

POLITICS, MANAGEMENT AND CONFLICT IN THE CANADIAN FISHERIES

A Public Forum

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Politics, Management and Conflict in the Canadian Fisheries
Proceedings from a Forum on Maritime Affairs

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University of Victoria
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Introduction

Cdr. Peter G. Chance
MASC President

In British Columbia, the first word that springs to mind when we think of Canadian fisheries is often “conflict”. Conflict between and within governments, between governments and the public, and between and within communities. Another response might be “management”--or rather, “mis-management”. Whether justified or not, frustration and finger-pointing is the response to our current state of apparently depleted fish stocks in once-abundant rivers and oceans. Underlying both of these responses is “politics”--as both the cause of our current situation and the vehicle for getting us out.

Politics, Management and Conflict in the Canadian Fisheries, the title of this second annual *Forum on Maritime Affairs* of the Maritime Awards Society of Canada (MASC), offers these three key words as a starting point for us as we work toward a solution to the most essential of problems in the current fisheries debate — to protect, and allocate shares in, an increasingly scarce resource, in a climate of mis-trust, uncertainty and social division.

The search for such solutions is what drives the objectives of the Maritime Awards Society of Canada — to promote research into maritime affairs, and to foster and enhance study and public awareness of the vital importance of maritime issues to the economic, social and environmental well-being of all Canadians. This objective is being pursued through the establishment of funds to support post-graduate scholarships at Canadian universities. MASC scholarship funds have been established, and scholarships have been awarded, at three universities — the University of Victoria, Memorial University of Newfoundland, and Dalhousie University in Halifax. A fourth fund has been approved by the University of Calgary which will support advanced maritime graduate studies with an emphasis on Arctic Ocean issues.

The Maritime Awards Society of Canada is a registered charitable organization, and I encourage anyone concerned with or interested in Canada’s maritime affairs to consider becoming a member of the Society.

Another goal of the Society is to sponsor an annual public forum for expert analysis and general discussion of current issues in Canadian ocean policy and management. This present Forum follows on the success of the first MASC public forum on maritime affairs held in 1995. This time last year, the University of Victoria was the scene for ***Pacific Ocean 21: Four Problems in Search of a Solution***. That forum sought to take bearings from four corners of the chart of maritime issues: ship-building and ship repair; integrated coastal eco-system management; the salmon fisheries; and Canada’s defence role and security issues in the Pacific. (In this age of global positioning systems and electronic charts, there might well be other corners, of course.) The range of topics covered in that first MASC forum was indeed ambitious, and it was particularly successful in providing a solid foundation upon which to build future, more focussed, discussions. In subsequent years, ocean technologies and concerns with security – both of the nation state as well as of the environment – will be topics for consideration.

In 1996, however, our concern is for the current health and the future viability of the Pacific fishery. When the present program was still at the planning stage, the program committee

didn't anticipate that fisheries management on the west coast would develop into the explosive issues that have played themselves out over the past several months. If we had listened more carefully to Arthur May, the dean of fisheries management in Canada, we might have better anticipated the current state of affairs. He is quoted as saying:

Fishing, as you know, is Canada's oldest industry. That brings us to Canada's oldest headline: "Fishery In Crisis". And the second oldest headline: "Task Force Formed On Fishery Crisis".

Unfortunately for the fish on the west coast, though fortunately for the level of interest in our meeting, our timing was good as we assembled at the University of Victoria again for our own "task force" on **Politics, Management and Conflict in the Canadian Fisheries**. In the early months of 1996, the issue of declining fish stocks again stirred up conflict among fishers, advocates, government officials and politicians, and made the Pacific front page news once again.

When the program for this forum was designed, many complicated questions underlying ocean resource management and fisheries issues were candidates for inclusion in the public education program of MASC. International negotiations, the UN Convention on the Law of the Sea, the Convention on Straddling and Migratory Stocks, amongst others, all created an increasingly complex set of international commitments and obligations, and unclear rights. More specifically, relations with the EU and North Atlantic fisheries institutions, and relations on the West Coast, especially with the Pacific salmon issues, were generating increasing uncertainty.

This time last year, amendments to the Fisheries Act and the Oceans Act were in train. Fisheries and Oceans Canada departmental reorganizations were reallocating duties among vessels which might carry DFO, Coast Guard or Navy personnel. There was increasing recognition of the vast irreducible uncertainties inherent in the complex ecological systems which underlie the intricate networks of interacting species which make up a fisheries resource. And experiments around the world with new management systems based on enterprise allocations and community allocations, individual transferable quotas and other market based instruments were generating controversial experience which needed appraisal.

In order to understand concerns with the Fisheries, it seemed, some understanding of all of these developments and where they might lead would be essential. In particular, this forum was intended to refer briefly to several issues: the concept of Canada's international rights, responsibilities and commitments with respect to oceans and ocean resources; the complex science underlying the dynamics of marine resources, and the lessons we should learn from the recent East Coast experience; the complicated management measures which have been introduced to govern entry, effort and harvesting in various fisheries, and the lessons we should learn from others about them; the present state of play in international negotiations around the allocation of harvests, particularly – on this coast – the Pacific Salmon Treaty; the present posture of the federal government in its approach to oceans and fisheries matters; the evolving interests in the Pacific fisheries; institutional issues around monitoring, measurement and community management; compliance, monitoring, enforcement and self-regulation; and how current proposals for constitutional, regulatory, organizational and administrative change might impact on all those longer-term issues.

None of this, of course, anticipated the current concern with fleet reduction plans, even though the question of reduced harvesting capacity obviously has been a central management issue for a long time. The present forum evidently could not avoid close consideration of the Mifflin

Plan presented just prior to the opening of the meeting, and there was indeed lots of heated debate. But because the program was not designed to address this issue, the presentations at the forum were conducted as originally envisioned. Discussion of the current fleet rationalization plan was ably addressed by our luncheon speaker, the Hon. Ted McWhinney, Parliamentary Secretary to the Minister of Fisheries, and by Louis Tousignant, the Director General (Pacific Region) for the Department of Fisheries and Oceans. This publication also helps flesh out the issue with an appendix containing background material gathered in the weeks following the forum.

Thus, in the body of this document we find an opening section in which two distinguished scientists confront the problem of drawing policy lessons from uncertain and contested science. A second section examines the use of economic instruments in the attempt to manage fishing activities effectively and sustainably in this uncertain setting. The third section adds to this economic and scientific background some diplomatic and legal dimensions, focussing particularly on the UN Convention on the Law of the Sea and the Pacific Salmon Treaty.

The luncheon address of Dr. Ted McWhinney provides the bridge which carries the discussion from this international/legal context into the contemporary concern with the Pacific Salmon Revitalization Plan ("The Mifflin Plan") explored at greater length in the subsequent section.

Two further presentations explore more general aspects of individual conduct in the face of the incentives created by various institutional arrangements for collective or communal management. Some practical questions of compliance and enforcement capability in the international setting close the loop, and the central threads of the day's discussion are pulled together in the rapporteur's summary. In the annex, a series of subsequent developments are traced to provide an up-to-date context for this on-going and critical policy challenge.

As President of the Maritime Awards Society of Canada (MASC), it was my distinct pleasure and honour to welcome a distinguished group of speakers to our second forum on maritime affairs. The wealth of expertise and vision to which we in the audience had access proved to be an invaluable reference in understanding how Canada can best meet its commitments to the global society, and discharge its obligations to future generations of Canadians and the rest of the world, for stewardship of much of the world's oceans and marine resources.

I would like to acknowledge, on behalf of the Maritime Awards Society of Canada, the generous support received from the University of Victoria and the Francis G. Winspear Chair for Research in Public Policy at the University, and from the British Columbia Ministry of Environment, Lands and Parks; their support was essential to making this forum the success that it was. The participation of the British Columbia Ministry of Agriculture, Fisheries and Food and its Deputy Minister, Lorne Seitz, and the generous support of the BC Fisheries Secretariat for the duplication of this publication, is also gratefully acknowledged. Professor Rod Dobell organized the program and Justin Longo, working with him, edited and prepared this text for publication.

I would like to thank the Hon. John A. Fraser, Canadian Ambassador for the Environment, who presided as Honorary Chair at this Forum and brought to the meeting, in his opening remarks and participation through the day, his trademark concern and enthusiasm for the health of the west coast fishery. I would like also to thank the Hon. Robert G. Rogers who, in his capacity as Patron of the Maritime Awards Society of Canada, gave an eloquent and thoughtful charge to our forum, and our society, in his opening address.

We in MASC are happy to offer this record of discussion in the Second Annual MASC Forum as background information useful for anyone concerned with the future of the west coast fisheries.

Commander Peter G. Chance
President, Maritime Awards Society of Canada
Victoria, British Columbia
September 1996

Opening Address

The Honourable Robert G. Rogers, OC, KSTJ, OBC, LL.D., D.Sc.M., CD
Patron of the Society

Good morning, Ladies and Gentlemen. Let me say how delighted I am to be Patron of the Maritime Awards Society of Canada and to welcome you to this forum. When I was approached to accept the role of Patron it did not require much arm twisting. The sea is a source of endless fascination for us. Throughout history artists have sought to capture the many moods and colours of the sea and writers to portray its power and mystery through language and metaphor. One of my favourite poems is John Masefield's "Sea Fever" with its evocative beginning:

*I must down to the seas again, to the lonely sea and the sky,
and all I ask is a tall ship and a star to steer her by.*

Most of us, lacking the ability to express our fascination in artistic terms, are content to make up any deficiency by buying real estate with a sea view!

Of course the sea, as well as our rivers and lakes, are more than an inspiration. They are one of Canada's most prolific and precious natural resources and form the basis of an industry crucial to Canada's economic well-being. I have been fortunate enough to have lived, worked and travelled from one side of this great country of ours to the other and in so doing have gained a deep appreciation of Canada's debt to its maritime industries and heritage.

Geography has made us a maritime nation. Two great oceans cradle Canada's east and west coasts and our northern boundaries are circled and protected by frigid Arctic waters. The early settlers came to our shores from Europe braving the stormy Atlantic for a chance at a new life in a vast unspoiled country. Today our newcomers arrive largely from the Pacific rim countries and they too bring fresh ideas and energy to their new home. Canada has been richly blessed in human and natural resources and can take pride in the diversity and industry of its people. Our track record with our natural resources is another story. As some of you are aware, I spent my working life in the forest industry - another beleaguered Canadian resource - so the problems in the fishing industry have an all too familiar ring.

The problems facing our fisheries were unthinkable only a few short years ago. First of all there was no shortage of fish; the seas on both coasts were bountiful, teeming with an endless variety of fish, and could never be otherwise. It has been said that at one time you could put a bucket into the waters off the Grand Banks and pull it out filled with fish. What happened? Scarcity, of course, sets off its own chain reaction with groups and nations fighting over the dwindling stocks; the recent "turbot war" being a case in point. Aquaculture provides a partial solution to scarcity but its economic benefits are offset by accusations of pollution and tinkering with the genetic pool. And what about the pollution from other sources in the Great Lakes, in our coastal rivers and streams, the Red Tide which shows up on Vancouver Island and in the oyster beds in Prince Edward Island? International laws, conventions and treaties are set up but how effective are they in the heat of the moment and on the open seas? Whose fish are they anyway? The list goes on and on.

So far I seem to be all doom and gloom and I apologise for that. But I do not wish to diminish the crisis. Nor do I underestimate the challenges: we face complex problems with complex and often unpalatable answers.

The starting point must be in education. What is needed is the will to reorganise our education to integrate the idea of duty not just to Canada and its resources but ultimately to the planet. It is not an original idea nor is it a new one - the concept of stewardship is as old as humankind itself and you will find it in one of its oldest books. It is a transcendent idea that casts a

shadow over balance sheets and environmental concerns, as well as over political expediency and territorial squabbles. It is perhaps the only one which offers us a future. Only through enlightened education can we hope to raise awareness and in so doing find solutions to the challenges facing our fisheries. Only through educated men and women can we hope to take control.

We owe it to future generations of Canadians to bequeath them a country still rich in natural resources. We owe it to other nations to show by example how well we manage our resources. And we owe it to the planet to leave it better than we found it. Early in the nineteenth century the poet Byron berated his society with the words *Man marks the earth with ruin*. He went on to note - with some relief I would surmise - that *His control stops with the sea*. Now with technology our control does not stop with the sea but extends over the seas. We have to take responsibility for that control.

There is not much time left but I think we can do it - and I am willing to try.

I. Science and Irreducible Uncertainty

Science and Public Policy Under Uncertainty: Learning from the East Coast Fishery

Dr. Les Harris
President Emeritus, Memorial University

I am honoured that you have brought me all the way from the far east of our country, where “the hounds of Spring are still upon their Winter traces,” to this delightful clime that speaks more eloquently than I can of the profound effects of differing systems of oceanic circulation. But while our ocean environments are, indeed, very different, I hope, nevertheless, that my reading of the disaster that befell our ground fish stocks may have some relevance to the grievous problems that beset some, at least, of your west coast species that seem to be on the same slippery slope to decimation and, perchance, to commercial extinction. In view of the very limited time at my disposal, I will restrict myself to a synoptic version of a single cautionary tale: that of the stock complex known as “Northern cod.” Northern cod was that population whose annual migrations from the deeper waters of the continental shelf along the East and Northeast coasts of Newfoundland and Labrador to the shallows of offshore Banks and inshore coastal waters, furnished a substantial part of the commercially exploitable biomass that transformed Newfoundland into a “great ship” moored near the Banks and occupied in season by transient European fishers. In due course, that transient fishery became a settled community that became a colony, then a Dominion, and finally a province of Canada.

It will be 500 years next June since Giovanni Caboto reported Northern cod so abundant that it stayed the progress of a boat, and for the greater part of that 500 years, that profligate abundance was the sufficient condition for the existence of a community stretched along some 10,000 miles of sea and ice-ravaged coast. Northern cod, its provenance and its migrations, determined patterns of settlement, the locations of towns and villages, the nature of the economy, and the structure of society. It was Newfoundland’s *raison d’être*, the be all and end all of whatever Newfoundland might be.

Nor, until we neared the end of the 19th. century, did anyone appear to doubt the teeming inexhaustibility of those great schools of cod whose continued fecundity was an article of absolute faith. It was true, as anyone with half an eye could see, that there was some element of natural variability in the annual peregrinations of the schools. There were good years and bad years. But these were put down to naturally varying conditions of wind and sea, of ice and snow, of general oceanic climate, and to the acts of an inscrutable Providence.

But following years of scarcity there were always years of renewed plenty, and, of course, there was *never* a year in which there was an absolute failure throughout the range of the species; nor, any time of scarcity that was not followed by a time of abundance. I have put together the best statistical information available in the historical records — appropriately massaged to account for differing accounting systems among French, Spanish, Portuguese, English, American, Canadian and Newfoundland fleets — of Northern cod landings for the 150 years prior to the moratorium of 1992.

The data show a saw tooth progression of peaks and valleys, exacerbated in particular years by disruptions of normal trade patterns resulting from wars or rumours of wars, or from other forms of perturbation in the international market, but, in general reflecting either a natural variability of overall abundance or, perchance, of availability of gear. For we should remember

that until near the middle of the present century fishers were restricted to an essentially primitive harvesting technology, i.e., to fixed gear set in shallow waters. Significantly, catches rarely fell below an annual value of 200,000 tonnes and rarely exceeded 300,000 tonnes.

The first major disruption of this pattern occurred at mid-century when new technologies, notably the otter trawl, expanded opportunities for harvesting through an extended season and permitted fishers to follow migrating stocks into the deeper and heretofore inaccessible waters of the shelf, and ultimately, to concentrate the harvest upon the spawning aggregations of winter and early spring. The culmination of this new dispensation came in the mid 1960's when West Europeans developed the ultimately efficient and indiscriminate killing machine, the great factory freezer trawler with ice-strengthened hull, powerful engines and winches, and advanced electronic and acoustic fish-finding gear, that permitted fishing in ice-infested waters at great depths, and the tracking and finding of aggregations wherever they might be.

The location of the largest northern cod spawning aggregation, off the Labrador coast, led to an enormous increase in landings to something in the vicinity of 900,000 tonnes in 1968-69. Nor should we overlook the fact, obvious to anyone who has observed this type of fishery, that the recorded catch represents only a part of the total destruction. The small diamond mesh of the typical cod-end of the 60's retained virtually everything that came within its compass, being totally indiscriminate in respect of both size and species. Further, the periodicity of tows was not always determined by catch levels. Often the dumped contents of a cod-end would be high graded whilst the next tow, of predetermined duration, was in progress, and when it was complete and a newly-filled cod-end ready for dumping the remnant of the former tow, consisting of smaller fish and non-target species, would simply be shovelled through the scuppers into the sea. In consequence, I would not be at all surprised if the real catch in 1968-1969 had not been in excess of 1,000,000 tonnes. In any event, the consequences were disastrous. There was a rapid falling off of offshore landings but an even more spectacular decline in the inshore fixed gear fishery.

By the mid-70's the inshore fisheries along the east and Northeast coasts of the province were moribund and for the first time in this century there was official recognition that the living resources of the sea were indeed finite, and, that the nonsense of inexhaustibility had been predicated upon the simple fact that, until now, human predators had not possessed the technology that made total exploitation possible.

I will pass quickly over the negotiations that led to the declaration of the 200-mile economic zone, and will pass over as well the ill-judged and short-sighted compromise, ironically promoted by Canada, that left substantial parts of our shelf outside our effective control and created straddling stocks and an international fishery where none ought to have existed.

So we come to 1977 and the dawn of a new era of what was to be prudent, conservational, scientific, incorruptible, *Canadian* management. The new dispensation was initiated in a spirit of complete euphoria. The depleted stocks would be rebuilt, the foreign despoilers would be excluded from our waters, except where resources were clearly surplus to Canadian requirements, and the East coast fishers would at last enter the land of milk and honey where well-managed stocks would be harvested at a sustainable level into an illimitable future. With the new Jerusalem in sight, fishers and processors alike were urged to embark upon a process of major capitalization, building a new enlarged fleet and new processing facilities in virtually every cove along the seaboard.

To achieve all this, DF0 adopted a strategy under which the fishing mortality would be fixed at approximately 20% of the adult (i.e., sexually mature) population. Assuming a natural

mortality of 20% and an annual recruitment of some magically deduced average number, the theory was that the stock would rapidly rebound to its virginal state when fishing mortalities could be substantially increased and the spawning biomass still maintained at an optimal level that could be indefinitely sustained.

Prima facie, this simple strategy ought to have been successful and, for nearly a decade, indeed, everything seemed to be going swimmingly. Annual scientific assessments indicated that recovery projections were on track; the growth rate of the exploitable biomass was not only meeting but exceeding expectations; more and more harvesters and processors alike were tearing down their barns to build greater. But then, exactly as in the case of the man in the biblical parable, a chill voice pronounced the awful sentence, "Thou fool! this night thy soul shall be required of thee."

The fall stock survey results of 1986 exhibited a puzzling aberration; the fall survey of the following year showed a glimpse of the truth. The glorious dreams of the past decade had been built upon a foundation of sand. Not only was the stock not growing at the projected rate, it was, in fact, not growing at all, indeed, was probably declining. Not only had the fishing mortality not been held at 20%, it was probably in excess of 50%. Suddenly, as one Newfoundland fisherman put it, "the future . . . [became] a t'ing of the past."

If the situation were at all redeemable and if the growth strategy were to be gotten back on track, said the scientists, it would be immediately necessary to reduce the total allowable catch (TAC) by more than 50%, i.e., from 260,000 tonnes to 120,000 tonnes.

This advice fell upon political ears like a thunderclap of doom. How could they now make a *volte face* and tell those whom they had but yesterday encouraged to invest in a glorious future that it had all been wishful thinking? How could they face the horrific social and economic consequences of suddenly throwing tens of thousands of fishers and plant workers on the rocks of unemployment? Caught on the horns of a desperate dilemma they temporized, they set up an enquiry, hoping against hope that the scientists would be proved wrong in their latest pronouncements, or, at the very least, that blame for the debacle could be cast upon the scientific community so that politicians and bureaucrats might wriggle off the hook of responsibility.

In the denouement, there appeared to be ample blame to spread around among all the stakeholders: scientists, technocrats, politicians (federal and provincial), fishers (domestic and foreign), and processors. But I have no time to explore how we might derive a notion of proportionate responsibility. What I can do, perhaps, is to enunciate in brief and general terms what, in my belief, went wrong. From this simple catalogue something usefully applicable to your situation may emerge.

Simply put, then,

1. we were altogether too reliant upon good intentions as guarantors of good results;
2. we grossly underestimated the complexity of the ecosystem within which we were working;
3. we grossly overestimated the strength and depth of our knowledge of the significant physiological and behavioural characteristics of the animals we were intent upon exploiting;
4. we failed to appreciate the weakness of our institutional memory;

5. we failed to appreciate that the “management” of populations of wild fish was totally beyond our capacity, and, that what we should have been intent upon was the management of ourselves and our technology;
6. we placed far too much reliance upon the predictive capacity of our mathematical models;
7. we failed to appreciate the gross deficiencies in the data we fed into our models and which would have rendered the models useless no matter how good they might have been in and of themselves;
8. we failed to appreciate the distorting effect of a world view that is accepted as an article of faith and that will constrain us to see ambiguous data in the way that will make our model work;
9. we failed to appreciate the manner in which higher capitalization demands higher and higher levels of stock exploitation;
10. we failed utterly to appreciate the true significance of those parts of the shelf that had been excluded from our EEZ, and;
11. we failed to appreciate the extent to which sound conservational strategy might be subverted to political expedience.

Regrettably, I do not have time to explore each of these as I might wish to do. I will, however, offer a few points of elaboration in respect of my understanding of why, for example, the predictive value of our mathematical models was so pathetically weak.

1. I believe that the basic stock population numbers with which we started in 1977 and which we inherited from our European predecessors in the assessment sweepstakes, were greatly inflated, perhaps honestly, and perhaps to encourage a TAC substantially surplus to Canadian requirements and hence accessible to European fishers.
2. I believe that retrospective analysis, counting a population of animals only when they have all died and extrapolating a living population from that number, is at best a very uncertain science.
3. I believe that DFO erred in using only two indices of abundance in “tuning” the process of extrapolation from the dead past to the living present.
4. I believe that the indices used were both highly suspect. That based on the CPUE (catch per unit of effort) of the offshore commercial fleet was flawed for several reasons, but notably because when fish assemble in dense aggregations, high catch rates will continue until the last net full has been taken (a cup dipped into a barrel of water will be filled with the same ease as one dipped into the Pacific Ocean). That based on the RV (research vessel) annual survey results, a much more scientific tool, was nonetheless flawed because the survey, conducted on essentially the same dates each year, made no allowance for annual variability of migration and distributional patterns resulting from, for example, ocean temperatures or prey species availability. Further, when the RV index showed a marked variance from the CPUE index, DFO technocrats, under pressure from big fishing companies and politicians, discounted their own science by blending the RV and CPUE values, hoping, presumably, that the average of two wrongs might make a right.

5. Since a relatively small error in weight at age values will be magnified to a significantly large error in biomass calculations for a large population, I believe the treatment of average weight at age values as constants in modelling equations was doomed to produce incorrect results. Further, I believe, that in considering weight at age insufficient attention was paid to factors that determine variability in that domain including environmental circumstances such as temperature, salinity and food availability. Parts of the puzzle that might have been taken into consideration include the rapidly developing and increasingly intensive fisheries for capelin, shrimp and crab, all prey species for cod, that were almost bound to have had an effect upon food availability and hence upon cod growth rates and physical condition. In particular, I find it difficult to imagine that the significance of the capelin fishery should have been treated somewhat casually. For not only is capelin the most important food source for Northern cod, but it was a source already subject to steadily increasing pressures, before human predation became a major factor, from the recovering population of whales of several species, from rapidly burgeoning populations of harp and hooded seals, and from the great colonies of seabirds, at last recovering from the barbarous depredations of the 19th. century.
6. I believe it to have been an egregious error to have inserted into the equations as a constant an average value for annual recruitment. For although such an average might, over a long period of a century or so, come near the mark, for a single decade it was more likely to be wildly erroneous. Indeed, there are countless examples, among many species, of whole decades in which no good, or even average, year class is recorded.
7. I believe it to have been unwise to have accepted uncritically an unchanging natural mortality rate of approximately 20%, even though that number must have been increasing sharply owing to unreported and discarded by-catches from new fisheries and new technologies (one shrimp skipper told me that he had discarded as much as 10 tonnes of juvenile cod to recover one tonne of shrimp); discards resulting from the indiscriminate otter trawl fishery and from high grading practices; mortalities resulting from ghost netting; misreporting by all fleet sectors but most particularly by foreign flag vessels fishing on the Canadian shelf but outside the 200-mile line; and, without being specific, from very large changes in predator/prey relationships.
8. I believe that the scientific modellers wildly underestimated the effect of technological change upon the basic unit of effort. Vessel design, sea keeping capacity, power, winch capacity and power, new lighter weight but stronger materials ranging from trawl warps to monofilament net webs, navigational equipment, electronic fish finding gear, etc., etc., etc., all combined to enhance enormously the fish finding and killing capacity of the average fisher. To this technological revolution, whose real force has not yet, I believe, been fully recognized, we must add the power of experience and the very steep learning curve upon which Canadian deep sea fishers entered in 1977.
9. I believe that the failures of the model in the early days were not observed simply because people believed in it and desperately wanted to believe in the virtues of good Canadian science and good Canadian fishing practices. It is not a rare phenomenon that one's perceptions of particular data are influenced by one's world view; and where differing interpretations are possible, it is human to take that which fits the world view and makes the model work. This does not bespeak dishonesty, for if it did, then every

pre-Copernican astronomer was a charlatan and every anatomist pre-Harvey was a quack.

10. Finally, I believe that even good scientists will occasionally be tempted, in a realm where uncertainties abound, to couch recommendations in language that may be interpreted as what the Minister wishes to hear. And the Minister himself, if he has been told by a very cautious scientific advisor that his biomass estimates are plus or minus 30% and that a reasonable TAC may therefore fall somewhere on the spectrum, shall we say, of 200,000 to 260,000 tonnes, will be most likely to select the larger number and, if challenged, to announce that the figure was one provided by the scientific establishment. Nor are the media much inclined in such circumstances to open a sympathetic ear to the beleaguered scientist who seeks to explain the horrendous uncertainties that abound in ecosystem dynamics, and the most extreme difficulty of making valid predictions in the face of such uncertainties.

I realize that I have become too discursive and risk outstaying my welcome. Now, to make minor amends for my long windedness, I really will hasten to my conclusion. I will close with three simple dicta which I hope you may take as wisdom:

1. In fish stock assessment and in fisheries management there is only one solid basis for proper action and that is sound and comprehensive knowledge predicated upon good science.
2. Multi-species modelling is as yet beyond our scientific and technological capacity; successful ecosystem modelling is as yet beyond our dreams. We must live and work with vast uncertainties. In such a regime error is inevitable. What we can assuredly do is always to make our inevitable errors on the side of conservation.
3. Finally, I would paraphrase the cautionary principle of the LOS Convention and suggest that we must never permit ignorance to be an excuse for an inappropriate decision in fisheries management.

The Road to Sustainability[†]

Dr. Carl Walters
University of British Columbia

The institutional changes suggested in Chapter 5¹ might well take decades to bring about. It would be economically and socially devastating to many people involved in British Columbia's fishery, from the fishing vessels to DFO offices, to try and force these changes much more quickly. More, we really do not know if community-based systems will create the kinds of incentives and involvement in management that their proponents claim. They could be torn asunder by factors ranging from cheating by members to failure of monitoring and enforcement programs, and in doing so cause more harm than good. Such systems need to be tested and improved through the same kind of experimentation and practical pilot experience that we would use to evaluate risky technological innovations, and that we should have used more carefully in such historical developments as our Salmonid Enhancement Program.

Three key steps need to be taken soon if we are to embark on a program of institutional experimentation and improvement. First, economic incentives should be created for the formation of local, community-based management authorities. Second, there need to be changes in the legal restrictions and regulations for licensing commercial fishing, to provide protection for innovative institutional arrangements and to encourage development of safer and more selective fishing technologies. Third, there needs to be immediate restriction of some interception fisheries and management activities that are most threatening to long term biodiversity, the crucial ecological building block for future management systems. These steps may mean some lost jobs and income, but these are changes that the fishing industry will very likely have to face in any case. Further, the calculations in Appendix 1 hint that some directions of change may actually enhance employment in fishing.

Changing Management from Public Burden to Economic Opportunity

DFO already uses a variety of contract and charter arrangements with local people to provide the seasonal equipment and manpower needed for in season management of some fisheries (see Table 2, Appendix 1 for examples in Rivers Inlet). Contract employees from the Coastal Patrolmen's Association have carried out key monitoring tasks for nearly a century. The Aboriginal Fisheries Strategy is providing encouragement and training for Native people to develop management programs that include activities ranging from enforcement of regulations to monitoring spawning escapements (Pearse, 1992; McDaniels, et al., 1993). A very modest but critically important next step would be to encourage community organizations to contract with the public to provide complete management "package services", with each package cutting across various community interests and providing all management functions (ranging from offshore test fishing to enforcement to spawner enumeration and habitat restoration). This step would in effect create a new "industry" associated with fishing, with attendant economic

[†] This paper originally appeared as chapter 6 of *Fish on the Line: The Future of the Pacific Fisheries*. ©David Suzuki Foundation, 1995. Reprinted with permission.

¹ All citations in this paper to other chapters and appendices are in reference to the publication *Fish on the Line*.

development and employment opportunities. If public funding for agencies like DFO continues to shrink, this industry will even provide an economic safety net for some DFO employees, and prevent the loss of their much needed experience and expertise.

This step would be just another trick for maintaining public programs (disguising programs as contracts), and could even increase public costs, unless it were accompanied by at least two extra conditions: (1) a commitment to recover management costs directly from those who benefit directly from it, i.e. the fishermen, via license fees or local access charges to particular managed areas; and (2) an agreement to allow local management authorities to limit access to their fishing areas so as to reduce fishing costs and hence make part of the net income from fishing available to pay for the management costs. For an idea of what can be gained or made available by this second condition, compare the first two columns of Table 1, Appendix 1. Precedent for limiting the number of fishermen allowed into a management area has historically come mainly from the herring fishery, where large numbers of efficient fishing vessels (seines) have been attracted to small fishing areas by high roe herring prices; in this case, conservation and safety concerns have been used as the excuse for access limitation.

An advantage of seeking contract arrangements would be to encourage the development of a variety of management approaches (and divisions of responsibility among local stakeholders) best suited to the diversity of local conditions and opportunities that occur along our coast. That is, it would free people to try many alternatives to the current DFO regulatory model. In some places, most management functions might be best carried out by Native groups, while in others there might develop healthy cooperative arrangements between Natives, recreational, and commercial fishermen. In others, processing companies might take the lead to try a “corporate” approach to management.

All of these organizational experiments would of course have to be monitored and regulated by DFO as representative of the public’s interest in long term sustainability. It can be expected that at least some local organizations will end up being co-opted by local and short-sighted interest groups, essentially bowing to local pressure to put forward plans and in season regulatory revisions that would result in dangerously high harvest rates and/or misleading statistical pictures of management performance. Existing DFO stock assessment and management review processes, like PSARC (Pacific Stock Assessment Review Committee), are well placed already to provide much of the design advice and careful checking of plans that would be needed, and field staff are already in place to check on such matters as compliance with regulations and quality control in information gathering.

There is urgency in this recommendation. DFO now has some financial flexibility and a considerable pool of expertise and experience that could be used to assist in training local management people and monitoring experiments in management organization. There is a very real risk of losing this window of opportunity as Aboriginal Fisheries Strategy funding is completed and as an aging DFO staff approaches retirement under existing restrictions on staff recruiting.

Removing Legal Impediments to Local Authority, Responsibility, and Safe Technology

Suppose that a community of fisheries stake-holders came forward today with a proposal for local management of some area on the coast, such as Barkley sound with its rich recreational and commercial fishing opportunities, or Rivers Inlet with its relatively simple sockeye salmon fishery and potential for cooperation between commercial and Native interests. What legal barriers and bureaucratic regulatory impediments would this community encounter?

First, they would have to ask for creation of an exclusive fishing area or areas, since it would make no sense for them to invest in various management and protection activities if the fruits of their labours were accessible to the entire B.C. fishing industry. They would run into big trouble right at this point, since there is at present no provision in our regulations for exclusive area licenses. In fact, fishermen have so feared such licenses in the past (because they have depended on mobility to survive in the face of unpredictable harvest opportunities) that they have worked to establish a legal precedent for treating such licenses as unfair.

