they did promote "industry expansion through a variety of subsidy and assistance programs to help fishermen modernize and upgrade their equipment" (Crowley et al 1993).⁵⁸ This was done on an Atlantic-wide basis because Ottawa did not want to be seen to offer support to one province which was not available to others.⁵⁹ However, in the view of Raymond Blake, the Federal Government was taking the easy way out, failing to address the problems in the Newfoundland fishery. He claims that, even in the early days after Union with Canada, Ottawa assigned a large weight to social policy objectives. He went on to say that, "Despite its development strategy, Ottawa refused to venture outside normal government services to rehabilitate the industry. Nor was it able to administer the medicine that might have put the fishery on the road to recovery. It lacked the political will to implement the Walsh recommendations, and it allowed political considerations in the Maritime Provinces to limit its actions."

Parsons states that "Canada officially subscribed to MSY in the ICNAF context during the 1950s and 1960s. Domestically, however, it pursued modernization and fleet upgrading. This

was intended to improve incomes of fishermen, to provide the groundfish processing industry with year-round fish supplies through expansion of the Canadian offshore fishing effort, and to compete with the foreign fleets. Small and medium-sized firms consolidated into a few large, vertically integrated companies." Federal and provincial governments were encouraging expansion of Canada's offshore, midshore, nearshore fleets, and the development of new fisheries for scallops, shrimp and crab.

The Federal Government was now confronted with a growing problem that would impact massively on the Atlantic groundfish fishery and remains even today. Foreign fleets appeared in the Northwest Atlantic in the early 1950s. "Total catches increased from about 2 million tons to a peak of 4.6 million tons in 1968 and remained at about this level through 1973. Groundfish catches peaked in 1965 at 2.8 million tons and declined steadily from 1968 to 1974."⁶² The explosion of fishing effort by distant water fleets in Canadian waters took place in spite of the creation of the International Commission for the Northwest Atlantic Fisheries (ICNAF) in 1951, based upon a Convention signed in 1949. The conservation efforts of ICNAF began in the early 1950s with mesh size controls. "The management objective embodied in the ICNAF Convention was maximum sustained catch, i.e. MSY. But until the early 1970s there was no limit in the amount of fishing or catch."⁶³

Canada entered the Olympic race with the distant water fleets but it was an impossible race to win. The inevitable and abhorrent outcome was the serious damage to the sustainability of fish stocks upon which coastal communities had relied for centuries. While federal and provincial cost-shared programs were used to expand harvesting capacity, Canada's share of the groundfish catch in the Northwest Atlantic dropped from 34.5 per cent in 1955 to 20.2 per cent in 1965. Not only did the total Atlantic groundfish catch decline from 2.8 million tones in 1965 to 1.6 million tons in 1974 but also the Canadian groundfish catch fell from 620,000 tons in 1968 to 418,000 tons in 1974. ICNAF introduced catch quotas or total allowable catches (TACs) for two haddock stocks in 1970. The objective of ICNAF was changed to "optimum utilization". Parsons relates that, "By 1974 all of the major groundfish stocks of the ICNAF area were under a system of Total Allowable Catches and national allocations. These initial TACs were established at the MSY or F_{max} level." However, the damage sustained up to this point was enormous. The inshore fishery, lacking the ability to search for fish over a wide area, suffered the greatest damage.

Gene Barrett identified 1968 as the crisis year in fisheries management, a crisis wherein overfishing was so egregious as to bring an end to the "age of innocence". He describes a modernization phase from World War II to the early 1970s "when fishery policy promoted the industrialization and centralization of the fishing industry. This period marked a 30-year honeymoon between the private and public sector when large-scale development projects and capitalist expansion were seen to be synonymous with modernization and progress. However, the crisis in fish stocks from 1968 onward brought an end to this age of innocence." He goes on to say that "After 1974, fisheries policy was influenced by fishery and welfare economic principles, which advocated incorporation of public management and social considerations in the regulation of the resource.⁶⁷

The Harris Report⁶⁸ shows that the inshore fishery for the Northern cod stock has yielded 200,000-250,000 tons on a sustainable basis. Blackwood, citing Harris, 1990, NORDCO 1981 and Lear and Parsons 1993⁶⁹, states that "the traditional inshore catch of Northern cod had continuously declined from average landings of between 200,000 to 250,000 mt during the

early 1900s to 172,000 mt by 1956 and a low of 35,000 mt in 1974. The social and economic impact of this decline was enormous as tens of thousands of people abandoned the fishery as a means of livelihood and many communities were deserted."⁷⁰

This first collapse of the Northern cod stock and other major groundfish stocks elevated the policy objective of conservation and put a damper, for a period, on the impetus toward modernization. In 1964, Canada passed a new *Territorial Sea and Fishing Zone Act* that created a nine-mile fishing zone beyond the three-mile territorial sea and provided enabling legislation for the closure of other areas to fishing with straight baselines. The Act also provided for the use of headland-to-headland baselines. Many foreign vessels continued to fish in Canadian waters as agreements were negotiated on a bilateral basis. While it was intended that such fishing be phased out, Parsons⁷¹ notes that these negotiations were difficult and straight baselines did not become law until 1970.

Throughout the sixties and early seventies Canada witnessed a growing resource crisis in the groundfish sector. In 1974, the crisis deepened and was compounded by weakening prices in the US market. The result was a number of major policy interventions. These included a program of financial assistance to the industry and renewed efforts to establish a 200-mile economic zone. Flowing from this crisis was also the beginning of steps to assign fishing rights in the form of licences to individual fishermen and fishing enterprises. The federal minister was taking steps both internationally and domestically to recognize that fish are a common property resource and some form of ownership was needed to achieve conservation objectives.⁷² Up to this point it had been believed a shift from the inshore to the offshore sector would be the solution to the problems of the industry, along with modernization of plants and of the fishing fleet. "Now it was believed that the crux of the problem lay with the labour supply itself; that labour had to be persuaded to leave the industry. Government now saw as its objective the attainment of a "proper mix" of capital and labour in the industry so that maximum returns could be guaranteed to all dependent on it. In other words, the elimination of labour surplus, not the acquisition of up-to-date technology, had become the object of federal policy."⁷³ This did not mean an end to vessel subsidies because the offshore fishery was still seen as needing encouragement. The Federal government continued its support to the provincial resettlement program to reduce the number of people dependent upon the fishing industry. However, licensing was added to the array of policy instruments along with restricted entry to certain fisheries. This raised fundamental questions about the right to fish and how such rights would be allocated. The full-scale introduction of licensing was not to come until early in the next period, from 1974 to 1992, but clearly, the management objectives of the Federal Government were evolving into the complex input control system in place today. Conservation was clearly rising on the spectrum of management objectives along with economic management to improve the economic viability of the industry.

Provincial Policy Objectives - 1974 to 1992

The Moores administration came to office in 1972 on a campaign that stressed rural development and criticized the resettlement program of the Smallwood administration. The new government resisted the licensing of fishers. They encouraged the growth of processing

capacity and funded the building of a new fleet of larger longliners. The province was enticed to look to the opportunities for an expanded fishery arising from the partial withdrawal of the foreign fleets because of the new 200-mile limit.

In November 1978, the province released a white paper on fisheries development that called for expansion of the offshore fleet through joint ventures with foreign enterprises. A primary landing and distribution centre would be established to supply raw material to seasonal inshore plants. The government saw joint ventures as a means to strengthen processing and marketing as well as fleet capacity. Trawlers would fish part of the year for Northern cod that would be frozen for later processing during the down-season. This fish resource was seen as being taken from the foreigners rather than from the inshore fishermen.

The scientific evidence provided by DFO scientists at the time was that in the period from 1979 to 1985 stocks would recover under sound Canadian management to a high level of abundance. The 1973 planning document prepared by provincial officials that formed the analytical base for the 1978 White Paper called for a balance between the inshore and offshore sectors. The entire offshore catch in ICNAF areas 2 and 3 was to be landed and processed in Newfoundland. The inshore fishery would be supported by provincial funding for larger, more mobile trawlers but licensing policy should be introduced to restrict licences to bona fide fishermen.

The federal minister, Romeo LeBlanc, was not receptive to the concept of a new fleet to supply inshore plants or to the expansion of the offshore fleet to include freezer trawlers. He did not favour joint ventures with foreign firms, viewing them as back door arrangements for foreigners to remain within the zone and to continue to apply excessive fishing pressure upon the stocks. Minister LeBlanc did not resist "over the side sales" of fish to foreigners with the same vigour. However, the minister's opposition did not stop Newfoundland from collaborating with Nova Scotia and Prince Edward Island to advance a proposal for a fleet development program. At this same time, Newfoundland and other Provincial governments became concerned over their limited provincial powers with respect to fishery management. At a First Ministers' conference in 1978, Newfoundland first requested a delegation of administrative authority along with provincial participation in setting and allocating quotas. This position was later changed to a plea for concurrent powers with provincial paramountcy. While the federal minister did not accede to these requests, there was general initial support for greater provincial involvement in policy formulation.

It is clear that the quest for greater provincial power occurred because citizens look to their provincial governments to manage the economy and, in a province like Newfoundland, the fishery is a major economic force. It is also clear the policy objective was to derive as much benefit as possible from the rebuilding of groundfish stocks by establishing the maximum allocation for Newfoundland. Increasing the jurisdictional authority of the province in fisheries management was seen as one way to accomplish this objective.

The policy positions that developed around the management of Northern cod were directed toward achieving these maximum benefits to the province. The province sought a share of 85 per cent of the TAC in this growing stock for the inshore fishery. While this specific target was not accepted by the federal Minister there was acceptance that "The first and over-riding priority in allocations is to the inshore fishery." One outcome of a conference on Northern cod management held in August 1979 was that two-thirds of the TAC of Northern cod was set aside as an allowance for the inshore fishery. The position of the province was that to the extent

that a "surplus to inshore effort can be clearly seen to exist, it must be reserved to offshore effort landing into Newfoundland ports for distribution to processing plants which now operate on a seasonal basis."⁷⁵

The inshore allowance became a key policy focus for the province, recognizing that inshore fishers along the Northeast Coast of the island and in Labrador had a long history of fishing this stock. While there had been catch failures from time to time, the stock had not been subject to massive fishing pressure until the 1950s when foreign trawlers began harvesting more than the resource could reasonably sustain. In 1980, the inshore allowance was set at 110,000 tons, while the offshore fleet was allocated 45,000 tons out of a Canadian quota of 155,000 tons. However, as the TAC expanded the domestic offshore allocation outpaced the inshore allowance, thereby shifting the balance more in favour of the offshore sector. In 1984, when the Canadian quota was set at 246,000 tons the inshore fixed gear allowance was at 115,000 tons while the offshore allocation was 112,000 tons. Furthermore, the inshore fixed gear sector could not catch its allowance. Inshore catches increased from the trough of 35,000 tons in 1974 to about 96,000 tons in 1980, declined to 80,000 tons in 1981 and peaked at 113,000 tons in 1982. The increases in the TAC went to the Canadian offshore sector, including vessels from the Maritime Provinces. "The result was that the inshore sector, which was promised first priority in allocation and were supposed to get two thirds of the TAC was, by 1986, receiving only 43 per cent of the TAC as an allocation, and due to the low level of the stock and foreign harvest outside 200 miles, was accounting for only 26 per cent of the total catch."⁷⁷ The reason for this was that the biomass had been overestimated and the ability of inshore vessels to harvest a declining resource fell far short of the technical capacity of the offshore fleet to home in upon a shrinking biomass. The inshore allowance itself did not protect the stock or those who depended upon it as had been hoped.

In addition to increasing the inshore allowance the province sought to have the allocation principles established by the federal minister used to protect the interests of the Newfoundland fishery. The 1984 Atlantic Groundfish Management Plan identified the allocation principles as being adjacency to the resource, the relative dependency of coastal communities and the various fleet sectors along with economic efficiency and fleet mobility. The province had emphasized the adjacency principle, along with historical dependence, to ensure that Northern cod was harvested principally for the benefit of the Newfoundland industry. In 1993, the "basic principles" of the Atlantic Groundfish Management Plan were changed to "guidelines." This may have signalled a move by the Government of Canada to move away from the earlier allocation principles or to inject a higher measure of ministerial discretion.

The inshore sector faced repeated catch failures during the 1982 to 1988 period, and in 1991, low inshore landings signalled the collapse of cod and then other groundfish stocks. In the winter of 1992, the offshore fleet encountered extremely low catches, and later in the year the Northern cod fishery was closed. The Northern cod moratorium was quickly followed by moratoria for most other major groundfish species.

According to Blackwood, the collapse of the Northern cod stock can be attributed to a number of causes, including foreign overfishing and the consistent overestimation of the size of the stock biomass. He also argues that "the refusal of the Government of Canada to set TACs at the stated management objective of $F_{0.1}$ in the 1989 to 1992 period also increased the share of the offshore sector. During the 1980s it was apparent that the offshore sector received special consideration due to its ability to catch its quota and employ a large number of people

while the inshore gear sector fell into a cycle of catch failures, make-work programs and a high dependence on Unemployment Insurance."80

Blackwood goes on to argue that the allocation process was flawed and that the intended preferential access to the inshore sector was undermined, as was application of the principles of adjacency and historic dependence. He concludes this was caused not only by foreign overfishing but also by the significant geographic redistribution of Northern cod landings to Nova Scotia and the South Coast of Newfoundland. The latter was caused by annual allocations to the Canadian offshore sector being increased over a series of years. Communities on the Labrador and Northeast coasts of Newfoundland experienced a reduced share of total landings and were no longer the only major participants in the Northern cod fishery. Blackwood supports these observations with data from 1978 and 1988 concerning the regional distribution of cod landings and the top 15 landing ports.⁸¹

In the period immediately before the moratorium, the provincial government adopted a position of joint management of the Newfoundland fishery. This resulted in a formal proposal for a joint management body that would derive its authority from both levels of government. This proposal was advanced to decentralize decision-making and to harmonize federal and provincial management decisions.

The objectives of fisheries management were radically transformed over the period 1974 to 1992. At the beginning, the anticipated economic potential of extended jurisdiction led the province to invest in plants and vessels to build up capacity to harvest and process a growing resource. Dean points out that "Prior to the collapse of the groundfish sector and, more specifically in the initial year of extended fishery jurisdiction, the fishing industry was generally promoted as an employer of last resort. It is not surprising; therefore, that employment maximization became so enshrined in fisheries policy as to constrain the implementation of those policy measures that would lead to the emergence of a more viable and dynamic fisheries sector. In retrospect, this policy approach was driven largely by income security considerations and limited substitute employment opportunities outside the fishery in regions and communities with a strong fisheries dependence."82

It soon became clear that the promise of extended jurisdiction would not be fully realized and that overcapacity had become a serious threat to the viability of the industry. Restricted access to the processing sector began in 1979, followed in 1981 by a freeze on licences for principal species. However, expansion in the number of plants continued during the 1980s. As major groundfish stocks began to decline in the late 1980s, the province's interest shifted to conservation and allocation issues, relating particularly to Northern cod. The conservation issues were driven by the sudden decline in the resource while the allocation issues flowed from the failure of the inshore sector to benefit from the 200-mile limit and the perceived inequity of offshore landings of Northern cod in other non-adjacent provinces.

Federal Policy Objectives 1974-1992

Even before the extension of jurisdiction to 200 miles in 1977, new approaches to manage the fishery outside the existing Canadian zone were being discussed within ICNAF. Improvements in the concept of maximum sustained yield were accepted in some cases,

founded primarily upon biological concepts, as compared with the maximum economic yield concept that normally leads to the selection of a lower level of fishing effort and costs. Canada adopted the objective of conservation but also sought special preference for the coastal state. In 1975, Canada achieved a reduction in fishing effort by non-coastal states. In 1976 ICNAF agreed to move toward the more conservative $F_{0.1}$ approach to fisheries management. The advantage is a lower fishing mortality rate with higher average stock biomass, greater stock stability, higher catch per unit of effort and improved economic efficiency. 84

In the 1974-76 period, a market downturn compounded the resource crisis in the groundfish industry. This triggered a program of federal financial intervention combined with a policy review. From the latter emerged the May 1976 *Policy for Canada's Commercial Fisheries* that looked beyond the extension of jurisdiction that was to take place in 1977. Major shifts in policy were announced. Best use of the fishery, defined as the sum of net social benefits, was to replace maximum sustainable yield. The policy recognized the need for a systemic approach to the management of the fishery, including measures to deal with the "common property" aspects that create excessive costs and dissipation of economic rent through the race to maximize each fisher's share of the catch. It also recognized the social and economic consequences of the instability to which the industry was prone. Entry to the fishery, along with fishing effort, was to be controlled. In fact, excessive catching and processing capacity was to be withdrawn. Fewer people would be employed in harvesting. This was seen to be essential. Access was to be allocated based upon a satisfactory trade-off between economic efficiency and historical dependency of the fleets involved.

The late 1980s and early 1990s were marked by major problems in the management of virtually all major groundfish stocks. This is most effectively shown by reference again primarily to the Northern cod stock. DFO had undertaken to manage Northern cod with a conservative regime with quotas set below the estimated $F_{0,1}$ level. However, with the optimistic stock projections, decisions were taken to allocate a large share of the resource to the Canadian offshore sector, including new users, both adjacent and non-adjacent, and initially, foreign fishing fleets. The Keats Report commissioned by the Newfoundland Inshore Fisheries Association (NIFA) raised concerns over the use of offshore catch rates in the estimation of biomass size and with the consistent overestimation of the stock. Blackwood⁸⁶ cites the retrospective analysis by CAFSAC in 1988 that shows what TAC levels should have been established if the biomass had not been overestimated. The deepening failure of the inshore fishery led to the appointment of Task Forces and Panels, headed by eminent persons such as Lee Alverson and Leslie Harris. Even when the revised data were available, there was a reluctance to take the necessary steps to adjust the TAC. Blackwood notes that even when scientists discontinued using offshore catch rates and recommended a TAC of 125,000 tons, the Minister of Fisheries and Oceans set the TAC at 235,000 tons.

There appeared to be sounder conservation grounds for a sharp reduction in quotas once the new $F_{0.1}$ estimates were available. These events leading up to the moratorium on Northern cod indicate a conscious policy decision to favour employment and the economic viability of processing and harvesting enterprises over the interest of conservation. The necessary corrective action was not taken until the resource crisis had reached critical proportions. Looking back over the period, one is drawn to the inevitable conclusion that conservation was not in the forefront of fishery policy. In retrospect, the bright optimism associated with the extension of jurisdiction was foolhardy and led to fishing pressure that could not be sustained.

Provincial Fishery Policy Objectives 1992 - 2002

The most recent period has been dominated by the impact of the crisis in the groundfish industry and the emergence of shellfish as the dominant component of the fishing industry. A higher value product has been substituted for a less valuable groundfish product. The structural changes in the industry have resulted in a reduction in the number of participants even though the landed value remains high. Financial support programs have been substantially eliminated. The Fisheries Loan Board no longer exists but has been replaced by another, more generic, commercial lending program. The province has participated in early retirement programs for fishers and plants.

The present situation is one where the industry's viability rests heavily upon snow crab. Dean⁸⁷ cites industry stakeholders who estimate that the crab fishery represents 80 per cent of industry margins, noting that the snow crab dependency is especially pronounced along the East/Northeast Coast and Coastal Labrador.

The moratorium accentuated the high overcapacity in the fish-processing sector and led to a proposal from industry for a proactive program to withdraw plant capacity, through the purchase of processing licences. The province chose not to take this approach but in 1995 did adopt some of the recommendations of the Fishing Industry Renewal Board (FIRB) designed to limit the number of licensed plants by the designation of "core" or strategic plants. This was combined with restrictions on the ability of non-core plants to combine and thereby to achieve core status.

The FIRB had considered the option of a totally deregulated fish processing industry but rejected this approach as undermining the objective of creating a stable, self-sustaining and competitive industry with minimal requirement for public sector support. The Board argued that it was important to establish a regional balance between harvesting and processing capacity and the policy framework it proposed called for an arm's length board to manage this regional balance.

The FIRB also recommended that no new snow crab licences be issued until groundfish stocks had recovered but the provincial government did not accept this recommendation. This new licensing policy did not result in any meaningful capacity reduction. Indeed, the number of crab plants has increased to 42. The recent decision to withhold the issuance of further crab licences appears to indicate some greater commitment to capacity reduction or control.

The emergence of the cooked and peeled shrimp industry on the Northeast Coast triggered a considerable growth in the number of plant licences, from three in 1997 to 12 active plants and four inactive licences in 2002⁸⁸. Government has not to date accepted the recommendation of the Inshore Shrimp Panel that a quasi-judicial board be established to manage capacity in the processing sector.

The Report of the Special Panel on Corporate Concentration discusses the role of "strategic" fish plants in economic development and concludes that "strategic plants" in the inshore sector suffered a loss in the important role they had previously played in rural economies. Blackwood has identified the reallocation of Northern cod from these plants; while Dean refers to the erosion of their role arising from the explosion in the number of inshore plants in the period before the moratorium. The only possible conclusion is that a strong role for strategic processing plants in regional economic development was not one of the objectives of provincial fisheries policy,

even though this concept of strategic plants appeared to be accepted in the 1949-74 period as well as during Commission of Government.

Federal Fishery Policy Objectives 1992-2002

In the post-moratorium period, the federal government has directed its attention to the restructuring of the Atlantic groundfish industry and assisting people dislocated by the collapse of this important component of the fishery. The policy objectives have included capacity reduction and social adjustment. The preference has been to achieve adjustment out of the fishery to relieve the pressure, recognizing that the fishery crisis of the 1990s exacerbated a previously existing problem of excess capacity. The Task Force on Incomes and Adjustment in the Atlantic Fishery (the Cashin Task Force) identified overcapacity as a fundamental problem of the groundfish industry. The overcapacity "contributes to overfishing because fishermen have substantial investments in vessels and fishing gear, and thus have a desire to maximize their return in a competitive fishing environment."89 The Auditor General notes that even if the groundfish industry were to return to levels of a decade ago, the industry could not provide adequate incomes. Even though the number of groundfish licences had been reduced from over 17,000 in 1993 to just over 10,000 "Core" licences in 1997 the Auditor General concluded that excess capacity remained. "If the fishery is to be managed on a sustainable development basis, ecologically and economically, then another means of addressing the social and cultural issues of coastal communities has to be found."90

The Department of Fisheries and Oceans has been seeking to improve its understanding of what went wrong in fisheries management. These problems include total catch levels being set above conservation standards largely because of overestimation of stock levels. Commercial fishing data, on which stock assessment were based, in part, were coloured by selective fishing using increasingly effective technology in areas of high fish concentrations. Fishers caught more fish than was allocated. Irresponsible fishing industry practices, such as unrecorded landings, misreported landings, dumping of bycatch and high grading contributed to the collapse.

The Auditor General's report of 1997 concluded that the primary objective should be to conserve the resource, and that the Federal fishery managers ought not to be sidetracked by other competing objectives, such as "providing economic opportunity, facilitating access to reasonable incomes and Canadianization of the fishery." With such greater weight being assigned to conservation "healthy fisheries would then contribute to achieving and maintaining social and economic objectives, including the viability of coastal communities."

The 1997 Report of the Auditor General also provides some useful commentary with respect to the ostensible objectives of fishery policy. These included the following:

"14.70 Statements of Canadian commercial fishing policy were advanced in 1970 and 1976. In 1970, the main objective of government fisheries policy was to maximize employment in Canada's commercial fishery. The 1976 Policy of Canada's Commercial Fisheries indicated that in the near future fisheries would be regulated in the interest of people. In 1981, the Minister of Fisheries and Oceans published a discussion paper on Canada's Atlantic

fisheries policy for the 1980s. This document included a strategic objective "to maintain fishery resources at levels which will generate the maximum continuing economic and social benefits." The current status of these policy documents is unclear.

"14.71 Legislation passed in the 1980s established the objectives of economic viability and maximized employment. The *Atlantic Fisheries Restructuring Act* adopted as a hierarchical set of policy objectives for the Atlantic fisheries:

- That the Atlantic fishing industry be economically viable on an ongoing basis;
- That employment in the Atlantic fishing industry be maximized subject to the constraint that those employed receive a reasonable income; and
- That fish on the Atlantic Coast of Canada be harvested and processed by Canadians to the extent that this objective is consistent with the first two objectives and with Canada's international treaty obligations."94

While the importance of conservation may have been understood, there was no explicit reference to it in the legislation.

The response from the Department of Fisheries and Oceans conveyed acceptance of the need to establish a statutory commitment to conservation, endorsing the precautionary principle and affirming that "conservation of Canada's fisheries and their management on a sustainable basis are central to the economic viability of harvesters and processors and the well-being of communities dependent on fisheries resources."

While the Auditor General acknowledges that capacity reduction represents an important component of fisheries policy, the 1997 Report also notes that:

"14.92 Currently, the incentive is for fishers to remain attached to the fishery rather than to leave it. In fact, those involved in the industry may see an advantage to strengthening the attachment where possible, since federal income support or employment insurance benefits remain attractive compared with other social support programs, and few employment alternatives exist. It appears that provincial governments and other organizations may have little reason to encourage people to leave the fishery; in the absence of employment alternatives, the demand on provincial social programs could increase." ⁹⁶

Funding had been moved from the adjustment and rationalization component of The Atlantic Groundfish Strategy into income support. The Auditor General observed that this served to encourage people to remain attached to the fishery and dependent upon federal government support.

The basic thrust of the observations of the Auditor General goes to the heart of the problem. The fishery cannot possibly achieve economic viability and ecological sustainability if it is burdened with policy objectives beyond its realistic ability to deliver. Fishery managers cannot find a solution to the unemployment of people who are no longer part of the fishery. The

Department of Fisheries and Oceans cannot solve the problem, in a fisheries management context, of continuing to support the number of people and coastal communities that have depended upon the fishery in recent decades.

The Employment Insurance (Unemployment Insurance prior to 1996) program has played a major role in allowing government to maximize employment. It is beyond our mandate to explore the full impact of employment insurance but this program is frequently seen as having unintended consequences, whose overall impact may be quite substantial. These alleged consequences include contributing to overcapacity and removing young people from school prematurely. However, it has to be acknowledged that the program contributes to the economy of the province by injecting new dollars which partly offset the economic weaknesses and industrial seasonality that have maintained unacceptably high rates of unemployment. It has been argued that such injection of new funds holds people in place who would otherwise withdraw and, indeed, that Employment Insurance continues to attract new entrants.

The Employment Insurance program pays out more benefits to participants in the fishery industry, fishers and processing workers alike, than the value of premiums collected. The program injects new money into the industry and the province.

The overcapacity that existed at the time of the moratorium exacerbated the adjustment problem arising from the collapse of the groundfish industry. Exactly how much of this overcapacity can be attributed to Unemployment Insurance is difficult to determine. The result was that landed values and earned incomes in the groundfish sector went into free-fall and many more people had to pull up stakes than would have been the case if the overcapacity had not existed. The 1997 report of the Auditor General of Canada identified Unemployment Insurance as contributing to overcapacity⁹⁷. The report also notes that in 1990 self-employed fishers were receiving \$1.60 in Unemployment Insurance benefits for every dollar earned in the fishery, up from 96 cents in 1981.⁹⁸

Various capacity reduction programs were used to retire people, vessels and gear from the fishery, at considerable cost to government and some of the benefits have been erased by the unintended effects of Unemployment and Employment Insurance.

The major change to the EI program made in 1996 was a move away from the concept of insurable weeks to one based on minimum insurable earnings. The threshold to qualify is relatively low (\$2,500 for a repeat qualifier and \$5,000 for a first time recipient). In recent years the number of fishing benefits recipients has been increasing, after declining from 1990 to 1995, especially during NCARP and TAGS. There were approximately 13,600 fishing benefits recipients in the province in 2000, about the same number as there were in 1990, before the moratorium. This represents roughly 85 per cent of registered professional fish harvesters in that year. The number of fishing insurance claimants in the region and the percentage of registered professional fish harvesters receiving fishing benefits has increased successively since the program was revised in 1996. This was in spite of the significant capacity reduction in the fishing industry over the past decade, as a result of groundfish licence retirement and other industry adjustment programs. Since 1992, groundfish licences have been reduced by over 50 per cent. This probably indicates as much the level of underemployment that existed in the previous groundfish-dominated industry as it does the removal of essentially unproductive or redundant earning capacity since 1992 or the effective replacement of it in the new shellfish fisheries. This appears to be confirmed by the fact that the number of fishing benefits recipients is now back to around the long-term (late 1970s and 1980s) annual level.

It appears to be fairly easy for harvesters to qualify for maximum benefits, especially when compared to their counterparts in fish processing. Because benefits are tied to fishing income levels, the program does not provide protection against catch failure, because low catches and earnings lead to low levels of benefits. Over the years, there have been various attempts to establish a more appropriate fishery income support system, including catch failure insurance but these have been unsuccessful. The primary reasons appear to be the prevailing even greater dis-incentive to work in such programs and the impossibility of self-financing except with prohibitively high premiums.

The overall EI situation is different for plant workers. The number of regular Employment Insurance beneficiaries in fish processing occupations has declined by about 50 per cent since 1990. Approximately 17,600 plant workers in the province received regular benefits in 1990, compared with only 9,600 in 2000. This may be attributable to the existence of a higher threshold than exists for fishers and the significant decrease that has occurred in the number, duration and earnings of processing jobs.

Young people may still find it attractive to leave school at an early age to fish or to work in a fish plant in order to gain access to benefits. The softer eligibility requirement recently put in place for harvesters could lead to further drop-outs from the school system. The lower number of jobs now available in fish processing will hinder this and the now limited (and strictly controlled) numbers of fishing enterprises that can hire additional crewmembers. The research report prepared by Audas and Murrell for AIMS⁹⁹ notes that young Atlantic Canadians continue to go into highly seasonal occupations at a rate significantly higher than the national average. This appears to confirm the longstanding concern about the negative impact of Employment Insurance upon the length of stay in school and overall educational levels in fishing regions.

This narrative only touches the surface of the manifold issues that are raised by Employment Insurance. Nor are we in a position to prescribe solutions for consideration of the Commission. What is clear is that a holistic approach is needed involving both the federal government and the province to examine how Employment Insurance can contribute to a successful fishery and complement other income support measures. In establishing a vision for the fishery of the future it is important to ensure that income support programs will complement the objectives of fishery policy, rather than working at cross purposes.

The Employment Insurance program has also had unintended effects on policy makers. It has accommodated the policy objective of maximizing employment without reducing the incomes of industry participants, both processing workers and harvesters. If this program were not available then the maximizing of employment would have created an intolerable level of overall incomes for people in the industry. It also has to be recognized that the program has lulled policy makers into accepting economic policies that allow high rates of unemployment to continue for decades.

It is our recommendation to the Commission that the linkages between income support measures, particularly Employment Insurance, and fishery management be subject to further review to ensure that the success of the fishery is not compromised by the unintended consequences of a well-meaning and firmly established program that injects new funds into the province. This review should examine the unintended consequences of Employment Insurance, including growth in, or even maintenance of, capacity. It should also examine the impact on the education of the young school age people of the province who could still be drawn out of school by the lure of qualifying for benefits. It should recognize the positive contribution that

Employment Insurance makes to the economy of the province and that, in its absence, and in the absence of a successful program of economic diversification, the level of incomes in the province would be significantly curtailed.

DFO has undertaken an Atlantic Fisheries Policy Review, which will likely lead to a re-statement of its policy objectives. The Minister has already made policy decisions on one component of this review, the Report of the Independent Panel on Access Criteria. It is reasonable to believe that the overall Review will lead ultimately to the evolution of more sharply focussed policy objectives.

Conclusion

There are some observations that can be made with respect to the effects of fragmented fisheries management and the lack of convergence in fishery policy resulting from the fractured management system. It is clear that there was an attempt to build a rational policy framework using strategic regional centers to modernize the industry. One can speculate that, with strategically placed fish plants, combined with greater discipline in the growth of both harvesting and processing capacity, the industry would not have been plunged into such an abyss by errors and misfortunes in resource management. One can also speculate that more effective joint management or policy integration between both levels of government would have created a more rational, robust and viable industry. It is tempting to believe that a mechanism that achieved effective policy integration and shared policy objectives would have produced a better outcome than the one that lies before us.

The policy objective of maximizing employment did not serve the industry well. It had the result of pushing the resource to the limit and forcing decisions on quotas that were probably in the high-risk range of the advice given by scientists. This policy objective of maximizing employment was made tolerable by virtue of the Employment/Unemployment Insurance programs. This availability of benefits from the program allowed this objective to be sustained over a period of decades and reduced the pressure for meaningful economic development programs.

This paper provides some historical perspective on the objectives of fishery policy. The objectives we have addressed in this exercise are high-level objectives. There have been significant changes in policy from one administration to another, sometimes reflecting public reaction to previous policy. In other cases, policy has been changed because of resource problems, opportunities or market factors.

The current objectives of the fisheries management policy of the Government of Newfoundland and Labrador appear to be as follows:

- To create regional balance between harvesting and processing capacity;
- To maximize employment in the fishing industry;
- To sustain rural communities and regional economies on the basis of incomes and employment from the fishery and to modulate necessary adjustments;
- To resist the notion of strategic regional plants in favour of a multiplicity of plants in many communities;

- To advance the claim of fishers in adjacent communities to be the principal beneficiary of adjacent fish stocks;
- To maximize the share of adjacent resources harvested and processed in the province and thereby, the benefits accruing to the province from the industry;
- To establish stable industrial relations and equitable sharing of the benefits between processors and harvesters from the sale of products from the fishery;
- To achieve a greater voice in the management of the fishery through changes in the province's relationship with the Government of Canada.

The corresponding apparent objectives of fishery policy for the Federal Government appear to be as follows:

- To maximize employment in the industry, subject to the constraint of reasonable earnings;
- To build and maintain an ecologically sustainable resource base;
- To build the scientific capability to minimize the uncertainty attached to scientific estimates along with the management skills to operationalize scientific estimates of risk and uncertainty;
- To allocate fish resources on an equitable basis to various competing user groups;
- To minimize the impact of resource and market changes upon fishing people and communities;
- To maintain Canadian control and to maximize the benefits to Canadians of fish harvesting and processing; and
- To reduce capacity and facilitate adjustment out of the fishing industry.

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Alternative Fishery Management Policy Objectives for the Future

In this chapter, we will discuss the issue of alternative policy objectives for the future with a view to establishing a prescriptive model of fisheries management. This model can then serve as a benchmark against which to assess past and present fishery policies. These policy objectives are the highest levels of intentions or aims that governments adopt for the fisheries management system. In this context, we will take the fishery management system to cover both the catching and processing of fisheries resources, recognizing that there are collateral impacts from all such decisions. While marketing activities obviously influence the level of success in processing and harvesting, we will not include that activity, as it is not one where government involvement is any longer expected, desired or anticipated. These policy objectives will be guideposts for the future management measures governments should take in each of those two areas. They will, in effect, set the tone and direction to which all lower level program objectives, strategies and specific policy instruments must conform.

An examination of the context in which fisheries policy objectives must be developed and implemented is illustrative of the difficulties that governments face in coming to grips with the best approaches to managing the fishing industry. A better appreciation of how the sectors of the fishery relate to each other, to the resource and to markets, will help to understand past fisheries policy objectives and what is reasonable and feasible to expect for the future. In many ways, a failure to take into account the interrelated fishery system is the prime reason why the development and implementation of fisheries policy objectives has caused so much grief and frustration over time.