The problem with assigning them an exclusive fishing area is not simply that DFO lacks an administrative category for such licenses. At issue here is the more fundamental question of what rights to continued access or compensation have been established by existing license holders who would be excluded from the area. There are two extreme views about this issue: (1) fishing licenses have been issued by the public as a privilege of access to the public's resource in the past, and this privilege can be revoked at any time if it is in the public's best interest to do so; or (2) licenses constitute a basic right of access, i.e. a property right, that cannot be taken away without reasonable compensation. Most likely the second of these views will prevail, and the community will have to work out some scheme for compensating other fishermen for lost fishing opportunity.

Second, they will want to establish part of their fishery as an outside test operation, operated with a relatively small number of boats but at times and places outside of existing fishery openings and perhaps using non-standard fishing gears. Again they will run into trouble, because while DFO can contract to fishermen to conduct test fisheries, they are constrained to follow various general rules concerning government contracts (competitive bids, etc.) and cannot just issue special test fishing or survey licenses. If the test fishery uses non-standard gear, it may fall into a special category of regulations concerning exploratory fishing activities.

If the stake-holders have not given up entirely by this point, they will soon encounter still other impediments. If they want to try using large traps or fish wheels for fishing, to allow live release of non-target populations, they will run up against regulations that were put into place nearly a century ago when such fishing methods were considered dangerous and unfairly competitive compared to gill nets and trolling. Notice here that there is nothing in principle to stop DFO from changing the regulations, but where is the incentive to do so considering the outcry that is sure to come from existing lobby groups?

But wait, there is still more to come. Suppose they have now managed to obtain agreement at least in principle about all their licensing and gear requirements, and have worked very hard to put together a management plan that looks like a substantial improvement on past arrangements for the area. They now risk having this dandy plan co-opted by others, for example by being made part of the Aboriginal Fisheries Strategy. If you think this would be unprecedented, ask a commercial abalone fisherman what has happened to their elaborate plans for surveys and local licensing.

Three initiatives are now providing impetus and opportunity for change in legal arrangements for fishing. First, Native groups are developing community-based management systems at various locations along the coast, as part of the Aboriginal Fisheries Strategy. Information gathering initiatives (like those reviewed by Nish'ga and Klemtu representatives at the recent 2nd Annual Coastal Communities Conference on Fisheries, Prince Rupert, April 1994) in particular are becoming seen as very helpful in empowering local communities, but so far mainly in relation to debates with other users about allocation and needs for conservation. Second, creation of the South Moresby Marine Park may offer a new legal avenue for licensing local initiatives; consumptive uses like fishing will be allowed in part of the Park, and Parks

Canada has authority to license business concessions. There appears to be no reason in principle why fishing interests could not be counted and licensed among such concessions. Third, some fishermen are beginning to press DFO for area licensing, which DFO can now do provided fishermen voluntarily accept a plan for fairly allocating the licenses. However, there are some serious economic problems with this approach, as indicated in the Appendix 1 calculations for Rivers Inlet.

Creating a Legal Requirement for Conservation and Sustainability

Existing fisheries legislation permits the Minister of Fisheries and DFO wide latitude to ignore conservation needs when balancing various demands on the fishery resource. The Minister is not required to take whatever regulatory steps might be needed to stop declines in Georgia Strait chinook and coho stocks, even if such excuses for inaction as habitat loss and changes in the ocean environment could be ruled out. DFO can knowingly allow wild populations to be overharvested in mixed-stock fisheries targeted on hatchery fish, if no way can be found to protect those wild populations and if they are no longer of much economic significance. DFO can turn a blind eye to depletion of various localized marine resources like clams and prawns, claiming lack of financial resources to monitor and enforce regulations on such fisheries.

This discretion must be severely limited, whether through new legislation or amendment of the Fisheries Act. Conservation of all remaining natural populations, no matter how small, should be made an absolute requirement and first priority in all fisheries management planning and administration. No public representative (DFO official) should be allowed to knowingly engage in an enhancement or regulatory activity that significantly threatens a natural population. Legislation along these lines would not stop fisheries managers from making various mistakes and errors of judgement in the face of great uncertainty; that would not be humanly possible. But such legislation would open the door to careful public scrutiny, review, and even (as a last resort) legal action to ensure that DFO does protect our public interest in long term sustainability.

Partnerships for Information

Fisheries ultimately depend on ecological production systems, but their viability is equally dependent on information. It has been emphasized repeatedly above that fisheries literally live and die by how skilled we are in informing ourselves about their fluctuations. The people of Newfoundland just learned this vital lesson the hard way.

Had a major ecological production crisis hit the B.C. fishery 15 years ago, most observers would have predicted the resulting allocation battles to shake out roughly as:

- winners (or those losing the least): seiners, trollers
- losers: Natives, gill nets, perhaps recreational fishermen.

Should crisis strike again (and it will), allocation battles would likely have a very different outcome:

- winners: Natives, recreational fishermen
- losers: everybody else.

There are two ways for fishermen to deal with this possibility: (1) deny it, and hope for the best while trying to consolidate a strong enough political and legal power base prevent it; or (2) accept it as possible and begin building positive partnerships that will change the battles into efforts of shared responsibility and survival.

Now back to information: one of the strongest arguments that our outside fishermen can bring to discussions about partnership is their ability to provide better information to bear on the management of local, inside fisheries. The time to start developing such partnerships is now, before crisis pushes all stake-holders onto the defensive. Though it will be argued below that some of the more dangerous interception fisheries should be scaled down as quickly as possible to prevent loss of biodiversity and future productive options, it would be sheer folly to either eliminate these fisheries entirely or let them collapse as an evolutionary byproduct of the economic and political selection process that will accompany the next production crisis.

Creating Incentives for Innovation in Fishing Technology Toward Selective Gears

Many of our worst interception problems could be solved very quickly if fishermen were encouraged or forced to develop more selective (eg live release) fishing gears like quick-deployment, drifting traps. Judging from the remarkable inventiveness that fishermen have displayed in finding ways around historical gear restrictions and in becoming more effective at competing with one another, the limiting factor is almost certainly not a physical or engineering one. Innovation is discouraged now by both our licensing system and by the politics of gear-based lobbying and peer pressure.

At least two kinds of incentives could be used immediately to encourage development of more selective gears for use in problem situations like the mouth of the Skeena River (1) economic subsidies, by transfer of funds into gear research; and (2) closure of fishing areas and reduction of fishing times except to selective gears. Transfer of SEP funds from hatchery production into selective gear research and testing has already been proposed. A heretical but likely effective suggestion for eliminating steelhead interception on the Skeena has been to simply announce that the commercial fishery is closed except to gears that release all steelhead alive; it is a pretty safe bet that the entire commercial fleet would be back on the water within six months of such an announcement, with a whole assortment of clever ways to avoid killing steelhead. The heretical suggestions deserve more attention, since they involve the basic issue of accountability. Think of this analogy: suppose a prosperous businessman runs over a child, should we let him get away with this because his employees would lose their jobs if he is jailed? Should we let a fisherman kill non-target species just because jobs would be lost if his activities are restricted, especially if killing those fish means significant economic or personal loss to other fisheries stake-holders?

Scaling Down the Most Dangerous Interception Fisheries

There is a relatively short hit list of major fisheries that now pose the biggest threats to maintenance of fisheries biodiversity in B.C.; in alphabetical order, these are

- Fraser River gill net
- Georgia Strait sport fishery
- Johnstone Strait Seine and gill net
- Juan de Fuca Seine
- outside troll
- Skeena River gill net
- trawlers (shelf and deep water)

The salmon fisheries in this list are of course also our largest and most valuable ones, so no sane observer would suggest that we try to get rid of them as quickly as possible. But we have got to do something soon about the impacts that they are having on non-target populations.

Fishermen are well aware of these problem situations, and here are some of their own suggestions for improving matters while minimizing economic disruption:

- (1) encourage replacement of gill nets with live-release gears (see above), including developing Native river fisheries;
- (2) require seiners to brail catches (dip net out non-target fish) at places and times of worst interception;
- (3) reduce sizes of seine areas to avoid aggregations of other species (already done to likely extent possible);
- (4) maintain troll fleet size while equipping trollers to provide better information for management (on board computers, etc.--SEAGRID concept);
- (5) require catch-and-release of all wild chinook, coho in Georgia Strait;
- (6) encourage transfer of trawl licenses to more selective gears, eg longlines;

This sample of ideas represents only the most widely discussed options that have arisen in recent debates about allocation and interception. There may be many more worth considering, like using seines with live release handling in River mouth areas, and there is a key need to encourage fishermen to bring such ideas forward by providing forums where they can speak freely and imaginatively.

Technology to Improve Monitoring and Drastically Reduce Illegal Fishing

Cooperative management programs and partnerships at all levels in the fishery must ultimately be based on trust, and it does not take much cheating (or expectation of it) to turn cooperators back into competitors. We do not know how much cheating in the form of illegal fishing and misreporting goes on today, and this fact alone makes it much harder to build cooperation. Further, our enforcement systems are extremely expensive.

There is a simple way to end most illegal fishing, and at the same time provide much better biological monitoring data on the spatial distributions of fish and fishermen. That is to require every fishing vessel to carry a permanent, closed transponder unit that can be queried from shore radio stations or satellites to regularly provide position information on the vessel. Installation of such units would be a once-off "license" cost of no more than a few thousand dollars for each vessel, and the shore-based computer systems that would cycle through the transponders and record positions every few minutes or hours would cost on the order of a few fishery officer salaries. Combining the computer tracking information with field catch rate and sales slip landing information would allow biologists to construct detailed maps of relative abundance changes, a key requirement for improving in season adaptive management systems. An extra bonus from this arrangement would be a substantial reduction in the cost of search and rescue operations, i.e. it would help make ocean fishing safer.

This is not a new proposal, and many fishermen have complained bitterly that it represents an Orwellian intrusion on their privacy. That argument is simply nonsense. The public has every right to monitor activity on its waters that may affect its fish, and we already exert that right through a clumsy and inefficient surveillance program with expensive vessels and airplanes.

Much cheaper transponder units could also be required on recreational fishing vessels and as attachments to river fishing gear by Natives. However, it is doubtful that much use could be made of the resulting flood of information. There is a peculiar argument about how it would not be fair to require commercial vessels to carry transponders unless everyone else does too.

Investment in Knowing Who is Who: Marking and Tagging Programs

One of the most important functions served by our hatchery program has been to mark large numbers of chinook and coho salmon, providing indispensable information for international negotiations and assessment of harvest rates. This function needs to be strengthened and improved no matter what happens to salmonid enhancement programs (SEP), and in particular should be extended to many more populations (especially wild ones) by providing the required materials and training to local fisheries interest groups such as SEP community projects, watershed stewardship societies, and Native management teams.

Development of live release fishing gears would create still more opportunities for cooperation in marking programs to give better estimates of harvest rates, release survival rates, and population sizes (mark-recapture estimates). Such programs will be especially important in evaluation of release mortalities in intensive fishing situations where an individual fish may be captured several times as it moves through a single fishing area.

How are better marking programs to be funded? Marking is fairly cheap, but mark recovery and mark rate sampling from catches and spawning areas is very expensive. Some public funds and manpower might become available through things like improvement in surveillance technology (previous section) and reductions in some SEP activities, but there are many competing demands for such funds. A safer and wiser approach would be to seek funding directly from the fisheries, through cost-recovery mechanisms like increased license fees and landing taxes. The argument here is that all fisheries interest groups stand to gain from knowing more about where fish go and how abundant they are, so all should share in the cost of acquiring this knowledge.

Education Programs for Local Managers

If responsibility and authority for management are ultimately to be shifted more into the hands of local communities, we have got to begin soon to build a substantial number of people with the technical knowledge needed for effective management. This knowledge ranges from basic ecology and population dynamics to statistical sampling design and information systems management, and is not easy for people to grasp. A competent fisheries manager requires roughly the same literacy and quantitative ability as we would expect of professional engineers. A grave mistake in the past has been to assume that knowledge of biology is enough, when in fact mostly what a fisheries manager does is to work with statistics; relatively few DFO staff and outside consultants are good at this, and those few are being worked to exhaustion.

This problem is not going to be solved by putting a few more people through existing university and college programs. We need to develop an educational process that feeds on itself, using existing skilled people and their experience to help others who can then go on help still others. An approach like this was used by DFO in the 1970s, and some of the people who participated in that program have done very well and could provide the intellectual backbone for a renewed in-service and outreach effort. Like marking programs, funding for this effort could come from a variety of public and private sources without being a major burden to any single stakeholder. The key need now is for some dedicated individual to take the lead in making it happen.

DFO has made an excellent start in this direction through SEP investment in a “Streamkeeper’s Handbook” that lays out in clear and simple terms how to do such things as stream mapping and stream cleanup. The format and approach used in this handbook could easily be extended to matters such as how to conduct in season harvest assessments and escapement surveys. The key need is for clear advice about how to design sampling programs to give objective and unbiased information about the range of factors that a local manager must consider in running a fishery while restricting it so as to be sustainable. An indication of why something like this is urgently needed comes from the way fishermen have responded to suggestions that they voluntarily participate in things like abundance surveys. They are very eager to do so, but usually ask that they be allowed to choose where and when to fish (sample); they are eager to demonstrate that they can find fish (which we already know they can do) but are not eager to spread their efforts in the ways needed to really tell how abundant the fish really are. Their attitude is great so long as the only objective is to convince an unwary bureaucrat that maybe there are enough fish out there to justify a fishery opening, but would cause them big grief in the long term when they discover that they have been able to find the last few fish.

Creating a Voice for the Fish: An Independent Conservation Commission or Ombudsman

Our fish are obviously threatened by various vested interests, from commercial fishermen to loggers. But events such as the disappearance of 1.3 million sockeye salmon from the Fraser River in 1994 make it clear that these vested interests include not only the traditional bad guys, but also many who are usually thought of as the good ones. DFO representatives assured us with paternalistic confidence that the situation is under control, and the missing fish were a combination of counting errors and mortality due to high water temperatures. But what they should have told us is that they haven’t a clue what really happened, and that they simply do not have the resources to monitor and manage properly anymore in a world of changing demands and threats. So we clearly cannot trust our own agency officials any more. Native representatives, supposedly a voice for conservation and wise husbandry of resources, were quick to blame commercial fishermen for the disappearance; this is particularly bizarre and worrisome, because the apparent disappearance involves measurements made entirely upstream from the commercial fishery. So either the Natives have entered the finger-pointing arena of “you-do” conservation, or are having real trouble understanding the information issue. Either way, their reaction should hardly give us confidence that they can capably and responsibly take over various key management functions on the Fraser River system.

We very badly need an independent commission, authority, or ombudsman’s office that can provide the public with honest and objective appraisals about what is really going on when such conflicts arise, about long-term trends and possible future threats, and about progress toward meeting various objectives related to biodiversity and sustainability. This watchdog operation would have two key functions: dispassionate review and analysis of scientific information related to the fisheries, and a broad educational mandate to advise both the public and particular fisheries interest groups on sustainable management practices and requirements.

Learning by Example: Supporting Experiments in Fishery Organization

Many people in government and industry are rightly suspicious about whether there really are better ways to manage our fisheries. The simplest, cheapest, quickest and ultimately the only way to find out whether these suspicions are warranted is to try some alternative fishery organizations on a pilot or experimental scale that involves tolerable risk to existing and future

fishery interests. Some experiments are already underway in connection with the Aboriginal Fisheries Strategy, the black cod and halibut ITQ systems, a few Central Coast salmon fisheries, and with Skeena River stakeholders seeking ways to avoid damage to other stocks from sockeye harvesting. However, it is not clear whether anyone will be investing enough in monitoring these experiments to really tell us how well they are working in all key performance dimensions (social, economic, ecological), and there is no clear plan for comparing them to reference or control situations where the same monitoring information is provided for “business as usual” management. If the idea of experimenting with people and organizations sounds abhorrent, note that what we need to understand is the comparative advantage of alternative organizations; such comparisons do not come for free.

Here are examples of situations where comparative experiments would be relatively easy to develop from existing institutional structures and initiatives:

- (1) the Rivers and Smith Inlet sockeye fisheries (nearby coastal inlets with similar sockeye salmon runs and an opportunity in Rivers Inlet for commercial and Native fishermen to develop a better in season management system);
- (2) the black cod and trawl fisheries (where initiatives in the black cod fishery appear to be stimulating cooperative arrangements while traditional approaches appear to be pushing trawlers in the opposite direction);
- (3) coastal clam fisheries (where Native management areas can be contrasted with a viciously competitive commercial fishery in other areas);
- (4) prawn fisheries in coastal inlets (where several discrete populations are fished by a small number of commercial license holders, and a different comanagement arrangement could be tried in each inlet--or fewer tried with experimental replication);
- (5) abalone fisheries (where commercial and Native initiatives could be compared);
- (6) salmon fisheries in inlets along the West Coast of Vancouver Island (where growing recreational fisheries have become an important economic contributor to several communities, but with much potential for conflict with commercial and Native interests).

Studying situations like these for a few years is obviously not going to provide direct tests of ecological sustainability; for example, it might take many years for the black cod fishermen to unknowingly destroy that resource through some flaw in their technical assessment or regulatory system. But what we can learn quickly is whether people and institutions can work together to create and implement the type of monitoring, regulatory, and allocation systems that would be necessary to ensure long term sustainability.

II. Fisheries Management and Economic Instruments

Individual Quotas in the Atlantic Fishery: Retrospect and Prospect

Dr. Peter J. Nicholson
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BCE Inc.

I am a little bit of an imposter here, as it's been thirteen years since I have been involved in this industry directly. I suppose the positive side of that, since I now work for a phone company, I have none of the axes to grind which dominate policy discussions in this industry any more.

But, having said that, I am genuinely pleased to have been given the opportunity to be here. This invitation afforded me the chance to go back and look over what has happened in the past thirteen years to a policy that I felt passionately about at the time we introduced it on the Atlantic coast. This policy was, as you know, made official through the Kirby Task Force in 1982. But, in fact – as I'll point out – an example of the sort of quotas that Peter Pearse will describe later had already been introduced on an experimental basis in the Atlantic off-shore groundfishery the year before.

In any event, what's been said this morning by Drs. Harris and Walters, and by Peter Pearse in a moment, is an excellent background to what I have to say. I'm going to go through a few charts that summarize a number of the points that have been made already.

Table 1 – The Great Groundfish Bust (*Atlantic Canada Groundfish Landings*)

Year	Tonnes	Notes
1982	820 000	(peak catch)
1983 – 1991	700 000	(approximate annual average)
1992	460 000	
1993	300 000	
1994	115 000	
1995	100 000	(approximate TAC)

In table 1, you see that the phenomenon that Professor Harris was speaking about applies not just to the Northern Cod but in fact to all groundfish species on the east coast up to date. The peak catch of all groundfish species on the east coast in cod, haddock, red fish, flounders and pollock was about 820 000 tons (in 1982). It remained roughly constant across that mix of species at 700 000 tons during the next eight years and then began a decline in 1992. Finally the total allowable catch in 1995, the year just finished, was a mere 100 000 tons, a great deal of which was not caught.

What that points out, and one can have an endless debate about the ultimate significance here, is that the factors at play in the east coast fishery go far beyond those mentioned by Dr. Harris because, in fact, every groundfish fishery of every description, subject to every kind of catch history, has had roughly the same experience. In the case of northern cod, a more dramatic decline. To make things even more puzzling, the consensus of those close to the industry is that the most overfished groundfish species on the east coast – the cod and haddock in the western end of Nova Scotia and on the Georgia Bank – in fact has recovered more quickly and more completely than the others. So there are many, many puzzles of an ecological and industrial sort in this industry.

Now the second table [table 2, below] fills in some of the economic data for the Atlantic coast. This table is based on 1990 data for the Atlantic, while the industry was still somewhat in full swing, including not just groundfish but the shellfish species as well. We see that a total market value of \$2 billion was not sufficient even to cover the cost of production. (I remember from Professor Walters' chart that at least the B.C. fishery was covering the cost of production.) And when you add the costs of fisheries management that could be specifically allocated to the east coast, another \$330 million in the red, and finally unemployment insurance and transfers, \$680 million, leaving a net negative value from this activity of roughly \$1.1 billion.

Table 2 – Fishing for Subsidies (1990 Data for Atlantic Canada)

	\$ Billion
Total Market Value	2.00
Cost of Production	(2.10)
Cost of Fisheries Management	(0.33)
UI and other Transfers	(0.68)
Net Value	(1.10)

Clearly, when you look at these two charts in combination, the ecological disaster in one case and an economic disaster, by any standards, in the second, something is wrong.

Now, Peter Pearse will discuss the subject that I am going to talk about and I don't pretend that this is the entire solution. But certainly the concept of property rights does come to grips with both dimensions of this problem. And I'm going to go back even further than Peter and begin with Aristotle – presuming an accurate translation from the Greek.

“What is common to many is least taken care of, for all men regard more what is their own than what others share with them”.

-- Aristotle; 4th century BC

Arthur Young is a very little-known obscure English economist who wrote a lot about agricultural and common property issues in the 1700s. He once wrote:

“Give a man the secure possession of a bleak rock and he will turn it into a garden; give him nine years' lease of a garden and he will convert it into a desert.”

-- Arthur Young; 1787

And then another Arthur who understands the east coast fishery very well – having been the Deputy Minister of Fisheries for a number of years and, before that, the Chief of Policy for the Atlantic Coast, and now Professor Harris' successor as President of Memorial University – has said:

“When fishermen actually own their own stake in a resource – just as the farmer owns the land – only then will we have the kind of fishery that provides the appropriate rewards for those who are engaged in it.”

Arthur W. May; 1994

Now that's quite a strong statement because that's passing from simply rights to catch the fish, which may be individualized, to the concept of actual ownership, but Arthur remains consistent with Aristotle, which is good company.

Now, let's look at the question of individual quota from an abstract or policy point of view [see figure 1].

Figure 1 – Individual Quotas, Pro & Con

PRO		CON	
!	Shifts the incentive from maximizing share to maximizing economic surplus	!	Increased incentive to “cheat” – mis-report, “high-grade”, etc.
!	Curbs the competitive “race for the fish” and economizes on inputs	!	Effective monitoring is costly
!	Facilitates optimal integration of harvesting, processing and marketing	!	Initial quota allocation may be unfair
!	Transferable quotas lead to <i>voluntary</i> self-rationalization of capacity, leading to greater efficiency and professionalism	!	Transfer of quota may disrupt communities, and lead to excessive concentration
!	Ultimately, IQs evolve toward property rights, which encourage self-regulation and resource enhancement	!	Increases industry vulnerability to fluctuations
		!	Not suitable for all fisheries
		!	Benefit is conferred disproportionately on fishers (at the expense of processors)

“Shifts the incentive from maximizing share to maximizing economic surplus.” And from that single proposition derives most of the attractions of this scheme. It follows that it “curbs the

competitive race for fish and therefore economizes on inputs". And that, therefore, addresses one of the points that Dr. Harris made, that the incentives to overcapitalize and the consequences posed thereby for resource conservation, were among the key points that were misunderstood and led to the northern cod crisis.

It also "facilitates the optimal integration of harvesting, processing and marketing," for the simple reason that when you're not racing for a catch and trying to catch it all at once before the next guy does, you are no longer forced to produce the gluts on board the boat and in the plants that not only destroy quality but also destroy markets. I should say, for instance, that after this scheme was introduced to the offshore sector of the Atlantic coast, National Sea Products, the biggest producer, was able to move to a quality-based pricing system for fish. Up until then they just could not persuade the fishing community to do that, the reason being that when you are racing for the fish, you just do not have time to take care of any of it adequately. And the industry did not grant sufficient pricing differentials for quality to offset the volume advantage of winning the race.

Another point that Peter Pearse emphasizes is that "transferable quotas lead to voluntary self-rationalization of capacity." In cases where this system can be used, you don't really have this impossible issue of determining what prices the government should offer to buy out licences. It happens automatically. And that leads not only to greater efficiency through the rationalization of capacity, but much greater professionalism because the fishers who tend to remain are those who are best at their craft.

And, finally, as Peter points out, "individual quotas evolve toward property rights which encourage self-regulation and resource enhancement." An enormously important conclusion.

Now there are also a number of criticisms. There is "an increased incentive to cheat." The reason is that individual quotas impose one extra constraint on the fisherman. It's just that much more binding. Now, to some extent, those incentives already exist in any quota-limited fishery. Anyone who has been part of those fisheries before IQs were introduced will understand that we are talking here about a matter of degree when we consider the increase in cheating.

"Effective monitoring is more costly." At least, the popular argument is that it is. On the other hand, if you really believe that you are maintaining quota management, you also have to monitor every fish that's landed and you ought to be monitoring discards at sea and things like that as well. So while it is somewhat more costly to monitor, I don't think it is that much more expensive.

"Initial quota allocation may be unfair." Well, fairness is in the eyes of the beholder, obviously, but that can be an extremely difficult and important issue to deal with.

"The transfer of quota may disrupt communities and lead to excessive concentration." Now, today, you never hear a politician speak about the fishery without saying that's there far too many people in it. And regardless of how the resource may recover, never again will we need the excess capacity we've had. And yet when it's proposed that maybe one of these systems might produce some concentration of fishermen, and ultimately of the fishery located in particular communities, then there is suddenly a pulling back and the response is: "Oh no, we can't do that." So there is a little inconsistency in that criticism.

"Increased vulnerability to fluctuations." That cuts both ways. The reason why it can make you a little less flexible is that once you are restricted by a set of quotas, if the fishery is particularly bad in the area where your quota is concentrated, you no longer have the ability,

unless you can buy from someone else, to go to an area of the coast where the quota may be looser. That's also a problem for the large offshore mobile fleet on the Atlantic coast but, notwithstanding, they accepted it.

"Not suitable for all fisheries." We've already heard that example. For instance, the inshore cod trap fishery in Newfoundland is not one that is amenable to this scheme. It doesn't matter that much because there is not a whole lot of capital invested in it anyway and the race for the fish is enclosed by the inshore migration. So the fishermen are not going chasing fish around. The fish come into the bays and into the traps.

And then the last bullet is one that has come out recently. It's very contentious in Alaska and becoming increasingly so on the east coast. "The benefit is conferred disproportionately on fishers not processors." The reason is that when the fisherman has the full season to catch his or her fish as he sees fit, he is not as bound to the single buyer in his region to take the fish from him quickly. So there is no question that fishermen gain some market power under circumstances like this, and this makes the processors a little unhappy.

Now, those are the abstractions. In terms of what's happened, I've just sampled below [table 3] a set of fisheries in which the scheme has been put in place on the Atlantic coast. I should say that today – and I may be off by a year or so, but certainly a year ago – there are 23 fisheries in Canada that are subject to individual quotas of one kind or another. They cover 35% roughly of the commercial value of all fish caught in Canada. Of those 23, five of the schemes are on the Pacific coast, two in the freshwater fisheries, and the other 16 on the Atlantic. So I am only showing you a sample of some of the more significant ones.

Table 3 – Evolution of Individual Quotas (*Atlantic Canada*)

Date	Fishery	Participants	Method of Initial Allocation
1976	Fundy Herring	53 vessels	equal boat quotas
1982	Offshore Groundfish	4 companies	negotiated by participants
1984	Inshore Groundfish (Newfoundland west coast)	107 vessels	equal allocation within vessel length group based on catch history
1986	Offshore Scallops	10 companies	50% equally to licensees; 50% based on catch history
1987	Offshore Shrimp	16 licenses	equal quotas
1989	Inshore Groundfish (Gulf of St. Lawrence)	192 vessels	based on catch history; permanent transfers allowed for first time
1991	Inshore Groundfish Scotia – Fundy	450 vessels	based on catch history – best 2 of 4 years (1986 – 1989)

Source: L.S. Parsons. 1993. *Management of Marine Fisheries in Canada*.

The Fundy herring was the first in 1976. It has never worked very well. The one that's probably worked best began in 1982 when the four companies that dominated the offshore groundfish fishery agreed among themselves, and I'll describe in a second how that was done, to divide their portion of the catch as percentages of the TAC allocated to those fleets. And the fact that they were able to agree in one afternoon on 34 of 35 stocks among themselves on the initial allocation was quite a feat. It is easier, clearly, to come up with an initialization where there are relatively few players, quite homogenous. But since then the scheme has been extended to some large multi-vessel fisheries, particularly the last two that you see: the inshore groundfish fleet in the Gulf of St. Lawrence; and then the most dramatic, really the buccaneer fleet of the Atlantic coast, the inshore groundfish fleet in the Scotia-Fundy region with 450 licenced vessels, has now been subjected to this scheme. I am told that it is working well and I will come to that in a second.

Now let me just say a word about how the enterprise allocations were first negotiated on the east coast. I think that this was the first – quite frankly I take a little pride of authorship here – I think this is the first major fishery in the world in which this was actually done. And many of the others took their cue from us. We got computer printouts from DFO of the catch history of the four companies, going back about ten years. And the fleet managers of each of the companies sat around a table at a meeting that I chaired, and we went through stock-by-stock, about 35 in all. Below is a typical example [table 4a] in which the numbers are imaginary, just to illustrate the methodology. This table shows codfish on the eastern Scotia shelf of Nova Scotia and the percentages of the catch according to the DFO records over ten years.

Table 4a – Negotiating Initial Enterprise Allocations

Step 1: Stock #12 – Cod (4VsW)

Catch History (as a % of the 4 company total)

(n.b.: numbers are not actual; for illustration only)

Company	1972	1973	-----	1980	1981
NatSea	56.1%	53.7%	-----	47.2%	46.1%
Nickerson	20.5%	21.2%	-----	24.5%	26.7%
Lake Group	12.3%	13.7%	-----	15.9%	16.3%
Fishery Products	11.1%	11.4%	-----	12.4%	10.9%
	100%	100%	-----	100%	100%

Now I told each of the four of them, including myself: take a look at that sheet of computer printout. Now write down on a piece of paper what you think is a fair allocation, taking all of that history into account and your knowledge of the nature of that fishery and why the history is as it is. So everyone just scribbled down on a piece of paper what they thought the percentages to each company should be, with the constraint that the estimates were to add to 100.

Below [table 4b] is an example of what we saw. National Sea said they should get 52%, Nickerson 22%, the Lake Group 14%, Fishery Products 12% and so on. Then each person had to defend their suggestion to the others. Within no time we were able to agree to a decimal

place on a fair allocation which all of us accepted. So, in one afternoon, we went through 34 of 35 stocks and agreed on all of them.

The one we couldn't agree on was northern cod which, for historic reasons that I won't go into, the Fisheries Department ultimately had to arbitrate. That scheme has worked from that day to this and it is quite a testimony on how to apply these things in practice. Of course, I would acknowledge that, for larger fisheries with far more participants, you can't go to that kind of negotiated process. But I think when one is trying to initialize these quota allocations, you do have to use quite a bit of imagination as to a fair process that will be accepted.

Table 4b – Negotiating Initial Enterprise Allocations: Step 2

Proposed “Fair” Enterprise Allocation

Proposed by:	NatSea	Nickerson	Lake Group	Fishery Products
NatSea	52%	22%	14%	12%
Nickerson	53%	22%	13.5%	11.5%
Lake Group	51%	23%	14%	12%
Fishery Products	50%	25%	13%	12%
<i>Step 3</i>				
Agreed Share:	52.0%	22.5%	13.5%	12.0%

Here, then, is the summary of the experience today. I have drawn this from a remarkable book by Scott Parsons on the management of marine resources, as well as from some internal Fisheries and Oceans documents of recent dates. The successes are that there has been much better integration of harvesting, processing and marketing. The catch has in fact been spread more uniformly over the season. The competitive race has tended to end in situations where this scheme has been put into place. The quality has improved significantly. Fleet capacity has been reduced and is now better tailored to the resource (I'm going to show you some numbers that bear these out in just a moment). Productivity has increased and unit costs have decreased. The monitoring, and this is very important, of the inshore dragger fleet catch has improved. This has been one area in which these programs were viewed most sceptically. They were afraid that the incentive to cheat and the cost of monitoring would really result in a conservation crisis. I don't think now that that's due to be the case.

The next item is the most significant of all: No sector in this country, having once tried this system, has ever gone off it. And, finally, new sectors are being added regularly.

The problems are that discarding, at least in the beginning, appeared to increase. There's a statistic that comes from Parsons, that the northern cod discards, by number, increased from an estimated 7% of catch in 1981 to 24% in 1986. Subsequently, monitors were placed on 50% of all vessels fishing northern cod and, other than the possibility that some monitors may be bribed, I think that that problem was pretty much solved after 1986. And then, finally, the monitoring is costly, although I would argue that it shouldn't be much more costly than proper monitoring of any limited entry quota-based system.

Now just to give a couple of facts and figures, the following consequences of IQ systems are interesting. This deals with the offshore groundfish fleet where enterprise allocations began in 1982. In 1981, there were 80 individual closures in the offshore fishery because of seasonal limits being reached or quota limits being reached. By 1987, there were no closures at all in the offshore fleet, notwithstanding the fact that the total catch had not gone down. So it wasn't because people were underfishing the quota, because of a quota increase. But there were 200 closures in the inshore fishery where this technique had hardly been tried.

When individual quotas were introduced experimentally with small boats on the west coast of Newfoundland in the Gulf of St. Lawrence – this was the first small boat fleet on the east coast in which this scheme was attempted – the season was extended from an average of 9 weeks per vessel to 20 weeks, despite the fact that the quota actually went down. So that's quite a telling testimony.

In addition to this are some of the economic implications. There were 325 licenced groundfish dragger boats under 65' in Scotia Fundy in 1991, after which point the IQ system was introduced. In 1994, there were only 200 vessels active. There was a great deal of retirement of capacity and combining of quotas from, let's say, 3 vessels or 2 vessels down to one. The active trawler fleets of NatSea and Fishery Products International was rationalized from 123 in 1981 to 99 vessels in 1987. This was at a time when the fishery was still going strong on the offshore with 11% less carrying capacity (i.e. quotas had not diminished significantly). In harvesting offshore scallops, between 1983 and 1987 (again the period before and after the IQ system was introduced), the number of vessels declined by 16% but the productivity of those that remained doubled. Primarily that was due to very healthy resource conditions, but not exclusively. And my last point is a very important one: that the average per vessel operating costs of this west coast of Newfoundland fleet of small draggers fell 23% between 1983 and 1985, again, the period when this trial was introduced.

I should emphasize that to see these kinds of improvements that quickly is remarkable. Because, over time, as you adjust your capital more and more to conditions, you'd expect these statistics to improve further. So I think that's quite compelling testimony.

Now just to conclude, I would like to touch on some remaining issues. The first is an obvious one: under what circumstances and subject to what conditions should individual quotas be converted to an actual property right – i.e. a property right with security of tenure, right of management, and right of sale or lease? Right now, they are still just a right to fish, a right to a portion of the quota. The fishermen do not literally own the resource, and consequently security of tenure, the rights of management, the rights of sale are restricted to varying degrees.

Second, enforcement: how can an IQ system be more effectively and economically enforced? This is important in a budget-constrained world but also very important in light of the conservation discussion we've just had.

And finally, this last point: what, if any, rights to IQs should be granted to the other half of the fishing equation – the processors?

I would like to conclude on the question of enforcement, because it is, I sense, the Achilles heel of the IQ system. If you can't do this economically and if you can't assure people that it's pro-conservation and not anti-conservation, it's not going to get very far. The "buy-in" by participants is very important. That's obvious. But I think that as experience accumulates with the success of these programs, there is more and more buy-in. Fishermen were understandably sceptical in the beginning. They are becoming less sceptical.

There is a lot to be said for consultation to agree on some principles of responsible harvesting. Minimizing the number of landing points is extremely important, but that's important for any kind of fisheries management; the principle is violated egregiously on the Atlantic coast over the years because of the unwillingness of communities to accept the closure of small craft harbours. *Perform plant and point-of-sale audits*: that's to make sure that fish aren't being diverted unreported to plants; there's a lot of collusion that exists between the buyers and the processors.

Here's one where I almost find that my present job is beginning to trench a little bit. *Maximize the use of information technology*: I think there's tremendous potential here. When you consider the economic stake that's involved in getting this system running, both the economic stake and the conservation stake, to spend a few hundred or a few thousand dollars on really good on-board monitoring systems, I think is money extremely well spent. Of course, you have satellite position monitoring within a few metres anyway. But I think that the notion of on-board video camera surveillance has real potential. (If there's a break in the video tape, you really have to explain yourself.) And also, you can measure the weight of a catch that's taken over the stern of a vessel with a tension monitor in the cable and then those weights have got to relate to what's ultimately recorded as landed. Any difference has got to be a sea discard, with due allowance for gutting and things like that. So, there absolutely are technological answers to most of these questions.

And then, finally, as one always should do with cases where monitoring cost is high, you have to have very severe penalties for infractions.

So, taking all those things into account, I think that this individual quota approach is a system that, in those fisheries where it works, works magic.

Grasping the Nettle: Institutional Reform for Sustainable Fisheries on the Pacific Coast

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Like many other ocean fisheries around the world, Canada's Pacific fisheries are in trouble. The symptoms are familiar: stocks are depressed, the fishing fleet has expanded well beyond the capacity needed to harvest the catch, fishing incomes are low and unstable, and the fishing community is rife with conflict and uncertainty. All these problems have been worsening. This is the antithesis of sustainable development.

In this bleak picture it is hard to find good news, but we can say that despite its poor performance, the Pacific fisheries are potentially capable of yielding rich harvests of unusually valuable fish, and of generating very high returns to those who catch them. Moreover, we know, basically, what must be done to conserve and enhance the stocks and to make the fishery profitable. The problem is how to make it happen; how to get from here.

In this paper I examine the causes of the problems of the Pacific fisheries and the obstacles to solving them. The difficulties are seen to be rooted in the entrenched institutional framework within which fisheries are exploited and managed. I then turn to discuss possible reforms to overcome these institutional barriers, and how recent events provide an opportunity to initiate the needed changes.

Problems of Open Access

A few observations about the historical development of fisheries management are helpful in putting our current problems into context. The key to understanding the problems of the fisheries is the common property regime in which they have traditionally been managed.

The idea that the sea, and the fish in the sea, belong to everyone was well established in Roman law, and it has been reinforced by, among others, King John in his *Magna Carta* of 1215 and the great Dutch jurist Hugo Grotius in his 1609 law of "freedom of the seas". Coupled with conventions about the law of the sea, this doctrine meant that everyone had a right, shared with all his compatriots, to fish in his country's territorial sea, and a right, shared with people of all nations, to fish in the high sea as well. No one could claim property in fish until they were caught and taken into possession. Thus, centuries ago, long before Canadian fisheries became significant, the principle of free and open access to fisheries became firmly entrenched and widely accepted among nations. It remained the general rule until recently.

This doctrine was not problematical as long as the fish available exceeded the demands on them, which was generally the case until this century. Moreover, fish in the sea were widely regarded as inexhaustible. As long as the supply of fish exceeded the demand for them, there was no "scarcity" in the economic sense, no need to ration them among the demanders, and hence no need for assigning rights to them.

But times have changed, and mainly since the second world war, the circumstances of ocean fisheries have changed fundamentally. Fishery after fishery around the world has expanded,

catches have exceeded the sustainable yield, and stocks have declined as a result. Through most of the second half of this century the world catch of fish continued to increase, but this was not so much a result of improved management and utilization of stocks as a process of moving on from depleted stocks to new stocks. Today, the frontier of economic exploitation is closed. The world catch has peaked at nearly 100 million tonnes per year landed, and another 30 million tonnes caught accidentally and discarded (FAO 1995).

Most of the world's most valuable stocks are now overfished and declining (Weber 1994). A recent FAO report indicates that 70 percent of the world's marine fish stocks are heavily exploited and depressed. Of the FAO's 15 major fishing areas, catches have declined in all but two. Declining catches are reported in all regions of the Atlantic, all regions of the Pacific, and in the Mediterranean and Black Seas. In some of the world's greatest fisheries a few years ago, such as Atlantic cod and Peruvian anchovy, catches are now a small fraction of past levels (FAO 1995).

This is the *conservation problem* that results from the common property regime. Every fisher competes for the catch against all other fishers, and none has the incentive or authority to practice restraint and conserve the stocks. Predictably, when fish are valuable, they are overfished.

But common property fisheries lead to another problem as well. Every fisher can claim as much as he can catch in open competition with all the others. This encourages every vessel owner to expand his fishing power to catch a bigger share which, of course, is a zero-sum game in a fully exploited fishery. And if the fishery is profitable, it will attract more fishermen to the industry. Thus fishing fleets expand, even if they are already big enough to take the available catch. As they expand, the additional labour and capital raises costs, reducing profits concomitantly. This process continues until all profits are dissipated in higher costs and redundant fishing capacity. This is the *economic problem* of common property fisheries.

The process of dissipating the economic rents means that profitable fisheries are inherently unstable. Profits cause expansion of the fishing fleet, increased fishing effort and greater pressure on the stocks, until declining yields or rising fishing costs, or both, eliminate the profits. The adjustment is sometimes slow and painful. But always, eventually, commercial fisheries gravitate toward a kind of Malthusian equilibrium between man and fish, characterized by overexpanded fishing capacity, depressed stocks and low incomes.

Because this process of decline is driven by profit-seeking, it has been deepest in the potentially richest fisheries -- those that yield highly valued products, or involve low harvesting costs, or both. Whales, salmon, halibut and shellfish are conspicuous examples. Advances in fishing technology and improvements in product markets can alleviate for a time the economic burden of overexpanded fleets and reduced catches, but in the long run only aggravate them.

So the economic problem of the common property regime ensures that, in the absence of measures to prevent the process, even the potentially richest fisheries will, over time, yield low incomes.

These two tendencies - toward overfishing of stocks and overexpansion of fishing capacity - have been worldwide phenomena, but they have been particularly dramatic in the North East Pacific. Here, over the last 200 years, a series of rich fisheries developed based on sea otters, fur seals, whales, halibut, roe-herring and shellfish; the stocks were over-harvested and depleted, and the overexpanded fleets suffered painful decline.

Management Responses

As these problems developed in Canada and other fishing nations, governments responded with corrective measures slowly and falteringly. For many years they focused exclusively on the conservation problem. In the face of uncontrolled expansion of fishing fleets, a wide array of restrictions to limit the fishing power and efficiency of vessels were designed to protect the stocks from over-exploitation -- gear restrictions such as limits on the length and depth of nets, area restrictions to protect parts of the stocks from fishing pressure, and season restrictions to shorten their exposure to capture. The success of these controls was mixed, but even when they succeeded in protecting the stocks from overfishing, they did nothing to mitigate the economic problem of excessive expansion of fishing fleets. Many of our stocks of salmon, for example, have been well managed at sustainable yields, but the fleets have overexpanded and dissipated the potential profits and resource rents.

The economic problem was recognized much later, in the 1950s and 1960s. By the 1970s this institutional explanation for the dismal record of fishing industries achieved some acceptance within the fisheries agencies of western countries, and they began to acknowledge that there is more to managing fisheries than protecting stocks from overfishing.

The search for means of overcoming the economic problem was given a major boost by the 1982 International Convention on the Law of the Sea, which encouraged coastal states to extend their authority over fisheries 200 miles seaward. This enclosed most of the world's valuable commercial stocks within one or more nations' control and encouraged coastal states to manage and conserve them. It encouraged them to manage their fishing industries as well.

The first significant policy initiative to respond to the economic problem was introduced by Canada's Minister of Fisheries to control the Pacific salmon fleet. The 1968 Davis plan involved issuing licenses to all established salmon fishing vessels and no more, thus limiting the size of the fleet. And to reduce the already excess capacity, the government purchased licensed vessels and cancelled their licenses. This *license limitation policy* became a pattern for governmental efforts to control fleet expansion in Canada and elsewhere.

Restricting the number of boats seemed to be the obvious thing to do in an overcrowded fishery, but it met strong opposition. The tradition of open access to fisheries was difficult to overcome in the fishing community. Moreover, fishermen did not often appreciate the need for the new restriction. Many felt that the government's role was to conserve the stocks, and to let anyone fish who wanted to; if too many entered some would go broke, but there was no need to interfere. For many, the economic waste and dissipation of resource rents resulting from open access, and the public interest in overcoming this tendency, were too subtle, or at least insufficiently important to justify restrictions on the traditional free and open access to the fisheries.

Nevertheless, goaded by recurrent crises of resource depletion and industrial depression, governments adopted restrictive licensing remarkably rapidly. By the end of the 1970s, access to many of the important commercial fisheries in Australia, Iceland, the United States, Norway and other western fishing nations were restricted through some form of license limitation, including the major fisheries on Canada's Atlantic and Pacific coasts.

In terms of the rights of fishermen, license limitation implied a fundamental change. Previously, all citizens had an equal right to fish, so fishermen's rights were no different from anyone else's. In a legal sense the right to fish lacked an essential characteristic of property: the right to exclude others. License limitation changed this. Fisheries remained common property in the sense that all the fishermen holding licenses shared the right to fish the stocks, but others were now excluded. Now the only way an outsider could enter the fishery was by

purchasing the license of an established fisherman, thereby displacing him. Inevitably, the limited number of licenses became valuable, reflecting fishermen's expectations that their earnings would increase.

However, it soon became apparent that limiting the number of fishing units was not adequate to control expansion of fishing power. Fishermen still had incentives to expand their fishing capacity in an effort to increase their shares of the catch, and they did so with vigour whenever prices rose. They replaced their boats with bigger, more powerful vessels, and equipped them with more advanced equipment for finding, catching and handling fish. Governments responded with additional restrictions on the length, hold capacity and other dimensions of vessels in efforts to limit their capacity. But there are so many dimensions to the fishing capacity of a fishing unit, and they are so manipulable in the hands of ingenious fishermen and naval architects, that restrictions were soon overcome. As a result, fishing capacity and the costs of fishing rose, but catches typically did not.

The vicious circle thus prevailed. As fishing power continued to grow, regulators were forced to protect the stocks by shortening seasons and adding more and more restrictions on fishing, in a treadmill of regulation. In our Pacific herring fishery, after several years of limited entry, some seasons were shortened to as little as 15 minutes.

Stinting the Fisheries

Around the late 1970s some academics began to consider a quite different approach, involving another fundamental change in fishing rights. The total allowable catch in a fishery could be divided up and allocated among the licensed fishermen. Then licenses would convey not simply a right to fish but a right to take a specific quantity of fish (Maloney and Pearse 1979).

Quantitatively specified rights to the catch would eliminate the competitive race for undefined shares of the catch. Moreover, if quotas were transferable, transactions would enable fishermen to adjust the scale of their operations for maximum efficiency.

How this new approach could be implemented was first proposed in detail in my 1982 report of the Royal Commission on the Canada's Pacific Fisheries, and a year later for the Atlantic fisheries by the Kirby Task Force (Pearse 1982; Kirby 1982). The Atlantic proposals were adopted, and "enterprise allocations" were introduced in one after another of the Atlantic fisheries.

Within an astonishingly short time, quota licenses, variously called individual transferable quotas, quantitative rights, enterprise allocations, and catch quotas, were introduced in major fisheries in several countries: Canada, New Zealand, Australia, Iceland and Britain, among others. Here, on the Pacific coast, where the concept of quantitative fishing rights originated, its acceptance has been slow.

The most sophisticated quota licensing system today is that of New Zealand. There, by the 1980s, open-access fishing had led to the usual problems of overexpanded fleets, depressed stocks and low incomes in the long-established inshore fisheries, and a regulatory regime was needed for the fisheries of New Zealand's new 200 mile extended economic zone. In an unprecedented stroke of policy reform, individual transferable quotas (or ITQs) were introduced first in the deepwater and then in the inshore fisheries, and they quickly proved to be successful and enthusiastically supported by the fishing industry.

Redefining fishing rights in quantitative terms fundamentally changes fishing behaviour. It eliminates the competitive rush to fish. With each fisherman's catch limited by his quota, many restrictions on fishing, such as closed seasons and restrictions on fishing gear can be relaxed,

increasing the efficiency of operations. Additional gains in efficiency are realized as overexpanded fleets rationalize themselves. Vessel owners purchase the rights of others, eliminating them and their excess capacity from the fleet. The onus on regulatory control and enforcement is reduced, and effort shifts from policing fishermen on the fishing grounds to monitoring landings and reconciling them with the quotas of fishermen.

There are two other highly significant effects of fishing rights based on individual quotas. Once the shares of the catch are allocated among fishers, the stage is set for cooperation. With the interest of every participant in the fishery clearly defined by their quotas and no longer a result of competition, fishers soon realize they have a common interest in maintaining the productivity of the stocks, in enhancing them, in protecting them from poachers, and in discipline among themselves.

The other effect is the creation of significant wealth in the form of quota holdings. Fishing enterprises find themselves with new assets in fishing rights, and they soon become sensitive to any actions by other fishermen, poachers, or governments that might diminish the value of their share in the fishery, and to anything that they can do to enhance it. These are the ingredients for successful self-regulation, opening opportunities to shift responsibility for managing fisheries from governments to fishers themselves.

In New Zealand the shift of management responsibilities to holders of fishing rights is progressing with support from both the fishing industry and the government. Quota-holders in deep sea fisheries have begun to organize expensive exploration ventures at their own cost, shellfish quota-holders are undertaking enhancement projects, and in other fisheries quota-holders are becoming involved in setting harvest levels, information-gathering and other activities. (Pearse and Walters 1992). Here, halibut and sablefish quota-holders have voluntarily adopted levies on their landings to cover the costs of monitoring catches and administering their quota systems.

This is not to say that the quota system is a panacea. The early schemes have encountered many problems of implementation, administration and compliance, and sometimes difficult adaptations. In particular, the system does not lend itself easily to fisheries based on highly volatile and unpredictable stocks such as the salmon and herring fisheries of the north Pacific, where the total allowable catch cannot be determined until the short seasonal fishery is well under way. It is also difficult to apply where administration and enforcement is weak, as in some fisheries of developing countries. And it becomes complicated where catches are mixed, where fishing alters in-season catch rates, and where the geographical distribution of catches must be managed.

Fishermen typically resist the quota system because it involves a fundamental break with age-old traditions. With quotas, a fisherman's share of the catch is no longer determined by his skill and effort in competition with others on the fishing grounds. They can no longer gain at the expense of others. To fishermen, steeped in the traditions of free fishing, this is often regarded as an unwanted restriction on their freedom.

Future Directions

Where are all these developments leading us? What we have seen is a progression in the definition of fishing rights, from unrestricted rights of everyone to fish open access, to rights restricted to an authorized few, to rights to defined quantities of fish.

With well-defined, divisible and transferable shares in the catch allocated among the fishers, the potential benefits of cooperation become obvious, and cooperatives, sanctioned by

government licensing are the logical result. In the end, holders of quotas in a fishery may become, in effect, like shareholders in an enterprise that controls the stock and its yield. But whether that is the final result or not, cooperation portends better management of resources and improved economic performance of fishing industries.

In short, the long tradition of open access to fisheries is ending. It can no longer be sustained. After centuries of unlimited rights to fish, fishing rights have begun to take on the characteristics of property common in other resources. The social and economic implications are not unlike those of the enclosure movement on agricultural communities of eighteenth century Europe.

In the last two decades, fishermen's rights to resources have been evolving with astonishing speed, and the trend is clearly toward more well-defined, tangible, and exclusive rights held by users. Rights to most of the world's ocean fish have been claimed by coastal states. Governments of those states have adopted licensing schemes to exclude not only foreigners but most of their nationals as well, limiting access to only a few. Increasingly, the rights of those license holders are specified in quantitative terms. And they have begun to act as cooperative owners. The long-term implications of this development for the organization of fishing industries are profound. It will mean the end of much of the uniqueness of fishing -- the competition for fish, the uncertainty, even the romance of fishing. But the resulting incentives for fishermen to do more than simply harvest fish, by taking responsibilities for managing them and developing them as well, presents a new frontier of opportunities in ocean fisheries.

The Special Problem of Salmon

The management regime for salmon, by far the dominant fishery on the Pacific coast, has not evolved beyond limited licensing, and further development is problematical. My 1982 Commission recommended individual quotas for the halibut fishery and all the smaller fisheries on the Pacific coast. They are now in place in several small fisheries -- roe-on-kelp, abalone, black cod -- and most significantly the halibut fishery, where it has been highly successful in raising incomes and improving management. In a significant development during the last couple of months, salmon trollers (many of whom fish halibut as well) have proposed a pilot program based on individual quotas.

My Commission concluded that individual quotas were not practical, for the time being at least, for our two biggest fisheries -- salmon and roe-herring -- because of the complex structure and volatility of these fisheries. For these, the Commission recommended a plan to reduce the fleet by half, mostly through self-financing.

The proposals to reduce the salmon and herring fleets were not adopted, and there has been little change in the policy governing these fisheries. The number of licenses and vessels has not changed significantly, but their fishing power has increased greatly, to the point that open seasons are now very short, and often risky. For example, the seine fleet fished 24 days in the Upper Johnstone Strait in 1982, but was reduced to 3 days by 1994, and there were fears that if another one-day opening had not been aborted at the last minute the fleet could have wiped out a major stock.

Since 1982, shifting markets and volatile cycles in fish abundance have put the fishing industry on a roller coaster. In the early 1980s it slipped into a deep recession with low salmon prices and catches, and high interest rates and fuel prices. In the late 1980s fortunes rebounded with high catches, strong markets and favourable exchange rates. In the early 1990s salmon markets fundamentally changed; with huge increases in supply from aquaculture combined with high catches of wild salmon to drive prices down. B.C.'s share of

world salmon production fell from 14 percent to 7 percent and is expected to continue to decline.

Last year, unexpectedly low returns of salmon reduced levels to 40 percent of the average of preceding years. This year, returns are expected to be even lower, and most fishing enterprises are expected to lose money. The fishery is approaching a crisis.

A variety of events in 1994 undermined confidence in the fisheries management regime and led to the appointment of Ambassador Fraser's enquiry. The Minister of Fisheries endorsed Fraser's recommendations and set up an industry Roundtable to advise him about how to rationalize the fleet. With the recommendations of the Roundtable in hand, Fisheries minister Fred Mifflin announced on March 29th his salmon fleet revitalization plan. Although this initiative broadly follows the recommendations of the Roundtable, it has run into a storm of opposition.

The Mifflin Plan

The Mifflin plan proposes to cut the salmon fleet in half. This will be done in two ways:

- i) A federal appropriation of \$80 million will be used to purchase fishing licenses offered for sale. This is estimated to be enough to reduce the fleet by 20 percent.
- ii) The coast will be divided up into areas, and each license holder who stays in the fishery will have to choose one area in which his license will apply. This means that in order to be able to fish the whole coast, as they have had the right to do hitherto, vessel owners will have to buy licenses for the other areas from other vessels, thus eliminating those other vessels from the fleet.
- iii) Similarly, vessels that carry two types of gear will have to choose one and, if they want to continue fishing with the other, they will have to purchase another license for it. Area licensing, single gear licensing and the resulting "stacking" of licenses are estimated to be capable of reducing the fleet by another 30 percent.

If the fleet is reduced by 50 percent, over 2000 vessels and vessel owners will be displaced, and another 2500 to 3500 crew.

There are other important elements of the plan:

- ! The question of catch allocation -- the distribution of the catch among the sectors of the fleet -- has been assigned to an independent investigator with the concurrence of industry groups. This vexing issue tends to pervade all consultations with fishing groups and to frustrate decisions on other issues, so getting it off the table is an important step.
- ! License fee increases will be phased in over two years, to about three percent of the value of landings.
- ! Levies on landings, as an alternative revenue mechanism to license fees, will be introduced over time.
- ! The government will consider establishing a fishing industry board to take responsibility for fleet rationalization and development, as recommended by the fishery.

Opposition to the plan takes many forms, the main complaints being:

- ! The scheme offers nothing to the crews of vessels displaced by fleet reduction.
- ! Vessel owners will have to incur the significant costs of additional licenses to maintain the coastwide fishing privileges they now enjoy, and they must do so at a time of very low earnings.
- ! The scheme will accelerate the concentration of license holdings in the hands of big companies. The plan does nothing to advance conservation of the stocks. The \$80 million provided for this fishery, compared to the \$1.9 billion for the Atlantic fishery adjustment reflects continuing discrimination against the west coast.

Notwithstanding these criticisms, the fleet reduction plan is a bold step to alleviate some of the stress in the salmon fishery. It offers a new opportunity for vessel owners to exit the overcrowded industry, and if it is successful in reducing the fleet by half, it will significantly improve the economic performance of the remainder. It will also make fisheries more manageable and less threatening to the stocks.

But it must be recognized that reducing the fleet does nothing to alleviate the perverse incentives to keep expanding fishing capacity. Though it will, temporarily at least, improve the economic performance of the fleet, vessel owners will still compete for undefined shares of the catch, and can be expected to keep investing in fishing power.

In the longer term, more fundamental changes in fishing rights will be needed to direct the incentives of vessel owners toward the collective interest in efficient industrial development. Individual quotas may be suitable for the troll fleet, which catches fish more gradually over a longer season, but it is difficult to see how they could be implemented in the hectic and volatile net fisheries. Ultimately, the most effective regime might be based on local cooperatives of fishers holding the rights to fish for salmon running into particular watersheds, so that they can collectively organize fishing, take a proprietary and stewardship interest in the stocks, and share the benefits. This model has some of the characteristics of salmon fisheries in Japan and Alaska, and of some recent arrangements with aboriginal communities here.

Undoubtedly, the biggest obstacle is not in designing a new local management regime, but in finding acceptable arrangements for transition from the established system with its heavy commitment in fishing rights and fleets. Some academics, and the Department of Fisheries and Oceans, have begun to explore how local salmon management could be organized. It implies the development of collective or communal property rights in fish. But, like individual quota management schemes, it offers a means of aligning the incentives of participants to cooperate in resource management and stewardship. Both approaches, individual quota management and local communal management, thus involve changes in the right to fish to bring about improvement in the organization of fishing industries.

III. Diplomatic and Legal Background

Purposes and Principles or Platitudes and Pronouncements?

J. Alan Beesley, O.C., Q.C.

Mr. Chairman, fellow participants and distinguished guests: it is an honour and a challenge to be invited to participate in a forum on such important political, scientific, ecological, economic and legal issues, engaging such an eminent group of interdisciplinary experts.

The morning programme is extremely well organized, so as to provide an orderly progression of ideas and a cross section of views and positions on both East Coast and West Coast fisheries problems, ranging from scientific uncertainty and conflicting economic interests to divergent political objectives, and alternative options, including both institutions and means of enforcement.

I note, however, that the title of the morning session, "The Science and Politics of Imperilled Canadian Fisheries" does not directly address the role or function of law in the management of fisheries, so I will offer some comments on legal aspects as part of the foundation and background for our discussions.

The title of my brief address is: "Purposes and Principles, or Platitudes and Pronouncements".

The first two terms are borrowed from the UN Charter, and the last two from Lester B. Pearson, found in the following quotation, which I have cited before in other places: "Diplomacy is largely the art of making an indiscretion sound like a platitude, and politics that of making a platitude sound like a pronouncement."

My thesis is as follows:

- (1) No system of national law devised thus far has been able to prevent breaches of the law ranging from fraud to violence, in spite of generations of experience, the development of sophisticated legal superstructures and the establishment of strict penal systems, so it is simplistic and superficial to dismiss or deny the existence of international law for being unable to avoid or punish such breaches of law on the international plane; and
- (2) In addition to the continuing process of development of customary international law through state practice, somewhat analogous to the common law process, there exists a vast and rapidly expanding network of bilateral and multilateral treaties, many of them global in scope, which effectively regulate relations amongst states on issues as diverse as boundaries, trade law, arms control, health standards, the environment and fisheries; and
- (3) Contrary to widespread public perceptions, states do tend to observe and implement their treaty obligations to one another, because it is in their self interest to do so; and
- (4) Weaknesses in the application of international law often arise not from inadequacies in the law elaborated through negotiations among states, but from the unwillingness

or hesitation of states (such as Canada, and those with similar constitutions) to enact the necessary domestic legislation and establish the required mechanisms; and

(5) On issues as complex and interrelated as oceans affairs, a global constitution of the oceans is required, particularly in the field of fisheries; and

(6) The 1982 UN Law of the Sea Convention comprises just such a Constitution of the Oceans, embodying as it does not only a comprehensive set of substantive legally binding rules of law on uses of the oceans, but the most complete set of dispute avoidance and dispute settlement mechanisms in existence; and

(7) Although the Convention has been in force since November 16, 1994, Canada has not ratified it, nor has the USA nor the EU, with the consequence that each feels free to assert the Convention rights on a “pick and choose” basis, while not accepting corresponding obligations; and

(8) The Convention has thus not had the impact intended by its negotiators, particularly in avoiding and settling disputes amongst states.

1982 UN Convention on the Law of the Sea

The question arises as to why Canada, generally recognised as the state which gained most from the hard fought twelve year law of the sea negotiations, should have failed to ratify the Convention; nearly fifteen years after the conclusion of the negotiations, and the signature of the Convention by 119 states.

Indeed, Canada has not even harmonized its national legislation with the Convention, although not hesitating to cite the Convention on a selective basis, while repeating its promises to ratify it, most recently in the Speech from the Throne on February 27, 1996. One wonders whether we have been hearing over the years Statements of Purposes and Principles, or Platitudes and Pronouncements. Is the Convention just another “scrap of paper”? If so, why did Canada sign it on December 10, 1982? Have successive Canadian governments recognized that, as a signatory to the Convention, Canada is “obliged to refrain from acts which would defeat the object and purpose of the treaty”? That is precisely what Canada’s obligations are, pursuant to Article 18 of the Vienna Law of Treaties Convention, which Canada acceded to in 1970.

I do not suggest that ratification of the Convention would be a panacea for all of Canada’s fisheries problems. I do suggest that the Northwest Atlantic Fisheries Organization established by the NAFO Convention on October 24, 1978, and the 1985 Pacific Salmon Treaty, are inadequate without the legal underpinning of the 1982 Law of the Sea Convention. Moreover, astounding as it may seem, there is even reason to believe that Canada may now attach a higher priority to ratifying the 1995 UN Agreement on Straddling Stocks and Highly Migratory Species than to the 1982 Convention on which the later “mini-treaty” is based. (For example, the February 27 Speech from the Throne refers to “legislation to ratify the UN Straddling Stocks Agreement and the Law of the Sea Convention”, in that order). Perhaps no one has yet noticed that the Straddling Stocks Agreement, while signed by Canada and the USA, has not been signed by the European Union or any of its member states. It is one thing to sign – and ratify – regional agreements (such as NAFO and the Pacific Salmon Treaty) before ratifying the Convention elaborating the rules of law on which they are based, but it is quite another to ratify them instead of that Convention; it is still another to consider ratifying an amending agreement (such as the Straddling Stocks Agreement) before - and perhaps even

instead of - the basic Convention being amended, (although that term is not used). Are we now seeing the world through salmon pink coloured glasses? Is that why we are now engaged in a dispute with the USA over the status of Canadian internal waters? Perhaps we should remove the scales from our eyes. With a case in the International Court over turbot and a dispute concerning Canadian territory as a spin-off from the salmon dispute, does anyone have the impression that perhaps these are important foreign policy issues and not merely fisheries matters? I should be interested to hear the views of those present.

The Purposes and Principles of the Convention

Let us consider the Law of the Sea Convention from a more detached perspective.

The “Brundtland” Commission on Environment and Development stated in its 1987 report:

“The most significant . . . action that nations can take in the interest of the oceans’ threatened life support system is to ratify the Law of the Seas Convention.”

The Rio Conference in chapter 17 of Agenda 21 stated:

“International law, as reflected in the provisions of the UN Convention of the Law of the Sea . . ., sets forth rights and obligations of states and provides the international basis upon which to pursue the protection and sustainable development of the marine and coastal environment and its resources.”

The former Secretary-General of the UN, Mr. Perez de Cuellar, addressing the International Law Association in Montreal in 1982 described the Law of the Sea Convention as “possibly the most significant legal instrument of its century”.

What of the official Canadian attitude to the Convention? Perhaps the statement of the then Canadian Secretary of State for External Affairs, the Honourable A.J. MacEachen, delivered to the Final Session of the Law of the Sea Conference in Jamaica on December 6, 1982, provides a clue: “*The Law of the Sea Convention, and the Convention alone, provides a firm basis for the peaceful conduct of ocean affairs for years to come.*”

Salmon

Let us consider what the Convention has to say about salmon. To quote again from the statement by Mr. MacEachen: “*The Convention recognizes the primary interest and responsibility that the state of origin has in respect of salmon that spawn in its rivers.*” That statement referred to Article 66 of the Convention, on Anadromous Stocks, which reads in part, as follows:

“Article 66. (1) States in whose rivers anadromous stocks originate shall have the primary interest in and responsibility for such stocks.”

This provision is commonly referred to as the “ownership” principle, but it is couched as a legal rule.