The Inter-related Fishery System

The fishery system consists of the fish resource, the harvesting sector, the processing sector and the fish products marketing sector. The fish resource and the habitat in which it dwells are of paramount importance. The people who work in the industry and who depend upon it are of even greater importance. We saw, in a previous chapter, that concerns about resource conservation are relatively recent phenomena, and that belief by some in the in-exhaustibility of ocean resources has not necessarily fully disappeared even today. However, it is now clear that the first imperative is the necessity to protect and conserve the fish resources and their habitat; without this the long term prosperity and, indeed, survival, of the harvesting and processing sectors will always be in doubt.

The Canadian fisheries, and many others around the world, attest to the tendency of the harvesting sector to over-exploit the resource, to use excessive amounts of labour and capital and to continually seek to circumvent or foil fishery regulations. A largely unstable resource base, recurring industry crises and unacceptably low levels of average incomes, especially in the small boat fleets, even after open entry was eliminated, have characterized this sector. It also invariably features a wide assortment of pervasive group conflicts that range across gear types, vessel size classes or geographical areas (and often combinations of all three). It can also

influence the shape of the processing sector by its pattern of fishing activities; while it, in turn, can be affected by competing demands of processors for raw material.

In the early 1990s, these tendencies were exacerbated in Newfoundland by a massive resource collapse and the ensuing transformation of primarily a groundfish industry to one based mostly on shellfish. The level of adjustment required in that "largest layoff in Canadian history" was massive. Such adjustments are often long-term because exit from this industry is not easy for any one or more of the following reasons: difficulty in liquidating fishing assets; costs (both financial and psychological) of retraining or resettling; lack of exposure to, or knowledge of, alternative employment and absence of opportunities to re-locate or re-employ. These factors can leave an excess of labour in the sector for extended periods, often as long as a generation. Today's harvesting sector is comprehensively managed for a mix of conservation, economic efficiency and societal benefits through a wide array of entry and effort controls. However, these have not yet eliminated all problems of overcapitalisation and overcapacity, with the result that the commercial appetite of the catching fleets continues to bear no resemblance to what the resource can sustain.

The processing sector has also shown a consistent tendency to overcapitalization and overcapacity that is remarkably similar to that of the harvesting sector. While some of this may reflect the pace and location of developments in harvesting, a good deal of it appears to occur from efforts to out-compete others for raw material, with results similar to those blamed on the common property nature of primary fishing. This creation of redundant processing capacity results in heightening of the seasonal peaks in plant operations that can be inherent in the nature of harvesting operations. This in turn can lead to weakness in product marketing if processing enterprises are not strong enough to compete effectively with competitors. Governments have often contributed to these tendencies by generous plant construction assistance and subsidy programs and then tried to offset some of the ensuing marketing weakness with financial assistance or directly intervening through centralized, or single-desk, selling arrangements such as NAFEL or the Canadian Saltfish Corporation. In Newfoundland, the result has been the imposition of limitations on entry to, and controls on, types of processing operations very reminiscent of those used in the primary sector. In the past, fish processing was labour intensive, but now has become much less so with the mechanization in today's predominantly shellfish-based activities. With the greatly reduced supply of groundfish, only partially offset by expanded shellfish landings, processing employment has become even more seasonal and produces a lower level of annual earnings. Finally, the raw material requirements of the processing sector seldom equate to proper allowable catch levels.

Moreover, the level and composition of catch implied by market demand rarely will equate to the proper level of exploitation for a fish stock or any combination of them. MacKenzie terms such a co-incidence as "wholly fortuitous". Markets cannot be relied on to dictate the proper level of resource exploitation. On the other hand, it is rational to manage the catch of a given species to the level required by the market when to do otherwise would produce an undesirable surplus of inventory. Resource exploitation also can be managed to eliminate or diminish unwanted seasonal peaks in production or to improve product quality by reducing the amount of small or poor quality fish. The dictum here is that, while resource management can take account of certain signals from the markets in terms of timing of quantities and grades of products, the marketplace itself cannot be permitted to dictate allowable catch levels as these will usually be above the capacity of the fish resource over the long term.

The over-investments of the past remain in the harvesting and processing sectors of the Newfoundland fishing industry and recently have been repeated to take advantage of the new resource base for shellfish. The groundfish collapse and lack of subsequent recovery has reduced the offshore trawler fleet to a small fraction of its former size, eliminated many full-time processing jobs and left a small boat fleet in several parts of the province with a small income base. Some of these outcomes may never be undone; the degree to which that is still not accepted will make it even more difficult to devise future policy objectives that many can regard as reasonable and equitable.

The present worldwide fishery situation is essentially one where the limits of raw material supply (the resource) have been reached (and in the Newfoundland case have declined in overall physical terms since 1992). Because more than adequate harvesting and processing capacity exists, the sustainable level of exploitable fish resources is now clearly the pre-eminent factor in the setting of policy objectives and the development of policy instruments for management of the harvesting and processing sectors.

The Policy Path to the Present

Fishing societies and their governments have long moved away from the concept of MSY as a useful objective of fishery management because of the resource instability it generates and the lack of weight it gives to other economically or socially desirable outcomes. Likewise, the pure economic efficiency objective of maximizing total net returns has never been fully accepted as an aim of fisheries management. As many, including Parsons, point out "... governments have to consider such things as income distribution and employment as well as conservation and economic efficiency." We have seen earlier in Chapter 3 that Canada, by the latter half of the 1970s, had moved along the path of alternative optima to adopt a concept of optimum sustainable yield (*OSY*) as the preferable approach to fisheries management. This is an amalgamation of *MSY* (the maximum physical yield) and *MEY* (the greatest excess of revenue over costs of fishing) into a concept of maximizing the overall benefits to society that can be derived from the fisheries. In the 1976 Policy for Canada's Commercial Fisheries, this was termed "best use".

Indeed, the Kirby Task Force statement of fisheries management policy objectives advocated the "best use" approaches of reasonable economic viability, employment maximization subject to reasonable incomes and Canadianization. Later re-statements of government's aims in dealing with the downturn in groundfish, the eventual collapse and the ensuing adjustment efforts continued to combine achievement of economic efficiency, resource conservation and minimum social disruption, without any explicit ranking being given to each. These evolutions all show a set of policy objectives that espoused more than pure economic efficiency; and that the emphasis changed depending on the Minister of the day or the latest crises. Indeed, most of the clearer statements of Canadian fisheries policies have followed some particular problem in the industry. The 1976 Policy for Canada's Commercial Fisheries was part of the response to the 1973-74 groundfish crisis, the Kirby Task Force recommendations were the result of the 1980-82 problems and the later statements by Ministers Siddon, Valcourt and Crosbie Constitution of the impending, and then the actual, groundfish

collapse of 1992 and beyond. Similarly, the implicit refinements of policy objectives since the post-moratoria adjustments have retained a mix of conservation, economic efficiency and minimum social disruption with an added sustainability precept. The current Atlantic Fisheries Policy Review is the first substantial review of explicit fisheries policies since the early 1980s. Access and allocations are important components of this review, with access criteria being the subject of a separate enquiry by an independent panel headed by former federal Deputy Minister Arthur Kroeger.

The Theoretical Basis of Policy Optima

Surprisingly little of the current economics literature on fisheries management directly addresses the range of options for policy objectives. Most current economics writings range between two schools of thought. One proposes economic efficiency as the sole aim of fisheries management while the other advocates a more balanced approach where there is provision for conservation, resource allocation, efficiency and social values. The first adheres to the Neoclassical economics view that the ultimate economic objective of any endeavour should be the achievement of the greatest difference between the value of an output and the cost of the inputs used to produce it (i.e., to maximize resource rents). Because society derives the greatest benefit from any economic activity in this way no other outcome is deemed acceptable. To do so is to make a value judgement that is not permitted under this school of economic thought. However, Copes points out that choosing maximum net returns, as the sole objective is itself a major value judgement.¹⁰⁴

Currently, some economic theorists argue that the completely unfettered use of individual transferable quotas (ITQs) will achieve this ultimate objective of net revenue (and resource rent) maximization and solve all the ills of commercial fisheries in the process. Others argue this tool is not fully proven, especially the claims of self-interest driven conservation. These opponents parade a long list of observed and conceptualised adverse results they claim make this a far less satisfactory instrument that is often postulated.¹⁰⁵

Still others raise several technical problems with the notion of rent maximization itself. For example, it is possible, under certain discount rates assumptions, for the objective of rent maximization to lead to a quick fishing-out of a stock¹⁰⁶, which would not be a socially desirable outcome reflecting a realistic social rate of discount which properly weighs the interests of future generations. A more practical problem is the dynamic data requirements for determining whether maximum net rent is really being achieved. These include up to 30 years of future annual operating costs and selling prices, annual catch levels and interest rates, most of which are not ever likely to be available for analysis. A deeper perspective is that all people do not, and indeed cannot, always make the types of rational decisions required by the Neo-classical school of economics. Davidse points out that people do not always act this way because it is impossible for them to do so in a pure sense and there is not an unlimited capacity to make use of all the information that is so required¹⁰⁷. In his view, people usually do the best they can and applying the assumption of rational behaviour to the fishing industry is very hazardous. He cites the cases of Dutch fishing families remaining in the fishery when

selling their licences would bring a greater return because "pure economic considerations are embedded in or subordinated to social-psychological ones". 108

The major source of disaffection with rent maximization is that it ignores other societally desirable outcomes that are valued in the real world. These include a long list of social preferences that can justifiably be claimed as legitimate alternatives to the attaining of pure economic efficiency.¹⁰⁹ Such aspirations as small community life styles, independence of the owner-operator as well as higher levels of employment and more equitable distribution of income are just some of the alternative values to rent maximization. For example, dissipating some or all of the rent in favour of higher total income and/or employment levels can be especially justified when the economy is below full employment. Then a higher utilisation of what would otherwise be surplus labour is a benefit rather than a cost to society. Moreover, since full employment is a still un-achieved economic state, this outcome is still quite appropriate for fishing regions or other non-urban areas. Two obvious caveats are that poverty-level incomes are not an acceptable price to pay for higher levels of employment or total income, nor are special ongoing operating subsidies to sustain those enterprises whose viability has been compromised. This approach can accommodate such desires as a higher number of differentsized enterprises operating from a larger number of communities so long as the returns to the labour and capital involved are reasonable. It also acknowledges that the social and cultural values of fishing communities are not inferior (and indeed could be considered superior in many respects) to those espoused by the more earnest of free market theorists.

Fishery management arrangements to achieve many of these "sub-optimal" objectives are best designed in a multi-disciplinary approach that incorporates the views of other social scientists. ¹¹⁰ The input of these disciplines is especially useful in designing management measures to give effect to the final policy objectives for the fishery management system. Cadigan has produced an excellent review article that catalogues some of the types of inputs available from social sciences other than economics. ¹¹¹ These so-called "alternative" writings espouse, amongst others things, the wider use of Traditional or Local Ecological Knowledge and community-based approaches in management of fisheries. These are useful in interpreting trends in fisheries data or in designing management measures that are more suitable to controlling some types of adverse behaviour of licence holders.

Another approach to fisheries management is suggested by using a broad set of social, economic and biological indicators of progress. Charles *et al*¹¹² have proposed such indicators to measure the health of the fisheries and the marine environment. Such indicators would measure the state of fish stocks, the contribution of the fishery, the quality of the marine environment, the well-being of the communities that depend upon the marine environment and the effectiveness of the institutions that manage both the fishery and the oceans. The genuine progress indicators described by Charles are intended to ensure that resources are used in a sustainable manner to benefit citizens at large, stakeholders, communities and the natural environment. This new approach could offer the potential for better management of the fishery by embracing a wider range of performance measures to evaluate and possibly amend management objectives.

We have been struck, in particular, by the situation of women in today's fishing industry¹¹³ and their aspirations. Slightly over 20 per cent of the individuals reporting fishing income are now female. More than half the total processing workers are women, although the percentage is lower in unionized plants. In both cases, the average income for women is lower than for

men, the same as in the case of fishing incomes. Most of the women harvesters are in the Apprentice category under Professionalization because they are latecomers to that occupation. They find it more difficult to acquire the requisite training courses to advance through the other levels. Women also fared poorly from adjustment programs where support levels are determined by historical attachment. Such attachment is often poorly documented because their work patterns have differed from those of men. Women are generally more concerned about social and community values than their spouses or partners. They also are more interested in the education of offspring and their prospects for the future. All of these factors give women a different perspective on what the objectives of fisheries management should be compared with males. They would generally put more weight on the social aspects or goals of fisheries activities but not necessarily to the exclusion of other objectives such as a decent level of earnings. These are the outcomes that are most often dismissed by the advocates of economic efficiency and the use of free market forces.

The Alternatives For Future Fishery Policy Objectives

In his 1984 treatise on the economics of fisheries management, MacKenzie¹¹⁴ asserted that governments become involved with fisheries management because of:

- 1. The overcapacity that comes from the excessive inputs of labour and capital resources directed at the fishery, arising from the common property nature of the resource.
- 2. The untenable pressure this brings to bear on the fishery resources.
- 3. The resultant recurring crises in the industry and the general impoverishment of participants.

These reasons are probably even more valid today because of where these factors have taken the industry. The situation in, and the interconnections between, all sectors of the industry dictate a balanced approach to policy objectives. Copes has pointed out the pitfalls of uni-dimensional policy objectives that give all weight to either conservation, economic efficiency or social values. Any one of these single-focus approaches is bound to be less than successful and certainly will not produce acceptable overall results. The preferred alternative is one where there are multiple policy objectives but these are ranked in importance.

More precisely, the highest level of policy objectives for fisheries management can be found in one of the following scenarios:

- 1. Maximization of net returns including the resource rent (which could be appropriated by the state as a return to the public from the resource), along with intra-marginal resource rents and consumer surplus.
- 2. Maximization of the total enterprise or individual incomes from fishing.
- 3. Maximization of the number of individuals employed in the industry.
- 4. Some combination or melding of the above into what is deemed a more appropriate mix of benefits to society as a whole.

The real keys to success of fisheries policies objectives are the strategies and programs that are adopted to achieve them. There is not time or space here to delve into this detailed and complex area of fisheries planning but a useful reminder is that policies often are only as good as the efforts made to implement them. Indeed, the core fishery management functions of setting the level of catch, allocating it and granting access to harvesting and processing are the main ways in which the high level policy objectives just discussed are achieved. The policies applied to each of these activity areas now have some 30 years of accumulated history and are the subjects of many and varied treatments in the overall fisheries literature. These writings include dissertations on such diverse topics as options for conducting of fisheries science, the most suitable basis for, and the method of, decision-making and control, the proper policy objectives (from many perspectives) for fishery management and the best tools or management systems for achieving preferred outcomes.

With all that in mind, the following seem to be the most appropriate fisheries policy objectives for the future and should achieve the most suitable balance of resource conservation and protection, economic viability and community and socially desired values. Therefore, the objectives recommended to the Royal Commission are as follows, ranked in descending order:

- 1. Resource conservation must be the dominant objective, including the restoration of biodiversity and fishery habitat. Management should be highly precautionary; with TAC levels set at the lower end of the range advised by scientists and including a buffer to allow additional assurance against overexploitation. Ecological sustainability cannot be built upon the ecosystem that currently exists, with its degraded biodiversity and a precarious dependence upon historically exceptional levels of shellfish abundance. Concrete objectives for stock rebuilding need to be established for all major demersal, pelagic, estuarial and shellfish stocks. These objectives should include target levels of fishable biomass for stocks such as Northern cod (i.e., 2J3KL), cod on the southern Grand Banks (3NO), cod on the St. Pierre Bank (3Ps), cod in the Northern Gulf (4RS3Pn), American plaice and yellowtail, redfish, turbot and capelin. It is not sufficient to establish annual management plans for major species. There should be medium and long-term management plans aiming toward specific levels of stock restoration. One approach for consideration by the Royal Commission is to rebuild the species diversity and abundance that existed at the time of Union with Canada or else the levels that existed prior to massive overfishing.
- 2. The rights of aboriginal people must be respected in all allocation decisions.
- 3. Fishery resources must be managed and allocated so that those closest to them derive the maximum benefits. Allocation decisions must recognize the resource-use aspirations of adjacent coastal communities.
- 4. The industry must generate a competitive return including a premium for the high level of risk involved in fishing. Harvesting and processing enterprises should be allowed sufficient returns to make them viable, allowing a return to labour and capital comparable with returns in other industries where risk is similar.
- 5. Within the preceding objectives, the level of employment should be optimized, not maximized. This means the aim should not be to maximize employment, nor to achieve the level of employment that would result from maximizing the economic

rent. However, employment levels should allow enterprises to be globally competitive and should not impair the viability of harvesting and processing enterprises. When regulatory decisions are taken to add capacity and employment, governments should attempt to measure the impact of such decisions on the viability of existing enterprises. The economic data to allow such measurement should be compiled by government and such data should be readily accessible from harvesting and processing enterprises, on a confidential basis, as information necessary to facilitate the management of a public resource. The federal government has used this type of approach from time to time when evaluating the wisdom of issuing a new licence to prosecute the Northern shrimp resource.

One of the fundamental questions is the extent to which social, political and economic objectives can be legitimate components of fishery management policy. History shows quite clearly that the fishery has been almost continuously used to achieve social and political objectives. Such cases include policy decisions whereby fish plants were placed in literally hundreds of communities, in preference either to a policy of *laissez-faire* or, alternatively, the approach of establishing strategic plants on a regional basis. Where these over-expansionary actions compromise economic efficiency to the point of undermining enterprise viability, either for processing plants or for the harvesting sector, they should be rejected as being incompatible with sound fisheries management.

The objectives of fisheries management should be explicitly stated and consistently applied by resource managers. The existence of multiple objectives is, in and of itself, not problematic. What is needed is a clear ranking of the objectives and some sense of what the trade-off is among them. To use an analogy at the macroeconomic level, fiscal and monetary policy makers strive to achieve a balance among the national unemployment rate, the rate of inflation, the rate of productivity growth and the level of per capita output and incomes. Some measure of inflation is tolerable to achieve a reduction in unemployment but if inflation is rampant then higher employment levels may have to be sacrificed.

The same kind of trade-offs must be made in fisheries management, where the licensing of excess capacity for social purposes can detract from long-term economic viability. The overriding objectives of fishery policy must be conservation and ecological sustainability, combined with enterprise viability, producing reasonable levels of income comparable with other industries. Fishery management decisions impact on a host of economic and social factors, such as community viability, regional development, gender equity in employment and personal health, just to name a few. The dictates of sound public policy demand that these impacts be factored into management decisions. These decisions establish the regulatory framework within which the industry must operate. That regulatory framework comprises rules governing how fish are harvested and processed but also how people are treated and respected. These rules include, for example, occupational health and safety and industrial relations. If these regulatory interventions impose an inordinate cost and are out of line with similar interventions in other industries then enterprise viability can be jeopardized. When this occurs the overall management regime has to be examined and rationalized. By the same token, if the industry performs in a fashion inimical to the health of people who work in it then there is a compelling public policy imperative to take corrective management action. In essence, we believe that the complete list of fishery management policy objectives can be as varied as

society wishes, subject to the overriding requirements of conservation and sustainability and reasonable economic efficiency.

Some may view these requirements are incompatible or requiring a high degree of definition in terms of trade-offs or the actual application of these in real life. These constraints are somewhat counter-productive: in general terms conservation and sustainability are a limiter on economic efficiency, while both are even more limiting on the normal human or political aspirations to maximise physical output or employment. The precise determination of conservation or economic efficiency may not be possible at a given point in time but they must be adopted as the guiding lights of fisheries policy objectives in the future. The decision as to the weights to be assigned to conservation, economic efficiency and social factors is the prerogative of government. Any views we might express must be understood to reflect our personal values. However, conservation is both an objective and an overriding principle. We would not see conservation compromised in any way to promote economic or social objectives. Having staked out this position we believe that the fishery can make its greatest contribution if government intervention is kept to the minimum that is required to mitigate the social impact of necessary economic adjustments. Only in this way can governments expect the fishing industry to make the most suitable contribution to society.

The Role of Individual Transferable Quotas (ITQs)

Some comments on the role ITQs could play in achieving these objectives are warranted because this has been demonstrated to be an extremely powerful instrument of fisheries management. It has to be recognized that this is an instrument of fisheries policy and not an objective. It is the latest method advocated to control the tendencies of licence holders to employ excessive amounts of capital and labour in their operations. It is focused on control of output as opposed to input as was the focus with limited entry. This instrument also proposes the creation of rights in shares of fish quotas that can then be bought and sold on the open market, thus creating a mechanism under which the less efficient operators are removed from the industry and those remaining are able to maximise their returns. This removes governments from deciding who stays and who remains and allows market forces to determine the final size and shape of the fishing industry.

This powerful characteristic of ITQs is the reason why there are such ardent supporters and opponents of this approach. In a fully transferable IQ system or regime, economic efficiency is the final determinant of the level and composition of participants. It is when such systems are allowed to function with no control or limitation on the acquisition of quota shares that the results become unacceptable. The most evident of these problematic outcomes is concentration of access to the fishery and foreign or absentee ownership of the quota shares. Examples of both are available from fisheries when fully transferable IQs have been in place for some time, including Australia, New Zealand and Iceland.

Leal¹¹⁶ is one of the proponents of the ITQ approach to fishery management. It is his view that government regulation has failed, having been unsuccessful in preventing overexploitation but greatly increasing costs. He cites spectacular failures of regulation including the collapse of the cod fishery in Atlantic Canada. Government intervention can be most effective, in his

view, by creating private property rights and transforming the commons into transferable property. Without such rights the common property nature of the fishery prevents fishers from saving fish for the future. If they practice conservation and leave fish to reproduce for the future they take the risk that someone else will harvest the fish. By taking the fish now, each fisher captures all the benefits while absorbing only a small fraction of the cost of stock depletion because the cost is split among all fishers. This creates an economic incentive for too much fish to be taken and for too many fishers to enter the fishery.

Leal cites a wide range of examples to support his proposition that private property rights represent "best practice" in fishery management. Each fisher can take his share of the total allowable catch without concern that another fisher will pre-empt his access. This allows a more orderly fishery and one which will maximize the value of the catch by levelling out the effort and allowing fishers to harvest at a time and location where value is maximized. Transferability allows quotas to be taken by the most efficient fishers. Leal identifies four principal advantages. First, he cites examples where the market value of the catch is improved, for example, because of the ability to sell more product into the fresh fish market as a result of the levelling-out effect of ITQs and, in another case, because the longer season and slower pace of fishing enabled fishers to direct for larger, more valuable fish (tuna). Second, is the reduction in overcapacity along with improved vessel productivity as more efficient fishers buy out the less efficient. The fishery can be downsized through ITQs without the taxpayer-funded buyout of surplus vessels that has taken place in other non-ITQ fisheries which have collapsed. Third, safety has improved as the incentive to fish in all kinds of weather has been removed. Fourth, Leal argues that conservation is improved, partly because ITQs can be more effective than traditional regulation in achieving a desired overall harvest for the season. In some fisheries, ITQs have the effect of preventing the harvest of small, immature fish because of the greater ability to fish selectively.

Leal cites the example of the Atlantic sea scallop fishery off Nova Scotia, where the Canadian government introduced enterprise allocations in 1986 as one where the result was a strong partnership in favour of greater conservation. Leal goes on to argue, "the closer ITQs are to full property rights the stronger the incentive for fishers to conserve the resource."¹¹⁷

Leal acknowledges that there are associated disadvantages, including the discard of bycatches and the high-grading of small fish. He does not see these problems as being insuperable and proposes a number of solutions. For larger vessels one of the solutions is at-sea monitoring by observers.

There are examples where quota allocations are achieved among fishers on a cooperative basis, without being imposed by government. Leal argues that these private harvesting agreements can be quite effective in ending the race for fish and eliminating overcapacity. Governments can play a role in facilitating these arrangements by identifying discrete sectors with common characteristics, such as the use of a particular gear type, and setting aside a share of the total allowable catch for that sector. This allows fishers or their representatives, such as a union, to allocate harvest shares among themselves as well as carrying out certain monitoring and enforcement functions. This is not unlike the way the inshore shrimp industry is managed on the East Coast of the province. In this example the FFAW/CAW performs a management function in determining fleet shares and landings caps. Quotas are not transferred from vessel to vessel but there are in-season reallocations among fleets within the sector, based upon size. While the management of this inshore shrimp fleet sector is far removed from an ITQ system,

there are discussions around the option of combining quotas within the fleet and within local areas that could permit some movement toward capacity reduction.

Leal, along with most proponents of ITQs, argue that they foster incentives for fishers to improve the fishery and are most effective when they are established as clear property rights, rather than rights of access only. Such clear property rights could be sold, pledged as loan security and transferred from one generation to another.

The most common means to establish the initial ITQs is on the basis of catch history. An alternative, advocated by many, is the use of auctions which have the potential to generate revenue to the government up front and avoid the issue of windfall gains associated with the "free" disposition of a public resource. An auction would allocate ITQs to those who value them the highest, as indicated by their bids. Such auctions are used in the allocation of government-controlled resources such as airport landing rights and broadcast frequencies in the United States and sale of rights to explore for hydrocarbon resources in Canada. For mature and fully subscribed fisheries, such auctions are not practical options. However, a secondary market in ITQs has the potential to simulate the advantages of an auction market. Indeed, such a secondary market exists in this province today but transactions involve individual species licences or the complete fishing enterprise. If either the individual species licence or the enterprise is entitled to individual shares of a specified species, these entitlements are transferred to the new holder. While these individual shares are not yet considered permanent (and generally cannot be combined) such licence transfers/re-issuances appear to be undertaken on the assumption that they are long-term entitlements.

Apostle *et al*¹¹⁸ provide an instructive and relevant case study of ITQs, involving surf clam and ocean quahog fisheries in the U.S. mid-Atlantic and the mobile groundfish fleet in the Scotia-Fundy region. It describes the evolution of ITQs, which were implemented in 1990 and 1991. The U.S. fishery was a case where the decision-makers were able to work with a relatively "pure" economic model of ITQs, without caps on ownership to prevent concentration and with virtually no limits on transferability. This fishery operated over a wide geographical area without impacting heavily on any one community. In the Scotia-Fundy case, issues of equity and the impact on communities were very important. The outcome of the Scotia-Fundy case was also largely driven by the vulnerability of groundfish stocks and by the resource declines which quickly led to moratoria beginning in 1992. In fact it is hard to separate the effects of declining resource from those arising from the introduction of ITQs.

In both the Canadian and U.S. cases, the objectives of capacity reduction and fleet rationalization were achieved. The level of employment was reduced and in Scotia-Fundy, crewmen were left with a reduced share. This is attributed to the weakened bargaining position of crew members associated with reduced employment opportunities, along with the fact that the cost of purchasing or leasing ITQs has been taken from the crew share. Notwithstanding the cap on the share which individual enterprises could take in Scotia-Fundy, there was still a significant amount of concentration which occurred subsequent to the introduction of ITQs. With respect to conservation there appeared to be a shift toward improved stewardship but this might have occurred in Scotia-Fundy because of the fragile state of the resource. In both cases there was no auction of rights and quotas were based on historical shares. There was no rental enacted to extract economic rent by government. There was a shift in landings from one region to another and in Scotia-Fundy the community and regional consequences were substantial, notwithstanding the requirement that ITQ holders must be *bona fide* fish harvesters and that no

person or enterprise could hold more than two per cent of the ITQ for a species in a specific management area. In the surf clam and ocean quahog fisheries there was no such cap and the system began with full and unrestricted transferability. In the Scotia-Fundy inshore mobile-gear groundfish fleet the system started with IQs, not ITQs. The reduction in overcapacity was associated with considerable concentration in holdings as well as a reduction in the number of active ports and buyers. The Scotia-Fundy case is an example of the trade-off between economic efficiency and equity where some communities gained at the expense of others. Whether this can be attributed to the ITQ system or to a declining resource is not clear.

The conclusions of Apostle *et al* on monitoring and compliance are somewhat reassuring. The data cited show that the number and severity of violations have been reduced. While the evidence is not irrefutable it is reasonable to conclude, as the authors have done, that compliance in Scotia-Fundy has improved under the new regime.

Apostle *et al* observe that "the level and types of "community" have been diminished by the introduction of ITQs. It is also possible that this particular path, as hard as it may seem, is part of a reconstruction of community for the next century." ¹¹⁹ Their study emphasizes the importance of consultation and industry participation in setting up the system. In Scotia-Fundy the implications of ITQs for coastal fishery-dependent communities played a bigger role than they did in the U.S. surf clam and ocean quahog fisheries, which were more geographically dispersed and where the community impact was much less critical. Even in the latter fishery the concern about monopoly power and corporate control led to a 10-year delay in the decision to go ahead with ITQs. In Newfoundland and Labrador, as in the case of Scotia-Fundy, these concerns would be even greater as a result of the potential loss of supply to local fish plants if ITQs were transferred to owners in other ports. Similar concerns on the part of communities in Alaska relating to halibut and sablefish in the North Pacific contributed to the current moratorium on ITQs in U.S. waters.

The study by Apostle *et al* looked at the impact of ITQs on southwestern Nova Scotia and found that the ITQs which were initially awarded to all enterprises were quickly concentrated even before they became permanently transferable. Vertical integration increased as plant owners gained control through arrangements with fish harvesters, who continued to be the nominal owners under fleet separation policy. On the positive side, plant owners were able to keep operating even though the total allowable catch was declining.

Even with these drawbacks (and others) to wider acceptance of this tool, we feel there is a role for its use in achieving the objectives outlined above. A properly designed ITQ regime can allow the fishery to reach more or less the desired level of incomes and employment while removing governments as the final selectors of participants. A few simple rules on the degree of accumulation of quota shares and eligibility to acquire them can remove some of the concern about concentration and control as well as that of absentee ownership. In the first case, a rule regarding the maximum allowable share of quota holdings would mitigate undue concentration. In the second case, specified eligibility criteria, similar to those currently in use in fishery licensing, would confine the ownership of quota shares to those who are willing to enter the industry on these bases and would prevent non-resident ownership.

This is the type of approach to the use of ITQs that we feel is appropriate for the future fishing industry of Newfoundland and Labrador. This controlled transferability of quota shares would allow the industry to become more efficient than it is now but still provide for the broader range of participation of individuals and communities envisaged in the future policy objectives

we have laid out. This tool will need be combined with other management measures that will still be needed to attain resource conservation (TACs, fishing seasons, gear regulations, etc...) and to allocate access in some fisheries where IQs will probably not be applicable or needed, such as the lobster fishery¹²⁰.

All of Newfoundland's over-65 ft. fleets have effectively been rationalised by the groundfish EA program and the individual share-based licensing in Northern shrimp. There are a number of "inshore" (under-65 ft.) fisheries in this province that now utilise some form of individual quota shares to allocate access amongst licence holders. Before the collapse of Northern Gulf cod, the under-65 ft. mobile gear fleet in 4R had adopted an ITQ program for their cod allocations that included an accumulation limit on acquisition of individual shares. The current individual share arrangements in 3Ps cod, 4R shrimp and all crab fisheries plus the landings cap measures in Northern shrimp are all stepping stones to some form of transferable quota shares regime. In fact, the Temporary Seasonal Crab Permits for under 35 ft Core operators were recently converted to licences when these fishermen voted overwhelmingly to accept permanent combining of such enterprises.

The likely long-term outcome is that as the benefits of permanent IQs become more obvious they will be adopted in more fisheries¹²¹ and transferability/combining of them will become more acceptable and will be adopted with limits on the amounts one enterprise can accumulate.¹²² As this happens concentration of enterprises will occur (that is an avoidable consequence of improving efficiency) and operators will increase the size of vessels they now can afford to use as their quota holdings increase. This could allow the removal of the 65 ft. vessel replacement barrier for those who acquire sufficient individual shares to justify operating a vessel in the 65-100 ft. category. Other operators would move up to larger vessels in the 35-65 ft. group, while a similar move would occur in the under-35 ft. class. Some in the latter category could move into the 35-65 ft. fleet if their accumulation of individual shares justifies that. Those who do not acquire additional shares would remain much the same as now. There would be eventually fewer enterprises operating a range of vessels that are larger in size on average than now. This would result in more efficient fleets consisting of fewer enterprises operating from fewer locations. This allowance for private sector decision-making in the controlled accumulation of individual shares is the most effective way of achieving the policy objectives we have stated in this chapter. The role of government would be reduced to assisting licence holders establish the original sharing formula and setting the level of ITQ accumulation that will produce the preferred size of the more efficient harvesting sector. The latter limit would have to be monitored and adjusted over time if necessary. We feel this approach would achieve the proper balance between the rent maximising results of freely transferable IQs and the other objectives we have proposed for the industry of the future.

There is no really good reason why this approach should not also be applied to the processing sector. Many of the same irrational investment and operating decisions observed in the harvesting sector are also found here. "Common property/open access" factors appear to have similar influences here as they do in harvesting. In this case an Individual Shares approach would be based on some concept of transferable or tradeable "production/output quotas" or "raw material/input shares" that are related to the overall available catch quotas. As in the harvesting sector, such production quotas would remove governments from having to decide who remains in the industry but could allow market forces to determine the eventual participants, and within limits, the size of their operations. Governments could determine the

approximate scale of the processing sector through rules on combining of production quota/ raw material shares. This would eliminate the need for governments to decide on the size, type and location of each and every processing operation, as in the current model. The issuance of some form of production quota or raw material share could relieve governments of many of the almost impossible decisions the current approach requires. As with the harvesting sector, the introduction of such production quotas should be combined with parameters to control against undue concentration of ownership.

We recommend that governments adopt the controlled use of Transferable Individual Shares in shaping the size and structure of both the harvesting and processing sectors in the future fishery in a manner that allows the achievement of the objectives we have proposed in this chapter. There should be a high level of consultation and participation by all stakeholders to enable further evolution in the current system of individual quota holdings. We recommend that the next step on the harvesting side should be the enhanced ability to combine enterprises, along with greater flexibility with respect to vessel replacement.

Strengths and Weaknesses of the Current Management Regime and Division of Powers

This chapter will examine the strengths and weaknesses of the current fisheries management system and division of powers that has been described earlier. We will assess these in the context of the management objectives that flow from our examination of the economic and other resource management literature as well as from the perspective of the province of Newfoundland and Labrador.

Policy Integration

There must be an integration of policy objectives between the federal and provincial governments to achieve these objectives, as well as broad public support for a vision that places stock rebuilding as a high level societal goal. Because of divided jurisdiction, there must be an agreement on objectives between the two levels of government if fisheries management is to be successful. Otherwise, the province will attempt to achieve one set of objectives in its management of the processing sector while the federal government will move in another direction for the harvesting sector. These sectors are part of an integrated system and need to be managed in concert. The means of achieving policy coordination are central to this report. While the federal government has the preponderance of management authority for the fishery, the powers of the province to regulate its processing sector are not inconsiderable. These include regulation of entry and level of participation in processing, quality control, and the level of processing and value added to be undertaken within the province prior to export. The province also exercises controls over the extent to which landings must be processed on a local area basis. In addition to this regulation of processing, the province has legislative authority for occupational health and safety as well as collective bargaining in the port market and in the processing sector. However, the province has no power in resource management, including fisheries science, setting of TACs, resource allocation and regulation of harvesting technology.