“Article 66. (2) The state of origin of anadromous stocks shall ensure this conservation by the establishment of appropriate regulatory measures for fishing in all waters landward of the outer limits of its exclusive economic zone and for fishing provided for in paragraph 3(b).

. . . The state of origin may, after consultations with other states referred to in paragraphs (3) and (4) fishing these stocks, establish total allowable catches for stocks originating in its rivers.

This provision is commonly referred to as the conservation principle.

“Article 66. (4) “In cases where anadromous stocks migrate into or through the waters landward of the outer limits of the exclusive economic zone of a state other than the state of origin, such state shall co-operate with regard to the conservation and management of such stocks.

This provision lays down the legal obligation of co operation, not directly addressing intermingling stocks, but coming close.

The principle on which Canada’s west coast salmon negotiations have been based is the “equity” principle, not embodied in the Anadromous Species rules of the Convention. I suggest, however, that the judicious application of the conservation and ownership rules would have much the same effect as the equity principle. The difference, of course, is that the Law of the Sea rules are enforceable as between parties to the Convention.

Binding Settlements of Disputes

Let us now consider the possibilities if both Canada and the USA, neither of which is a party to the Convention, had both ratified it. In such event, either party could invoke the third party dispute settlement provisions of the Convention. To alter the focus a little, let us consider the situation if both states were now to ratify the Convention.

As pointed out by Mr MacEachen, when he was Canada’s Secretary of State for External Affairs:

“Provisions on the peaceful settlement of disputes have been made a fundamental part of the Law of the Sea Convention -- an historic achievement for an international treaty of such magnitude. Parties to the Convention will be obligated to ensure that disputes on the interpretation of the Convention will be settled by peaceful means agreeable to the parties concerned. Of course only parties to the Convention will be bound by these provisions, but those that might challenge the Convention and wish to remain outside of it must recognize the disservice they do not only to the attainment of agreed rules for the uses of the oceans but to the peaceful resolution of conflicts.”

It is only necessary to add that it is a well established principle of international law that a state cannot hide behind its constitution. (Since no reservations are permitted to the Law of the Sea Convention, neither Canada nor the USA could ratify the Convention with a federal state reservation; thus Alaska could no longer act as if it were an independent sovereign state, but would be obliged to act as if it were a part of the USA). The relevant rule of international law is embodied in Article 27 of the Vienna Convention on the Law of Treaties, which reads in part as follows:

“Article 27 – Internal Law and Observance of Treaties

A party may not invoke the provisions of internal law as justification for its failure to perform a treaty.”

Part XXV of the Convention is devoted to the Settlement of Disputes, consisting of some twenty provisions (Articles 279 to 299), plus Annex II, providing for a Commission on the Limits of the Continental Shelf; Annex V on Compulsory Conciliation procedures; Annex VI setting out of

the Statute of the International Tribunal for the Law of the Sea (consisting of forty-one articles) Annex VII, on Arbitration; Annex VIII, on Special Arbitration, (for various issues, including fisheries matters). The totality of these provisions provide what has been described by the leading expert on the issue, Professor Louis B. Sohn as “a veritable code for the settlement of disputes which may arise in the future with respect to the interpretation and application of the Law of the Sea Convention This is the way to the rule of law and to ensuring that the peace of the world is not jeopardized by a dangerous escalation of law of the sea controversies.”

In a Forum such as this, which includes naval officers, legal and other enforcement experts, as well as politicians, diplomats, academics, scientists, officials, and other stakeholders such as aboriginal peoples spokespersons and members of the public, is there anyone who would question the desirability of settling disputes peacefully through binding third party processes? Does anyone envisage such a system coming into force to resolve Canada’s fisheries disputes if Canada does not ratify the Convention?

East Coast Problems

It is evident that there are unresolved legal questions arising out of the West Coast fisheries dispute which raise basic foreign policy issues, including, now, territorial sovereignty. What of Canada’s East Coast fisheries issues? Are they minor fisheries problems, or does the threat and near use of force on the turbot dispute also raise basic foreign policy issues, of particular interest to those at this Forum concerned with enforcement? Does Canada’s dispute in the International Court of Justice with Spain constitute just another tedious question of passing interest to international lawyers, or does it also raise fundamental foreign policy issues? I hope we will have time to address these questions.

In the meantime, what might usefully be said of the legal aspects of Canada’s East Coast fisheries dispute?

I had occasion recently to review this question in the context of an address I gave on November 17, 1995 to the St. John’s Colloquium on Fisheries. Straddling stocks is the problem of major concern on Canada’s East Coast.

This is what Mr MacEachen had to say on that subject:

“Canada joined with many other coastal states in developing a provision to conserve fish stocks that ‘straddle’ the economic zones of neighbouring states or the two hundred mile limit. Without international co operation, such stocks cannot be effectively managed and conserved.”

These words have proven prophetic.

I do not propose to cite here the many provisions of the Convention laying down the legal obligation to conserve the resources of the oceans, both within and beyond 200 miles. It is worthwhile, however, to recall that the Convention provides (whether or not this is now also a rule of customary law) as follows:

Article 63. (2) Where the same stock or stocks of associated species occur both within the exclusive economic zone and in an area beyond and adjacent to the zone, the coastal state and the states fishing for such stocks in the adjacent area shall seek either directly or through appropriate subregional or regional organizations, to agree upon the measures necessary for the conservation of these stocks in the adjacent area” (emphasis added).

It will be noted that the operative phrase “shall seek”, lays down a binding legal obligation and not a mere non-binding duty.

Appended to the text of these comments is a brief analysis of the cumulative effects of this Article, which read together with Articles 87, 116, 117, 118, and 300, clearly impose legal obligations on all states to conserve straddling stocks. (These provisions are also embodied in the 1995 UN Agreement on Straddling Stocks, as are a series of new provisions ranging from the precautionary principle to enforcement measures.) It is my position, which I do not propose to discuss here, that the European Union and its member states, particularly Spain and Portugal, seriously and repeatedly breached the provisions of the Law of the Sea Convention through systematic over-fishing of straddling stocks. I recognize that this is not the time and place to discuss that issue. I have, however, appended the texts of my comments on that question, from my November 17 speech in St. John’s. In the meantime, I would note that the EU has not ratified the Convention, although Austria, Germany, Greece and Italy have done so. As for the 1995 Agreement on Straddling Stocks, neither the EU nor any of its member states have even signed that Agreement; Canada, of course, has signed but not ratified that Agreement.

The 1995 “mini-treaty” on Straddling Stocks is so important, assuming that it eventually comes into force, that I am also attaching to this statement an extract from my St. John’s speech summarizing its provisions. The agreement tightens up and improves the relevant provisions of the Law of the Sea Convention on those issues it addresses.

In sum, Canada’s position on straddling stocks would, in my view, be much stronger if Canada had ratified the Law of the Sea Convention and if the Convention had been brought into force quickly, rather than twelve years after its adoption.

Overview of the Convention

The Law of the Sea Convention does not merely codify pre-existing law. The major part of the Convention consists of progressive development of the law; that is to say, it creates new rules of law. However, these proposed new rules do not constitute “instant law”. Some are enforceable only amongst or between parties to the Convention. One example is the proposed rule of “transit passage”. I know it is a new rule, because I, personally, coined the term “transit passage”. (Some maritime powers argued that it represented customary law even before the Conference concluded, and still do, although they are still not parties to the Convention.)

This concept of “instant law,” applicable on a highly selective basis, was rejected by Canada and most other states during the law of the sea negotiations. It never occurred to me that anyone would try to apply such an approach to Canada’s Inside Passage, but it seems to be occurring. Even on this type of frivolous issue, it would strengthen Canada’s legal position if Canada were a party to the Convention.

I note in passing that under the Convention pre-existing internal waters retain their status as internal waters, and that the Convention does not recognize or create any right of passage through such waters, neither on the basis of past neighbourly usage nor any other basis.

Even the twelve mile territorial sea limit constituted new law, or progressive development, but no one would argue to-day that it has not become accepted as a rule of customary law. The Exclusive Economic Zone concept was also wholly new, but it too has now attained the status of customary law. The “ice covered waters” rule, based on Canada’s Arctic Pollution Prevention Act, is also received customary law now, although some might argue to the contrary. As for the straddling stocks and anadromous species rules, views undoubtedly differ as to whether this

new law is now customary international law, but I would argue that it is. We cannot assume, however, that all parts of the Convention are now customary law and thus binding on parties and non-parties alike, although some would say that that seems to be the Canadian view.

What then are the practical implications for Canada of not ratifying? Some of the many questions which arise are as follows:

- ! Can Canada claim a seat on the Council of the Sea Bed Authority, charged with the management of sea-bed mining beyond national limits, as foreseen by Mr. MacEachen, without ratifying the Convention?
- ! Can Canada assert its rights as a “pioneer investor” to mine the deep ocean sea-bed, as forecast by Mr. MacEachen, without becoming a party to the Convention ? Canada repeatedly said no throughout the negotiations. I still do.
- ! Can Canada claim a seat on the Sea-Bed Tribunal without becoming a party to the Convention establishing it ? Of course not.
- ! Can Canada assert the rights embodied in the Convention to a continental shelf extending to the newly defined “legal” limits of the continental margin, anticipated in Mr. MacEachen’s speech, without becoming a party ? Merely to ask is to create a lawyers’ feeding frenzy.
- ! Can Canada invoke the forty-five basic legal rules of the Convention contained in Part XII, on Protection and Preservation of the Marine Environment, should, for example, there be a serious oil tanker accident in the Strait of Juan de Fuca, if Canada is not a party to the Convention? I would answer in the affirmative, but would the USA agree? These are not minor issues, and they go well beyond the preoccupations of those of us concerned with fisheries management.
- ! Can Canada utilize the Convention to counter claims, however invalid, that the Strait of Juan de Fuca and the Inside Passage are international straits, while Canada remains outside the Convention ? Perhaps, but a middle power such as Canada needs the protection of the Convention when dealing with a major power, particularly if Canada would wish to invoke the Convention in an international tribunal. The North-Sea Continental Shelf decision is a case in point.
- ! What happens if Senator Foghelles denounces Convention Article 234 on “ice-covered waters”, on the grounds that Canada’s Arctic waters are being used to trans-ship Cuban cigars? Everyone knows that the article is tailored to Canada’s Arctic legislation. If it is now customary law, as are the straight base-lines enclosing Canada’s Arctic, could we cite the Convention in support of Canada’s rights?
- ! One issue of fundamental importance to all states, including Canada, is the guarantee of freedom of navigation provided by the Convention. This issue alone warrants its ratification by Canada.
- ! On fisheries, is it the Canadian position that the series of fisheries mini-treaties created on the basis of, but outside the Convention, are better than the Convention? Why then are they not working ?

Perhaps the most important issue raised by Canada’s present practice of asserting rights under the Convention, without accepting the related obligations, is Canada’s credibility. As I suggested to the Conference here last month, “It seems logical to assume that eventually

Canada's allies in negotiations of importance to Canada will begin to question Canada's good faith."

These are but a few of the host of questions which are unresolved for countries such as Canada, attempting to "pick and choose" amongst the rights and obligations embodied in the Convention, -the very position Canada opposed so fiercely throughout the negotiations.

Ratification of the Law of the Sea Convention

As pointed out to the March 31 Conference here, I made a plea in a statement to the Ocean's Management Workshop at UBC on March 18, 1988, that Canada, as one of the major beneficiaries of the Law of the Sea Convention, "take the lead" in co-operation with other states, "to begin the process of actually ratifying the Convention". No such action was taken by Canada. I suggest that it is still not too late to do so.

There is reason to believe that the following states are now in the process of preparing for ratification of the Law of the Sea Convention: France and Spain; then, Belgium, Finland, Japan, the Netherlands, Russia and the UK, perhaps as early as June 30; others said to be preparing to do so are Denmark, Ireland, Luxemburg and the USA. Where would this leave Canada ? To repeat what I said here on March 31, should Canada, allegedly in search of its identity, be "Leader, Laggard or Opportunist"?

Conclusion

I should like to close with this quotation from Mr. MacEachen:

We must maintain the principles that governed our deliberations, in particular the "package deal". The Convention sets out a broad range of rights and responsibilities. If states may arbitrarily select those they will recognize or deny, we will see the end not only of our dream of a universal, comprehensive Convention on the Law of the Sea, but perhaps the end of any prospect for global co-operation on issues that touch the lives of all mankind. We must not, we cannot allow that to happen. The Law of the Sea Convention, and the Convention alone, provides a firm basis for the peaceful conduct of ocean affairs for the years to come. It must stand as one of the United Nation's greatest accomplishments, and worthy of support of every nation."

Were these words a Statement of Purposes and Principles or mere Platitudes and Pronouncements ? I believe they express Purposes and Principles which go to the heart of Canada's national interests and international credibility. I flatly reject any suggestion that they be dismissed as mere Platitudes or Pronouncements. I conclude by renewing my plea that Canada live up to its reputation and responsibilities, and not only ratify the Law of the Sea Convention, but take the lead in co-ordinating similar action by other states. Let us decide now whether to fish or cut bait.

The West Coast Salmon Dispute: A Canadian View of the Breakdown of the 1985 Treaty and the Transit Licence Measure

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1.0 Introduction

In June 1994 Canada enacted a regulation explicitly requiring foreign fishing vessels transiting selected west coast Canadian waters to purchase a licence for such passage.² The action was directed at American salmon fishing vessels which had previously enjoyed an explicit exemption under Canadian law from the need for permission to utilize the waters of Canada's west coast "Inside Passage".³ The break down of negotiations between the two countries on revitalizing the 1985 Pacific Salmon Treaty⁴ was the cause of the Canadian action. Canada had broken off the negotiations and took the transit licence action in order to apply pressure on the United States to unify and moderate their position on the alleged excessive "interception" of salmon originating in Canadian rivers.⁵ The direct intervention of U.S. Vice President Al Gore to assure Canada that progress was possible in renewed negotiations resulted in removal of the transit licence requirement in early July.⁶ However, negotiations have not yet produced salmon management arrangements satisfactory to Canada.

On the west coast of North America, where salmon is truly fisheries royalty, the issue of salmon has long been at the forefront of Canada's international ocean concerns. The life cycle of salmon, an anadromous species which begins life in fresh water rivers migrates to the ocean where it intermingles then returns to spawn in the fresh water river of origin, poses particular problems for resource management and international relations. As early as 1930, Canada and the United States agreed on a treaty to establish the International Pacific Salmon Fisheries Commission to regulate the taking of sockeye salmon which originated in the Fraser River.⁷ Moreover, following World War Two, Canada entered into a tripartite agreement with the United States and Japan the primary purpose of which was to curb Japan's fishing efforts regarding salmon of North American origin.⁸

Salmon was at the forefront of Canadian concerns during the 1970s at the Third United Nations Conference on the Law of the Sea (UNCLOS III), a process designed to establish an international constitution for ocean uses. Although the 200-n. mile fishing zone received the primary attention at UNCLOS III and clearly has implications for salmon management, the final product of UNCLOS III, the 1982 United Nations Convention on the Law of the Sea,⁹ contains a specific provision, Article 66, relating to anadromous species.

The introduction of the 200-n. mile fishing zone and the inclusion within the LOS Convention of a specific regime for anadromous species were significant considerations in the re-examination of the 1930 Fraser River Treaty. After protracted negotiations, the two countries entered into the 1985 Pacific Salmon Treaty. It was the break down of this Treaty which led Canada to the transit licence action. The purpose of this contribution is to provide the context for the Canada-U.S. salmon problems on the west coast by outlining the LOS Convention provisions on salmon, the content and operation of the 1985 Pacific Salmon Treaty, and a brief analysis of the international legality of the Canadian transit licence action. Negotiations for

a bilateral accord for west coast salmon management are continuing, but the prospects for a long-term agreement satisfactory to Canada are not good.

2.0 The Law of the Sea Convention

2.1 The Anadromous Species Regime

The original position that Canada took respecting offshore fishery resources at UNCLOS III was what has been described as the species approach.¹⁰ The idea was that the international community should delegate to Canada the authority to manage particular species located in waters adjacent to Canada since, as the state with the most direct interest in the resource, Canada would be in the best position to ensure appropriate conservation of the resource.¹¹ This species-centred approach, based on resource management principles, was swept aside by the 200-n. mile exclusive economic zone (EEZ) tidal wave which struck UNCLOS III in 1973-74. Canada supported this spatial approach, but continued to argue that anadromous species (salmon) should be treated separately.¹²

Canada's special concern about salmon arose not only from the economic and cultural importance of salmon on the west coast, but also from the dramatic decline of east coast salmon stocks.¹³

At UNCLOS III, Canada went to extraordinary lengths to support its view that the state of origin of anadromous species had special obligations and rights regarding the resource throughout its life cycle irrespective of the waters where the resource was found.¹⁴ One commentator described Canada's passion for salmon at UNCLOS III in the following terms:

*The promotion of the cause of salmon, carried out by distributing a 'salmon portfolio' to all delegations, took on the appearance of a crusade... .*¹⁵

Canada and the United States, together with several other states with a special interest in salmon, were responsible for the drafting of Article 66 of the LOS Convention, the special regime on salmon.¹⁶ Of the special classes of species acknowledged in the LOS Convention, the anadromous species regime is the most detailed. The reason that has been suggested for this is that only a handful of states had a direct interest in salmon,¹⁷ and the one country that might have been expected to object to a salmon regime which gave special authority to the state from which the salmon originated (state of origin), Japan, had already accepted the principle of special rights through the 1951 North Pacific fisheries treaty with Canada and the United States.¹⁸

Article 66(1) establishes the framework for the management of salmon by directing that "States in whose rivers anadromous stocks originate shall have the primary interest and responsibility for such stocks."¹⁹ Thus, the state of origin principle is unquestionably enshrined in the LOS Convention, as is the responsibility on the state of origin to take appropriate measure to ensure resource conservation.²⁰ The other paragraphs of Article 66 "establish how states of origin are to protect their interests and discharge their responsibilities."²¹

The major issue addressed in the LOS Convention anadromous stocks regime concerns salmon interception activities beyond the 200-n. mile zone. Paragraph 3(a) establishes that there is to be *no* salmon fishing on the high seas except in the situation where banning high seas salmon fishing "would result in economic dislocation".²² Even where a state might be able to claim economic dislocation and thus fit the exception to the prohibition on high seas salmon fishing, any fishing must be conducted pursuant to an agreement with the state of origin. "In the absence of an agreement on terms and conditions, high seas fishing for anadromous species

is forbidden.”²³ There appears to be little constraint on what type of regulations can be imposed on high seas salmon fishing by the state of origin including the imposition of catch quotas.²⁴

Enforcement of regulations related to high seas salmon fishing is to be by agreement between the state of origin and the high seas fishing state.²⁵ The state of origin has regulatory control of salmon fishing activity on the high seas, but not the authority to unilaterally enforce the regulations on the high seas. Illicit high seas salmon fishing, however, is clearly a breach of the LOS Convention.²⁶

Of course, salmon do not restrict their movement to waters of the state of origin and the high seas. They also venture into waters of other states and thus salmon from one country can be intercepted by the fishers of another state in that country’s waters. The general principle that the state of origin has the primary interest in salmon is applicable in these transborder situations. Also applicable is the ability of the state of origin to establish the total allowable catch for neighbour’s waters. However, the state of origin cannot directly regulate the salmon fishery in a neighbouring state.²⁷ The obligation in the LOS Convention is that the neighbouring state in which salmon migrates is to *cooperate* with the state of origin regarding conservation and management of the stocks.²⁸ Thus, while anadromous species are covered by a special regime, the salmon regime which gives primacy to the state of origin yields, to a large extent, to the sovereignty aspects of the 200-n. mile zone regime.

2.2 The Legal Status of the Anadromous Species Regime

The legality of the anadromous species provisions in the LOS Convention is relevant to the Canadian-American negotiations on west coast salmon since the state of origin principle and the duty to cooperate establish the framework for discussions.

As a matter of technical treaty law, the LOS Convention comes into force in November 1994 for those states which have ratified the Treaty. Canada’s Foreign Minister has announced in the House of Commons that Canada “will soon” become a party to the LOS Convention.²⁹ Despite this assurance, it is not a foregone conclusion if and when Canada will become a party to the Treaty.³⁰ As for the United States, the issue of becoming a party to the LOS Convention is complicated. First, the United States was one of the very few countries not to have signed the LOS Convention, and although American concerns with the LOS Convention centred on the deep seabed mining regime,³¹ there has existed a degree of antipathy towards much of the LOS Convention. Second, for the United States to become a party to the LOS Convention, the U.S. Senate is required to give its advice and consent. The complexity of the Treaty, the lack of a clearly identifiable constituency supporting the Treaty, and the history of American ambivalence to the Treaty appear to be major strikes against Senate ratification. However, the U.S. Secretary of State has announced that the LOS Convention will be submitted to the Senate for its advice and consent in late 1994 or early 1995.³² With Canadian and American ratification of the LOS Convention, the anadromous species regime provisions would be considered as legally binding between Canada and the United States.

Even if Canada and the United States do not become bound to the LOS Convention’s anadromous species regime through the operation of international treaty law, it can be argued that the Article 66 regime is binding on the two countries as a matter of customary international law.

That a regime, carefully negotiated by all the interested parties and accepted without dissent in a consensus document, can become part of customary international law, and thus binding on all states, is unquestioned.³³ The transition from treaty text to customary international law is made easier where there exists a significant amount of state practice which follows the

wording and concepts in a treaty. A recent examination of whether the salmon provisions of the LOS Convention are part of customary international law concluded that, as regards high seas fishing for salmon, the Treaty is largely being followed to the point that: "In the absence of agreement, a directed fishery for salmon on the high seas is illicit".³⁴

Canada has asserted that the state of origin principle in the LOS Convention is part of customary international law and that this entails a salmon ownership concept for the state of origin and an obligation on non-states of origin to reduce interceptions.³⁵ The Canadian view is that this applies both as regards high seas salmon fishing and as regards neighbouring state salmon interceptions. The implication of Canada's ownership concept is that interceptions must be compensated for by the intercepting state.³⁶ In the above cited examination of customary law, the author notes that in neighbouring state situations the non-states of origin "have accepted the obligation to minimize interceptions of anadromous species of foreign origin."³⁷ However, there is no conclusion whether customary international law *requires* such minimization or whether there is an obligation to compensate the state of origin for interceptions which take place.

Even if Article 66 of the LOS Convention is binding on Canada and the United States through treaty or customary international law, there exists ambiguity in the meaning and implication of the state of origin's primary interest and how it is to operate respecting neighbours. A failure to cooperate on conservation and management of transborder salmon stocks could be considered a breach of an international obligation.³⁸ The reality of this obligation, however, is that it is primarily useful for creating a platform for negotiations, but it cannot be used to force states into an agreement.

If the LOS Convention were to come into force between Canada and the United States, the dispute settlement process contained in the Treaty would be available to either country regarding the interpretation and application of Article 66. Although the LOS Convention contains provisions regarding compulsory third party dispute settlement,³⁹ disputes regarding a coastal state's "sovereign rights with respect to living resources in the exclusive economic zone" are exempted from compulsory adjudication.⁴⁰ This phraseology would cover the issue of U.S. interceptions of Canadian salmon and the application of the Article 66 salmon regime between neighbours. For certain types of fisheries disputes exempted from compulsory adjudication, employment of a conciliation commission is mandated by the LOS Convention.⁴¹ However, none of the listed situations cover the circumstances of alleged excessive interception by U.S. fishers of Canadian salmon. Thus, while the LOS Convention provides dispute settlement options, none of the mandated procedures are directly applicable to assist a state complaining of a misapplication of Article 66 by its neighbour. The reality of international relations, particularly between Canada and the United States, is that the option of either third party adjudication or conciliation, even if directly applicable, would only be utilized in very exceptional circumstances.⁴²

3.0 The 1985 Pacific Salmon Treaty

3.1 Reaching Agreement

Since the 1930s, Canada and the United States have jointly managed the sockeye salmon of the Fraser River. In 1958, Fraser River pink salmon also came under the management control of the International Pacific Salmon Fisheries Commission.⁴³ The 1930 Fraser River Treaty called for an equal division of the sockeye and pink salmon resources between the two countries. While the Fraser River salmon arrangements were perceived as successful,⁴⁴

changes in allocation arrangements and an expansion of the salmon species requiring joint management were seen as necessary. A motivation for revisiting the allocation split between the two countries was the concern that the benefits of monies spent on salmon enhancement was not and would not accrue to the investing country because of the mutually high level of interceptions.⁴⁵ This discouraged salmon enhancement and, more generally, inhibited proper management of salmon by the state of origin.

In 1971, Canada and the United States commenced discussions on a revised treaty regime for Pacific salmon management.⁴⁶ Central to these discussions was the state of origin principle endorsed by both Canada and the United States at UNCLOS III. As one observer noted: "To be internationally credible, the state-of-origin principle required that the Americans and Canadians seek to disentangle their mutual fisheries."⁴⁷ However, the historic pattern of salmon interception of the two countries⁴⁸ and the intermingling of species made it impossible to strictly adhere to an application of the state of origin principle. What the negotiators contemplated was a process to trade-off salmon interceptions so that a degree of balance would be achieved between the two countries.

The negotiations for a new west coast salmon treaty proved to be extremely difficult, primarily because of the competing interests within each country (particularly the United States) among those harvesters which relied on interception and those which relied on the salmon returning to the river of origin.⁴⁹ Also complicating the negotiations was the growing evidence in the 1970s and 1980s that chinook salmon originating from Washington and Oregon were becoming less plentiful, thus requiring conservation measures in order to ensure preservation.⁵⁰ Chinook was the principle American salmon species intercepted by Canada and the diminishment of the amount of chinook available made balancing interceptions between the two countries difficult.

A deal on salmon concluded in 1982 between the two countries was ultimately unacceptable to U.S. interests, primarily Alaska, leaving Canada "literally outraged".⁵¹ Canada's reaction to the U.S. rejection of the compromise package was an intense fishing effort on salmon of importance to the United States in order to pressure the United States into an acceptable salmon treaty.⁵² The pressure put by Canada on American salmon, combined with an American objective to improve relations with Canada⁵³ and an all-important compromise among the competing American interests,⁵⁴ led to conclusion and entry into force of the new west coast salmon treaty in 1985.

3.2 Contents and Operation

Beyond the Fraser River salmon species, the 1985 Pacific Salmon Treaty covered the salmon species of the transboundary rivers ("a river that rises in Canada and flows to the sea through the United States"⁵⁵), in particular the Stikine, Taku and Alsek Rivers which flow through the Alaska panhandle; the salmon of the B.C.-Alaska ocean boundary area;⁵⁶ and chinook and coho salmon, which were primarily of American origin.⁵⁷ On its face, the 1985 Treaty was an ambitious and comprehensive attempt to jointly manage the salmon resources of North America's northwest region.

For Canada, the key to the 1985 Pacific Salmon Treaty was the replacement of the obligation under the 1930 Fraser River Convention which guaranteed fifty percent of the resource to the United States with the principle that American allocations were to be based on equity. Article III(1)(b) captures the equity concept: "(E)ach Party shall conduct its fisheries and its salmon enhancement programs so as to ... provide for each Party to receive benefits equivalent to the production of salmon originating in its waters." The concept is simple, reflecting as it does the state of origin principle in the LOS Convention,⁵⁸ that each country should get the benefit of the resources that originate in its rivers. In the broad operation of this principle in the 1985

Pacific Salmon Treaty, the United States was to receive a fixed number (rather than a fixed percentage) of the Fraser River salmon and Canada would be compensated through interception of American-origin coho and chinook. The memorandum of understanding attached to the Pacific Salmon Treaty indicates that precise interception trade-offs were to be examined in the future⁵⁹ and that until agreement could be reached, the annual fishery arrangements were to be developed “in an equitable manner”.⁶⁰ Thus, while the equity concept was accepted in principle, its precise operation was much circumscribed.⁶¹

As well as the controversial equity principle, the two states committed themselves to “prevent overfishing and provide for optimum production.”⁶² They accepted that in fulfilling the two objectives of conservation and equity it was desirable to reduce mutual interceptions and to avoid undue disruption of existing fisheries.⁶³ The desire to avoid undue disruption of existing fishing patterns stands squarely in the way of the equity (state of origin) principle and allows fishers in both countries to point to different parts of the Pacific Salmon Treaty to support their activities.⁶⁴

The Pacific Salmon Treaty established a structure which was to make recommendations to the two governments on conservation and allocation of the salmon covered by the Treaty.⁶⁵ The Pacific Salmon Commission is composed of Canadian and American appointees⁶⁶ and decisions and recommendations of the Commission must have the agreement of both the Canadian and American sides.⁶⁷ The Pacific Salmon Commission has the assistance of the three panels: the Fraser River Panel for sockeye and pink salmon; the Southern Panel for salmon originating in rivers south of Cape Caution; and the Northern Panel for salmon originating in rivers between Cape Caution and Cape Suckling.⁶⁸ As well as creating this bureaucratic structure, short term agreements on the harvest arrangements for specific stocks were set out in the Annex to the 1985 Treaty.⁶⁹

From the Canadian point of view, the most important of the species were the sockeye and pink salmon of the Fraser River. It had been estimated that 80 percent of the American interception of Canadian salmon were of Fraser River sockeye and pink salmon.⁷⁰ As already noted, the United States yielded its right to fifty percent of this resource. What was devised for the Fraser River was a two step allocation agreement with the United States entitled to a pre-determined harvest volume for 1985-1988 and for the period 1989-1992 there was a pre-set aggregate limit of 7 million sockeye and 7.2 million pink salmon.⁷¹ In 1989, the Fraser River Panel and the Pacific Salmon Commission were to commence consideration of altering the allocations through the application of the equity principle.⁷²

4.0 Breakdown of the 1985 Pacific Salmon Treaty

Serious problems with the Pacific Salmon Treaty arose in 1992. Despite the allocation agreement for Fraser River salmon found in the Treaty, the two countries could not agree on a joint management plan for 1992.⁷³ The United States announced its intention to catch 870,000 sockeye salmon, which exceeded the Treaty limits by over 400,000 salmon. For the 1992 season, Canada estimated that the United States exceeded its Treaty obligation by 337,000 sockeye.⁷⁴ Combined with this perceived U.S. overfishing was the poor run of chinook salmon which “resulted in Canada failing to reap comparable rewards from its intercepting” practices.⁷⁵ Hence, the Canadian view was that the United States was benefitting from excessive interceptions while Canada was unable to even the balance through a similarly expanded interception program.

The 1992 perceived imbalance was symptomatic of the overall imbalance that Canada felt had occurred under the 1985 Treaty. It was the Canadian view that U.S. interceptions of Canadian salmon had increased dramatically during the period of the Pacific Salmon Treaty, while there had been a significant decline of Canadian interception of American salmon. The latter was the result of the weak coho and chinook runs from the northwestern U.S. states. There was also the problem of Alaskan interceptions of Canadian-origin salmon from the transboundary rivers which had led to the first deadlock at the Pacific Salmon Commission in 1987.⁷⁶ The data from the Pacific Salmon Commission revealed increases in U.S. interception from 6 million to 9 million salmon from 1985 to 1992, while Canadian interceptions decreased from 5 million to 3.5 million salmon.⁷⁷ In particular, the Alaskan interceptions of Canadian-origin stocks had increased from 3 million to 5 million fish.

Against this background, Canada and the United States entered negotiations to renew the arrangements for Fraser River sockeye and pink salmon management, alter the perceived high interception levels in Alaskan waters, and extend and renew other parts of the Pacific Salmon Treaty. Canada's position on issues of principle were largely unchanged from the negotiations that preceded the 1985 Treaty. Canada insisted that salmon from its rivers were "owned" by Canada and, therefore, when the United States intercepted Canadian-origin salmon compensation was required.⁷⁸ The United States' position was to recognize the need for restraint on the Fraser River stocks, but stress the precarious position of the American-origin chinook and coho salmon and emphasize the need for conservation of these resources.⁷⁹ The United States recognized Canada's high priority on equity but was of the view that "a numerically simplistic ('bean counting') economic evaluation of production and benefits is not the best way to proceed."⁸⁰

The negotiating position of the United States was complicated by internal dissension among the representatives from Washington, Oregon, Alaska and the Native organizations. In particular, Alaska relied on interceptions and saw no need to reduce effort, while Washington and Oregon worried about the recovery of endangered stocks and hoped to restrain Canadian fishing of those stocks.⁸¹ Achieving a unified negotiating position was further complicated by each of the representatives having a veto over discussions. The lack of unity and the constant squabbling within the United States negotiating team was a source of considerable frustration for Canada.⁸²

The Pacific Salmon Treaty was clearly collapsing. Washington and Oregon fishers were demanding greater access to plentiful Fraser River salmon. Alaskan fishers were increasingly intercepting Canadian-origin salmon. Pressure existed on Canada to support conservation of the weak American chinook and coho salmon runs, thus removing any possibility of balancing interceptions. While the conservation needs of the chinook and coho gave Canada leverage in reaching an accord with Washington and Oregon interests, no similar leverage existed respecting the activities of Alaskan fishers.

An agreement for the Fraser River was reached for the 1993 fishing season which allowed Americans to capture a minimum of twenty percent of the total allowable catch (TAC) to a maximum of 2.806 million fish depending upon the level of the TAC for Fraser River sockeye.⁸³ For pink salmon, the United States were entitled to 25.7 percent of the TAC to a total of 3.6 million fish. For the transboundary rivers, the unacceptable regime that had existed up to 1992 was continued. An integral part of the 1993 arrangements was to be the commencement of negotiations on the meaning and implementation of the equity concept detached from the technical negotiations on fisheries arrangements and catch limits.⁸⁴ Despite the 1993 management agreement, Canada continued to be of the view that the underlying problems

with the Pacific Salmon Treaty remained unresolved, hence the separate negotiation tract for refining and implementing equity.

In January 1994, Canada postponed scheduled negotiations citing a lack of U.S. proposals on the equity issue.⁸⁵ Efforts to establish 1994 management arrangements under the Pacific Salmon Treaty met with failure and in May 1994 Canada broke off negotiations citing frustration with the United States not having a united position and having to deal with the U.S. states separately.⁸⁶ From the Canadian perspective, Alaskan fishers were continuing their capture of salmon originating in Canadian waters at unacceptable levels, the commercial salmon fishery in Washington and Oregon was being closed for conservation reasons,⁸⁷ which would increase the pressure from Washington and Oregon fishers on Canadian stocks, and the weak American chinook and coho salmon runs meant that Canada was not in a position to balance the interceptions by the United States. In the past, aggressive Canadian fishing of Fraser River stocks to reduce the amount escaping into U.S. waters and aggressive interception of American chinook and coho salmon had been employed as pressure tactics.⁸⁸ In 1994, this was not seen as a conservationally-responsible tactic⁸⁹ and in June the Canadian government announced that all American commercial fishing vessels transiting selected "inside water passages" on the British Columbia coast would be required to purchase a licence from Canada.⁹⁰ The transit licence of \$1,500 (Cdn.) was designed to capture the approximately 300 U.S. fishing vessels that used the Canadian waterways to go from Washington and Oregon to Alaskan waters to harvest salmon.

The reaction to the transit licence measure in Canada was positive, primarily because the action was seen as a toughening of Canada's stance vis-a-vis the United States, inevitably a politically popular position. Official U.S. reaction was publicly muted. The U.S. Department of State reportedly delivered a protest note to Canada respecting the transit licence.⁹¹ Many American west coast politicians and fishing groups were predictably outraged.⁹² Bills were introduced and passed in both the U.S. Senate and House of Representatives directing the U.S. government to reimburse American fishers for any transit licence fee paid to Canada.⁹³

The direct intervention of Vice President Gore led Canada to remove the transit licence and resulted in a resumption of negotiations.⁹⁴ Reportedly, Vice President Gore assured Canada that: the United States would reverse the trend of intercepting increasing amounts of Canadian salmon; the United States would regulate its fishery to protect sensitive stocks; and a renewed salmon treaty would cover more than a single year.⁹⁵ It should be recalled that the arrangements in the 1985 Salmon Treaty had only become acceptable to the United States when the Reagan Presidency interceded.⁹⁶ Thus, the role of Vice President Gore must be seen as essential to any successful conclusion of west coast salmon arrangements.

Despite the intercession of Vice President Gore, Canada and the United States were unable to reach agreement on a joint management arrangement for 1994. The United States reportedly felt that Canada had agreed to apply the 1993 arrangements in 1994.⁹⁷ Canadian officials strongly denied that this was the case, indicating that Canada would develop an independent salmon plan.⁹⁸ This inability to agree on what was taking place in negotiations is symptomatic of the problems between the two countries.

Escalation of the dispute could involve Canada in taking conservationally-questionable measures regarding harvesting practices of its own salmon resources to try and prevent fish from being available to be intercepted by American fishers and pressure being applied on already dangerously low American-origin chinook and coho stocks. The reality is that Canada has few effective or palatable levers in its negotiations with the United States.

The Canadian employment of the transit licence had the desired effect of attracting attention at the highest levels of the U.S. government,⁹⁹ although it remains to the future whether this will result in fruitful negotiations. The measure, which interferes with vessel passage, has been criticized in the United States as being inconsistent with international law.¹⁰⁰ The next section will deal briefly with this issue.

5.0 The International Legality of the Transit Licence

Along the B.C. coast there are a series of channels and waterways cutting in a north-south direction, referred to as the Inside Passage, that allow for vessel passage in sheltered waters landward of fringing islands. Although not usually considered part of the Inside Passage, the most obvious of the channels and waterways are the waters between the B.C. mainland and Vancouver Island. These waters were covered by the June 1994 transit licence requirement. Other waterways more properly part of the Inside Passage and for which a transit licence was needed were: Fitz Hugh Sound, Finlayson Channel, Princess Royal Channel, Principe Channel, Grenville Channel and Laredo Sound. These waterways are north of Vancouver Island and south of Prince Rupert and are landward of numerous offshore islands which fringe the B.C. coastline. Clearly, Canada selected waterways which were an integral component of Canada's land mass and, for example, avoided naming the Hecate Strait, the water between the B.C. mainland and the Queen Charlotte Islands, as a waterway for which a transit licence was required.

Until June 1994, American fishing vessels had enjoyed an explicit exemption under Canadian law permitting passage through the Inside Passage without the requirement of a licence or permission to enter Canadian waters.¹⁰¹ Such an exemption did not exist for other foreign fishing vessels, all of which required a licence to enter Canadian waters¹⁰² except where they entered Canadian waters because of distress¹⁰³ or they entered Canada's 12-n. mile territorial sea "for the purpose of passing through such waters during the course of a voyage to a destination outside Canadian fisheries waters".¹⁰⁴ The clear assumption in the regulations was that the waters of the Inside Passage were not part of Canada's territorial sea, thus necessitating the explicit exemption for U.S. fishing vessels. While no explicit licence fee existed for non-American vessels utilizing the Inside Passage, the regulations directed that entry into any Canadian waters required permission. In June 1994, Canada removed the explicit U.S. exemption regarding the Inside Passage and imposed a licence fee for all foreign fishing vessels using the Inside Passage.

The international legal justification for the transit licence is that the waters in question are part of Canada's internal waters over which Canada exercises absolute jurisdiction and, therefore, Canada can impose conditions and requirements on foreign vessels and even prohibit foreign vessels from using the waters.¹⁰⁵ In traditional parlance, a state's internal waters are those waters landward of the baselines utilized to delineate the territorial sea and economic zone.¹⁰⁶ The baselines can either be straight baselines used to deal with geographically complex coastlines and for which there exist flexible criteria for construction¹⁰⁷ or baselines based upon the low water mark taking into account river mouths and similar physical anomalies.¹⁰⁸ Canada announced its straight baselines for the west coast of the Queen Charlotte Islands and Vancouver Island in 1969.¹⁰⁹ No straight baseline has been proclaimed connecting the north of Vancouver Island with the south of the Queen Charlotte Islands and thus enclosing the Queen Charlotte Sound.¹¹⁰ However, Canada has employed a fishery closing line across the Queen Charlotte Sound.¹¹¹ The fishery closing line is a unique Canadian contribution to international practice, the goal of which in 1971 was to eliminate foreign fishing from selected

near-shore waters of Canada. The precise international legal status of the fishery closing line is uncertain.¹¹² It has been asserted that Canada views the waters of Hecate Strait, Queen Charlotte Sound and the waters landward of Vancouver Island as historic internal waters.¹¹³ Canada's 200-n. mile zone for the B.C. coast has been delineated assuming that the fishery closing line across Queen Charlotte Sound is a proper baseline.¹¹⁴ Moreover, the west coast 200-mile fishing zone specifically excludes the waters seaward of the fishery closing line which is described as "Fishing Zone 3 and other areas within the internal waters and territorial sea of Canada".¹¹⁵

Litigation between the Federal Government of Canada and British Columbia in 1967 concluded that jurisdiction over the territorial sea and continental shelf on the west coast resides in the hands of Ottawa.¹¹⁶ In 1981, British Columbia declared that the waters and seabed landward of the baselines and fishery lines used by Canada to delineate the 200-n. mile zone were a provincial Inland Marine Zone.¹¹⁷ The 1967 Supreme Court of Canada case had not been asked to resolve constitutional jurisdiction over internal waters and British Columbia took the view that it had jurisdiction over west coast internal waters.¹¹⁸ Further litigation in 1984 resulted in the seabed under the waters between Vancouver Island and the mainland coming under provincial jurisdiction.¹¹⁹ In reaching this conclusion the Supreme Court of Canada decided, as the Federal Government had acknowledged, that the waters in question were not part of the territorial sea of Canada but were internal waters.¹²⁰ While not determinative of the issue of internal waters at international law, the constitutional litigation reflects the Canadian view that the waters landward of Vancouver Island to which the transit licence applied are internal waters.

The sum of the existing straight baselines, the fishery closing lines, historic waters possibility and the geographical reality that the waterways to which the transit licence applied are an integral component of British Columbia's coast, lead to the inescapable conclusion that the waterways to which the transit licence applies are, as a matter of international law, part of the internal waters of Canada.

The connecting waterways of the Inside Passage along the coast of British Columbia are of a different character, however, than what is normally considered part of internal waters, such as ports, bays and rivers. The waterways are more closely related to a canal or similar internal interconnected navigable waters. However, even canals and similar navigable internal waters, absent special international arrangements, are subject to absolute sovereignty.¹²¹

The U.S. Senate Bill designed as a response to the Canadian transit licence asserts that an international right of innocent passage exists for vessels using the waters of the Inside Passage. There are two possible basis for this assertion. First, that the waters of the Inside Passage are part of Canada's territorial sea. A coastal state has jurisdiction over vessels in its territorial sea subject, however, to that vessel's right of innocent passage.¹²² As noted above, Canada recognizes the general right of innocent passage for foreign fishing vessels.¹²³ The geography of the fringing islands plus past Canadian actions regarding baselines, historic waters and fishery closing lines would make it difficult for the United States to successfully sustain the argument that the waters to which the transit licence applied are territorial waters and not internal waters.

The second possible basis for the asserted innocent passage right arises from Article 8(2) of the 1982 LOS Convention where it is provided that in waters enclosed by straight baselines, which were not previously considered as internal waters, the right of foreign vessel innocent passage applies.¹²⁴ Under this provision, innocent passage can exist even in internal waters. As a technical matter the lack of Canadian straight baselines in the Inside Passage area defeats the

potential application of Article 8(2). More broadly, the onus of showing application of Article 8(2) innocent passage rights would fall on the asserting state, here the United States, and that onus would be a heavy one given the inconsistency of innocent passage with the internal waters regime. American acquiescence to the special exemption that existed in Canadian law for passage of U.S. fishing vessels through the Inside Passage would operate to deny the existence of an Article 8(2) innocent passage right.

A variation of innocent passage, known as transit passage, exists where waters in question are part of an international strait.¹²⁵ There was no direct assertion that the Inside Passage constituted an international strait and, if made, such a claim would be easily defeated since the Inside Passage does not meet the criteria of an international strait.¹²⁶

Another possible U.S. argument regarding navigation rights in the Inside Passage arises where navigable waters, because of their proximity to two or more states, can be characterized as shared waters. In such a case a state's sovereignty over its portion of the waters may be circumscribed by the rights of the sharing state. This situation arose in the *1992 Honduras-El Salvador-Nicaragua Case*¹²⁷ before the International Court of Justice where the Court was required to determine the legal status of the Gulf of Fonseca, a water body on which all three states bordered. The Court was able to find a history of condominium in the Gulf with the result that the waters were to be shared and the rights of the littoral states over the waters circumscribed.¹²⁸ However, the possibility of shared waters is not the case for the connecting B.C. waterways of the Inside Passage or the waters landward of Vancouver Island since these waters are not truly shared as in the case of a bay or strait with two or more littoral states.

While port fees and navigation user fees are a well-accepted international practice,¹²⁹ a "pure" transit fee arrangement raises concerns for states like the United States which have a strong interest in the protection of unimpeded navigational rights both for commercial and security reasons.¹³⁰ The normal circumstances in which transit fees have arisen have been in the context of international straits with the suggested fees being connected to marine pollution prevention considerations.¹³¹ These types of transit fees have been strongly resisted by user states. *The possible misuse by other states of the Canadian transit licence example in circumstances dissimilar to the B.C. coastal situation is a concern for both Canada and the United States.*

While the international legality of Canada's transit licence action is evident, the implications of the action are of concern. Just days after the imposition of the Canadian transit licence, it was suggested in the United States that Canadian vessels using the Strait of Juan de Fuca should be subject to an oil pollution levy.¹³² It is not surprising, therefore, that very shortly after the introduction of the transit licence requirement it was revoked.

6.0 Prospects For the Future

The need for a joint American-Canadian agreement to cooperatively conserve and share the salmon species in the Pacific northwest is unquestioned. Several American-based salmon species are at the point of endangerment and uncontrolled fishing effort for other species could lead to the same result. Emphasis purely on the species in extremis, while sound from a conservational point of view, will not satisfy Canada's desire to have the United States reduce its interception of Canadian "owned" salmon. It cannot be denied that the state of origin principle is a crucial component of existing international practices, if not a binding principle of international law, regarding cross-border salmon management. Canada's position in the bilateral salmon discussions has been premised on making the state of origin principle

operational in its west coast salmon relationship with the United States. Reduction by the United States of salmon interception is not without cost, however, not only in resources foregone and work lost, but also politically.

An international lawyer's answer to the dilemmas facing Canada and the United States would be to obtain a binding legal opinion about the application of the state of origin principle. If, as Canada asserts, the state of origin principle is equivalent to ownership of salmon then any American interception would *require* compensation either of direct monies or equivalent resources. It might be easier for the United States to accept that interceptions have to be reduced or direct compensation paid if the decision came from an international judicial authority rather than through a political compromise. The quantity of compensation issue could also be left to an independent panel as is frequently the case in domestic situations. Of course, one of the problems that has bedevilled the Pacific Salmon Commission and the negotiations between the two countries has been attempting to verify, quantify and value the interceptions of each country.

While such a "legal" approach may be helpful, it is a truism of shared ocean resources that legal division of resources does not lead to or necessarily encourage appropriate management of the resource. Joint efforts to conserve and manage salmon species would still be required.

A resource manager's approach to the west coast salmon problem would be strict controls of all harvesting practices coupled with expanded enhancement programmes. The key to this approach would be the independence of the resource manager from the political pressures from the two countries. What could be envisioned is a truly independent Pacific Salmon Commission with direct authority over the harvest and enhancement practices of the fishers of the two countries, instead of a Commission composed of the equal numbers from the two protagonists and where consensus is the operating principle. The loss of sovereignty, accountability, and national control over outcomes are the most obvious roadblocks to the independent Pacific Salmon Commission idea. Also, while the issue of total resources available to be captured is a resource manager's issue, the sharing between countries is a political/negotiable issue and the independent Pacific Salmon Commission would have to be staffed by the uncommonly wise in order to have the legitimacy to succeed in deciding allocation issues.

Short of reconstructing the institutional mechanism currently in place (the Pacific Salmon Commission), the way ahead is a continuing series of limited agreements for specific species and years punctuated with mini-fish wars when negotiations are fruitless. The history of the Pacific Salmon Treaty since 1985 clearly fits this pattern. The nature of the entrenched interests lead to no other result. The west coast salmon arrangements between Canada and the United States can be expected to be on the agenda between the two countries for years to come.

Endnotes

1. Ted McDorman is Associate Professor, Faculty of Law, and Associate, Centre for Asia-Pacific Initiatives, University of Victoria, Victoria, British Columbia, Canada and Associate, Oceans Institute of Canada, Halifax. The author wishes to acknowledge the assistance of Catherine J. Parker, who, however, wishes to disassociate herself from any and all the comments and conclusions in this paper. A revised version of this paper appeared in the *Loyola of Los Angeles International and Comparative Law Journal*.
2. "Licence Fee Announced For U.S. Vessels", press release, Canada, Department of Fisheries and Oceans, 9 June 1994. Coastal Fisheries Protection Regulations, amendment, Canada Gazette, Part II, Vol. 128, No. 13, SOR/94-444, 14 June 1994, pp. 2575-2578 issued pursuant to the Coastal Fisheries Protection Act, R.S.C. 1985, ch. C-33, as amended. See: "Canada moves to protect B.C. salmon", 10 June 1994, *Toronto Globe & Mail*, at A1 and A4; "U.S. boats face through-B.C. fee", 10 June 1994, *Vancouver Sun*, at A1 and A2; and "Canada fires \$1,500 shot at U.S. boats in fish war", 10 June 1994, *Victoria Times-Colonist*, at A1 and A2.
3. Section 17 of the Coastal Fisheries Protection Regulations, Vol. IV, Consolidated Regulations of Canada, (1978), ch. 413, amended by section 13 of the Coastal Fisheries Protection Regulations, amendment, Canada Gazette, Part II, Vol. 119, No. 13, SOR/85-257, at p. 2575 stated:
A United States fishing vessel may, without the authority of a licence, pass through the Canadian fisheries waters known as the 'Inside Passage' on the west coast of Canada if it complies with the conditions described in section 15(2).
The primary condition in section 15(2) is that the fishing vessel have its gear stowed below deck or otherwise not readily be available for fishing.
4. Canada Treaty Series, 1985 No. 7 [hereinafter the 1985 Pacific Salmon Treaty].
5. Article I(4) of the 1985 Pacific Salmon Treaty defines interception as "the harvesting of salmon originating in the waters of one Party by a fishery of the other Party". Note: Thomas C. Jensen, "The United States-Canada Pacific Salmon Interception Treaty: An Historical and Legal Overview" (1986), 16 *Environmental Law* 363, at p. 369.
6. "Gore's assurance on salmon lifts block on stalled talks", 3 July 1994, *Victoria Times-Colonist*, at p. A2; "Canada catches concessions in salmon scrap", 4 July 1994, *Vancouver Sun*, at p. B1 and "Lifting of boat fee paves way for fish talks to resume", 3 July 1994, *Seattle Times*, at p. A1.
7. United States-Canada, Convention for the Protection, Preservation and Extension of the Sockeye Salmon Fishery in the Fraser River System, signed 26 May 1930, 50 Stat. 1355 (1930), 8 U.S.T. 1058, T.I.A. section No. 3867 [hereinafter the Fraser River Treaty]. The Treaty did not come into legal effect until 1937 due to ratification delay in the United States. See: Jensen, *supra* note 4, at p. 374, fn. 24.
8. The 1951 International Convention for the High Seas Fisheries of the North Pacific Ocean, Canada Treaty Series, 1953 No. 3 and 205 U.N.T.S. 65. Generally concerning this Convention see: E. Miles, et al., *The Management of Marine Resources: The North Pacific* (Berkeley and Los Angeles: Univ. of California Press, 1982), at pp. 55-63 and 170-173. See also: J.A. Yogis, "Canadian Fisheries and International Law", in R. St. J. Macdonald, G.L. Morris and D.M. Johnston, eds. *Canadian Perspectives on International Law and Organization* (Toronto: Univ. of Toronto Press, 1974), at pp. 402-403. The 1951 Treaty was replaced in February 1992 by the Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean, with Canada, the United States, Japan and Russia as parties. The 1992 Convention has established the North Pacific Anadromous Fish Commission (NPAFC) to promote the conservation of salmon in the North Pacific.
9. United Nations Convention on the Law of the Sea, done 10 December 1982, reprinted in (1982), 21 *Int'l Legal Materials* 1261-1354 [hereinafter the 1982 LOS Convention].
10. The Canadian position is summarized in Barbara Johnson, "Canadian Foreign Policy and Fisheries", in B. Johnson and M.W. Zacher, eds. *Canadian Foreign Policy and the Law of the Sea* (Vancouver:

Univ. of British Columbia Press, 1977), at pp. 73-74.

11. This Canadian viewpoint is well articulated by L.H.J. Legault, "Maritime Claims", in Macdonald, et al., *supra* note 7, at pp. 392-393 and see Johnson, *supra* note 9, at pp. 72-73.

12. See: Johnson, *supra* note 9, at pp. 77 and 83.

13. The decline of east coast salmon stocks in the 1970s is discussed in Owen Myers, "The Management of Transboundary Stocks: Atlantic Salmon and Northern Shrimp", in D. VanderZwaag, *Canadian Ocean Law and Policy* (Toronto: Butterworths, 1992), at pp. 96-99. Concerning east coast salmon generally, see: Myers, at pp. 92-108; Derek Mills and David Piggins, *Atlantic Salmon: Planning For The Future* (London: Croom Helm, 1988), 587p.; and Jill L. Bubier, "International Management of Atlantic Salmon: Equitable Sharing and Building Consensus" (1988), 19 *Ocean Development and International Law Journal* 35-57.

14. "Canada: Working Paper on the special case of Salmon", A/Conf. 62/C. 11/L. 81, 23 August 1974, reproduced in *Third United Nations Conference on the Law of the Sea, Official Records, Vol. 3* (New York: 1975), at p. 240.

15. Johnson, *supra* note 9, at p. 83.

16. Concerning the drafting and negotiating of Article 66 of the LOS Convention, see: Satya N. Nandan and Shabtai Rosenne, eds. *United Nations Convention on the Law of the Sea, 1982: A Commentary Vol. II* (Dordrecht: Martinus Nijhoff, 1993), at pp. 665-679 and William T. Burke, "Anadromous Species and the New International Law of the Sea" (1991), 22 *Ocean Development and International Law Journal* 95, at pp. 100-102.

17. Douglas M. Johnston, *The International Law of Fisheries* (Dordrecht: Martinus Nijhoff, Rev. ed. 1987), at p. lxxii.

18. See above, *supra* note 7. More generally concerning recent issues of high seas capture of salmon on the North American west coast, see: Burke, *supra* note 15, at pp. 107-108 and T.L. McDorman, "Canada and the North Pacific Ocean: Recent Issues" (1991), 22 *Ocean Development and International Law Journal* 365, at pp. 370-372.

19. For a detailed discussion on the interpretation of LOS Convention, Article 66(1), see: Burke, *supra* note 15, at p. 102.

20. LOS Convention, Article 66(2).

21. Burke, *supra* note 15, at p. 102.

22. The reason for this exception was to accommodate Japan's investment and involvement respecting high seas fishing. Burke, *supra* note 15, at p. 104.

23. Burke, *supra* note 15, at p. 105.

24. LOS Convention, Article 66(2).

25. LOS Convention, Article 66(3)(d). See: Burke, *supra* note 15, at p. 106.

26. Burke, *supra* note 15, at 106.

27. Burke, *supra* note 15, at 117.

28. LOS Convention, Article 66(4).

29. Canada, House of Commons, Debates, 15 March 1994, at p. 2255.

30. Generally on Canada and ratification of the LOS Convention, see: T.L. McDorman, "Will Canada Ratify the Law of the Sea Convention?" (1988), 25 *San Diego Law Review* 535-579.

While it is evident that Canada is moving towards becoming a party to the LOS Convention, a wrinkle

has arisen from recent Canadian action on the east coast. In May 1994 Canada enacted changes to the Coastal Fisheries Protection Act, S.C. 1994, c. 14 and produced regulations, Coastal Fisheries Protection Regulations, amendment, Canada Gazette, Part II, Vol. 128, No. 12, SOR/94-362, 25 May 1994, pp. 2222-2227, to provide to Canada the legislative capacity to enforce international regulations on fisheries stocks located adjacent to Canada's 200-n. mile zone against vessels of selected countries (or vessels without nationality) that are not a party to the international regulatory regime adjacent to Canada's east coast fishing zone. Accompanying this "limited" unilateral extension of Canada's enforcement jurisdiction was a change in Canada's acceptance of the compulsory jurisdiction of the International Court of Justice (I.C.J.), the effect of which was to remove the possibility of being taken to the I.C.J. regarding the legality of Canada's new legislation. "Canada Takes Action To End Foreign Overfishing", press release, Canada, Department of Foreign Affairs and International Trade, 10 May 1994. Under the dispute settlement process of the LOS Convention, see *infra* note 38, compulsory dispute settlement is to be available regarding issues of navigation, fishing, etc. on the high seas (beyond 200-n. miles). The Canadian decision to restrict the applicability of the I.C.J.'s compulsory dispute settlement to the new law respecting high seas fishing activities may be perceived as inconsistent with the requirement in the LOS Convention to allow compulsory dispute settlement. Thus, Canadian ratification of the LOS Convention may have to await the overcoming of the conflict with the dispute settlement requirements. A full evaluation of the above is beyond the scope of this paper.

31. See: Markhus G. Schmidt, *Common Heritage or Common Burden? The United States Position on the Development of a Regime for Deep Sea-Bed Mining in the Law of the Sea Convention* (Oxford: Clarendon Press, 1989), 336p.

32. Letter from Secretary of State Warren Christopher to Senator Claiborne Pell, dated 30 June 1994, reproduced in United States, Congressional Record, Senate, Vol. 140, No. 86, 30 June 1994, section 8095 and see pages 8095-8097 for the accompanying document entitled "Oceans Policy and the Law of the Sea Convention".

The American concerns about the deep seabed mining regime in the LOS Convention were shared by virtually all industrialized countries, as is evident by the fact that no industrialized country was among the first sixty states ratifying the LOS Convention. Many of these concerns have been addressed in the Draft Agreement Relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982. The effect of this Agreement will be to substantially alter the deep seabed regime found in the LOS Convention. The Agreement is to apply provisionally, until 1998 or it comes into force, at which time it will supercede parts of the LOS Convention. The goal of the Agreement is to entice industrialized countries to ratify the LOS Convention "as amended". See: United Nations, General Assembly, "Report of the Consultations of the Secretary-General on outstanding issues relating to the deep seabed mining provisions of the United Nations Convention on the Law of the Sea", U.N. Doc. A/48/950, 9 June 1994. The full details of the above Agreement, its entry into force, and its relationship with the LOS Convention are beyond the scope of this paper. See generally: E.D. Brown, "Neither Necessary nor Prudent at this Stage: The Regime of Seabed Mining and its Impact on the Universality of the UN Convention on the Law of the Sea" (1993), 17 *Marine Policy* 81-107 and Moritaka Hayashi, "Effect of the Entry Into Force of the 1982 UN Convention on the Law of the Sea on the Ocean and Coastal Areas" (paper presented at the Singapore Conference on Sustainable Development of Coastal and Ocean Areas in South-East Asia: Post Rio Perspectives, 28-29 May 1994).

33. See generally: Oscar Schachter, "Entangled Treaty and Custom", in Y. Dinstein and M. Tabony, eds. *International Law at a Time of Perplexity* (Dordrecht: Martinus Nijhoff, 1989), at pp. 717-738; Mark E. Villiger, *Customary International Law and Treaties* (Dordrecht: Martinus Nijhoff, 1985) 432 p.; Bin Cheng, "Custom: The Future of General State Practice In a Divided World", in R. St. J. Macdonald and D.M. Johnston, eds. *The Structure and Process of International Law: Essays In Legal Philosophy, Doctrine and Theory* (Dordrecht: Martinus Nijhoff, 1986), at pp. 513-554; and Antonio Cassese, *International Law in a Divided World* (Oxford: Clarendon Press, 1986), at pp. 180-185.

34. Burke, *supra* note 15, at p. 119.

35. "Statement Regarding the Canadian Position", 3 December 1992, at Pacific Salmon Commission meetings, reprinted in Pacific Salmon Commission, 1992/93 Eighth Annual Report (Vancouver, 1993), at p. 5 [hereinafter "December 1992 Canadian Statement"].
36. "December 1992 Canadian Statement", supra note 34, at p. 5. Note also: Joy A. Yanagida, "The Pacific Salmon Treaty" (1987), 81 *American Journal of Int'l Law* 577, at p. 589.
37. Burke, supra note 15, at p. 117.
38. LOS Convention, Article 66(4).
39. See: LOS Convention, Part XV, section 2, Articles 286-296. Generally on the dispute settlement process and procedures of the LOS Convention, see: A.O. Adede, *The System for Settlement of Disputes under the United Nations Convention on the Law of the Sea* (Dordrecht: Martinus Nijhoff, 1987), 285 p. and J.G. Merrills, *International Dispute Settlement* (Cambridge: Grotius Publications, 1991), at pp. 155-178.
40. LOS Convention, Article 297(3)(a).
41. LOS Convention, Article 297(3)(b).
42. Canada and the United States have demonstrated an overwhelming preference for negotiation as the primary means to manage and resolve the countless disputes that arise between the two countries. See: Richard Bilder, *When Neighbours Quarrel: Canada-U.S. Dispute Settlement Experience* (Madison: Institute For Legal Studies, 1984), at p. 25, and generally, at pp. 24-63.
43. For a brief discussion of the Fraser River Treaty, see: Jensen, supra note 4, at pp. 373-376. For a more detailed study, see: John F. Roos, *Restoring Fraser River Salmon: A History of the International Pacific Salmon Fisheries Commission, 1937-1985* (Vancouver: Pacific Salmon Commission), 438p.
44. Jensen, supra note 4, at p. 375 and Yogis, supra note 7, at pp. 399-400.
45. Note: Jensen, supra note 4, at p. 371: Overharvest by the intercepting jurisdiction can also jeopardize artificial or natural salmon enhancement programs: the home country will be understandably reluctant to invest in hatcheries or habitat restoration if the fish produced are caught by fishermen of another nation.
46. Jensen, supra note 4, at pp. 379-380.
47. Johnson, supra note 9, at p. 81. Note also: Burke, supra note 15, at p. 110.
48. The 1930 Fraser River Treaty assured the United States an equal share of the sockeye and pink salmon from the Fraser River. Canadian fishers had long been involved in significant interception of chinook salmon originating in the Columbia River and other rivers of Washington and Oregon. See: Jensen, supra note 4, at pp. 384-386.
49. Concerning the complex interactions in the United States, see: Jensen, supra note 4, at pp. 384-395 and Yanagida, supra note 35, at pp. 579-588.
50. See: Jensen, supra note 4, at pp. 387-390.
51. See: Jensen, supra note 4, at p. 395. Note also: Marlyn Twitchell, "Implementing the U.S.-Canada Pacific Salmon Treaty: The Struggle to Move From 'Fish Wars' to Cooperative Fishery Management" (1989), 20 *Ocean Development and International Law Journal* 409, at p. 412.
52. Note: Gordon R. Munro and Robert L. Stokes, "The Canada-United States Pacific Salmon Treaty", in D. McRae and G. Munro, eds., *Canadian Oceans Policy: National Strategies and the New Law of the Sea* (Vancouver: Univ. of British Columbia Press, 1989), at p. 26.
- These authors describe the inherent need for joint management of the west coast salmon by emphasizing the negative effects of competitive behaviour where the United States and/or Canada intercept the others salmon. The prisoners dilemma, rational decision making by the players resulting

in outcomes each recognizes as inferior yet without cooperation the lesser outcome is inevitable, is described at pages 18-19. Without cooperation on west coast salmon, each country in seeking to maximize its catch could inevitably destroy the resource itself.

53. The west coast salmon dispute was identified by the United States as an issue that could be resolved in time for the infamous “Shamrock Summit” of March 1985 between U.S. President Reagan and Canadian Prime Minister Mulroney. It was at this Quebec City meeting the 1985 Pacific Salmon Treaty was finalized. See: Jensen, *supra* note 4, at pp. 397-399 and Munro and Stokes, *supra* note 51, at p. 28.

54. The compromise was forged by the native American group which forced Alaska to moderate its position. See: Jensen *supra* note 4, at p. 398.

55. Pacific Salmon Treaty, Article I(7) and see Article VII and Annex IV, chapter 1. See also: Jensen, *supra* note 4, at pp. 407-408.

56. Pacific Salmon Treaty, Annex IV, chapter 2 and see: Jensen, *supra* note 4, at p. 410. The B.C.-Alaska ocean boundary area is commonly referred to as the Dixon Entrance area and is the subject of an ocean boundary dispute between Canada and the United States. A brief note on the ocean boundary dispute is provided in McDorman, *supra* note 17, at pp. 372-375.