There is a longstanding perception that divergence of policies and priorities has been a major problem in the management of the fishery. This has given rise to a number of reports that have recommended various forms of policy coordination through the creation of a joint board. These reports include the following:

- House, Douglas, 1986, "Report of the Royal Commission on Employment and Unemployment", prepared for the Government of Newfoundland and Labrador.
- Harris, Leslie, 1990, "The Independent Review of the State of the Northern Cod Stock", prepared for the Minister of Fisheries and Oceans.
- Maloney, Aidan, 1990, "Report of the Commission of Enquiry into the Alleged Erosion of the Newfoundland Fishery by Non-Newfoundland Interests," prepared for the Honourable Clyde K. Wells, Premier of the Province of Newfoundland and Labrador.

 Dean, Leslie, "Report of the Special Panel on Corporate Concentration in the Newfoundland and Labrador Fishing Industry", prepared for the Minister of Fisheries and Aquaculture.

These reports, and others, have focussed upon the need for integration at the policy level, recognizing that any further integration, such as joint decisions through a single management body, first require that basic agreement exist at the level of policy objectives. Agreement on such objectives is a necessary, but not a sufficient condition, for successful management. We have concluded that there has not been enough policy integration and the management failures of the past can be attributed, in part, to defective intergovernmental coordination in this area.

A number of issues will illustrate the need for such policy coordination and integration. We will take two examples for the sake both of clarity and brevity but many others could be cited. These two relate to (1) resource projections and provincial allocations and (2) capacity and seasonality. These examples show that lack of policy integration leads to uneconomic choices that are detrimental to the building of a viable and competitive industry.

One of the principal factors influencing regulatory policies with respect to harvesting and processing capacity is the quantum of resource forecasted for the short, medium and long terms. If there is no agreement on resource projections then it is likely that the two levels of government will establish divergent parameters for the management of the harvesting and processing sectors. There is no formal mechanism to achieve convergence of views on global resource availability for major species. If each level of government takes a different perspective on the resource, they will adopt different policies as to how much processing and harvesting capacity is required. Not only is there need for a framework for making resource projections, but also to achieve agreement concerning the share of the resource that will be allocated to participants in each province. Without such agreement on global resource forecasts, or a reasonable basis for joint agreement on the resource level that will be allocated, the province is left in a very difficult planning position. The province will be operating in isolation, with the result being that the number of plants licensed will bear little relationship to landings. Such a disconnect cries for a solution!

The second example relates to the need for parallel development of the harvesting fleet and the plant capacity that processes landings from it. This parallel development should take place not only at the provincial level but also on a regional or local basis. If successful, there will be a regional balance between harvesting and processing capacity. If unsuccessful, there will not only be a lack of regional balance but the viability of enterprises will be compromised. With too many plants relative to landings, the raw material available to individual plants may be insufficient to achieve an adequate return. With too many fishing vessels the port market may suffer from depressed prices or else the quotas available to individual vessels may not be sufficient to allow a competitive return. Furthermore, regulatory controls at the harvesting level can have the effect of limiting vessel size, resulting in a very narrow seasonal window within which the fleet may operate safely. Such vessel size controls imposed at the federal level, which impair the mobility of the fleet, tend to create a highly seasonal pattern of landings. This creates pressures upon the provincial government to license a larger number of plants than the overall economics of the industry can justify.

There have been few attempts to achieve such policy integration. The appointment in 1953 of the Newfoundland Fisheries Development Committee, as a joint federal-provincial

body, chaired by Justice Albert Walsh, was such an attempt. The restructuring of the offshore processing sector in the early 1980s represents an example of a close and effective working relationship forged to address a major financial crisis affecting the larger enterprises in the industry. (This occurred at a time when both governments were in the midst of disagreements over the division of fisheries management powers.) The Fishing Industry Renewal Board was established in 1994 as a federal harvesting adjustment board. Its mandate was broadened in 1996 through provincial participation and funding to include policy development for the processing sector. Its recommendations to the province provided the basis for a new licensing policy for that sector. These instances show that policy coordination can take place within the existing structure, even though such felicitous partnerships are infrequent.

Strengths of the Existing System

The present division of powers in the fisheries management system does have certain strengths. These advantages need to be balanced against the weaknesses. On the basis of this evaluation we will conclude as to whether fundamental changes in the management system are needed.

Ability to Pay

Clearly, the federal government holds preponderant management authority, relative to the province, and carries a much larger share of the cost. The federal government has much greater ability to pay for its extensive management responsibilities. The management of the fishery is an extremely costly undertaking, as evidenced by the expenditures of the Newfoundland region of DFO in 2001-2002 of \$167 million. These costs include fisheries science and stock assessment; the broad range of fisheries activities involved in setting quotas, fishing seasons, minimum fish sizes, gear restrictions and so forth; the enforcement of regulations; regulation of fishing vessel safety and operation of the Coast Guard and the necessary support functions. From this perspective the existing division of powers represents a strength of the system, rather than a weakness, because the federal government can command the resources necessary to protect the resource and to implement the conservation measures needed to achieve the conservation objectives established either independently by the federal government, or jointly with the province.

Conduct of International Relations

Historically, other countries have exercised rights to fish in waters adjacent to Newfoundland and Labrador. With the advent of extended jurisdiction in 1977, this situation changed but the 200-mile extended economic zone did not eliminate the international dimension of fisheries management. Many important stocks straddle the Canadian zone and their management requires international agreement. The federal government has responsibility for the conduct of Canada's international relations and is in the best position to undertake negotiations with countries that claim the right to fish within the Canadian zone, or outside the zone, in the case

of straddling stocks. This international dimension of fishery management requires a strong federal role, the exercise of which can be argued as a strength of the existing division of powers. However, it must be noted that there have been instances where the federal government has been blamed for compromising its fisheries objectives in order to achieve trade objectives in other sectors. Without a presence in these negotiations, the province is not in a position to safeguard the interests of its fishing industry. Nevertheless, it would be difficult to argue that the federal government ought not to be in charge of international fisheries relations. From this perspective, the current international mandate of the federal government has to be seen as a strength.

Resolution of Interprovincial Conflict

In addition to the international dimensions of the fishery and the conflicts arising from it, some form of conflict resolution is essential for resolving the interprovincial rivalry and conflict associated with fisheries management. The logical authority to conduct this conflict resolution is the federal government. However, as with the federal international role, there is a caveat that must be registered on the interprovincial role as well. This caveat relates to the principles of resource allocation. In its arguments leading up to the extension of jurisdiction, Canada relied heavily upon the rights of adjacent coastal communities in international law. Such rights are also used as a basis for establishing the rights of Canadians to fish. However, the federal government is perceived in this province as being prepared to weaken the adjacency principle to assert that fish resources are national in scope. The recent acceptance of the access criteria proposed in the report of the Independent Panel on Access Criteria by the federal Minister lends support to this perception. These criteria added a new principle of equity, which is seen in the province as a weakening of the principles espoused by Canada in its Law of the Sea negotiations. 123 It is argued that the principle of equity has the potential to weaken the principle of adjacency by allowing some participation by residents of other provinces in resources that are indeed adjacent to a province but which extend well beyond the near shore.

Insulation from Undue Political Pressure

We have heard the argument that federal fishery managers headquartered in Ottawa are in a better position to resist undue political pressure and therefore the powerful role of the federal government in fisheries management is a strength. Those who take this position argue that if the province were in control of resource management they would be less impervious to pressures to compromise the biological integrity of the resource by undertaking a more adventuresome approach in setting TACs. They also argue that the province would be more accommodating to pressures for additional harvesting licences and thereby further compromise the economic viability of the industry. These people cite what they consider the egregious overcapacity of provincially licensed plants in the processing sector to validate their viewpoint. The same argument is sometimes made to support continuation of the enforcement role of the federal government, based upon the greater ability of managers in Ottawa to enforce regulations without interference. Such political interference is deemed more likely if

provincial ministers were vested with the broad enforcement powers currently exercised by the federal government.

Weaknesses of Existing System

The following are some of the more obvious weaknesses of the current highly centralized fisheries management system. These are indicated in the context of lack of coordinated fisheries management initiatives and complementary policies and the resulting general failure of fisheries management.

Inadequate Role of Province

The provincial government plays an important role in setting economic and social policy. Major functions of the province include significant social programs such as the funding and operation of the health care and education systems, funding of the University, the Courts, social services as well as economic programs relating to the management of natural resources. In other provinces where the major natural resources are land-based, the provincial government has the principal regulatory power to manage the economic destiny of the province. The principle of provincial ownership and management of natural resources is established in section 92A of the Constitution Act with respect to non-renewable natural resources and certain specified renewable resources (not including fisheries). Under the Atlantic Accord of 1985, the province acquired certain delegated powers, not through constitutional amendment but by federal legislation, with respect to the management of sub-sea mineral and petroleum resources on the continental shelf. This was seen as righting a wrong in the sense that, in the Terms of Union with Canada, Newfoundland and Labrador did not renounce any claim to its mineral rights on the continental shelf. The management arrangements made in the Accord for the new offshore petroleum sector recognized an important role for the province. Furthermore, citizens of the province look to the provincial government to establish social and economic policy objectives. The provincial government, in turn, finds itself frustrated with its lack of authority and its inability to participate meaningfully in major fisheries management decisions.

Lack of Provincial Vision

On the other hand, those stakeholders who argue for the status quo, or for even greater federal power, also argue that the province lacks stated, or indeed any, objectives for the fishery and has no vision of how it should be revitalized. These people cite the lack of a provincial White Paper to guide the fishery of the future and the fact the province's last consultative document (or Green Paper) entitled "Changing Tides" was never finalized, as proof of this position.

Lack of Bilateral Policy Coordination and Integrated Decision-making Mechanisms

We have discussed earlier the need for high level policy coordination and for integrated management decisions. The lack of such integration and coordination is perceived by many to be a major weakness of the current system. A number of recommendations have been made over the years to remedy this situation. These have included jurisdictional changes to enhance the powers of the province and various forms of joint boards to advise on policy or to implement decisions within a framework of mutually-agreed policy objectives. None of these proposals have come to pass.

Influence of Union and Industry

It is claimed that industry stakeholders, particularly the Fish, Food, and Allied Workers (FFAW/CAW) and the Fisheries Association of Newfoundland and Labrador (FANL), have more influence over federal fisheries decisions, and are more likely to be consulted, than the provincial department. This places the province in an invidious position where it can be taken off guard by decisions that will have a major impact upon the people of the province and the demands they will make for social programs and for alternative economic opportunities.

Exercise of Ministerial Discretion

The current system places a large amount of discretion for management of fish harvesting in the hands of the federal minister. The same is true at the provincial level with respect to the regulation of the processing sector. Both of these situations are anomalies in public administration. It is rare to find instances where Ministers can be so intimately involved, as Fisheries Ministers are, in making decisions that have such a major effect on individual enterprises. Usually, Ministers set the policy framework for such decisions but do not take the actual decisions. Both the federal and the provincial Ministers have powers that go well beyond the policy level. This creates the potential for the exercise of wide discretion in licensing and allocation decisions, that can be either a legitimate exercise of Ministerial discretion or, depending upon the circumstances, capricious interference outside of any policy framework. In the latter instance, the result is a highly unstable regulatory environment that compromises the competitive position of the fishing industry.

In other comparable situations, where access to public resources is conveyed in the form of temporary or permanent rights, there is normally an open, transparent process available where the general public has a right to intervene. There are many examples of these, including the Canada-Newfoundland Offshore Petroleum Board, the Canadian Radio Tele-Communications Commission (CRTC), the National Energy Board, the Alberta Energy and Utilities Board and the Public Utilities Board of Newfoundland and Labrador. These bodies make decisions based on evidence and the tribunals themselves must provide reasons for their decisions, based only on this evidence. The lack of transparency in the decision-making process is one of the main weaknesses of the existing fisheries management system.

We note that the establishment of the Fisheries Resource Conservation Council in 1992 represents a step in the direction of creating a higher degree of transparency by creating a mechanism for the public review of fisheries science. Public recommendations are made to the Minister of Fisheries and Oceans, based upon input from fish harvesters, scientists and other interested parties. This advice covers conservation measures as well as research and assessment priorities. The mandate of the FRCC covers groundfish only, and the final decision rests with the Minister.

Ministerial Control over Fisheries Science

The lack of federal-provincial integration in fisheries science is seldom cited as a major shortcoming of the existing division of powers. Nor is there evidence that major resource crises, such as the collapse of major Atlantic groundfish stocks, would have been avoided by better policy integration in this area between governments. However, there has been criticism of other aspects of fisheries science. In 1997, for example, within the context of the collapse of the groundfish fishery, Hutchings, Walters and Haedrich¹²⁴ argued that fisheries science suffered when the Fisheries Research Board was dissolved in 1979 and science was integrated into the Department of Fisheries and Oceans. Their contention was that political and bureaucratic interference in government fisheries science was harmful to the fish stocks and to the well-being of people who depend upon them. They argued that there should be an independent scientific organization which would be free of political influence and which would release all scientific information on stock abundance to the public at the same time it was given to the Minister. The authors conclude that the existing framework has failed to ensure viable fish resources and sustain the fishing people and communities upon which successful fisheries management depends.

On the other hand, another independent scientist, Trevor Kenchington¹²⁵ takes a somewhat different approach, arguing that fisheries management and science do need to be separated from the political arm of government but that they should remain together. He argues the need for science to be close to managers, to explain scientific advice and to understand the management questions that need to be addressed. He also believes that science has not been given the support it needs and that it has been starved of financial resources. Kenchington contends that senior scientists are not being replaced and that the work, which should be performed by scientists, is being done by technicians.

The formation of the FRCC in 1993 was an initiative to separate the decisions on TAC from the Minister and the internal operation of the DFO science organisation. The role of this body is currently under review by the Department and we have expressed our views on it elsewhere.

Political Control over Fisheries Management

The events leading up to the moratorium indicate how total allowable catches were kept well above $F_{o.1}$ even after the Canadian Atlantic Fisheries Scientific Advisory Committee (CAFSAC) had revised its estimates of the biomass. Hutchings *et al*¹²⁶ cite the example in 1990 of how the Minister established the TAC for 1991 at 190,000 tons, even though the $F_{o.1}$ level of harvest should have been only 100,000 tons. In 1992, it was clear that the TACs had

been far too high in relationship to the retrospective estimates of the biomass and the Minister announced a moratorium on July 2nd. Why did the Minister select a TAC level in several years leading up to 1992 that was so far out of line with the scientific advice arising from the revised biomass estimates and the announced management policy? At the time, there was a sense that sudden adoption of the lower TAC would have imposed too much social and economic hardship. This gives rise to the argument that conservation would be better served through a separation of management from the political level. Furthermore, the conservation objective ought not to be compromised for short-term social and economic objectives.

Too Much Influence by Stakeholders

There is clearly a large public interest in the management of the fishery, because fish are a public resource. However, representatives of fish harvesters and processors dominate most consultative bodies. Provinces generally complain that the federal Minister and his Department give a higher level of deference to the union and industry than to provincial departments of fisheries. We understand the provincial Minister also consults extensively with these same stakeholders in this province. This high level of influence by industry stakeholders at both levels of government has the potential to compromise the overriding imperative of conservation and of stock rebuilding, given the unavoidable sacrifice associated with any meaningful level of stock recovery to historical levels. It has to be recognized that it is virtually impossible for people whose livelihood is at stake to give impartial and objective advice.

Inadequate Community Involvement

In assessing fisheries management options it is important to look not only at the role of the federal and provincial governments but also to examine how local communities and regions can make a larger contribution to the management function. There is an excellent precedent for this in the management of lobsters but for other shellfish and for groundfish and pelagics the full potential remains undeveloped. An example of some thinking in this regard is the proposal for community-based ecological fisheries management¹²⁷ advanced by the Conservation Council of New Brunswick. In that approach, Community Fisheries Boards (CFBs) would serve as a "trust" to hold and oversee management of inshore fisheries within a defined geographic area or on behalf of inshore harvesting groups. All such fishing licences would be held in trust by the Board and would not be the property of individual fish harvesters. The CFB would control fish stocks on an ecosystem level by effort control instead of quotas. In addition to managing fishing activities, the CFB would control other oceans activity in its coastal zone. Local fish harvesters would form a council within the zone with fisheries scientists serving as advisors. This model is similar to one in Japan where coastal fish harvesters' associations hold the right to fish and their management plans are subject to approval by the regional government. The NB Conservation Council proposal also allows for the management of stocks in larger geographic regions through Bio-Regional Fisheries Boards.

We are not able to take a position on this approach, as it does not seem to have advanced beyond the proposal stage. We do recognize that we must be open to new ideas for the better management of the industry. We are encouraged with the success of the Eastport project for the conservation of lobster. While it is sometimes argued that large stock complexes do not readily allow for regional or community management, the reality is that most of these stocks have important regional components which would benefit from local input with respect to protection of nursery areas and spawning grounds. We strongly advocate the encouragement of greater participation in such activities that will build a badly needed conservation ethic from the ground up. The lack of strong community and regional commitment to conservation is a weakness of the present system.

Women in the Fishery

Women have traditionally played an important role in the fishery. One of the weaknesses in the present system is that the governance of the industry has been dominated by male managers in government, in industry and in fish harvesters' organizations. We note that there appears to be little recognition of the historical role of women in the transition to more formal professional credentials for harvesters. Furthermore, the collapse of the fishery has had a particularly large impact upon women¹²⁸, with 12,000 out of 15,000 people losing their jobs being female. The data on participation by women are misleading because the earlier data would not have fully reflected women who processed fish at the household level in the 1950s and 1960s. Adjustment programs in which compensation was based upon "historical attachment" have failed to recognize the important historical role of women. In building a vision for the fishery of the future it is important that women be given a more prominent role in stewardship and in setting the objectives for stock rebuilding and for restoring the ecosystem to a more resilient and bio-diverse condition.

Conclusion

This assessment has been mainly directed toward jurisdictional questions and broad issues concerning the governance of the fishery. We have excluded from our scope many topical and detailed issues such as those surrounding gear technology, fleet separation, individual transferable quotas (ITQs), and the respective roles of seals, depleted capelin stocks and environmental factors in understanding the collapse of the groundfish industry.