57. Pacific Salmon Treaty, Annex IV, chapters 3 and 5, and see: Jensen, *supra* note 4, at pp. 405-407.

58. “In essence, the goal of allocating benefits as a matter of ‘equity’ between the two parties is a functional device allowing for the acknowledgement of the dominant position of the state of origin”. Burke, *supra* note 15, at p. 111.

59. “Memorandum of Understanding” attached to the 1985 Pacific Salmon Treaty, section A - Implementation of Article III, paragraph 1(b), second paragraph: “(It) is anticipated that it will be some time before the Commission can develop programs to implement the provisions of Article III, paragraph 1(b) in a complete and comprehensive manner”. See: Jensen, *supra* note 4, at p. 404 and Twitchell, *supra* note 50, at p. 412, who notes:

In order to implement the equity principle, each country must estimate the value of the salmon it produces that are harvested by the other country. Because the countries currently lack sufficient data on the value of the intercepted fish, the equity principle will be implemented through a phased approach, as data is gathered.

60. “Memorandum of Understanding” attached to the 1985 Pacific Salmon Treaty, section A - Implementation of Article III, paragraph 1(b), second paragraph.

61. This is the conclusion of Yanagida, *supra* note 35, at pp. 589-590.

62. Pacific Salmon Treaty, Article III(1)(a).

63. Pacific Salmon Treaty, Article III(3).

64. Twitchell, *supra* note 50, at p. 419 captures the conflict as follows:

Fishers who feel they aren't getting enough fish and want to increase their allocation, however, invoke 'equity' as a debating point. Intercepting fishers counter that the treaty also prohibits 'undue disruption' of existing fisheries, and therefore their allocation should not be altered.

65. Pacific Salmon Treaty, Articles II(8) and IV(5) and (6).

66. Pacific Salmon Treaty, Article II(3).

67. Pacific Salmon Treaty, Article II(1) and (6).

68. See: Pacific Salmon Treaty, Annex I.

69. Pacific Salmon Treaty, Annex IV. The management regimes in the 1985 Treaty are outlined in Twitchell, *supra* note 50, at pp. 413-417. A revision of Annex IV became effective 17 May 1991 and

extended the management regime for some of the salmon species into the 1990s. This revised Annex IV is reprinted in the Pacific Salmon Commission, Eighth Annual Report, *supra* note 34, at pp. 129-147.

70. Munro and Stokes, *supra* note 51, at p. 29 citing a Canadian government press release.

71. See: Pacific Salmon Treaty, Annex IV, chapter 4.

72. Pacific Salmon Treaty, Annex IV, chapter 4, section 1(g).

73. See: "Canada stands by treaty", (1992), 5 No. 3 Pacific Tidings, at pp. 1-2.

74. "December 1992 Canadian Statement", *supra* note 34, at p. 9.

75. "December 1992 Canadian Statement", *supra* note 34, at pp. 8-9.

76. See: Twitchell, *supra* note 50, at pp. 417-419.

77. Canada, Department of Fisheries and Oceans, "Backgrounder", dated April 1994, attached to "Licence Fee Announced For U.S. Vessels", press release, Canada, Department of Fisheries and Oceans, 9 June 1994. While there was no disagreement on the numbers, there was disagreement over the dollar value of the salmon.

78. "December 1992 Canadian Statement", *supra* note 34, at p. 5.

79. "Statement Regarding the United States Position", 3 December 1992, at Pacific Salmon Commission meetings, reprinted in Pacific Salmon Commission, Eighth Annual Report, *supra* note 34, at pp. 12-14.

80. "Statement Regarding the United States Position", *supra* note 80, at p. 16.

81. The division within the United States was a replay of the problems encountered in initially agreeing to the Pacific Salmon Treaty. See: Yanagida, *supra* note 35, at pp. 579-588 and Jensen, *supra* note 4, at pp. 384-395.

82. See: "Canada ready for war with U.S. over fish", 27 May 1994, Vancouver Sun, at p. A1. See also: "Talks fail, union agent seeks wider salmon war", 28 May 1994, Victoria Times-Colonist, at pp. A1-A2.

83. "Letter of Transmittal to Governments regarding fishery regimes for 1993", Pacific Salmon Commission, Eighth Annual Report, *supra* note 34, at pp. 127-128.

84. "Canada-U.S. Agreement Reached on Pacific Salmon Harvest", press release, Canada, Department of Fisheries and Oceans, 24 June 1993.

85. "Canada Cancels Pacific Salmon Treaty (PST) Negotiations", press release, Canada, Department of Fisheries and Oceans, 20 January 1994.

86. See text accompanying and material cited in *supra* note 82 and 83. See also: "Canada Quits Salmon Talks - Failure to Reach Treaty with U.S. ups Odds of a Fish War", 27 May 1994, Seattle Times, at p. A1.

87. "US closes Pacific salmon fisheries", May 1994, Fishing News International, at p. 45.

88. Munro and Stokes, *supra* note 51, at p. 26 and see, more generally, *supra* note 51.

89. See: Canadian Minister of Fisheries and Oceans Brian Tobin, "Licence fee got message through to Americans", 29 July 1994, Victoria Times-Colonist, at p. A5.

90. "Licence Fee Announced For U.S. Vessels", press release, Canada, Department of Fisheries and Oceans, 9 June 1994 and Coastal Fisheries Protection Regulations, amendment, Canada Gazette, Part II, Vol. 128, No. 13, SOR/94-144, 14 June 1994, pp. 2575-2578.

91. See: "Fishing Boats Face Canada Fees Today", 15 June 1994, Seattle Times, at p. A1.

92. See: "Canada moves to protect B.C. salmon", 10 June 1994, Toronto Globe and Mail, at A1 and A4 and "Fishing Boats Face Canada Fees Today", 15 June 1994, Seattle Times, at p. A1 and see also: Editorial, "Canada's Fee on U.S. Boats is Pure Blackmail", 10 June 1994, Seattle Times, at B4.
93. Senate Bill, section 2243, 103rd Congress, 2nd Session and House of Representatives Bill, H.R. 3817, 103rd Congress, 2nd Session. Both bills were to amend the Fisherman's Protective Act of 1967, 22 U.S.C. § 1971-1977. See: "Canadian Toll Imposes 'Quiet Time' on U.S. Fishermen", 16 June 1995, Seattle Times, at p. A1.
94. "Gore's assurance on salmon lifts block on stalled talks", 3 July 1994, Victoria Times-Colonist, at p. A2.
95. "Canada catches concessions in salmon scrap", 4 July 1994, Vancouver Sun, at p. B1.
96. See text accompanying supra note 52.
97. "No new deal, so Canada, U.S. to follow '93 salmon plan", 23 July 1994, Victoria Times-Colonist, at p. A2.
98. "Ottawa fish official denies agreement on use of '93 rules", 26 July 1994, Victoria Times-Colonist, at p. A3 and "U.S. negotiators being mischievous - Zirnhet", 27 July 1994, Victoria Times-Colonist, at p. A3. See: "Plan targets sockeye - aims to save coho, springs", 29 July 1994, Victoria Times-Colonist, at p. A3.
99. Canadian Minister of Fisheries and Oceans Brian Tobin, "Licence fee got message through to Americans", 29 July 1994, Victoria Times-Colonist, at p. A5.
100. Senate Bill, section 2243, 103rd Congress, 2nd. Session specifically recites that in international law there exists a right of innocent passage for U.S. vessels through the "Inside Passage" off the Pacific Coast of Canada and that Canada's transit licence is inconsistent with this right of innocent passage.
101. The regulation is set out above at supra note 2.
102. Coastal Fisheries Protection Act, R.S.C. 1985, ch. C-33, as amended, section 3.
103. Coastal Fisheries Protection Regulations, Vol. IV, Consolidated Regulations of Canada, (1978), ch. 413, as amended, section 14(1).
104. Coastal Fisheries Protection Regulations, Vol. IV, Consolidated Regulations of Canada, (1978), ch. 413, section 15(1) amended by section 1 of the Coastal Fisheries Protection Regulations, amendment, Canada Gazette, Part II, Vol. 115, No. 5, SOR/81-193, at p. 748.
105. Concerning the international legal regime that applies to internal waters, see: R.R. Churchill and A.V. Lowe, *The Law of the Sea* (Manchester: Manchester Univ. Press, Rev. ed., 1988), at pp. 51-52. See also: V.D. Degan, "Internal Waters" (1986), 17 *Netherlands Yearbook of International Law* 3-44.
106. LOS Convention, Article 8(1).
107. Straight baselines, the criteria for them and the application of the criteria, has been a topic of intense international interest. On the issues and problems of straight baselines, see: Churchill and Lowe, supra note 106, at pp. 28-33; United Nations, Office for Ocean Affairs and the Law of the Sea, *Baselines: An Examination of the Relevant Provisions of the United Nations Convention on the Law of the Sea* (New York: 1989), at pp. 17-26; and W. Michael Reisman and Gayl Westerman, *Straight Baselines in International Maritime Boundary Delimitation* (London: MacMillan, 1992), 242p.
108. See: United Nations, *Baselines*, supra note 108, at pp. 1-15.
109. Territorial Sea Geographical Coordinates Order (Order, P.C. 1969-1109, 29 May 1969), Vol. XVIII Consolidated Regulations of Canada (1978) ch. 1550, at pp. 13751-13758, regulation issued under the Territorial Sea and Fishing Zones Act, R.S.C. 1985, ch. T-8 as amended.

110. Canada has always been sensitive to American reactions to utilization of straight baselines which may be perceived as deviating from the internationally accepted criteria for construction of straight baselines. The criteria are discussed in the material cited in *supra* note 108. Despite there being no length criterion respecting a straight baseline, a straight baseline connecting Vancouver Island and the Queen Charlotte Islands could be perceived as being of excessive length and thus enclosing waters which should remain part of the territorial sea.

The United States officially protested the 1969 straight baselines drawn by Canada on the west coast. Note: United States, Department of State, Bureau of Oceans and International Environmental and Scientific Affairs, *Limits In The Seas*, (No. 112), United States Responses to Excessive National Maritime Claims (Washington, 1992), at p. 25. Canada's recent experience with straight baselines has been in the Arctic and the United States officially protested Canada's system of straight baselines. See generally: Donat Pharand, *Canada's Arctic Waters in International Law* (Cambridge: Cambridge Univ. Press, 1988), at pp. 159-179.

111. Fishing Zones of Canada (Zone 1, 2, and 3) Order, (P.C. 1971-366, 25 February 1971), Vol. XVIII Consolidated Regulations of Canada, (1978), ch. 1547, at pp. 13739-13740.

112. Concerning Canada's fishery closing lines, see: Johnson, *supra* note 9, at p. 68 and Legault, *supra* note 10, at p. 384. Regarding U.S. reaction to the fishery closing lines and west coast straight baselines generally, see: Ann L. Hollick, *U.S. Foreign Policy and the Law of the Sea* (Princeton: Princeton Univ. Press, 1981), at pp. 172-173.

113. See: Lawrence L. Herman, "Proof of Offshore Territorial Claims in Canada" (1982), 7 *Dalhousie Law Journal* 3, at pp. 7-8. The claim that certain waters are historic internal waters of Canada is best known regarding Canada's Arctic. See generally, on historic waters and the Arctic, Pharand, *supra* note 111, at pp. 89-130.

Claims to historic waters are difficult issues in the international law of the sea. See generally: D.P. O'Connell, *The International Law of the Sea*, Vol. I, (Oxford: Clarendon Press, 1982), at pp. 417-438. Not surprisingly, therefore, states can exempt disputes regarding historic title from the compulsory dispute settlement procedures of the LOS Convention. Conciliation, however, remains available. LOS Convention, Article 298(1)(a).

114. Fishing Zones of Canada (Zones 4 and 5) Order, Vol. XVIII, Consolidated Regulations of Canada, (1978), ch. 1548, at pp. 13741-13746. The United States has never commented adversely about Canada's west coast 200-n. mile zone.

115. Fishing Zones of Canada (Zones 4 and 5) Order, Vol. XVIII, Consolidated Regulations of Canada, (1978), ch. 1548, sec. 5.

116. Reference Re Ownership of Off-Shore Mineral Rights, (1967), 65 D.L.R. (nd.) 353 (S.C.C.).

117. British Columbia Order in Council 1347, 4 June 1981, made under section 87(g) of the Petroleum and Natural Gas Act, R.S.B.C. 1979, c. 323. See generally: Peter Finkle and Alastair Lucas, "The Concept of the British Columbia Inland Marine Zone" (1990), 24 *Univ. of British Columbia Law Review* 37-52.

118. The principal question before the Supreme Court of Canada in 1967 involved constitutional jurisdiction respecting the territorial sea. Excluded from consideration was "harbours, bays, estuaries and other similar inland waters."

Canada's west coast territorial waters in 1967 were delineated without the benefit of straight baselines and were only 3-n. miles in width. The assumptions underlying B.C.'s Inland Marine Zone are that the waters are internal waters and that the 1967 Supreme Court of Canada decision applies to the territorial sea regime rather than to specific water areas. See: Finkle and Lucas, *supra* note 118, at pp. 39-42 and 46-47.

119. *Re Attorney-General of Canada and Attorney-General of British Columbia*, (1984), 8 D.L.R. (4th) 161 (S.C.C.).

120. Re A.-G. of Canada, *supra* note 120, at pp. 167-171.
121. Note: Churchill and Lowe, *supra* note 106, at pp. 53-54.
122. Concerning the right of innocent passage, see generally Churchill and Lowe, *supra* note 106, at pp. 68-74.
123. See *supra* note 105.
124. LOS Convention, Article 8(2) which repeats Article 5(2) of the 1958 Geneva Convention on the Territorial Sea and Contiguous Zone, 15 U.S.T. 1606, T.I.A.S. No. 5639, 516 U.N.T.S. 205.
125. Generally on international straits and the right of transit passage, see Churchill and Lowe, *supra* note 106, at pp. 87-97. The question of when waters constitute an international strait was a major issue between Canada and the United States respecting the Northwest Passage. See generally: Pharand, *supra* note 111, at pp. 215-248.
126. The geographical requirements of an international strait, connecting bodies of high seas or economic zones, would appear not to be met as the Inside Passage clearly connects Canadian waters to Canadian waters. Moreover, while the Inside Passage may be convenient for certain U.S. vessels, other waters are available for passage. What constitutes an international strait, however, is not free from controversy. See: Churchill and Lowe, *supra* note 106, at pp. 97-97 and Pharand, *supra* note 111, at pp. 215-248.
127. Case Concerning The Land, Island and Maritime Frontier Dispute (El Salvador/Honduras: Nicaragua Intervening), Judgment of 11 September 1992, 1992 International Court of Justice Reports 351.
128. Case Concerning The Land, Island and Maritime Frontier Dispute, *supra* note 129, at pp. 586-606. A brief commentary on this aspect of the case is provided by Malcolm N. Shaw, "Case Concerning the Land, Island and Maritime Frontier Dispute (El Salvador/Honduras: Nicaragua Intervening), Judgment of 11 September 1992" (1993), 42 International and Comparative Law Quarterly 929, at pp. 934-936 and Iain Scobbie, "The ICJ and the Gulf of Fonseca: When two implies three but entails one" (1994), 18 Marine Policy 249, at pp. 251-253.
- The situation of shared waters is a very complex legal one about which there is little commentary. A dated but still interesting paper on this subject is Jeffrey D. Ewen, "The United States and Canada In Passamaquoddy Bay: Internal Waters and the Right of Passage to a Foreign Port" (1976), 4 Syracuse Journal of International Law and Commerce 167-188. See also: O'Connell, *supra* note 114, at pp. 315-317.
129. See: O'Connell, *supra* note 114, at p. 837.
130. America's policy of asserting navigational rights in the face of conflicting claims, the Freedom of Navigation Program commenced in 1979, is detailed in United States, *supra* note 111.
131. The idea of a user fee to keep the Malacca Strait free of pollution was recently mooted by Malaysia and Indonesia. "Political clean-up", 5 March 1992, Far Eastern Economic Review, at p. 10.
132. "U.S. ponders fee for Canadian vessels", 23 June 1994, Vancouver Sun, at p. A3. The State of Washington has recently attempted to apply pollution prevention regulations to vessels going to Canada through the Juan de Fuca Strait which raises the issue of the international legal status of the Strait. The Canadian and American positions are that the Strait of Juan de Fuca is an international strait giving rise to non-suspendible innocent passage rights for vessels going to either American or Canadian destinations. "Rough Waters in the Strait of Juan de Fuca", Vol. X, No. 8, December 1993, Oceans Policy News, at pp. 6-7. See generally: LOS Convention, Article 45(1)(b) and O'Connell, *supra* note 114, at pp. 315-317.

International Fisheries Management: The Politics of Limited Conflict

Dr. Ted McWhinney
Parliamentary Secretary to the
Canadian Minister of Fisheries and Oceans

It is my very great pleasure to have been invited by the Maritime Awards Society of Canada to address this Forum today on the politics of international fisheries management. I see so many old friends here today. I'm reminded of my friendship and association with Alan Beesley that goes back perhaps 35 years, maybe more. And John Fraser, not quite as long ago as that but I think perhaps 20 years. Alan, John and I and many others, we are all part of a company. "Law is not made by the judge alone," as Jeremy Bentham said, "it's made by judge and company." In law-making, we are not dealing with a static body of old rules which should defend some bygone age. Law-making, rather, is a sort of dialectical process. Ideas, discussion and criticism change the way rules are interpreted and even change the way rules are formulated.

I remember some time last year, before I was in my present capacity (which goes back only six weeks), the then Minister for Fisheries Brian Tobin asked me if he could get some advice on questions of international law and the UN Convention on the Law of the Sea. At the time, he was engaged in a bit of a dispute in the Atlantic with Spain and Portugal. He told me what the government was thinking of doing, and asked if it was possible. The answer I gave was: well, according to the old rules, interpreted unimaginatively (as they would be by many people), probably not. The minister, as you will probably remember, choose a more imaginative interpretation and seized the initiative.

I think one of the most interesting things that resulted from the so-called Turbot War of 1995 was that Canada took an *avant garde* position in terms of international law. It was probably a position which would have caused more conventional international lawyers to have said: "Minister, such an action would be ill-advised".

This issue is now before the international court, with Spain and Portugal having sued us for our action, and we are defending our actions on what are called jurisdictional grounds. We probably will win at the international court on jurisdictional grounds; but if we don't, we will have to debate the merits. I think if the same case had been brought three years ago, Canada would undoubtedly have won it very dramatically. Three recent deaths and retirements, however, robbed the court of some of its most interesting personalities, and we shall see what the outcome will be.

This is an example where Canada, in its approach to problem-solving, used what has been one of the most effective ways of international law-making. A unilateral act, where it is rooted in the main trends of world history, and where it is undertaken in the interests of conservation, acquires its own legitimacy. It is interesting to note however that, over time, Canada has tended to move slightly away from its original position, which was that we accepted the jurisdiction of the world court in an unqualified sense and invited all countries to do the same. We have occasionally qualified that position, most notably in 1980, in a move that Paul Martin, Sr. once told me he abhorred very much; we did so again in this most recent dispute.

Last year, I was approached in several international legal academies by members of certain foreign governments who offered their congratulations to Canada for “doing the right thing.” These were imaginative people who interpreted in a very creative way the earlier Hague Conventions in 1958 and 1960 and who recognized an international law duty of conservation.

Let me now speak to some of the current issues on the west coast. Just over one month ago, some legislation was passed by the United States Congress which made certain assertions, which are no more than assertions: First, that American vessels have the right of innocent passage through the inside passage of Canada; second, that Canada violated international law by imposing transit licence fees in 1994; and third, that Canada should compensate the United States, in essence reimburse the transit licence fees applied in 1994.

The statement in the American legislation did contain some errors of law which can be easily corrected and fears put to rest. It was also interesting as an example of what might be called the King Canute approach to international law. It is beyond the competence of a national legislature by national legislation to establish a right in international law, and simply cannot be done.

As to the errors of law, they were very simple issues here. The right of innocent passage, to which the U.S. legislation referred, applies under international law to what is called the territorial sea. The territorial sea in the region concerned is measured from the base line, the low water mark, on the west side of Vancouver Island. The inland passage is in fact part of Canada’s inland waters or internal waters. It is not subject to the United Nations convention on the law of the sea. International law does not apply to it. It is within our province to control and regulate, and to apply transit fees. We have every right under our law to do so. There is nothing in international law restricting our right to stop people, to (as some very combative fisher-people have suggested to me) search foreign vessels to see if they are conforming to our gun laws or our drug laws, or anything else. Some people are also suggesting harassment and various forms of civil application of existing laws. But as far as the application of the transit fee is concerned, there is no question that in legal terms it is warranted. As to whether a transit fee *should* be applied, however, I think that is a political decision and not a legal one.

I think it is an error to assume that the United States government will disregard international law when it is properly presented. If that were so, there would be no point in our conducting the Pacific Salmon Treaty negotiations which we have been involved in since 1985. By the way, I see no particular problem in the fact that negotiations have been going on since 1985: law-making, as I have said, is a continuing dialectical process and as the rules change in interpretation and application, an on-going dialogue and diplomatic negotiations are required.

As far as the Pacific Salmon Treaty is concerned, our position in international law is very clear. It is a treaty signed by the United States and is binding on the United States. The treaty power of the United States (unlike the Canadian treaty power) holds that a treaty entered into by the government of the United States becomes the supreme law of the land, anything in state law notwithstanding. Therefore, as a matter of international law, their obligation is very clear.

As a matter of the internal American law, however, some problems do arise. The United States government effectively delegated the implementation of the Pacific Salmon Treaty to four groups: the states of Oregon, Washington and Alaska, and the native Indian peoples of Washington State. You could say the federal government gave them, in essence, a political veto operating through American internal law. However, that there are complications in the internal law of the United States is a problem for the Americans. As a matter of international law, the

United States is responsible for the proper execution of the treaty, including the two prime imperatives: conservation and equity in the distribution of the catching of fish. This is the point that the Foreign Affairs Minister Lloyd Axworthy has been making to Warren Christopher, the American Secretary of State.

In any case, we have asked Mr. Christopher, with the apparent failure of mediation, to consider other options. Mediation is one method of solving problems, but the decision is not binding. The next step is arbitration, which is binding. There is also the possibility of reference to international court. In the politics of limited conflict, Canada is committed to third-party settlement.

In my present capacity as Parliamentary Secretary to the Minister of Fisheries and Oceans, I am learning very quickly about the salmon fishing industry. In my first two weeks on the job, I was engaged in the international law aspects of fisheries and going back to my own writing – that was the easy part. In the last four weeks however, I have met with perhaps a hundred members of various stakeholders in the fishing industry. They have phoned me, they have come to see me in my office, they have written letters. I think the very nice thing is that dialogue is civilized. Don't underestimate the people in the west coast fishing industry; these are very well educated, very articulate people who know how to make a reasoned argument.

But let me get back to the plan which the Minister unveiled on March 29th – the Mifflin Plan. We have heard the criticisms of the plan, but since the plan basically stemmed from a consultative process involving many people, it's a pity we haven't heard more people saying what's good about the plan. There are now a lot of people who are telephoning me to say that they like the plan. I have to tell them that, to paraphrase William James, an interest is only valid in so far as it's expressed.

The Mifflin plan is a five-point plan with two main objectives: conservation and sustainability. And, of the five points, the first element is that escapement is the priority. The commitment of the department of Fisheries and Oceans is to focus on its core mandate: to conserve and protect the resource. The fish come first. This is John Fraser's point, made eloquently in his commissioned report, but it is worth repeating again: conservation is not to be compromised. Part two of the plan deals with long-term allocation rules. The fleet rationalization process is to be implemented. We need the maximum level of clarity about long-term access to the resource.

It's worthy of remark that the Mifflin plan basically proceeded from a roundtable group of some seventy people which was representative of the main stakeholders in the Pacific salmon industry. The roundtable group is a process that has worked well. I met with this group and they were very lively people who were not loath to voice their opinions.

Dr. Arthur May of Memorial University in Newfoundland has been asked to consult with all the user groups and to provide advice on the allocation policy. The central component of the plan is fleet rationalization. The government's long-term goal is to reduce the size of the commercial fishing fleet by fifty percent. This is the process that is triggered by the \$80 million voluntary licence retirement program now in place. Now, I have had a great deal of advice, some of it conflicting, on this. Some people have focused on the issue of whether the money is enough; some people have said it's too much. I would simply say that, on the issue of money, we all operate within the parameters established by the budget. The government is committed to reducing the deficit, and all ministries have been given guidelines to reduce their programs. In such an environment, you have to fight to get money and you have to contend with other

priorities; the \$80 million is a figure reached within the Cabinet and one by which the Minister must abide.

Part of the plan involves area licencing, single-gear licencing, and stacking of licences. We have had a great deal of discussion on the issue of the stacking of licences. I think that many of these issues will be clarified with the sort of proposals that Dr. May is mandated to look into. We have had a lot of suggestions and I am passing them on to the Department and I appreciate those who have brought them forward.

We were discussing at the head table landing charges as an alternative approach to conservation. Landing charges are included in the plan and it is expected that they may contribute to a ten percent reduction in the effective fishing fleet.

The fourth component of the plan is transitional measures. We have been greatly affected by the evidence given to us concerning the effects on people employed in the industry, particularly as the industry moved away in more recent years from a sharing of profits basis to straight wages basis. This is a matter that goes beyond the competence of the Department of Fisheries and Oceans and properly belongs to other ministries in the government. This is something, however, to which the Minister is giving a great deal of attention. I think views expressed to me and views that have been expressed elsewhere will have a very large impact.

One of the issues that Dr. Pearse has commented on, which exists as the core of his two reports, and which is very much in line with government thinking, is the management of the industry. We are committed to involving the roundtable and the roundtable steering committee and working towards the creation of a Department of Fisheries commercial sector industry board. I think the details of this plan are still to be worked out, but it is a point in the expert advice given to us and in the work of Royal Commissions over the years, that has been noted and I think is of great importance to the industry and its future.

I return again, though, to our main points. We stand by the 1985 Pacific Salmon Treaty; we think it was a necessary step in the fulfilment of the international law imperatives – the first two Conventions on the Law of the Sea (1980 and 1982). We take seriously the conservation imperative. We have differences of opinion with the Americans on equity.

I don't have any great difficulty in deciding what equity is. There's a great body of international law on equity, but it turns on the particular facts. I think the general feeling in Canada, and it's coming again and again back from the industry, is that the Alaskans' view is not our view and it's perhaps not the view that's most compatible with world history. Some of the Alaskan papers that I have seen say that they have a different economic approach. This may be, but we will be pressing very strongly on this point.

The Minister of Foreign Affairs had very full discussions with the Fisheries Minister before going to Washington. We have asked for arbitration which I think is the constructive thing. We were not unhappy, by the way, with mediation, but since the report hasn't been published, that's about all I can say about it. On the subject of arbitration, we are asking for the co-operation of the President of the United States and it is our hope and expectation that this will turn out well.

IV. “The Mifflin Plan”

The Future Of The Fisheries - Battling Uncertainty

M.P. Shepard

The Relatively Quiet Past

1. With occasional shocks (such as the 1913 Hells Gate slide which devastated the great Fraser River sockeye salmon runs), the first century of B.C.'s fisheries was a relatively quiet one.
2. There were few surprises as annual resource cycles repeated themselves year after year.
3. As with all fisheries, after the first few decades, the salmon stocks were "fished up", dropping from their virgin, unsustainable, levels to lower levels that did not vary greatly from year to year. Fisheries for halibut, groundfish, crab and herring developed which, in a similar way, reached lower plateaus, providing modest and relatively stable catches.
4. It was in this relatively quiet environment that the fisheries developed.
5. Just as in Newfoundland, it was fisheries that led to the spread of European settlement along the British Columbia coast; Namu, Klemtu, Kyoquot, Tofino are magic names in recalling how the fisheries brought the coast alive with bustling activity. Well into this century, one had only to travel northward along the coast of British Columbia on a coastal steamship to see how the fishery had transformed the landscape.
6. The fishery was built by a polyglot of peoples with different ethnic backgrounds and interests.
7. With the focus of the industry on the canning of salmon:
 - ! Each year the coast came alive with the establishment of seasonal communities to serve dozens of canneries, crewed mainly by aboriginal people who came from the hinterlands to establish summer villages at the cannery sites. Oriental people played an increasing role in the operations as time passed.
 - ! First aboriginal gillnetters, followed by Japanese were the principal harvesters serving each cannery.
 - ! Fishermen from the Adriatic became the leader in the development of the more efficient seine fisheries for salmon, herring and pilchard.
8. Hardy Scandinavian fishermen pioneered the demanding offshore halibut fishery.
9. East coast Canadian bank fishermen became highliners in the trawl fisheries for groundfish..
10. People of all ethnic groups who favoured solitude and independence turned to salmon trolling, leaving home in the spring to remain on the grounds until autumn.
11. Aside from these commercial activities, growing urban populations looked to the sea and beaches for recreation and, in some cases, subsistence. Most found little difficulty in bringing home a fish for supper and a visit to local beaches usually could provide a feed of shellfish, crabs, clams, oysters, or abalone.

12. The sea provided attractive part-time work; the inside passage between Vancouver Island was the stamping grounds for part-time trollers and a “mosquito fleet” of outboarders shared in the harvest of salmon on the Fraser River.
13. Aboriginal peoples, with aquatic resources at the centre of their cultures and dependent on fish for subsistence, also exploited the resources. In the early years of this century, however, with their numbers decimated by European diseases and with Government policies which eroded traditional values, aboriginal use was moderate, certainly much less than in pre-contact times.
14. These diverse elements that made up the British Columbia fishery, aboriginal and non-aboriginal, commercial and recreational, seiners, gillnetters and trollers all competed for the resource. However, competition was not limited to local waters as United States fishermen intercepted salmon bound for the Fraser River in front of the traditional Canadian fishery in the estuary of the Fraser River.
15. Eventually, this threat was brought under control by the conclusion of the Fraser Sockeye Treaty in 1937 (extended to include pink salmon in 1956). In the early 1950s, the conclusion of the International North Pacific Convention with Japan forestalled the threat of harvest of Canadian salmon by Asian fleets.
16. The point of all the foregoing is to say that the first century of the fishery was a relatively quiet one, a time when there was relative stability. Thus:
 - ! The troller knew that he would leave port in the spring and be able to fish until the fall.
 - ! The salmon net fishermen knew they would be able fish 4-5 days a week throughout a 3-5 month season.
 - ! The salmon cannery operators and their processing crews knew when their operations would begin and finish.
 - ! The halibut fishermen knew that they would be able to fish to the limits of quotas that varied little from year to year.
 - ! The recreational fishermen knew that they could go to sea and fish at will with few limitations and usually have success.
 - ! The herring, crab and groundfish fishermen knew they would be able to fish quantities of resources that were dictated mainly by processing capacity.
17. While it is true there was always vigorous competition between different sectors of the fleet (gillnetters, seiners and trollers), they coexisted grudgingly, carving out more or less discrete niches. DFO acted as a benevolent arbiter between the sectors. Open conflict was, in the main, avoided.
18. In short, people knew what to expect based on the assurance that, with ups and downs, the resource would still be there and that the infrastructure of the industry would operate in much the same way as it had before. Few became rich, but as always, fishermen expected that next year would be the big one, when their nets would be too small to harvest all they could take.

The Shattering of the Dream

19. Times have changed. Where there was certainty there is now great uncertainty.

Resource Concerns

20. First, and foremost, is the availability of the resources.
 - ! The critically important salmon resource is demonstrating a volatility never experienced before.
 - ! In the 1990s, sockeye stocks have produced record harvests but, in 1995, fisheries for the all-important Fraser stocks were virtually closed because of low abundance. What happened?
 - ! Despite international efforts to improve conservation, many chinook stocks remain depressed creating major problems for the troll and recreational fisheries.
 - ! Coho stocks, particularly those in southern British Columbia and summer runs on the Skeena are also in bad shape.
21. Herring stocks which collapsed in the 1960s have not fully recovered and exhibit unpredictable variations.
22. Many groundfish stocks are depressed.
23. Reductions in shellfish stocks have necessitated severe conservation restrictions.
24. No longer the resource base be counted on to provide stable harvest opportunities.
25. With these major problems, the resources need more protection and management requires a better knowledge base to deal with them. These needs could not come at a worse time as stringent Government financial restrictions have required cut-back after cut-back in funding for DFO's programs.

Industrial Transformation

26. The modus operandi of the fishery has changed drastically in recent years. Following World War II there have been immense increases in the efficiency of the fleets. Despite a number of attempts to reduce the fleet, the remaining vessels became more and more mobile and powerful. Fishing capacity far exceeds the capacity of the resource to provide harvests. This has led to ridiculous situations where, in the herring fisheries, openings are sometimes limited to a few minutes by a few boats.
27. The days of the part-timer and the little guy were over as larger, more powerful vessels took over.
28. Processors have pushed for efficiency, centralising their operations. This has resulted in the closing of all but a handful of the scores of canneries that operated in pre-war times, removing employment opportunities for aboriginal cannery workers and for the homestead fleets that used to serve each operation. The coastline which used to be filled with vibrant summer-time activity is now a desert of rotten pilings. No longer could aboriginal communities in the north and the ethnically diversified communities in the Fraser that had provided plant workers for the canneries expect to find jobs.
29. With increasing supplies of overseas farmed salmon and cheap sources of other protein, low world market prices for salmon have added to the economic difficulties of the industry at all levels.

Competition Among Resource Users

With uncertain resources and poor economics, the allocation of resources among different sectors of the commercial fleet has become increasingly difficult. Add to this the desires of British Columbia's growing population to reserve larger parts of the resource for recreational purposes.

30. The constitutionally protected requirements for fish of aboriginal people, representing the Province's most rapidly growing population group, have mushroomed. With renewed pride and persistence, those people are now seeking to assume a prominent and contributory place in Canadian society through land claim settlements. In these settlements they are looking to fish, their traditional resource base, as an engine for economic development. With the resources fully subscribed, incremental aboriginal harvests must come from reductions in harvests by others.
31. With these conflicts, there is no longer certainty among resource users that they will be able to maintain their place within the coast-wide fisheries community. This causes great unease and engenders protectionist reactions.
32. Competition on an international scale adds to the problems. The 1985 Pacific Salmon Treaty, which built on the earlier Fraser Treaty, and which limited international competition for salmon is now on the verge of collapse. The problem stems from United States reluctance to meet its treaty obligations regarding the sharing of harvests between Canadian and United States fishermen. The difficulties have been caused mainly by a failure of southern United States stocks (which provided Canada with benefits balancing benefits to the United States from interception of Canadian Fraser salmon) and the failure of Alaskan fishermen to limit its expanding interception of Canadian stocks. The future of the Treaty hangs heavily over the heads of fisheries managers in both countries.
33. The crux of these conflicts, domestic and international, is uncertainty:
 - ! Scientists are increasingly perplexed by resource fluctuations.
 - ! Fishermen no longer can count on being provided with sufficient fishing opportunities to make a living.
 - ! The quality of recreational fishing has deteriorated and become aggravatingly unpredictable.
 - ! Processors can no longer plan their through-puts and markets are increasingly tenuous. Plant workers can no longer be assured they will have a job.
 - ! With land claim settlements pending, aboriginal and non-aboriginals are uncertain as to the resource shares that each will eventually attain.
 - ! Looming failure of the Pacific Salmon Treaty adds further uncertainty regarding future international sharing..
34. With everyone feeling threatened, positions of competing groups have become increasingly protective. Grudging coexistence has been replaced by increasingly bitter disputes between gear groups, between recreational fishermen and commercial fishermen, between non-aboriginals against aboriginals, between Canada and the United States.

35. DFO has struggled mightily with the burgeoning problems, with more success than many would acknowledge.
- ! The Department has adopted a philosophy of precautionary management aimed at providing safety margins regarding the exploitation of the resource.
 - ! With the resource dip of the past year, we have forgotten too soon that the early '90s provided record salmon catches in B.C. This did not happen by accident and contrasts with the sorry state of the salmon resources south of the line in Washington.
 - ! Successful implementation of the Canada-United States Salmon Treaty in its early years provided Canada and the United States with substantial benefits through limitation of interceptions and by bilateral programs to improve the knowledge base for management.
 - ! The institution of quota fisheries for halibut, geoduck and blackcod have greatly improved the economics of those sectors and benefitted consumers who now can count on superior quality.
 - ! New mechanisms for cooperative management involving all sectors of the industry and aboriginal communities are being developed. A good example is the Skeena where a watershed committee involving all users develops management strategies within a framework of objectives set by DFO.
36. Nevertheless, the problems have been overwhelming. The political challenge of dealing with the grossly overcapitalized industry harvesting a common property resource has not been met effectively. Science is just beginning to gain understandings of the reasons for unpredictable fluctuations in resources.
37. The challenge is to replace uncertainty with certainty, and, conflict with cooperation. We must succeed in providing certainty concerning the magnitude and composition of the fishing fleets. We must improve our knowledge of what causes fluctuations in the stocks. We must remove uncertainty regarding the sharing of resources between aboriginal and non aboriginal people? We must resolve our disputes with the United States to provide a dependable framework for future resource management and development.
38. It is the purpose of the present Forum to explore most of these perplexing and divisive issues. Whereas today's session cannot provide definitive solutions to the problems, answers, we can expect the very distinguished and authoritative panels of speakers to provide us all with a clearer understanding of the nature of those problems. Such improved understanding is the prerequisite for developing effective solutions. In this way this Forum can make a substantive contribution to the establishment of a firmer base for the future management and development of the fisheries.

The Department of Fisheries and Oceans

Louis Tousignant
Regional Director General
Department of Fisheries and Oceans
Pacific Region

I have learned a few things in the last couple of days. I've learned that the real meaning of the AB Line is the Alan Beesley Line. I've learned also that the Department of Fisheries & Oceans does not lack critics – and that's a good thing because having critics and people that challenge what you we are doing keeps the Department honest. I'm here today to ask your help because you are opinion leaders, not only the speakers but also the audience. You have influence in your own communities and I would like to seek your help in making the Mifflin Plan, as it is called, work. I will start with a very simple statement: without conservation, the use of the fisheries resource is not sustainable and therefore the economic benefits derived from their use cannot be sustained.

The Mifflin Plan is based on two objectives. One is conservation and the other is the viability of the sector. In light of those two objectives, three fundamental issues must be dealt with: allocation, capacity reduction, and consultation. I would like to take this opportunity to thank the Forum's Honorary Chair, Mr. Fraser, who added to these three issues in his report last year the need for better science. I can assure you, Mr. Fraser, that the Department has no intention of cutting stock assessments. In fact, we are reinforcing that function in the region. And we are strengthening our enforcement capacity as well; there will not be a Fisheries Officer fired in this region, except for cause if required. And it will be over my dead body that we water down the Enforcement Act.

Against this backdrop, let us turn to the Mifflin Plan. The first basis of the Mifflin Plan is conservation. As the Parliamentary Secretary Mr. McWhinney indicated today, escapement is the priority. Last year we introduced risk-averse management, which means that we are now managing the resource in a more conservative manner. We put buffers in the numbers that are expected for returns to be more certain that adequate numbers of fish would return. This move was resisted by the commercial sector who felt that we were cutting into their catch; it was resisted by the Aboriginal sectors because they felt they would have less fish; and moreover, it was resisted by the United States because it would limit opportunities for foreign fishing. But we did it.

The Department's move towards risk-averse management led us to scale back the distant commercial fisheries. We also began to put pressure on the seines in Johnston Strait by reducing the area where they would fish so that 500 of them, in a twelve-hour opening, would not catch all the fish if it happened to be a very important run. We made that decision, and the buffers that we established saved the day when, as a result of ocean mortality, we went from 10.7 million returns to 3.9 million. Despite that, we nevertheless achieved the third highest level of escapement on that run for that cycle of 1.7 million fish, which bodes well for the future.

So despite all of those problems, the buffers and the risk averse management approach have ensured that we were able to assure that enough fish reached the spawning ground.

Now with the Mifflin Plan, as part of the strategic directions for the future that have been given to license holders with their applications for this year, we set directions for the fishery. We will

try to reduce commercial interception fisheries. Where we are uncertain whether a run is high, we will not have as many distant fisheries and possibly no distant fisheries. We will try to lower the catch rates, to reduce the risk of over-harvesting. This approach ties in with the other Mifflin Plan elements of fleet reduction and rationalization.

We are also looking at means of reducing the incidental catch of species that are more delicate, like Chinook, Coho, and Steelhead. This will affect the nets in the Queen Charlotte Islands and Juan de Fuca Strait. We will continue mandatory Steelhead and Chinook non-retention practices in the net fisheries in Juan de Fuca Strait. We will limit gillnet use in the late season in the Fraser and in the Skeena to avoid Steelhead and Chinook by-catch. These measures will continue. We will have selective seine fisheries in the north on the Skeena where the seiners who catch sockeye are forced to release Steelhead, Coho and Chinook. The strategy involves incentives to develop more selective ways of fishing.

Area licensing is also part of the package from Mr. Mifflin. Area licensing will reduce the pressure of the fleet in each area and pave the way for greater local management and watershed management, which is a desire long cherished by many in this province. Single gear licensing will limit fishing capacity and, finally, license retirement and stacking will reduce the number of vessels on the fishing grounds.

These measures – fisheries management and licensing measures – are going to enhance our ability to conserve the resource and reduce the risk of over-fishing. Those who say that these measures do not apply advanced conservation techniques come in five categories: people that rely on others to form an opinion, people who have not read the material but who pose as people who know, muckrakers who enjoy creating controversy, groups that are concerned either about the gain of membership or the loss of membership, and finally the fifth category includes those who make a living out of criticizing (present company excepted, of course). But I want to assure you of one thing: conservation will not be compromised.

The second issue is allocation. We have got to figure out rules of the game to create more certainty for all sectors and to create more clarity. I have spoken about that broadly, within the context of the Art May exercise. We want to bring predictability, we want to bring more compliance, as a result of clearer rules. We want to have an orderly transition if aboriginal fisheries, as a result of treaties, displace other fishers; and we want fairness in that process. We need clear rules that lead to the expansion of the commercial or recreational aboriginal fisheries in a way that is equitable to the commercial sector. As well, it is very important to have clear rules among the gillnet, the seine, and the troller fleets within the commercial sector so that one fleet does not take over the other. Allocation is very important; it is fundamental, and with the industry the steering committee have agreed to move by 1997 to have rules in place.

The third element of the plan is fleet rationalization. I will quote from the Round Table paper: "There is a need for significant fleet reduction and that action is required before the 1996 season." That document was signed by everybody on the Round Table -everybody agrees there is a problem. Dennis Brown signed that paper. John Sutcliffe from the Union signed that paper. Nobody thinks that there isn't a problem. Well, we're tackling the problem. There are two reasons for that: conservation reasons, which I've explained a bit in telling you our approach to conservation. But also the package, the Mifflin Plan, will ensure more manageability of the fishery and better ability to enforce its goals by limiting fishing in certain areas. And let's be clear: it's a tough plan, but it's a decisive one.

There are also economic reasons motivating us. If you look at the cost of fishing over the last 30 years - in the 1950's a vessel was worth about \$50,000. Now, in the same dollars adjusted

for inflation, the fishing vessel's 1995 cost is over \$200,000. The cost of labour has gone up, the cost of fuel has gone up, the cost of electronics has gone up. The production of salmon has remained more or less stable. It is still cyclical of course. We had a bad year last year, we've got a predictable low year this year. We all knew we would have problems; but there have been years where it has been lower than that and we are at fairly high levels now. But the resource generally, if you take the long view, is stable and prices of salmon are going down. Not only are the costs of fishing going way up, but the price of the fish are going down. If you compare the period 1987 to 1990 with 1991 to 1994, Sockeye prices have fallen 28%, Pink prices have gone down by 45%, Chum prices have gone down by 53%, Coho 34% and Chinook 39%. That means that this year, 65% of the fleet will not make its way. On average, over the long haul, 20% of the fleet did not make its way. We've got to bring them to a level of viability. It's important because we are in an age where there will be less capacity for relying on unemployment insurance. There will be a need for more money in the industry to make ends meet. Fewer vessels, to achieve peace in the fishery. A better managed fishery. Longer seasons, longer openings. Fishing more delicately and more selectively.

On the issue of license retirement, the Mifflin Plan contains \$80 million that will go towards measures that will retire licenses and remove boats from the water. It will lower, if you take the whole fleet, capital costs of the fleet and it will increase the average income of the remaining fishermen by removing people from the industry – and provide more economic opportunities for those who stay. Area licensing, single gear licensing and stacking are the licensing measures.

Area licensing leads to more community based management structures over time. Some critics say, "communities will be decimated." I don't know on what basis they say that, because the majority of licenses right now are on the lower mainland and the east coast inside. So why wouldn't there be a proportional reduction of those licenses *vis á vis* the rest? If you take the long view, area licensing may bring fishermen to settle in the area where they live, to reduce their costs of moving to and fro. So, on the community decimation question, I don't know where the objections are coming from. We do not yet know the applications for the buy-back. Until we have that information, and before we have an idea of the impact, the actual impact, it's like reading a crystal ball to guess at the impact on communities.

Stacking. It's a further means of reducing the fleet. We couldn't go for a \$200 million buy-back. If we went for a \$200 million buy-back it would be impossible for any fisherman remaining to buy a license, because the prices would have gone sky high. The \$80 million is a quid pro quo. \$80 million to be spent by June 30 is a way of providing an honourable way for those who are marginal to get out, and by limiting it to June 30 the impact of government intervention in the licensing market will be short-lived. So it's a balancing act. This does not mean that there is no inflationary impact, in fact there is some impact of the buy-back, but we are trying to mitigate it. The stacking, coupled with the license retirement, will basically provoke the reduction and will provide opportunities for fishermen to increase their income without running additional boats and gear. You buy another license, you can fish the whole coast.

Now critics say capacity will not be reduced as a result of this. Well, they are full of whatever substance you prefer. They don't remember that fishing will be allowed only when conservation is met, and when Section 35 needs are met. Buffers that I spoke about are part of conservation. We will not allow fishing until and unless the conservation needs are met. Once that is met, or we are confident it will be met, then we will allow fishing. So let's not forget that basic prerequisite as a constraint on harvest levels.

But let's return to "capacity will not be reduced." It will be reduced. Area licensing will mean fewer vessels in a given opening. Single gear licensing will mean less fishing power. License

retirement will mean fewer boats. But they will say, "all the better seines that will stay on". Well, with respect to the seines it's probable that we will see selective retirements. We don't know yet that the older boats and the inactive vessels will go. But we do know at least that the older boats will not be modernized (there has been some recent tendency to do just that); they'd be out of the fishery. When greater abundance of salmon returns, the inactive license will not be resurrected from their ashes because they will be out of the fishery. So this is de facto capacity reduction. Furthermore, people forget that the seines will have an allocation. There will be a limit on the amount of fish that the seines can catch so even if they have the Cadillac of seine machines, they will be limited in the amount they can catch.

Let's take the gillnet and the troll. The technology in the gillnet and troll is less a factor than in the seine. But again we are going to remove licenses, so that means that units of effort will get out of the fishery. And we're going to stack licenses so two licenses equals one if you want to fish more than your area.

It is said that the small operator will die. That is not true. Nobody is forced to get out of the fishery. Shares of the small fleets will be protected by allocation policies. There will be a gillnet allocation. There will be a troll allocation. These are the small operators, not the seiners. They will have an allocation of fish for them. They will fish in an area. 40% of them right now fish in. So these guys are not forced out. People have a choice to stay or to leave with compensation and in each license area now. The catch per license, because there will be fewer boats, on average will increase. So they have a chance of being better off. We will limit the competition within the areas. So it's not obvious that the small operator will be absolutely devastated. The small operator that wants to fish every single nook and cranny in the coast and doesn't have money, yes, he will be devastated. He will not be able to fish the entire coast. But we have to start somewhere.

Now having said this, I am the last one to minimize the very, very, significant impact on fishers that this will have. We have an objective of reducing the size of the fleet over time by 50%, so I am not denying that lives will be disrupted. It will happen. But it had to be done. Everybody agrees it's tough, but it's necessary. And we can't expect in a context like this to have 25 million fishermen saying, 'yes! This is the thing to do!'. Picture your corporation, your business, and your boss comes in and says '50% of the people here are gone in five years.' Don't expect people cheering that this is the greatest plan since sliced bread. So that's what we are living through right now.

The other element of the Mifflin Plan is improved consultative processes. What we are looking at is giving a greater voice to the industry, the fishermen, the users of the resource, in decision making. The first thing we are going to work on with the industry, and we are planning a meeting in April to discuss that, is an industry board. It's important to manage the salmon province-wide, bearing in mind our Canada/US obligations and the fact that the salmon travel from Prince Rupert down to the Fraser, at least those stocks. We need to have a better province-wide management system. And we also need area structures flowing from area licensing paving the way for more local management over time. So we'll have to re-invent our consultative processes.

So that is the Mifflin Plan. *Conservation*. I hope I was clear about our commitment about that. I'm on the record and will live by it, barring acts of God. *Allocation*. We are going to straighten out the rules for allocation, and that is key to the resolution of problems. *Rationalization*. We need that to contribute to conservation and to make the industry viable, self-sustaining. *Improved consultations*.

What about transition assistance you will say? Well, what about transition assistance. We don't know what the impacts will be right now, yet. It's like people going to the dentist. They are afraid of being afraid. I mean, let's look at what the impacts are. The Minister said he would monitor the situation and we are monitoring the situation. There is an industrial adjustment service agreement between B.C. and the Union. It's got a steering committee. I met my counterpart a couple of days ago. DFO will be on that steering committee. The province is now on it and we will try to make sure the province has got significant representation in that process. We'll look at what's happening. The objective of that industrial adjustment service agreement that is now in place is to figure out transition services tailored to the needs of those displaced from the industry. So we are going to look at the situation as it unfolds. There is a lot of money in the regular programming of both the province and the federal government to deal with these labour adjustment questions. Therefore, we will try to tailor solutions that are tailored to the labour market.

What about the habitat? Yes, there's stuff on the habitat. We had a consultative workshop with representatives from environmental groups, academia, fisheries, etc., and we've all agreed that we should move toward something along the lines of a conservation council for habitat management. That – the crucial importance of habitat – is the one issue on which everybody agrees. We agree, the province agrees, the environmentalists agree, of course the fishermen agree, the processor, everyone is on-side. There is a letter to the Minister that is now with the participants of the workshop that I expect the Minister will accept, where we will work together. My hope is that we will be able to develop a new partnership with the province, MAFF and MELP and the others in the family of the provincial ministries that are interested in fisheries to tackle habitat issues together, fundamentally and aggressively.

So, to the Round Table. The Round Table wanted action in 1996; a reduction in the order of 25-50%. The Mifflin Plan provides for 50%. They wanted action on allocations. They got allocations. They wanted action on buy-back. They got buy-back. Not the way they want it perfectly, yes, that's right. When did you last get anything exactly the way you wanted it? With one of two items, they were divided on the way to do it so decisions had to be made. But there is a buy-back, and everybody agreed that there needed to be licensing measures. There's agreement on the problem, there's agreement on the need to reduce, there's agreement on the tools available, but there is a lot of criticism about the package. There is no denying that those who are affected or will be affected are vociferous about it, and it is quite understandable. But we had to do it. It was needed, it's been 25 years in the making. It was necessary and these things must be done swiftly. And as I said, nobody is forced out. If you are a small gillnetter in Rupert, you can remain a small gillnetter in Rupert, no problem. Nobody is asking you to go fish in Juan de Fuca Strait. Nobody is asking you to do that. If you want to do that you will have to buy another license.

So as a result of Mr. Fraser's report, we have some action. He's always there when it counts, you know. He was there when the Pacific Salmon Treaty was signed; he happened to be the Minister, strange; he happened to be the guy that gave us a report which basically made Mr. Tobin focus on the future of the Pacific salmon fisheries. With Mr. Fraser's report, Mr. Tobin's response, Mr. Mifflin's strategy, what we've got is a huge transition. We're putting fish first. We are not hostage to stakeholders. Some of the commentators earlier this morning were saying, "the stakeholders will want this, therefore the Department will do that". Well, we don't do that any more. We made very tough decisions. Last year we closed down the groundfish fishery for the first time in the history of the province, for four and a half months. That was painful economically in Rupert, Port Hardy, and Steveston; very painful. But we said no, we won't reopen until such time as we deal with the problems of the resource. So they now have observers.

They are forced to have observers, so that we can have a handle on the resource and they have to pay for that. They are paying higher license fees, etc. So it is a huge transition, and we're following Mr. Harris' precept of erring on the side of conservation.

We have big jobs to do on Canada/US allocations, review of the AFS, and the restructuring strategy that I mentioned, so there is a lot of change happening. As well, part of the strategy is to figure out 1996, which will be a tough season. Tough decisions must be made and you'll see later what these tough decisions are. But we are not inactive. We are hell-bent and absolutely, completely, utterly, dedicated to the notion of conservation, as are all fishermen regardless of their stripes. Because conservation equals sustainable use equals economic benefits. If we don't do that then we are going to be a basket-case like Newfoundland in fishery matters.

In closing, my hopes are that we can work cooperatively with a provincial government that has an holistic view of fish and habitat management. In the same way that there is cohesion between the federal government and the province in the matter of the Canada/US treaty, my hope is that we can get clear signals, one signal preferably, on such matters as allocation policy, economic development, habitat cooperation, and so on. My second hope is that our critics will work with us to deal with specific problems and not propel us into dealing with 25 gazillion other problems that they feel are important; because we have a big agenda in front of us and we are few, despite the fact some would say we are a bloated bureaucracy. We have got to keep focused on the problems I have just mentioned. I hope that we are able – with the province, with the stakeholders, with the environmental groups – to work more and more together. There are many jobs out there that need to be done and we need to pull all the hands to do those jobs and not fight with one another, not continual carping that “they are doing this, and that's not the way I would do it.” Well, if you want to do it, join the Department by golly and let's do it! And finally, I hope Carl Walter's little league team won their game this afternoon.

V. Institutions, Incentives and Individuals

Monitoring and Meaning: Statistics and the Aboriginal Fisheries

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It would be an extreme understatement to say that aboriginal fisheries on the west coast of Canada have been the focus of controversy during the past decade. Each year, coincidental with the arrival of spring and the early Fraser River runs of returning sockeye, controversy heats up around the subject of fish allocations to each of the various sectors, including sport, commercial sport, commercial (by gear type) and aboriginal. While pertinent to all sectors, it seems that extraordinary criticism is focused on the aboriginal sector on the subject of catch monitoring and compliance.

My objective in overview, is to cover the following:

1. Define what is meant by monitoring.
2. Examine why monitoring is discussed in the context of aboriginal fisheries.
3. Describe examples of first nations efforts to undertake fish management, including monitoring.
4. Consider what some of the statistics collected so far are telling us.

What is meant by Monitoring? And Whose Meaning are we Talking About?

In its simplest form, the ideal result of catch monitoring should produce information on who is catching what species (sub-species), how many, when, where and by what means. But nothing is simple.

The act of monitoring, is not a passive act of observing and recording fish catch numbers. It is in practice, an act to monitor certain groups of human beings, fishers, and their actions and activities. Generally, it becomes an intrusive act – at least, it becomes interpreted as such by the many groups of fishers. Motives are ascribed by monitors to fishers, the same for fishers to monitors. Rather than a dispassionate objective practice then, the act of monitoring is very much laden with human values; those of the monitors and the fishers and legions of others who are involved in the complex of bureaucracies and communities associated with fishing.

The necessity of monitoring to meet escapement and conservation goals are not usually debated subjects, even though these too are caught within the complexity of value laden definitions. Consider as examples, aggregate spawning escapement goals and the definition of conservation. Commercial, recreational and aboriginal fishers each define these in terms beneficial to their

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respective positions. Commercial fishers may support lower escapement targets and a higher total allowable catch, as they examine the health of stocks in aggregate terms. On the other hand, for aboriginal fishers, lost within the aggregate escapement numbers may be co-migrating endangered species and stocks which could be eliminated by fishing activity on the dominant runs. Gross spawning escapement may be met, but at the loss of various weak stocks if fish harvesting pressures are high.

More recently and typically, what gets debated is, who gets monitored more or should be monitored more, or suffers the consequences of being monitored more intensively. Behind this are the accusations that one group is taking too many fish; or poaching them or selling them and consequently should have their allocations adjusted or access curtailed or further fishing even more heavily monitored and enforced. These are all aggressively argued issues today.

The fact that it is government staff or agents who do the monitoring makes the issues even more contentious. It becomes interpreted as, "big" unknowing government watching the little guy. Also it can become interpreted as, "distant" government establishing the rules from Vancouver or Ottawa, and thereby easier to justify to self or others, that the government's systems, regulations and statistics are wrong and hence justification for taking more or accusing others of taking too much.

Added to the complexity of meanings framing monitoring is the subject of monitoring and the aboriginal fishery. This term monitoring is interpreted by many first nations peoples as another form of a continuing unwelcome presence of government in lives which are already dominated by governments. Furthermore, it is seen by many first nations people that where governments monitor fishers in the non-aboriginal sphere, in the aboriginal world, it is men, women, children, elders and whole communities who are being monitored.

The act of monitoring, is not a simple event, nor are the results available to simple interpretation. Even more so in the situation of the aboriginal fisheries, monitoring has many meanings ascribed, projected and interpreted by the various players involved in the dynamic. As a part of fisheries management then, ultimately the act of monitoring is caught within socio-political definitions and interpretations, which always are best resolved through human understanding and negotiations. Figure 1, "The Frying Pan", illustrates the complexity of the west coast salmon fishery.

Why are Questions Being Asked About Monitoring in the Context of Aboriginal Fisheries? Who is Asking?

Beginning with first nations blockades and protest in the late 1980's; various court decisions in the 80's and 90's and more recently, the implementation of the federal Aboriginal Fisheries Strategy and commencement of treaty negotiations, it seems that fisheries commentators are asking questions about monitoring and controls in aboriginal fisheries. The reasons why stem from issues of allocation of quantum, role in overall management and from a First Nations perspective, and matters of an aboriginal right.

While the volume of the debate has increased, the proportionate share of the catch between sectors has not. Consider figure 2, which illustrates that up until 1993, the overall share of the salmon catch by the aboriginal fisheries has been about 4%. This pattern has not changed appreciably in 1994 and 1995, where the current estimate is that approximately 5 to 6% of the salmon catch is taken in the aboriginal fisheries. Therefore, the concerns expressed by the commercial sectors, of aboriginal fisheries taking too many fish or of an imbalance between sectors, is one more of potential change in allocations, than of actual drastic re-allocations. A

pertinent question is, however, post treaty negotiations, what might the proportionate share of allocations be?

As an observer of aboriginal fisheries, let me introduce this section about why questions about monitoring are such a significant issue from the perspective of aboriginal people. To illustrate, I draw upon several vignettes from my journal.

Vignette #1:

As in-coming Director of Aboriginal Fisheries in 1992, at one of my first negotiation meetings with a First Nation, I was introduced to about 10 aboriginal gentlemen of various ages. After the round of introductions, the chair finished by adding, "most of the people here have been pinched for fishing."

I was dumb founded. I have been around in the fishing industry, but to be told that essentially for these people, to go fishing, means to go to jail, was an astounding matter.

These were not my images of stereotypical poachers. They were ordinary people who came from communities that looked like Indian reserves. They were not absentee fish license holders who live in Point Grey, in Vancouver. They were people for whom fishing still had meaning as an active part of their being – a way of life. But fishing, I came to understand, was also a means to make some money as it had been for a long time – even before government regulation and licensing had been introduced.

Without consultation, without consideration, aboriginal people have been marginalized in the fishery. Where once, they were the dominant presence in fishing, they are not any more. It is pointed out by critics of the recent revitalization move in aboriginal fisheries, that 20% of commercial salmon licenses are held by aboriginal people. This is true, but this fact does nothing to rectify the lack of access to up river aboriginal peoples. It also does nothing to recognize traditional fisheries in traditional territories which cannot be exercised because of conservation closures. It also ignores the fact that one fishery is effected through a privilege and another based on an aboriginal right.

With the Sparrow decision, there is now recognized and affirmed, a constitutionally protected but relatively undefined aboriginal right to fish for food, social and ceremonial purposes. Introduced in 1992, the federal Aboriginal Fisheries Strategy (AFS), attempted to address this obligation. Consultation and negotiations preceded allocations; fisheries management structures were altered to include first nations input and participation in economic development activities were introduced. The most controversial aspects of the AFS, pilot sale of fish agreements, was only one small aspect of a multi-faceted policy.

Through the AFS, the federal government was attempting to meet court ordered obligations and also to find a better way than confrontation and litigation to recognize that fishing is and has continued to be an important economic, cultural and social activity for first nations, one which is not fully understood by non-aboriginal people. Hopefully, it is not necessary for aboriginal people who go fishing to be arrested. However, given the catching and environmental degradation pressures which salmon face today, stepped up monitoring and enforcement functions will increasingly become an integral way of life for all fishers, if they and the fish are to survive.

Vignette #2:

In the interior, I walked a creek with a Chief whom I have known and respected for a long time. He and his people were adamant that they would not participate in the Aboriginal

Fisheries Strategy – they would not negotiate an allocation nor accept a communal license to fish issued by DFO. They did, however, want help with catch monitoring and a guardian program. They were concerned about the survival of the fish.

I indicated in negotiations that if there was no communal license in place, I could not offer any funding for monitoring and guardian programs.

We broke off talks and went for a walk. The Chief took me to a creek off the mainstem of a tributary of the Fraser. All he said, was, look, there has been only 20 to 25 returning mating pairs of Chinook and we have voluntarily not fished this creek for many years. We have no fish.

He said, “you at DFO laud our self-control and conservation ethic, but nothing has been done to improve the situation which is in severe decline.” He blamed commercial fishers, hitting co-migrating stocks which is decimating his community’s work to re-build a stock. He also was upset about the increased pressure from aboriginal fisheries down-river and in the Gulf of Georgia.

He indicated to me that DFO’s solution of giving his first nation a communal license to take sockeye on the mainstem Fraser was no solution. It would only lead to disputes between first nations since his people would be seen as intruders. He wanted his peoples’ right to fish for salmon, in their traditional way, in their traditional territory recognized.

The Aboriginal right to fish is a right to fish within ones own traditional territories. The Chief, during our walk, was imploring me to recognize that DFO must alter its salmon management approach from one based on aggregate run models to one based on protecting weak stocks and restoring endangered local stocks. His point was that if this was not effected, the government had a responsibility to compensated first nations over the loss of the opportunity to exercise their right to fish within traditional territories. He was asserting his right as recognized by law.

The Chief felt that for too long, government fisheries management approaches, had catered to the commercial sector with severe consequences to the resource and other groups dependent upon it. He was further pointing out that fisheries management focused on monitoring and counting fish given the status quo was a losing proposition. It must encompass broader considerations of habitat restoration and eliminating various pressures on the fish.

Vignette #3

In the midst of tense negotiations to come up with an allocation of sockeye salmon for a west coast aboriginal group, the first nations’ people got angry and walked out.

One of the Chiefs took me aside and said., “We are arguing over whether the allocation should be 10,000 or 15, 000 pieces. This is absurd.” He indicated that, prior to the late 1960’s, no-one took sockeye on troll gear. Then the Japanese-Canadians came along and developed the technology. Later in the 1970’s and 1980’s the sport fishers figured it out too – now the sport take of Barkley Sound sockeye has grown to be in excess of 100, 000 pieces. These were not originally in the allocation plan. Now to have DFO tell first nations that they can’t have an extra 5,000 or 6,000 pieces to meet their right, because it is allocated to the sport sector was not sitting well with the Chiefs. “Where is the priority? How can you tell us what we should take? That leaves a bad taste in everybody’s mouth.”

Despite the fact of the aboriginal right, which indicates that aboriginal needs for food, social and ceremonial requirements will be considered as the first priority after meeting spawning escapement and conservation needs, the first nations could only see that the recreational

fisheries had staked out a prior allocation which government was not prepared to encroach upon in any significant manner. To them, this was contrary to what their interpretation of the Sparrow decision had indicated about a priority right. Sadly, the pattern has repeated itself numerous times, consider examples in, recreational sockeye, commercial rock fish and sable fish and general harvesting of abalone. The participation of other fishers in “new” fisheries have grown at spectacular rates, excluding aboriginal fishers. Aboriginal people and their needs have been considered after the fact, and after conservation and the other sector groups. The aboriginal priority, up until the introduction of the AFS, had not included species other than salmon and herring.

Vignette #4:

At an AGM of the Pacific Trollers Association, I gave a presentation, like so many others, to explain and defend the government’s policy in Aboriginal Fisheries. I outlined the benefits of a better defined and stable fishery in the future and how the fishery might unfold in the coming season.

At the end of my presentation and the usual heat I had been taking from commercial and recreational fishers over the AFS, an elderly Japanese-Canadian gentleman walked slowly to the front of the room, looked me in the eye and asked in a steely way, “Do you remember me?” To my non-recognition, he stammered, “you should be ashamed of yourself and your father I’m sure would be disappointed too.”