The conclusion we have reached is that fundamental changes are required in the management of the fishery. Some of these changes will enhance the role of the Province in the management of the fishery, beginning with a long-term vision founded upon stock rebuilding. Other changes will provide for a more consistent application of fisheries policy and for changes in the process of management to make it more transparent, particularly in the pursuit of conservation goals. The options for making changes in the management of the fishery are set out in the next chapter.

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Alternative Fishery Management Systems and Arrangements

In this section, we will examine two groups of options for provincial participation in the exercise of central fisheries management functions, which are those related directly to the control and regulation of fish harvesting and processing. These are the fisheries management functions divided along federal-provincial lines in Canada and that, over the years, have been the focus of much debate pertaining to division of powers. We will take a broader perspective than just the division of powers in assessing whether there are better ways of administering or carrying out these key functions, activities or responsibilities. All possible changes should be considered to accomplish the objectives we have set, including changes in the constitution, if that is what it takes.

There are a number of alternative approaches that could be taken to enhance the role of the province in fisheries management. Some of these options range from constitutional change that confers some specific powers (such as the setting and allocating of TACs) on the provinces, to jointly agreed federal-provincial administrative arrangements. In the first part of this section, we will review and assess a variety of alternative arrangements for changing the division of powers, including various proposals for constitutional change and for delegation of authority to independent boards. This review will be followed by an examination of unilateral and bilateral delivery options for key fisheries management functions in the last part of this chapter.

Division of Fisheries Powers

Other Federal Arrangements

We have not conducted a thorough survey of other jurisdictions, but in our research we have looked briefly at two other federations, the United States and Australia. ¹²⁹ It is our understanding that, in these federations, the arrangements for the sharing of fisheries management authorities were created through federal/state agreements and then reflected in statutes enacted at the federal (or, in Australia, at the commonwealth) level, rather than through constitutional change.

In the United States some fisheries management rights, such as for freshwater fisheries and tidal fisheries out to at least three geographical miles, are constitutionally vested in the States. Eight Regional Fisheries Management Councils, comprised of industry and government representatives, appointed by the federal and state governments, develop fishery management plans beyond the three-mile state limit through extensive public consultation. The Secretary of Commerce can overrule decisions of the Councils but rarely exercises this authority. Provision is made for judicial review upon appeal.

There is potential for a lot of conflict in this arrangement. It is clear that the States do have meaningful jurisdiction and that the federal government is not in full control. However, Parsons¹³⁰ concludes that "A central lesson from the U.S. experience is the danger inherent in an extremely decentralized system of fisheries management. While there are some advantages

in allowing objectives to be set on a region-by-region or fishery-by-fishery basis, the failure to apply a national framework of objectives and standards can result in an extremely fragmented and ineffectual system of fisheries management."

The fisheries management system in Australia is characterized by considerable state and commonwealth agreement on exercising divided authorities for fisheries management. Australian states have management powers for fisheries in three-mile coastal zones and the Commonwealth for fisheries beyond that. A series of agreements has resulted in various arrangements for exercising these powers by either the State, the Commonwealth or jointly by both governments. In most cases, the Commonwealth has assumed control of fisheries that extend through and beyond state waters but some states have exclusive jurisdiction over specific fisheries that had previously been managed by the Commonwealth outside state waters. The basis for these management arrangements was provided by Commonwealth legislation. The Australian system gives the states a higher level of jurisdiction than Canadian provinces, although it is probably more centralized than the American system of regional councils.

What emerges from this cursory review is that other federations have attempted to strike a balance between the powers of the central government and those of the states/provinces. The arrangements underlying this balance have to be designed to fit the national circumstances. There does not seem to be a need to entrench them constitutionally.

Canadian Constitutional Discussions on Fisheries Management

The issue of fisheries jurisdiction was frequently debated in the Canadian constitutional discussions of the late 1970s and early 1980s. In 1980, Newfoundland made a proposal for concurrent jurisdiction whereby the federal government would have paramount authority in some areas, such as international negotiations, conservation and the establishment of TACs while other aspects of a local or provincial character would come under provincial jurisdiction, such as harvesting plans and fleet allocations. At a conference of first ministers in September, 1980 the federal government adopted a position that demonstrated some flexibility in turning over powers to the provinces. The federal government was receptive to provincial jurisdiction with regard to:

- (1) Inland fisheries in the non-tidal waters of the province,
- (2) Sedentary species in tidal waters in, or adjacent to, the province, and
- (3) Aquaculture within the province and in tidal waters or adjacent to the province.

With respect to seacoast and marine fisheries, including anadromous species, the federal government refused concurrent jurisdiction but offered closer consultation.

"With the exception of Nova Scotia, all provinces seemed to favour some form of jurisdictional change giving the provinces greater powers over marine fisheries. Quebec and British Columbia favoured exclusive provincial jurisdiction; the rest favoured concurrent jurisdiction with more or less power left with the federal government. Prince Edward Island and New Brunswick apparently wanted a strong federal role in the context of concurrent jurisdiction, while Newfoundland favoured a greatly diminished federal role." ¹³¹

In the late 1980s, Newfoundland again pressed for increased provincial jurisdiction over fisheries. By this time, the level of support from other provinces was less than it had been in 1980. Notwithstanding a provision in the Meech Lake Constitutional Accord of 1987 that called for fisheries to be on the agenda for annual constitutional conferences, this did not lead to any agreement. Opposition to any change in fisheries jurisdiction continued thereafter.

When the Wells administration came into office in 1989 it adopted a policy of joint management, such as had been recommended in reports by Leslie Harris, Aidan Maloney and Douglas House. Premier Wells said that he was not seeking a change in jurisdiction but rather was proposing shared management with the Federal Government. The proposed board would be similar to the Canada-Newfoundland Offshore Petroleum Board and would have the power to set allocations, license fish harvesters, vessels and processing plants.

This proposal is set out in a 1991 document of the Government of Newfoundland and Labrador¹³². The joint management board would derive its authority from both levels of government. The goals would be: to improve industry efficiency and stability by integrating key policy responsibilities and making decisions closer to the local level; to foster the effective integration of economic and social priorities with fisheries management decisions; and to establish a more open and predictable management process. The board would make decisions with respect to the regulation of the harvesting and processing sectors, through resource allocations and licensing. The board would recommend TACs for those stocks that overlap the boundary of the Newfoundland zone, when vessels based in the province land the largest share. Once the federal Minister has set the TAC then the stock would be allocated among provincial jurisdictions based upon an agreed formula.

The federal government would continue to be responsible for scientific research, habitat management, resource protection, surveillance, enforcement, native fisheries and international affairs. The board would apply resource allocation principles. An intergovernmental agreement would establish the policy guidelines for the board and mirror legislation would be enacted by the provincial and federal legislatures. Equal numbers of board members would be appointed by federal and provincial governments with a jointly appointed Chair.

Federal Proposal for Licensing and Allocation Boards

In the same year, the Federal Minister of Fisheries and Oceans, John Crosbie, released a proposal for reforming licensing and allocation systems.¹³³ The purpose was to reform the system to avoid confusion about rules, to create greater transparency and to restrain the discretionary power of the Minister. The document points out that there is no guarantee of a public right to be heard in the existing system before decisions are taken. Nor is there any public right to know the basis on which decisions have been made or a requirement for decisions to be based on explicit policy. This contrasts sharply with other federally regulated sectors, such as communications and energy, where separate quasi-judicial administrative boards make decisions that are both visible and accessible to the public.

Two new management bodies would be created, one for the Atlantic coast and another for the Pacific. Each would manage licensing and allocation for the marine commercial fisheries. The Pacific board would also manage the tidewater salmon recreational fishery. The Minister would retain responsibility for management of the aboriginal fishery and for conservation of the resource. The Minister would continue to set annual harvest levels and establish the management measures required to meet conservation goals. The Minister would give policy direction to the boards. The boards would undertake routine licence renewals, licence transfers and allocate licences in new or under-subscribed fisheries. They would also allocate the annual harvest among various user groups and among fleet sectors and fishing zones. Sanctions would be imposed in the case of a fisheries violation but only after a hearing to review evidence. On the Minister's direction, the boards could hold public hearings into licensing policy issues and make recommendations to the Minister.

The government would appoint members of each agency for a fixed term from a list of knowledgeable persons who have no active stake in the fishing industry. Regional balance in the selection process would be respected. Each board would establish regional panels to conduct hearings with respect to applications and licensing decisions. Decisions arising from these hearings would be subject to appeal back to these agencies.

Wildsmith's Proposal for Constitutional Change

The following discussion outlines a specific proposal for constitutional change in fisheries management powers developed by Bruce Wildsmith. This proposal creates a framework for discussing other options for change. The proposal suggests a number of other options for expanded provincial powers through constitutional change. His proposal was presented in 1986 and it drew upon the constitutional discussions that had taken place up to that time. The following narrative will trace the evolution of his proposal from the preceding constitutional discussions. This proposal is summarized here because it represents a useful starting point from which to examine other alternatives that lie outside of the framework of constitutional change. Wildsmith notes that the fundamental issue is the social and economic impact of management decisions upon the provinces. The thrust of his approach is to formulate a constitutional proposal to confer greater management authority upon the provinces, to enhance their ability to set social and economic policies.

"The key components of the fishery as an economic activity are tied to a province and its land base. Fishing vessels, for example, are docked, depart from and return to a port in a province. In many cases, vessels are built in that province. The crews normally live in the province and raise their families in local communities. Equipment is likely to be supplied locally and is often produced or manufactured in the province. The fish is landed in the province and processed in plants located there." 135

His approach is to isolate socio-economic decisions from conservation and preservation considerations, leaving the former to the provinces. He recognizes that these cannot in practice be totally separated but he uses this starting point in order to assign a greater role in fisheries allocations to the provinces. He also recognizes the practical difficulties in assigning fish on a provincial basis, given the fact that neither fish nor stock divisions respect provincial boundaries. The federal government would continue to have "exclusive legislative authority in relation to the preservation and conservation of all marine fish (except non-migratory molluses), marine animals, anadromous and catadromous species of fish and transboundary stocks of freshwater species. Complementary to control over these fish and animals would be responsibility for their habitat, including water quality." The federal government would

assign each TAC on a province-by-province and stock-by-stock basis. The federal government would withdraw from assigning quotas by fleet sector, by gear or by enterprise, because this would be left to the provinces. Licensing would be a provincial matter but enforcement would be left to the federal government. International relations and protection of habitat would remain in federal hands.

In Wildsmith's proposal, the provinces would have exclusive jurisdiction to authorize fishing within three miles of their coasts. Management of fish stocks within these waters would still be federal but access would be restricted to local fish harvesters. Commercial fish harvesters from other provinces would be kept at least three miles from land or from any island forming part of a province. Each provincial government would have exclusive legislative authority in relation to non-migratory molluscs (excluding squid) and stocks of freshwater species confined to the province. This would include all matters related to conservation and protection, harvesting, allocations, sale within the province, environmental protection and related matters. Aquaculture would be under exclusive provincial control, subject to federal override with respect to protection of the wild fishery and its habitat, shipping and navigation and marketing of fish outside the province. Marine and aquatic plants would be exclusively provincial except for a federal override to protect habitat and wild fish stocks.

Nine provinces supported provincial management of inland fisheries, sedentary species, aquaculture and marine and aquatic plants during the 1980 First Ministers Conference on the Constitution. The federal government approved the proposal in principle but with some reservations, on provincial powers over marine and aquatic plants. During the conference, nine of 10 provinces wanted at least concurrent jurisdiction over marine fisheries, while the federal government and one province were opposed. The provincial position was that both federal and provincial governments should be allowed to make laws relative to the sea coast fisheries. The nine supporting provinces therefore advocated concurrent rather than exclusive jurisdiction. They proposed that the federal government would set TACs and implement other conservation measures, allocate quotas to foreign countries and licence foreign vessels. In these matters, the federal government would be paramount. Provincial powers would be the fixing of catch levels within federally determined TACs, issuing quotas up to these levels and licensing domestic fishing vessels. Residual powers would be provincial, in the "Best Efforts Draft" endorsed by nine provinces. The provinces would allocate quotas in the fishing areas adjacent to each respective province. The provinces were to reach agreement on provincial shares based upon established principles, including traditional fishing patterns.

While the 1980 Best Efforts Draft would provide for an independent arbitrator, Wildsmith would make the federal government the arbitrator on the question of provincial shares. He recognizes that this arbitration role would be controversial. He suggests that this might not be too difficult for established fisheries where traditional patterns could be continued. New stocks, newly exploited stocks and expanded TACs would be more difficult but he suggests the use of the principle of equal access, ¹³⁷ which is part of the Common Fisheries Policy of the European Union, along with the adjacency principle. Aboriginal people have an entitlement to a share of stocks that they have historically exploited and the federal government would have to set aside a proportion of the TAC for aboriginal use before calculating provincial shares. The aboriginal groups would be responsible for allocations to their members. Once an equitable distribution of the TACs has been made among the provinces, each can then make an allocation of quotas to various fleets and regions within the province. The province could decide what kind of industry

it wants to create in terms of vessel size, size of enterprise and choice of technology. Each province can decide on whether it wants to encourage regional fishery centres or, alternatively, use the fishery to maintain a dispersed population.

"Each province would have exclusive legislative jurisdiction over the distribution of its percentage of each TAC set by the federal government, including the licensing of fishermen and vessels and control for socioeconomic objectives on method of capture and seasons. The province would be able to deal with points of landing, sale of fish (even if caught outside the province) labour relations in the provincial fishing industry, processing and local marketing." ¹³⁸

Wildsmith sees his model for constitutional reform, which creates a new allocation role for the provinces, as responding to their social and economic aspirations. It also places the provinces in an ownership role in which there is an incentive for them to make good decisions. He also sees some merit in allowing provinces to establish policies that will be a better fit to local conditions than a rigid centralized structure. He sees regional diversity of management structures as a positive factor.

Asymmetrical Federalism

A strong case can be made that special arrangements should be made for this province because of its high historical and continuing dependency on the fishery. It is possible in a model of asymmetrical federalism for different provinces to have different powers. It has to be recognized that provinces are different and that the powers assigned to them should reflect these differences. Indeed there are examples of this, including the arrangements for protection of denominational education in Newfoundland in its Terms of Union with Canada. The delegation of fisheries management powers to the Province of Quebec from 1992 to 1983 is an example of asymmetrical federalism as is the application of French civil law in Quebec. The province can advance such a claim for enhanced powers with particular cogency when it can present a proposal that is non-threatening to other provinces.

The Prospect of Constitutional Change

Wildsmith notes that there are three ways of realigning the role of the provinces in fisheries management: constitutional amendment, delegation of powers and federal-provincial consultation. We will later discuss an additional option to this list, the provision of independent policy advice through a jointly appointed advisory board. The discussions of the 1970s and early 1980s focussed directly on constitutional change. It is clear that the momentum behind this constitutional approach has now been lost and circumstances are not currently propitious for renewal of those efforts.

In seeking to re-open the question of constitutional change, the province would have to weigh the alternatives. The Province might consider seeking full management authority, including fisheries science, conservation measures, allocations and licensing, enforcement and so forth. Such a goal would be unrealistic in light of the high cost. The opposition to such a

constitutional change would also be formidable. Other provinces would strongly oppose giving Newfoundland and Labrador the power to set TACs for stocks harvested by their residents. A more modest goal might be to seek jurisdiction for fisheries management authority below the level of conservation and TAC setting. This might include licensing of vessels and harvesters as well as allocations of quotas to the various fleets. Such an arrangement could lead to a situation where fish harvesters would have to secure licences from more than one management authority. A Newfoundland and Labrador authority deciding upon allocations to residents of other provinces also would be strongly resisted. We feel there must be some realistic prospect that the proposed approach will be acceptable and have a realistic prospect of success. A successful proposal, at a minimum, must not be perceived as a threat to the allocations and access of other provinces and their residents.

Our conclusion is that constitutional realignment of fisheries jurisdiction is not a practical alternative nor a realistic option at this time. For this reason we have excluded constitutional change, whether it would involve concurrent or exclusive jurisdiction, as a practical policy alternative for the short to medium term.

Based on the past record the following conditions would have to exist, at a minimum, for any actual transfer of powers to occur:

- Federal-provincial discussion of major constitutional change would have to be opened again.
- There would have to be the possibility of inter-provincial trade-offs.
- Wide political, public and industry support for changes in the division of powers to manage fisheries would have to exist.

Because these pre-conditions definitely do not now exist, we will now examine ways in which exercise of the currently provided federal-provincial powers could be improved or delivered on a unilateral or bilateral basis.

Options for Exercise of Existing Powers

We will include the following under the heading of core or central fisheries management functions:

- 1. Stock Assessment
- 2. Setting the Level of Catch
- 3. Fisheries Licensing and Allocations
- 4. Processing Licensing and Other Controls
- 5. Fisheries Enforcement

We will also quickly review some of the other significant governmental functions that, while affecting the conduct of fishing industry activities, do not control the size or shape of the harvesting or processing sectors.

We will assess the optimal form of delivery for the core fisheries management functions against a set of selected criteria. We have selected these because they represent the types of performance measurements invariably at the centre of criticism of various efforts of

governments to manage the fishing industry. In our view, any change that improves one or more of these performance indicators is an advance over existing arrangements. We, then, make a further assessment or judgement as to whether it is feasible to pursue a suggested change in delivery arrangements. These include the likelihood of governments agreeing to the proposed changes and the extent of industry support that may exist or could be generated.

We have adopted the following criteria to assess the various options we will identify for each management function:

- 1. Impartiality, the absence of subjectivity and of blatant value judgements in ministerial decisions.
- 2. Highest degree of excellence of outputs or results.
- 3. Visible and transparent operations.
- 4. Adherence to stated or agreed objectives.
- 5. Efficiency of operations.
- 6. Ability of the respective governments to pay.
- 7. Supportive of conflict resolution and policy coordination.

Real or perceived deficiencies in some, or all, of these levels of achievement are the cause of all complaints directed at governments for their handling of various fisheries management functions. However, the causes of some results are not found amongst these performance standards but more in the unpredictable, un-measurable or uncontrollable features of the overall fisheries system. Two examples of these are: (1) the lack of an absolute method of measuring the size of fish stocks and (2) the absence of adequate international management regimes for straddling (and high seas) stocks. The first is beyond the present capability of fisheries science; international law, as now accepted by the world community, does not permit an immediate and effective solution to the second. We will assess and propose optimal approaches to carrying out certain fisheries management functions but without suggesting the changes will cure all the current ills of fisheries management. First, we will examine each of the central functions individually and offer conclusions on the preferred unilateral delivery option without reference to changing the division of powers. After that, we will be led logically into an assessment of some obvious joint delivery arrangements that flow from the review of options for individual management functions.

Individual Core Functions

Stock Assessment

This is the function of collecting, analysing and interpreting various forms of data to provide a status report on fish stocks and the effects of various levels of fishing on them in future time periods. The Regional Science branches of DFO presently conduct this function through their ongoing stock assessment activities. Stock Status Reports (SSR) are developed in regional or Atlantic zonal assessment sessions that include external private sector and institutional participants. These SSRs are then made publicly available. The FRCC, an independent body of

industry and institutional members, consults widely for input into the public advice it provides the Minister on catch levels and other management measures for groundfish stocks. The Stock Status Reports for other species (other than groundfish) are discussed in the various species advisory committees and then the Department of Fisheries and Oceans conveys the final (and only) advice on catch levels and other measures to the Minister.

This full-time function requires continuous data collection, specialized research studies and the application of the latest scientific modelling and analytical techniques. For over 20 years it has operated as part of the federal fisheries management structure, providing this service to the Minister for domestic fisheries and contributing to the NAFO Scientific Council's provision of advice to the Fisheries Commission of that organization. Canadian stock assessment efforts are no longer criticized as being secretive and excluding input from other experts. The most consistent complaint now is that the function is too under-funded to provide advice on the ever-increasing numbers of stock management questions being posed. The options for changed delivery of this activity include the following:

- 1) Provincial Delivery
- 2) Third Party/Arms Length
 - a) Crown Agency or Board
 - b) University
 - c) Private Sector Entity

It is unlikely the provinces have the ability or willingness to pay for conducting this activity. It is also highly unlikely the fishing industry as a whole would prove willing to contribute financially to an alternative arrangement for provision of this function. This might hold some promise in the most lucrative stocks where some form of co-management creates a vested interest in a higher level of assessment funding.

It has been suggested that fisheries science should operate apart from the potential of interference by politicians and senior officials. To separate fisheries science from management creates the danger that science will not address the relevant questions but might focus on issues more in the realm of pure, rather than applied, research. Separation might also create a barrier to the interpretation of scientific conclusions for use by fisheries management. These drawbacks would apply whether greater independence was achieved either by re-establishing an entity similar to the old Fisheries Research Board or by moving fisheries science into a university setting.

Our considered conclusion on the options listed above is that the best results against the criteria listed will be achieved if science continues to be aligned with resource management. Stock assessment is an activity needed only by the fisheries management authority; it has no real market value and is only the first step in the annual fisheries management process. In this case, it can operate in a more focused manner as part of that structure than in one where the first concern might not be the annual requirement for input to management decisions. This would be especially true of any arrangement where basic research is seen as a preferred activity. Scarce financial resources would be another compelling reason to keep Stock Assessment with the fisheries management authority where the priorities on the need for this input can be most effectively asserted. The FRCC advisory function separates the conduct of stock assessment

more clearly from that of TAC setting. The association of the two in the past was a major criticism of that function and fisheries science as whole.

Setting the Level of Catch

This is the function of deciding or setting the level of annual harvest for each stock. This has become commonly known as TAC, or quota, setting and has been one of the more controversial areas of fisheries management since it began in the 1970s. It has been a wholly federal responsibility with the power exercised by the federal fisheries Minister based on scientific advice generated by stock assessment scientists and commented upon by fisheries advisory committees. Beginning in the mid-1980s, this annual process for groundfish came under considerable criticism because the Minister was perceived to be ignoring scientific advice or receiving advice additional to what was made public. One result of this was the formation of the Fisheries Resource Conservation Council (FRCC), an arms length body of private sector and institutional experts, to provide public advice to the Minister on allowable catch levels and other management measures for groundfish stocks. In recent years, concerns similar to those of the 1980s are being raised regarding the catch levels for other species, but especially shrimp and crab. The popularly predicted repeat of the groundfish collapse in these species raises the policy question of whether the TAC setting process in other species groups should be made similar to that in groundfish or whether even that process itself should be revised.

The most significant possibilities for changed approaches to setting annual harvest levels include:

- 1. Federal Minister with public advice for all stocks from an independent conservation advisory committee (e.g. FRCC).
- 2. Quasi-judicial commission with public advice for all stocks from an independent conservation advisory committee (e.g. FRCC).

The first option would put all TAC setting on the same basis that now applies to groundfish. This would extend the improvements (openness, transparency, increased impartiality, input from other experts) achieved there to all other species managed by quotas. It would not make TAC setting completely free of possible political influence in so far as the Minister is not legally bound to accept the advice tendered.

Only a quasi-judicial commission, established under a separate Act that specifies the basis on which it must decide annual harvest levels, could achieve that. This independent TAC-setting Atlantic Canada Fisheries Conservation Commission (ACFCC) could also be required to conduct public consultations before reaching its annual decisions. Alternatively, an independent conservation advisory committee similar to the FRCC could advise it. This commission would set the annual catch level in accordance with pre-described principles that cannot be departed from. While this would ensure that the basis for decision is clear and unchanging, it might also imply no flexibility to manage the immediate social and commercial impacts of identified resource downturns. It was the exercise of this flexibility that caused significant departures from scientific advice or resulted in decisions to set TACs at the upper end of the ranges of uncertainty that had been estimated by scientific stock assessments. However, government in establishing the policy framework within which such a commission would operate could

give it the latitude to take social, community and commercial consequences into account. This would not be our advice. We strongly believe that the policy framework for management of fish stocks must be confined strictly to conservation criteria. This commission must be given specific conservation objectives to restore key stocks to levels that existed before the resource collapse of the early 1990s. For example, the abundance and species mix that existed at the time of Confederation might well be the target that governments should set to be achieved by the board or else the abundance that existed prior to massive overfishing.

The issue in these two broad approaches to quota setting is how much improvement would be achieved by extending the FRCC approach to all stocks or by going a step further and removing all quota-setting power from the federal Minister. 139 While the current groundfish arrangement has removed the source of certain previous criticisms of the Minister, it has not produced stock recovery. Nor has it eliminated the resistance to quota reductions from the same industry participants who a decade ago accused the government of being too tardy in reducing catch levels. Where previously "the proper interpretation" of the available scientific information was claimed sufficient to reduce quotas or close fisheries such actions now are resisted by calling for "more science first". In such a conservation deficient milieu, it is likely the most impartial, visible and undeviating of the two approaches (Independent Commission operating under special legislation) would be rejected by industry because it would remove access to a politically accountable Minister. It might also be resisted politically because it requires the federal government to pass its legislated responsibility for conservation to an un-elected body. The existing system is characterized by the powerful influences wielded by well-organized stakeholders, particularly when the management regime is subject to a high level of political control. Such stakeholders often want to push the conservation envelope while those who would speak on behalf of conservation and the broader public interest are less well-organized and financed. An independent board may allow a more committed approach to conservation by providing a forum for a more balanced articulation of the public interest and the public good.

The option of extending the FRCC approach would be an improvement over existing arrangements and more likely to gain industry and federal political support. However, it, in and of itself, would not be our choice. In this case, we would favour the independent commission, supported by the activities of an expanded FRCC that would make public recommendations to it. That would create more certainty about the basis on which TACs are set and should eliminate compromising the resource in the decision-making process. The board would review FRCC reports in the context of an open, transparent public hearing, where the decisions taken must be based on evidence freely available to all.

Fisheries Licensing and Allocations

While the public criticisms and outcries may have been the greatest in the case of TAC decision-making, fisheries licensing and allocations of quota have occupied even more time of industry participants, ministers and officials. Initially, licensing was more administratively separate from the questions of quota allocations and sub-allocations but the two are now more inextricably bound together. A decision on a new allocation is now much the same as a decision on a new licence or vice versa. These are the two functions that determine who benefits and to what extent from the available fisheries resources. The outcomes of these activities have

been behind most of the federal-provincial debates about division of powers in the 1978 to 1992 period, the subject of long and arduous discussions in the numerous species advisory committees throughout the Atlantic and the cause of the several significant disagreements between federal and provincial governments. The best examples of the latter include the first offshore Northern shrimp licences, the Nova Scotia offshore lobster licences and the inshore/ offshore split in the 2J3KL cod TAC.

While some will argue that most allocation and sharing arrangements have been resolved, unexpected decisions from exercise of this function still occur and generate outbursts of protests¹⁴⁰. The recent report of the federal Independent Panel on Access Criteria and the Minister's acceptance of some of its recommendations on access principles and priorities ensure that this topic remains one of significant uncertainty for future allocation decisions in emerging fisheries, significant quota increases and decreases, and re-opening of long closed fisheries. This arises because the Panel chose to reduce the weight assigned to the adjacency principle and to specify gradations in adjacency. In addition, the panel enhanced the weighting placed upon "equity", which gives the decision-maker a high level of discretion to allocate in a completely arbitrary fashion and without a clearly stated and quantifiable policy framework. The Minister rejected the Panel's recommendation for an independent advisory committee to address allocation issues that cannot be resolved within the Atlantic.

The outcome of the federal-provincial exercise on calculation of provincial shares would seem to be the cause of more uncertainty. These shares were to be calculated to provide assurances that measures taken by a province to reduce harvesting and processing capacity, in the context of fisheries adjustment, would not undermine the province's access to resources. The federal government has never accepted the concept of provincial quota shares, maintaining quota allocations are made to licence holders in variously designated fleets. The federal position is that quota allocations to individual fleets are simply that and do not imply any ownership or control by provinces. Consequently, the calculations from this exercise are to be taken "as benchmarks only" and not as definitive provincial shares.

The major options for new delivery arrangements in these functions that would eliminate this sort of uncertainty, create stability of access, increase transparency and impartiality of decisions and remove a major burden from the federal Minister are the following:

- 1. Independent (Quasi-judicial) Board that sets all allocations and issues all licences (on basis of policies promulgated in advance).
- 2. Independent (Quasi-judicial) Board that sets allocations only in cases of major TAC increases (beyond a specified percentage change) or completely new species quotas and issues licences for them when new entry is approved (on basis of policies promulgated in advance).
- 3. Independent (Quasi-judicial) Board only hears appeals (on basis of policies promulgated in advance) against decisions made in (1) or (2).

In many respects, the last of these options, while a minor improvement over the present arrangement, might be an acceptable one if there were no more major allocation decisions to be made down the road. This is not certain and could leave future decisions to be made with no clearer understanding of the applicable policies than exists today. It would still exhibit the lack of impartiality, transparency and consistency many feel now exists in the current approaches to allocation decision-making. These deficiencies would be removed under the

first or second suggested mandates for an arms-length board, especially if the second option explicitly included a sanctioning of existing allocation arrangements. Our overall preference would be for the mandate of this independent board to apply to all allocation decisions, clearly leaving existing sharing arrangements in place on a permanent basis.

Processing Licences and Controls

This part of the fishing industry management system is under provincial control. It has developed many of the same issues, problems and criticisms that we have seen in the harvesting area. There are claims of lack of impartiality, transparency, consistency and application of clearly stated policies. We have outlined earlier how the problems of overcapacity are similar to those in harvesting and the complaints about the level of, and lack of access to, overall benefits from processing are almost identical. As well, the kinds of controls the provincial government has adopted for management of this sector bear many resemblances to those used by the federal government in the harvesting sector.

The effective options to improve this function, in the same sorts of ways as above for the federal allocation and licensing activities, revolve around the following:

- 1. Provincial Minister with public advice from an independent advisory board or committee.
- 2. Independent Provincial Board that issues licences and associated restrictions (on basis of policies promulgated in advance).

The first option leaves the decision-making powers with the Minister but would subject them to the scrutiny created by public and open advice of an advisory board; the second option removes the decision-making entirely from the Minister. This board would operate under provincial legislation and would be guided in its decisions by policies publicly stated by the Minister or incorporated in its establishing legislation. In terms of our criteria, we would favour this latter approach while recognising that the traditional resistance by both ministers and industry members to such independent board proposals will remain. In the first case, it seems to be a guarding of powers and in the second a preference for the option of lobbying an elected representative over that of more open and impartial decision-making. However, there now appears to be support for an independent licensing board for fish processing, in that the recent recommendation by the Independent Panel on Inshore Shrimp was supported by both processors (represented by the Fisheries Association of Newfoundland and Labrador) and fish harvesters (represented by the FFAW/CAW).¹⁴¹

Fisheries Enforcement

This element of the overall fisheries management system is often overlooked. Many, if not all, management measures are only as effective as the capability, resources and commitment to enforce them. Except for enforcement under the two fish inspection acts all commercial fisheries enforcement is conducted by the federal government. The RCMP assists domestic enforcement while boundary line and NAFO enforcement receives some assistance from the Canadian Armed Forces. In all cases the federal fisheries authority controls the enforcement

policy in terms of priorities and strategies. Moreover, the field of fisheries enforcement is now as specialized as any other fisheries management function and, indeed, has developed its own literature dealing with theories, practice and effectiveness measures.

There are few options for alternative delivery arrangements for commercial fisheries enforcement. Apart from the unlikely involvement of provincial authorities the main alternative would be to move this function out of the federal management authority and place it with other law enforcement agencies and/or the Armed Forces. However, except for some sovereignty considerations in terms of the Canadian Extended Economic Zone (EEZ) that could involve more Armed Forces resources, we are not aware of any compelling reasons to remove this function from the federal fisheries authority. Enforcement of fishing rules and regulations is an integral part of achieving the objectives established for fisheries management. As such, there is a significant need to conduct this function in a targeted manner to focus on particular areas of non-compliance or other identified management priorities. It is our view that, ceteris paribus, such results are more certain when enforcement is part of the dedicated fisheries management organisation. Less than satisfactory attention will be given when this function is not accorded such attention and priority. We would leave delivery of, and responsibility for, the commercial fisheries enforcement unchanged. Likewise, we would not tamper with the current arrangements for the enforcement activities for inland sports fishing that are an ideal example of working in a shared jurisdiction. Reciprocal administration of the two fish inspection acts is no longer feasible since the provincial legislation now provides for entry and capacity controls and enforcement of the federal act is now part of a broader federal agency responsible for food inspection.¹⁴²

Joint Delivery Options

Our assessment of unilateral delivery of individual fisheries management functions produced some possibilities for alternative unilateral delivery arrangements by the present authorities. It also suggested that some joint delivery options exist for several of the core fisheries management functions. In this part, we will reduce those possibilities to two functional areas and discuss the possible options for bilateral delivery. We arrived at these two potential functional areas by the following process. We have concluded that stock assessment should be left with the federal fisheries authority as the best delivery arrangement and, therefore, we do not see this as a candidate for bilateral delivery. There does not seem to be real advantages in any form of joint delivery of this specialized function because it must be objective, "state of the art" and focused on the needs of fisheries management. We also rejected changes in the delivery of fisheries enforcement because other arrangements do not offer improvements or are not simply possible or affordable. This conclusion also effectively ruled out joint or reciprocal enforcement of commercial fisheries and fish inspection act measures. We are of the view that the responsibility for setting the annual level of harvests is best left with the federal side, if for no other reason, because these must be set for all stocks in the Atlantic managed by quotas. Joint arrangements for this function in some cases, such as the Gulf of St. Lawrence, would then involve five provincial governments (plus the federal). On balance, our preference in this case remains an independent federal board advised by a conservation advisory committee.

This would not preclude a stronger advisory role for the provincial government in the setting of TACs for stocks that are harvested principally by residents of the province.

That leaves the federal functions of fisheries licensing and quota allocations and the provincial controls on processing operations as the remaining possibilities for some form of joint Canada-Newfoundland arrangement. The only options that we judge effective in removing the deficiencies of the current system are the following:

A Joint Canada/Newfoundland and Labrador Fisheries Management Authority (CNLFMA) that administers:

- Ouota allocations to Newfoundland and Labrador fleets.
- Fishing licences where required by new quotas or transfers of existing authorizations.
- Issuance of new, or transfer of existing, processing licences.
- Design of other processing sector controls.

This board would operate within policies jointly set by both ministers and would administer allocations to provincial-based fleets based on TACs that would have been set by the independent federal TAC setting board.

A Joint Canada-Newfoundland and Labrador Fisheries Policy Board that coordinates federal-provincial policies for Newfoundland fisheries by:

- Issuing public advice to ministers on a regular and autonomous basis, and/or
- In response to issues referred to it, individually or jointly.

The first option would most effectively remove the criticisms of lack of impartiality, transparency and consistency from these functions. This arrangement would allow for the direct coordination of federal and provincial measures to manage the harvesting and processing sector. This would remove a long-standing source of bilateral complaints by both levels of government. Then the federal side could no longer complain that provincial processing policies or initiatives were compromising its harvesting management initiatives. Nor could the provincial authority claim that a lack of input to management of the harvesting sector was thwarting its efforts to undertake coordinated and directed development of the provincial industry. Similar complaints by industry directed at both sides would have less credibility.

The Canada-Newfoundland and Labrador Fisheries Management Authority would be appointed by the federal and provincial ministers, with each minister appointing an equal number of members and a chair appointed by mutual agreement. Members would serve for a fixed term and subject to good behaviour. The Authority would report to the two ministers, who would provide policy direction as required by the Authority. The governing legislation would be enacted by both the provincial House of Assembly and by the Parliament of Canada. It would provide for regular meetings of the two ministers to receive a report on the operation of the Authority and to consider the need for regulatory policy changes. The ministers would not be involved in individual licensing or allocation decisions but would set broad policy. In the event of a disagreement on a policy relating to fish allocations or licensing, the federal Minister would have paramount power, while in the case of application of processing policy the provincial Minister could make the final decision.

Allocations of resource to the province for disposition by the Authority would be made by the Atlantic Canada Fisheries Conservation Commission. This would be based upon traditional shares for existing resources. For new resources, mutually agreed allocation principles would apply.

This new approach to allocations and licensing would have the effect of enhancing the powers of the provincial Minister by providing an opportunity to participate in policy decisions relating to the harvesting sector, as well as those relating to the processing sector.

The separate joint policy board that would provide management advice to both ministers on an autonomous and/or referral basis could also complement this joint arrangement. This would complete the circle in putting fisheries management completely in the public domain. No decisions would be taken on any aspect except in an open and public manner and against published policies that were indeed first publicly advised. This would also make fisheries policies and the application of them more stable and consistent because to do otherwise would risk immediate public reaction (and condemnation). The role of this joint policy board would also include advising the Atlantic Canada Fisheries Conservation Commission with respect to TACs and management plans for stocks in waters adjacent to the province. This would include examination of measures for the rebuilding of stocks and the restoration of fisheries habitat and ecosystem biodiversity.

We have concluded that the types of new arrangements we have discussed in this section constitute preferable ways to conduct fisheries management in the future. These types of new delivery mechanisms will remove the basis of most complaints levelled at past arrangements by all players. A more coordinated and stable approach is also necessary for the more focused policy objectives we have recommended earlier because these are aimed at optimizing the mix of economic and social benefits that can be obtained from the fisheries resources adjacent to the province. However, this does not mean that these changes will meet with the approval of all, or even any, of the current players. Ministers at both levels in the past, with one exception, have been reluctant to have any of their powers fettered in any way. (The exception was the Honourable John Crosbie, who proposed an independent Atlantic allocation and licensing board.) Industry has not been supportive of past proposals to pass certain decision-making powers to independent boards. In particular, they also have not supported enlarged provincial fisheries management powers. Other provinces, as well, have also resisted transfer of federal regulatory powers to their provincial counterparts, especially when those involve the setting or sharing of annual TACs. This means, in essence, that no change in the exercise of powers is likely to occur, even if it is only in joint or bilateral agreements, unless there is concurrence at all levels of the Atlantic fisheries management system.

Summary of Proposed Management Arrangements

In summary, we believe the following changes to the current management arrangement for fisheries in Newfoundland should be pursued:

A. A quasi-judicial commission appointed by the federal Minister, the Atlantic Canada Fisheries Conservation Commission (ACFCC), that could receive advice on all species from a conservation advisory council (e.g., the Fisheries Resource Conservation Council) and other sources and render TAC and other major conservation oriented decisions. This Commission would also be charged with allocation decisions on

provincial fleet shares in new or existing species fisheries as well as for existing resources.

Our recommendation is that the province make representations to the federal government for the creation of such a quasi-judicial Atlantic Canada Fisheries Conservation Commission, to set TACs and manage interprovincial access and allocations, not dissimilar to the Canadian Radio-Television and Telecommunications Commission (CRTC) or the National Energy Board (NEB). This Commission would make major conservation (TAC) decisions, that would be implemented by DFO, based upon a transparent process in which evidence is received from a variety of sources, including DFO Science, the FRCC, industry stakeholders, the general public and the provinces. With respect to resource allocations, the inshore sector would have preferential access to Northern cod, Northern shrimp and other stocks similarly accessible to the inshore fleet. The federal Minister would determine allocations to aboriginal groups. The Commission would allocate shares to provincial fleets for stocks in which resident harvesters have historical rights. For new or expanding fisheries, agreed allocation principles would apply, subject to preferential access by inshore harvesters in adjacent coastal communities. This Commission should be comprised of knowledgeable and independent people with no personal stake in the decisions and should be gender balanced.

- B. A quasi-judicial Canada-Newfoundland and Labrador Fisheries Management Authority appointed by both the federal and provincial fisheries ministers to make decisions with respect to licences and allocations for the Newfoundland and Labrador harvesting sector and licences and other control measures in the Newfoundland and Labrador processing sector.
 - Our recommendation is the creation of a joint Canada-Newfoundland and Labrador licensing and allocations authority, whose mandate would encompass the harvesting and processing sector through delegated administrative powers from the province and the federal government. This authority would operate under a policy framework agreed upon by both ministers. Intraprovincial access and licensing decisions would be made based upon interprovincial allocations decided by the federally appointed fisheries management commission. This authority would be comprised of an equal number of members appointed by the province and by the federal government, with a chair selected through the mutual agreement of both governments. The members should be knowledgeable and independent people with an effective balance of men and women.
- C. An independent (not quasi-judicial) board to provide policy advice, either on its own volition or in response to referrals by ministers or by stakeholders.
 - This board would have no decision-making powers but it would be, in many ways, the most important of the three mechanisms recommended. This board would provide policy advice as requested by either the federal or provincial governments or else on the motion of the board itself. Another important role for this body will be to provide advice to the Atlantic Canada Fisheries Conservation Commission with respect to stock management and, particularly, to advise on the TACs of stocks in which the province's fleets are the major participants. The policy advisory board should establish targets for the rebuilding of major species and prepare draft management plans to meet identified

medium and long-term targets. This board should be comprised of an equal number of members appointed by each government with a mutually agreed chair. All members should be independent of any personal stake in the fishing industry and should not be employees of government. The membership should recognize that women have as large an interest in fisheries policy as do men. The initial tasking of this board should be to formulate the policy framework for the creation of a joint licensing and allocations authority (i.e., the Canada Newfoundland and Labrador Fisheries Management Authority), as recommended above, because such an authority can work only if there is congruence of policy, covering both the harvesting and processing sectors.

Until the conditions are right for the types of changes involved in (A) and (B) the formation of the joint policy advisory board might be a logical first step in development of new arrangements to change the exercise of fisheries management powers. The successful operation of such a joint board would tend to remove some of the reasons that now prevent new institutional arrangements. Indeed, making the first task of such a policy coordination body the preparation of a mutually agreeable proposal for joint management of the provincial harvesting and processing sectors would greatly advance this initiative.

Delivery of Ancillary Functions

There is a wide range of other government functions that have effects or influence on the fishing industry. While none of these directly control or influence the size of the harvesting or processing sectors, they do influence the levels or types of benefits that industry participants can expect from the industry. These include legislation or regulations directed at occupational health and safety in land and sea based activities, general environmental practices or requirements, training and professionalization of fishermen and processing workers, and collective bargaining. Because these do not, in their own right, determine the level of harvest or the numbers of fishing or processing licences they are not functions found in the provincial or federal fisheries administrations. Nor do we see any instances in which they should be transferred. While the fisheries managers at both levels should be cognisant of, and familiar with, such functions we see no need to change the present setting of any of these powers.

It has come to our attention that women have experienced barriers in progressing toward professional standing as fish harvesters and we recommend that the Professional Fish Harvesters Certification Board consider methods to remove barriers to training and accreditation of women. One step to this end might be more community-based training programs that would facilitate participation by women by making such training more accessible on a local basis.

Other Special Considerations

In this research project, we have examined many aspects of the fisheries management system. These included the past, present and future considerations for exercise of the powers to manage fisheries in Canada, the high level objectives that should be adopted for fisheries management in the future and the best approaches to share management powers from the perspective of Newfoundland and Labrador. In the preceding chapters, we have expressed our considered views and proposals on all these matters, as required by our terms of reference.

In the preparation of this report, we also became aware, or were again reminded, of a range of other factors that influence the place of fisheries management in the mosaic of the province and the views of others on it. These cover all manner of things from the general disdain for fisheries management that is publicly expressed almost daily, to the complete lack of any real notion as to where the government and the provincial society are going with the fisheries, and the general lack of a competent capacity in the area of fisheries policy development. These deficiencies, in a society that attaches so much importance to its fishing industry, are regrettable. It is also a hindrance to changing the current level of provincial involvement in direct management of a large part of that industry. We have commented in several earlier places that conditions are not right at this time for the province to expect any support from any quarter for an increase in its powers to manage fisheries. With the general lack of any clear articulation of government and society's intentions for the industry, it is no wonder there is such disillusionment with any suggestion for change in how the industry is managed.

We strongly believe that the Royal Commission should give serious consideration to urging the provincial government to adopt a number of specific actions to change the general malaise that exists in the present internal and external views of our approaches to fisheries management. Constant griping and transferral of responsibility are counterproductive in many ways, but especially in the raising of unrealistic expectations for solutions to the problems of the industry. Aimless debate and discussion is really only a source of added frustration that compounds the lack of specific policy directions or even aspirations. The following proposals are aimed at this broad area of such importance to this province.

Creation of a Public Capacity for Fisheries Policy

The almost complete lack of any objective and analytical capacity in the overall subject matter area of fisheries management is almost inexcusable in a province such as Newfoundland and Labrador. We refer here to the almost total absence, outside of such specialists in government organisations, of professional capabilities in fisheries biology, ecology and related physical sciences as well as in the social sciences that complement them in developing realistic expectations of fisheries policies. A major effort is needed to develop more of this capacity to objectively evaluate and understand the potential of the fisheries. This must start in the school system and continue into the secondary education system and into our degree granting and other post-secondary institutions. The ultimate aim, in this fishing province, should be

to develop centres of excellence in the public policy of fishery management, similar to those found in other coastal provinces of this country.

Memorial University should be mandated to strengthen its public policy capacity in the total field of fisheries management so that it can contribute more effectively to the development of policy for the future. This capacity should be multi-disciplinary in nature covering social sciences, education, business and engineering as well as the natural fisheries sciences. We note the participation by researchers at Memorial in the Coasts under Stress project, a comprehensive project focussing upon both the Atlantic and Pacific Coasts. We note as well the Chair in Fisheries Conservation at the Marine Institute of Memorial University. These initiatives build a foundation for the enhanced role the University could play in support of conservation and stock rebuilding objectives.

Pro-active Stance on Stock Re-Building

It is time for the government and people of this province to develop a higher vision of the potential of rebuilt fisheries and ocean resources around all our shores. A pro-active approach to rebuilding key groundfish stocks, along with restoration of fisheries habitat and bio-diversity, will require a significant commitment and even some sacrifice. The current fishery, while it is producing record levels of landed values, is taking place on the basis of a depleted ocean ecosystem where there is narrower range of species than formerly. Some experts argue that fishing further down the ocean food-chain (as is the case with our large crab and shrimp fisheries) is a dangerous practice. The matter of multi-species management may be relevant here as well. However, this concept has not really passed the theoretical stage in terms of its full-fledged application to commercial fisheries. We are proposing the promotion of this multi-species eco-system approach through increasing emphasis on the factoring in of species interactions, predator-prey relationships and habitat considerations in future management measures. This would also echo the Canada *Oceans Act* approaches of *sustainable development* of the oceans and their resources; conservation, based on an *ecosystem approach*; and, the wide application of the *precautionary approach* to the conservation, management and exploitation of marine resources in order to protect these resources and preserve the marine environment.

All measures available to promote restoration of depleted stocks must be considered, including a planned reduction in the number of predators, particularly seals, a moratorium on capelin harvesting, and experiments to determine the impact of enhancement and recolonization.

The publicized adoption of this as a major goal of this society would focus attention nationally and internationally and give the province a renewed sense of place. This effort could engage people on many levels including public participation in defining realistic objectives of stock rebuilding with an all-party committee of the House of Assembly to lead the initiative. The mandate of such an all-party committee might include the following issues:

- What lessons can be learned from the Northern cod collapse, and those of other major groundfish stocks?
- How can we promote innovation in conflict resolution associated with the management of the fisheries?

- How can a stronger conservation ethic be promoted?
- How can women play a bigger role in building this conservation ethic?
- How can the schools play a more effective role in educating the general public on the past and future of the fishing industry?
- How can the University play a more prominent role in undertaking public policy research in defining the policy options for rebuilding stocks, restoring biodiversity and fisheries habitat and other key components of fisheries management?
- What other societal changes will support a stronger conservation ethic to promote decisions that will benefit present and future generations?

Provincial Conservation Ethic

We continue to be disappointed by the general lack of anything resembling a conservation ethic on the part of all but a small number of industry participants. It is understandable that conservation can require significant sacrifice and may be perceived in the short term not to be worth the sacrifice. On the other hand, if there is not some increased awareness of the importance of this ethic and practice soon there may not a long-term future for the fishery. Efforts to develop such an attitudinal change, while difficult initially, could become a source of provincial pride. Again, this is an initiative that needs to begin at the earliest stages: in the school system. However, it should be aimed at all parts of the populace, not just the participants in the fishing industry.

In the context of building a stronger conservation ethic there is an important role for other provincial institutions, in addition to the schools and the University. The provincial Department of Fisheries and Aquaculture can play an important policy role in building a vision of the fishery of the future. Since the moratorium, the staff and budget of the Department have been reduced to the point where many believe the Department has been relegated to a minor role in the provincial government hierarchy. Our suggestion is that the role of the Department should be reassessed to ensure that it is sufficiently empowered and staffed to advise on important public policy issues and to commission research in anticipation of major issues that are likely to arise.

Specific rebuilding targets should be developed for key stocks, such as the major coastal cod stocks and Grand Bank flounders, and such rebuilding targets should be adopted as provincial societal priorities. The Provincial Department of Fisheries and Aquaculture could play a key role in such initiatives, working with the University and DFO scientists. Our suggestion is that these three parties organize an international conference to focus attention on finding the means to accelerate the process of stock rebuilding, along with restoration of bio-diversity and fisheries habitat. For example, these efforts could include experimentation with cod re-colonization using onshore hatcheries to fertilize eggs from wild broodstock and the placement of fingerlings in environments propitious for their survival. Those invited to the conference should include fish harvesters, processing plant employees, and plant operators as well as fisheries scientists, fisheries managers and social scientists. The conference organizers should set as an objective a high level of participation by women from each of these groups.

In conclusion, we believe that the search for effective mechanisms for improved participation in fisheries management should include expanded roles for key institutions in the province, including the House of Assembly, the University and the provincial Departments of Fisheries and Aquaculture and Education.

Conclusions

This report develops a statement of objectives for fisheries policy concerning the use of, and benefits from, the fishery resources adjacent to the province of Newfoundland and Labrador along with the mechanisms to enable the province to realize these objectives through adequate participation in management regimes. In order to develop options and to make recommendations, the consultants began by examining the fisheries management system prior to Union with Canada and the changes that took place subsequently within the context of management actions taken by two governments operating independently. The consultants undertook a survey of the objectives that the two levels of government appear to have adopted over three broad post-Union periods. This survey documents a serious disconnect between the interrelated nature of the fishery policy requirements and the divided jurisdictional responsibilities to make and implement these policies. The result of this disconnect is a dramatic failure of fisheries policy, resulting in the collapse of groundfish and other stocks and the precarious present dependence of the province's fishing industry upon two shellfish species. One of these is abundant (shrimp) but its contributions to margins are low, while the other (snow crab) is declining in abundance but its better margins have created a high measure of dependence.

The report also proposes a new set of policy objectives for management of the fishing industry. These would place first priority on conservation while also providing for a balanced and viable industry that respects the rights of First Nations and of people in adjacent fishing communities. They provide a greater place for the values and aspirations of women participants. This industry would have a level of overall participation that provides for competitive enterprises producing reasonable levels of incomes and overall returns. It would not be a rent maximizing industry but one that provides for a wider range of socially desired values without ongoing operating or capital subsidies. The report recommends that evolution of rights-based management systems continue, subject to appropriate safeguards.

The strengths and weaknesses of the existing management regime and division of powers has been assessed, leading to the conclusion that major changes are required to integrate policy decisions and to achieve policy coordination. The consultants conclude that the climate currently is not favourable for constitutional change, notwithstanding the compelling case for a realignment of fisheries management powers. Instead, they recommend firstly that a joint, federal-provincial policy board be established which would examine the current state of fisheries management and establish stock rebuilding goals for all major stocks, along with measures for restoration of the fisheries habitat and eco-system to the level which prevailed before massive overfishing of major groundfish stocks took place. The consultants recommend to the policy board a major restructuring of fisheries management, with the creation of a federal Atlantic Fisheries Management Commission, a joint Canada/Newfoundland and Labrador Licensing and Allocations Authority, along with a joint federal-provincial policy board.

This report also recommends institutional changes within the province to build a strong conservation ethic. These recommendations call upon action to be taken by the House of Assembly, being the highest deliberative body in the province, by the primary and secondary school system, by the University, by the provincial Department of Fisheries and Aquaculture and by fish harvesters. The consultants recommend that women be given a greater voice in

all fisheries management functions, in recognition of their commitment to the industry and the potential contribution that they can make.

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- The two main decisions on Northern shrimp allocations of recent years are illustrative. In 1997, a new allocation arrangement was introduced in this fishery after a public call for proposals on sharing and significant consultations on that input. This gave most of the TAC increases in 2J3K to under 65 ft. vessels from 2J3KL and 4RS with little or no public outcry throughout the Atlantic. On the other hand, the allocation of shrimp to PEI interests from Canada's NAFO allocation in 3L drew the highest level of political and public criticism in this province. This reaction was the main reason for establishing the Independent Panel on Access Criteria.

- One of the authors of this paper, David Vardy, was the chair of the inshore shrimp panel that reported to the Minister of Fisheries and Aquaculture on the Cooked and Peeled Shrimp Industry.
- The federal Fish Inspection Act (and hence its Inspectors) was never considered a vehicle to control the size of the processing sector, possibly because this was seen as a provincial sphere of authority since the (BC) Fish Canneries Reference of 1930.

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