The hurt and anger expressed to me was over change; an eroding commercial fishery, in which the Japanese-Canadian presence used to be a significant and even dominant part. The insinuation was that, what was being outlined in the Aboriginal Fisheries Strategy was wrong – a special deal for aboriginal, based on ethnic lines.

How soon it is forgotten that racially and ethnically based discriminatory regulations prevented Japanese-Canadians and Indians from using gas boats on the Skeena River, early in the twentieth century. Is it forgotten that misplaced hysteria, based on racism, led to the dispossession of all Japanese-Canadian fishers and their relocation from the West Coast, between 1942 and 1949.

As one considers the implications of the vignettes above, one must understand that the lines of disagreement between the various fish sectors is really an issue about allocations of a fixed or shrinking resource. This has also been the case in the recent past where any advantage has been used by the dominant groups in society to eliminate competition or skew access to their interests. As pressure upon the resource has increased, the questions of monitoring who is taking what has also increased. Much of the controversy arises now, because aboriginal people have levered successes in the courts to attempt to negotiate a greater proportion of the allocation for their interests. The fact is that the courts have recognized an aboriginal right to fish.

When aboriginal people were seen as irrelevant, they were not concerns; they did not even figure in the fish counts. However as they have used blockades, the courts and negotiations – any tools to find a place in society, and in the fishery, their irrelevance has changed.

3. Institutions Building

The goal for first nations has been a struggle to have a right to fish recognized and with that recognition, to be fully involved in the management of fisheries. During the past decade, first

nations have demonstrated their seriousness and commitment to this goal through various projects and institutions. Numerous examples exist, of community salmon enhancement, stream clearing, scientific surveys and guardian projects. Aboriginal representatives have also been board members of advisory panels and commissions.

With the Aboriginal Fisheries Strategy, the funding base and federal government priority for greater participation of aboriginal people in fisheries management projects have been confirmed. Most of the tribal councils and coast Indians bands are participating.

More recently, through the treaty negotiation process, what has been denied to first nations people in the past, due process in negotiating the relationship between aboriginal and non-aboriginal peoples, is what is beginning to occur. With the conclusion of treaties, it is anticipated that the institutional structures of first nations governments will permanently establish mechanisms for their participation in all aspects of fisheries management.

4. Statistics

What are some of the key statistics in considering monitoring and the aboriginal fisheries on a broad scale?. Figure 2 illustrated by sector, which groups of fishers are catching the salmon. Fairly consistently up to 1993, the aboriginal fishery had been catching about 3% of the salmon. This has increased slightly in the past 2 years. Relating this catch activity to the aboriginal population is probably a better way to portray the numbers. Figure 3, indicates that aboriginal populations have grown tremendously during the last 10 years. Some of this is as a result of federal legislation (Bill C-31), which has led to the restoration of Indian status to women and their children who lost or never gained Indian status as a result of the discriminatory aspects of the Indian Act, prior to 1985. The balance of the population growth is generated by the fact that the aboriginal population's age-sex profile is far younger than that of the general Canadian population. Consequently the aboriginal population's fertility rate is one of the highest of any group in Canada today.

These young people and their children and children to come will all want to exercise their right to fish. This will definitely require a re-allocation of the resource from others sectors to aboriginal fishers. Negotiating allocations in agreements fixed to a percentage of total allowable catch versus no attempt to negotiate agreements may be folly in light of the aboriginal right to fish and the population dynamics of the aboriginal communities.

Summary

Catch monitoring in the context of aboriginal fisheries has to move from the state of watching aboriginal peoples in a politically charged environment to observing all fishers, including aboriginal fishers in the context of conservation to ensure over fishing does not occur. The goal must first be to conserve and re-build fish stocks and secondly to meet lawful and constitutionally protected aboriginal rights. All other needs and uses must come after this.

What is meant by monitoring in the Aboriginal Fisheries? The meanings are myriad, and they are a reflection of the struggle and clash of values as access to limited fish resources are negotiated.

Co-Operative Management: Can We Get the Incentives Right?

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I. The Problem

Once upon a time, there was a farmer who became famous and wealthy because he had one particular talent. He was able to make a lion lie down with a lamb. Every day, hundreds of people came to his farm to see this wonderful sight. One day, a visiting PhD student took the farmer aside and said to him, "That's absolutely amazing; tell me, how on earth are you able to do that?" "Well, said the farmer, "no big problem, really. You just need a lot of lambs."

Unfortunately, unlike the farmer, British Columbia no longer has enough lambs, or trees, or fish to continue feeding resources to lions (or loggers) (or fishers) at the rate to which they have become accustomed. Further (without stretching the metaphor too far), the problem is not just one hungry lion, but a whole crowd of them, each demanding a share of a dwindling stock of lambs.

The fact that lions eat lambs does not make them bad animals; the fact that fishermen sometimes catch too many fish or that loggers sometimes damage fish habitat does not make them bad people. Rather, lions and other resource users face certain kinds of incentives that structure certain kinds of outcomes, both negative outcomes (or costs) and positive outcomes (or benefits). My purpose this afternoon is to talk a little about the incentives that we might look for in successful co-operative arrangements for the management of fishery resources.

II. What is "Co-Management"?

"Co-operative Management" or "Co-Management" is one of those expressions like "freedom", "justice" and "sustainable development" that are so convenient to use because they are so vague. In practice, the term tends to mean anything from "more consultation" to extensive devolution of decision-making authority or property rights from government to user groups and other stakeholders. Generally, governments have been more inclined toward the "consultation" end of the spectrum of definitions, while user groups have been more inclined toward the decision-making end. If such arrangements are anything more than purely advisory in nature, however, "co-management" involves some sharing of management authority between the government and those groups or communities who are directly reliant on a particular resource. In the last decade, "co-management" has emerged as an important approach to resource management, notably in those cases where legal recognition of treaty or aboriginal rights to a resource has required some redefinition of the existing management regime. Co-management regimes are not limited to agreements with aboriginal communities, however. The "partnerships" that would be possible under the proposed amendments to the Fisheries Act would

allow government and groups within the fishery to develop detailed agreements about the management and operations of the fishery and to share the costs of those operations (DFO, Communications Directorate, 1995:3).

In other words, the Act would sanction formal co-management arrangements with a wide variety of groups, not just aboriginal organizations and governments.

III. Co-Management in Practice: What Makes for Success?

Who wants co-management and why? Both user groups and governments look favourably upon co-operative management arrangements, although for different reasons. For user groups, these agreements provide a means for either securing or increasing their share of benefits from the resource system; for governments, such agreements can provide a way to rid themselves of some of the costs of managing resources that are usually oversubscribed, and are both difficult and expensive to police. The quid pro quo in these cases is a better defined allocation of benefits in exchange for assumption of some or all of the costs of resource management. In some cases, the quid pro quo might include the collection of resource rents for the “owners” of the resource, i.e. all British Columbians or perhaps all Canadians.

Co-operative management arrangements are not generally negotiated with individuals. They involve, rather, some degree of group or communal ownership of, or control over, a resource or a resource system. They represent thus, the application of what has been proposed as a “third option” for addressing the so-called tragedy of the commons. Whereas the conventional prescriptions for the “tragedy” have been state regulation or privatization (and we have heard much about these approaches this morning), scholars such as Ostrom, Pinkerton, Berkes, Feeney, Bromley, Gibbs and Oakerson¹ observe that self-government or self-regulation by groups holding resources in common has been practised in many settings around the world. Most, though not all, of these self-governing institutions have developed in traditional societies and on a rather small scale.

Those who have described successful self-governing institutions for the management of resources owned in common have isolated several characteristics which these arrangements seem to share. Some of the major common elements are as follows:

- a) The community of eligible users is clearly defined.
- b) There are clear geographic or other boundaries to the resource system over which the users have control and the community of users is able (informally or formally) to exclude “outsiders”.
- c) The communities involved are highly dependent on the resource or resources and are vulnerable to non-sustainable use.
- d) The resource users are relatively immobile. If the resource is overused or the resource system is damaged, the users cannot easily move to another location or another livelihood.
- e) Users are able to enforce management rules both against each other and against outsiders.
- f) Although users may not be homogeneous in a cultural sense, they share relatively homogeneous interests in the resource.

- g) Users invest their own resources in activities such as enhancement and enforcement. The costs of management and mismanagement are borne largely by those who benefit directly from the resource.

In this kind of management regime, the incentives faced by users are fairly clear. On the one hand, harvesters are relatively secure in their claim to resources and relatively confident that if they invest time and money in protecting and enhancing those resources, they will reap as a group the benefits of such investment. On the other hand, they know that if the resource is degraded or over-used, they will face the consequences, directly and probably rather quickly. Unlike industrial fishing fleets, they cannot simply sell out or move on. Because the resources are held in common, opportunistic behaviour by one user harms everyone else, so each user is motivated to ensure that others do not rob the common bank account. In these circumstances, particularly if the group of users is small and closely knit, monitoring, enforcement and compliance occur rather naturally.

One of the points often made about common property resource ownership is that it is not a rather simple-minded outdated alternative to private ownership. In some cases, private ownership of the resource, or at least of the resource system, is not feasible. Or, if it were feasible, it is not clear that private owners would be responsible stewards of certain kinds of resources.

IV. The Situation in B.C.

For British Columbia fisheries, of course, the issue is not whether successful self-governing institutions exist somewhere else or have existed at some other time, but whether they are feasible here. On the face of it, British Columbia fisheries do not display many of the characteristics mentioned above.

- a) At the most basic level, it not clear who is eligible to use the resource and how much of it they are entitled to use. This problem, of course, underlies one of the principal recommendations of the Pacific Policy Roundtable which led to the appointment of Dr. Art May to make recommendations about long term intersectoral salmon allocation. The problem of allocation is made immeasurably more difficult when fisheries are heavily oversubscribed. Any clear rules about allocation mean clear winner and clear losers.
- b) Physical boundaries are not clear; fisheries are often not divided up geographically even in cases where this would be consistent with the type of resource such as sedentary or territorial species, including many shellfish and some groundfish. This situation is changing in some fisheries, but it is usually resisted by harvesters as it limits their mobility.
- c) While fisheries are important to many coastal communities, the majority of both fishing fleets and fish processors are concentrated in a few centres, mainly Prince Rupert and the lower Mainland. In large centres, the relative importance of fisheries is much reduced compared with other economic activity.
- d) In many instances, both fishers themselves and capital investment are highly mobile. To the extent that plant, equipment and money can be used in other fisheries, for example, the incentive to maintain a particular fishery is diminished. As a result, the cascading collapse of one fishery after another (caplin after crab after cod) becomes a very distinct possibility.

- e) Although there is some degree of self-enforcement in some fisheries, fishers (and the public) rely on DFO for enforcement. Failures of enforcement are held to be the responsibility of government, not harvesters.
- f) Users are not homogeneous, and there is even less homogeneity or community of interest among those others who seriously affect the resource system, such as forestry and mining companies, municipal governments and developers, recreational boaters, commercial shipping firms, and so on.
- g) In some fisheries, notably the Individual Quota fisheries, harvesters pay some portion of management costs. These amounts are modest, however, in the overall scheme of fisheries management expenditures.

In general, the benefits of the fishery accrue mainly to harvesters and processors, while costs accrue to the taxpaying public in the first instance, and all present and future Canadians in the second.

In summary, then, the incentives created by successful self-governing resource management institutions are very different from those which exist in most B.C. fisheries. And it is unlikely that those who participate in the fishery will be able to voluntarily create the incentives that are required for sustainable management of the resource.

V. Recommendations

In light of the above and further to comments that have been made throughout the day, I would like to suggest that the fundamental requirement for the creation of appropriate incentives for sustainable fisheries is clear allocation of rights to the fishery resource. In some cases, it seems as if those involved in co-management discussions believe that the negotiation of agreements at the community level will lead to such allocation decisions. For example, a pilot project for intertidal clam management on the Sunshine Coast was made possible because local aboriginal and non-aboriginal harvesters were able to reach initial agreement about distribution of a limited number of clam licenses. This initial allocation has been the subject of persistent dispute, however, and has resulted in continuing pressure for the issuance of more licenses to deal with this conflict (Mitchell, 1995). This is to be expected when there are no clear, publicly stated principles upon which those who manage public resources on behalf of their owners distribute opportunities or rights to participate in use of the resource.

If co-operative management is to be an effective alternative to current management arrangements, these new institutions will have to be carefully “crafted” (Ostrom, 1990) with a view to creating compelling incentives for sustainable resource management. This will require clarity about:

- a) who has a right to participate in a fishery
- b) who bears the costs of the fishery. Ideally, costs should be distributed such that those who benefit from the resource bear a proportionate share of the costs of management (or mismanagement).
- c) incentives for self-monitoring and enforcement. Each user must be, in some way, a hostage to all the others. Various kinds of conditional and/or communal licenses may be needed to provide for this degree of mutual dependency.

As mentioned above, these kinds of institutional arrangement are not going to emerge “naturally” through the sort of slow, evolutionary, trial and error processes that led to traditional common property management regimes. The fishery resource is too fragile, and our ability to misuse and destroy it, is too complete. Governments will need to assume a strong role in crafting new institutions, and will need to maintain a strong presence in fisheries management, albeit a different presence from that which it has assumed in the past.

Minimally, governments will need to:

- establish allocations among different user groups.

- establish, monitor, and enforce conservation targets and standards.

- provide legal capacity for users to regulate themselves.

- provide arenas for the resolution of conflict within groups and between groups.

- establish rules for the equitable and orderly transfer of rights and the collection of rents, so that resource rents are appropriately shared between resource users and resource owners (the public); those who receive initial allocations do not benefit from unreasonable windfalls;

- government is less tempted to delay a clear allocation of rights to the fishery because of issues concerning transferability and the consequences of transferability.

Being clear about such fundamental matters in fisheries management would hold governments as well as resource users more accountable.

Finally, I would like to put in a word for creatures without backbones. (I am not referring here to academics.)

In my PhD research, I have been looking at new institutions for the management of shellfish resources, specifically intertidal clams and geoducks. While invertebrate fisheries receive much less attention than the better known salmon, roe herring or other fin fisheries, they are of large and increasing importance in British Columbia. In 1994, for example, the landed value of invertebrates exceeded one hundred million dollars. In 1981, the equivalent value was about eleven million dollars. In 1994, nineteen species of invertebrates were harvested; in 1981, only 13². Both the scope and the value of these fisheries have grown rapidly. Three of these fisheries - geoduck, red urchin and sea cucumber - are managed under individual quota systems.

As the salmon fleet is reduced, there will be growing pressure for participation in non-traditional fisheries. This pressure is already great and it will certainly continue to increase. If self-governing institutions for fisheries management are to be implemented as part of a new fisheries regime on Canada's west coast, they should be put into place soon. I am aware that a moratorium was placed on further invertebrate fisheries in 1992, and that the federal and provincial governments have recently concluded a Memorandum of Understanding concerning policy for new and developing fisheries. In these new fisheries, participation will be limited initially and expanded only with supporting data. It is also intended that these fisheries recover management costs from the resource users.

It is critical that such steps be taken for new fisheries, and that precautionary *institutional* arrangements be put in place for all those fisheries which are subject to increasing pressure. If the right incentives are created now, it might yet be possible to shut the stable door before

the horse clams are gone. If not, many other species may go the way of the sardine, the abalone, and the cod.

VI. Enforcement Capabilities

Ocean-Going Enforcement Tasks

Rear-Admiral Bruce Johnston, CMM, CD
Commander Maritime Forces Pacific

First, I would like to congratulate the Maritime Awards Society for organizing today's forum. As you have heard, this is the second in the series of what I trust will become a fixture on our calendars for the future. It is good value indeed.

The subject of this session is "Ocean Going Enforcement Tasks". I am content to be brief in my remarks as Commander Jennifer Bennett of HMCS Malahat, in her remarks will undertake to provide you with the operational posture of today's West Coast Navy in support of sovereignty and law enforcement across the board. As the Commanding Officer of Victoria's Naval Reserve Division, HMCS Malahat, I am certain she will put particular emphasis on the role of the Naval Reserve.

I would not have been comfortable addressing a similar topic two years ago. In that time-frame, and quite apart from a scarcity of ships and aircraft, your Navy was undergoing a re-assessment of roles and missions in the post cold war environment. Given the protracted nature of the cold war and the difficulty involved in rationalizing its end, it was understandable that some time would elapse before a fundamental realignment would take place. That has now happened.

I would be among the first to admit that Canada's Navy became somewhat one-dimensional during the cold war. Strategic anti-submarine warfare and our contribution to the strategic deterrent were the dominant roles of the Navy. On the West Coast in particular, this was the total pre-occupation of the available forces. One must also remember the heavy emphasis on training which utilized 60% of West Coast resources. In the past two years we have seen the introduction of four new frigates and the end of the Training Squadron *per se*. Now I enjoy the flexibility of having eight operational ships compared to the traditional four. With the introduction of a fifth frigate and the first of the six coastal defence vessels this winter, the fleet will gradually begin a gradual increase to 14 operational hulls in 1999. That is a most significant increase and provides the admiral of the day with about 1,500 sea days annually to satisfy his operational priorities. While we presently devote 200 days annually to sovereignty patrols, I foresee that doubling to 400 in the not too distant future.

I must add right now that my five patrol boats, the old Bay-Class minesweepers, are leading the way in demonstrating that officer training can be successfully combined with sovereignty operations. We should have Standard Operating Procedures well in place before the arrival of HMCS Nanaimo in December, 1996.

Well, what of the Navy's role in ocean enforcement? The short answer, of course, is that the Navy does not have a direct role in law enforcement except under specific circumstances. So why am I here, you may well ask?

The special joint committee examining Canada's Defence Policy and the 1994 White Paper clearly indicated that Canadians want to know more about what is happening in their own backyard. In today's political climate sovereignty is all about law enforcement, law enforcement depends on knowing what is going on, and that requires surveillance which must be accomplished by the Navy and Maritime Air because, frankly, only we can do it.

Maritime Sovereignty is the supreme authority of Canada to control affairs off our coasts. While the sovereign powers of the state diminish with distance from shore the ocean area for which Canada is responsible is larger than our land mass and constitutes a second seaward Canada. A national maritime presence whether it be the Navy or other federal maritime asset is required to meet the citizenry's needs for safe and reliable passage, recreation and trade on the nation's waters. A nation that fails to meet basic needs and policing duties invites abuse by smugglers and opportunistic traders. Perhaps most important to Canadians is the ability of Maritime Forces to monitor and detect threats to our considerable natural wealth and thereby facilitate the enforcement of our policies and laws.

Earlier than just last year there was very little routine co-operation between the Navy and other government departments (OGDs) on the West Coast for many of the reasons I mentioned earlier. Today, personnel from Fisheries, the RCMP, Revenue Canada, Customs and Heritage Canada routinely embark in Navy ships as they see fit to take advantage of the enforcement opportunities presented due to our superior mobility and wide ranging surveillance capability. The extension of the RCMP's Coastal Watch Programme is due in no small part to the much wider coastal coverage of the monthly sovereignty patrols. In fact, HMCS Annapolis begins a patrol on Monday. She will sail up the West Coast of Vancouver Island to Prince Rupert while her consorts, HMC Ships Cowichan and Thunder will go up the Inside Passage stopping in several locations along the way. The patrol begins with two days of joint training with the US Coast Guard off the Victoria waterfront. The naval patrols should not be characterized as simply "showing the flag." As I said earlier, Canadians want to know more about what is going on in their own backyard and we are in the business of finding out. Perhaps our greatest asset is the Aurora long range patrol aircraft that fly out of CFB Comox. I have nearly 1,000 hours a year allocated to me for operations. That translates into an average of two flights a week. I may be able to increase that to three. The Aurora crews perform general surveillance as opposed to providing specific support to particular government departments. We do, of course, seek advice on what would be most productive at any given time.

In the nearly two years of domestic sovereignty patrols with their focus on providing information useful to government departments, it has become apparent to all concerned that the Navy does have a part to play. We do help each other directly. Several investigations have been opened because of the observations made by the federal law enforcement officers embarked in the Navy's ships.

Last October, I chaired a symposium which was attended by representatives of the RCMP, Canada Customs, Ports Canada Police, Citizenship and Immigration, Ocean Sciences, Department of Fisheries and Oceans, Canadian Coast Guard, Marine Communications and Traffic Services, and Heritage Canada. The goal of the Symposium was to promote interdepartmental appreciation with respect to maritime operations and the capabilities that exist on the West Coast. It is my view that in the current fiscal climate which isn't about to change, mutual support and information sharing is the way ahead for Coastal Operations. Each of the agencies represented agreed that with minor constraints, co-operation between departments is essential in order to provide a common front against illegal activities on the water off our coast.

Time will tell how much surveillance is required. The answer will be determined so we see just how much success in enforcement is achieved. Naval and Maritime Air presence is a visible deterrent to potential law breakers much like the highway patrol car.

Recently, Maritime Forces Pacific opened a new maritime operations centre (MOC). One responsibility of the facility of interest to OGD's involved in law enforcement is the

development, analysis, and dissemination of the picture of maritime activity on a continuous basis. Each day I am briefed on the state of the picture, and information is shared with OGD's to provide a cue for their law enforcement operations. The centre is staffed 24 and 7 and the Senior Officer is responsible for maintaining the maritime picture, and distributing the information to other users including the fleet, CFB Comox, other government departments and the US Navy and Coast Guard and information is also available to other departments with a "need to know" and on request. The sharing of information is not considered "support to OGD's" by definition, rather it is sharing of surveillance information which the Navy compiles to support the National Sovereignty Mission. Because of its excellent communications capability the MOC is a superb facility for co-ordinating joint operations.

I want to mention another activity that is international in scope but has a direct effect on the British Columbia Coastal Fishery. Since 1989, Aurora long range patrol aircraft from CFB Comox have made a significant contribution in monitoring illegal driftnet fishing vessels on the high seas in the North Pacific. Between April and September, 407 Squadron flies 216 hours in six patrols. The Aurora is ideally suited to the task. The onboard equipment, which can monitor surface and sub-surface vessels is particularly useful to locate and observe illegal driftnet vessels. Flying at a high altitude to search an area they descend to investigate suspected ships. They fly extremely long distances to an area north of the 35th parallel and as far west as the 200 mile exclusion zones across the Pacific. Each patrol normally has three to four flights of about 10 hours each to cover hundreds of thousands of square miles of ocean area. It's been said that we are looking for "needles in haystacks." Our crews along with personnel from DFO and the US National Marine Fisheries Service along with provincial authorities have located the vessels, photographed them and presented the evidence to international authorities.

The tragedy of the driftnet fishery impacts on British Columbia because, in addition to harvested huge amounts of salmon, they also trap marine mammals and seabirds in alarming numbers. Since 1 January 1993 it has been illegal for any vessel from any country to employ driftnets on the high seas. However, some abuses continue. Canada's support has resulted in several arrests and the number of pirate driftnet vessels has diminished as a result of the photographic evidence gathered by these airborne maritime patrols.

The Canadian Navy's approach to its operations is first to provide security services to Canadians, through surveillance, and support to Canadian Sovereignty by developing a comprehensive picture of activities in our coastal waters and cuing the effective government department to respond appropriately to illegal activity or to protect lives and property. Doing this in co-operation with the other government fleets provides a presence that shows our capability and our resolve to deter infractions of national and international law. Canadians, particularly those living in coastal communities, support this mission. It is also important to inland Canadians as they are often the destination of contraband and are dependent upon the free movement of goods by sea for their economic well being.

Coincidentally, the Navy remains ready for any task anywhere in the world.

Ocean-Going Enforcement Tasks: The Role of the Navy and Naval Reserve

Commander Jennifer Bennett, CD
Commanding Officer HMCS MALAHAT

The Navy and the role it plays may be familiar to the people who live in and around Victoria and the Pacific coast but not so well known is the existence of and the role of the Naval Reserve. The Naval Reserve Division in Victoria is HMCS Malahat, one of 24 Divisions across Canada. While my area of expertise is the Naval Reserve, my remarks today will expand on Admiral Johnston's introduction to ocean-going enforcement tasks and blend the Regular Force and Reserve commitments and roles. In actuality, the title of my brief is a bit misleading because the "Naval Reserve" is in fact, an integral part of the "Navy".

As we have heard throughout the day, the economic importance of our ocean assets cannot be underestimated nor taken for granted. Economic factors are paramount for any country with maritime interests. The economies of the four Atlantic Provinces and British Columbia and the welfare of tens of thousands of Canadians are all heavily dependent on the vitality of the fishing industry. In the last decade we have had to come to terms with years of overfishing and the cumulative effects of fishing technologies which have disrupted the ocean environment. This has led to some of the challenges and problems discussed here today and it has become clear that we must better manage and protect our fisheries to ensure their long-term survival. We must focus on management, and effective management is enhanced by effective enforcement. This is where the Navy plays an important role.

The Canadian Navy has a long history of support to other government departments in the form of Fishery patrols (FISHPATs), sovereignty patrols (CANPATs), RCMP Preventative Patrols, Drug Interdiction Operations, Search and Rescue and Marine Research Support. These roles are becoming well known to Canadians through media coverage or personal experience but as today's forum deals more specifically with Canadian Fisheries, I will focus my comments on this support role although others may be linked with fishery patrols.

The need for Canada to maintain a maritime forces capable of supporting the protection of our ocean resources, the enforcement of laws and the safeguarding of lives on our oceans cannot be overstated. Most of Canada's maritime jurisdictions are well-established and internationally recognized but recent events have illustrated that disputes are inevitable when resources are involved. To assume the ocean frontiers will be respected without military forces being present to exercise sovereignty is an error with grave consequences. Canada must continue to be vigilant with regard to its territorial claims. However, our concept of what constitutes security has evolved and become broader since the days when we were concerned primarily with the threat of global nuclear war. Maritime presence is a military task which involves three important capabilities; surveillance, control and response. We must know what's happening on, above and below our waters by physical presence, or the presence of monitoring systems capable of detecting all activity. We must be able to establish a degree of control over these activities and have that control respected by others. Should a situation arise which conflicts with Canada's goals, challenges or threatens our interests, we must be adequately prepared to deter or respond appropriately and consider the use of force if necessary.

This requirement for a maritime presence in Canadian waters must be met with a balanced, general purpose, combat-capable maritime force. The mission of the Commander of Maritime Command is to ensure that we have that force. "Combat-capable" recognizes that there are

certain core capabilities which make a navy different from a coast guard or a fisheries protection service. By preparing for the ultimate task of fighting in a war, we are better able to accomplish a wide variety of other tasks. "General purpose" recognizes that threats are no longer predictable, and that our flexibility may be put to the test with some regularity in the future. Therefore, we must maintain an appropriate degree of specialization in all areas of naval warfare.

The word "balanced" in the Maritime Command mission refers to the need to think not only about the surface of the water but the presence above and below the surface. This implies a mix of resources and is reflected by the Navy's employment of maritime aircraft, surface ships of various sizes and submarines. To reduce any one of these three, substantially reduces our effectiveness in the course of our duties.

The Regular Force and Naval Reserve are very active domestically in support of other government departments through our sovereignty and surveillance operations. The Navy has the expertise and equipment to significantly extend the capabilities of other government departments as the Navy keeps the "Maritime picture" on a larger and more detailed scope. We are able to generate a comprehensive picture of maritime activities by employing input from a wide base of resources.. The Maritime Operations Centre in MARPAC Headquarters can then provide this information to the fleet and appropriate government departments to assist in enforcement tasks.

In our support to the Department of Fisheries and Oceans, we provide platforms from which to conduct fisheries patrols. The versatility of our ships and aircraft working together enable fisheries inspectors, embarked in Naval vessels and submarines, to be more effective by quickly covering wide areas and by confronting those engaged in illegal activities with an armed combat vessel and trained personnel. The fleet consists of a mixture of large deep-water warships and a growing fleet of smaller coastal patrol vessels, manned primarily by Naval Reservists. Our ships are capable of extended deployments with surveillance, intelligence and Command and Control to accomplish effective control over large areas. The smaller vessels are easily manoeuvrable in coastal waters and provide an effective force multiplier to DFO and CCG vessels in inshore or coastal waters. Given the well-documented evidence of depleted stocks and fierce competition in the fishing industry, it is more important than ever that we maintain a close watch over fishing activities. It is important to note however, that normally the Navy does not have the power of enforcement. We conduct very successful operations with embarked DFO officers by combining their special training and skills for boarding and enforcement with our highly capable ships and the unique ability to maintain a recognized maritime picture in the waters of interest to Canada.

For many years, the roles and mission of the Naval Reserve specifically centred on augmentation of the Regular Force. After many years of maintaining the status quo, the Naval Reserve has been assigned new challenges, and is rapidly changing to meet these new obligations. The key word for the Naval Reserve Formation of the immediate future is "change". The Naval Reserve was established as a Formation within Maritime Command in 1994. This organizational change has had a major impact on the way in which the Naval Reserve conducts business and on the way it relates to Maritime Command and the two other Maritime Formations - Maritime Forces Pacific and Maritime Forces Atlantic.

The Naval Reserve is charged with providing the Maritime Commander with trained personnel to help perform any of the mission elements assigned to Maritime Command, and to provide assistance to MARLANT and MARPAC in the conduct of naval tasks, as directed by Commander Maritime Command. We are to provide Maritime Command with trained personnel for the manning of combat and support elements to meet Canada's naval defence objectives in

time of peace, crisis and war. The Naval Reserve is largely a personnel resource which provides assistance to Maritime Command in the fulfilment of their missions and tasks.. In Canada, the Naval Reserve is an essential part of our Total Force Navy.

Although the Naval Reserve may be called upon to provide manpower assistance for any mission element or naval task, specific manpower and training requirements have been assigned. These include Maritime Coastal Defence Vessel manning and specialized training in surveillance, route survey, mine countermeasures and assistance to other government departments.

Over the next four years, the Navy will receive 12 general purpose Maritime Coastal Defence vessels (MCDV). These vessels are being built primarily to commercial standards and will be crewed by Naval Reservists. The MCDV's will provide the Naval Reserve with a multi-role operational capability to perform its maritime coastal defence mission. This includes coastal surveillance and patrol, support to other government departments, mine countermeasure operations, other naval taskings in support of planned and contingency operations and exercises, training, search and rescue and ready duty ships. Support to OGDs may include surveillance, fisheries protection, drug interdiction, environmental monitoring, apprehension of illegal immigrants and search and rescue. The ship design and modular payload concept have increased the versatility of these vessels and recognize the potential for future capability enhancements. The distribution of the MCDVs will be balanced between the two coasts. Of the six deployed to Halifax, up to four will routinely operate in the Great Lakes/Gulf of St Lawrence area during ice-free months and six will be deployed to Esquimalt. HMCS Nanaimo, the first of the west coast MCDVs is due to be launched this May and will be commissioned in Nanaimo in May 1997. The MCDVs will soon join the fleet and assume a broad variety of naval taskings previously undertaken by larger vessels. They will be more cost effective and efficient, deploying in support of traditional naval taskings as well as introducing expanded capabilities to our maritime forces. The sovereignty and fishery patrols are something for which these vessels are indeed suitable since their small size and manoeuvrability will make them able to get alongside virtually any ice-free berth in Canada. Added to this is the important fact that the Navy's other ships will then be free to carry out other more demanding missions.

Maritime Command's operational fleet will soon consist of 12 Halifax Class patrol frigates, 4 updated Iroquois Class command and control destroyers, 2 older Annapolis Class destroyers, three Operational Support Ships, three diesel-electric submarines, 12 Maritime Coastal Defence vessels (MCDVs), 2 Mine Sweeping Auxiliary vessels (MSAs), and several diving, training and support craft. All surface vessels are divided between Canada's two naval dockyards in Halifax and Esquimalt. The combination of sea and air capability is essential to get our job done. To that end, Maritime Command is supported by the Air Force's Maritime Air Group which employs Sea King Helicopters, Aurora and Arcturus long-range patrol aircraft and other utility aircraft.

The total of the Navy's domestic maritime responsibility represents a considerable work load for a relatively small organization. A large number of our roles are in direct support of other government departments but despite this focus, there are still several military roles which distinguish and further separate our Navy from a Coast Guard.

In the ever-changing climate of today's world, there continue to be numerous diverse challenges to our sovereignty and security: illegal fishing that employs advanced electronic equipment to detect fish stocks, exploit them quickly and escape the scrutiny of authorities; the potential for environmental disaster; drug smuggling; the simple threat of harsh ocean climate; traditional military concerns of exercising sovereignty and the specific issues of concern discussed throughout today's forum. While it is unlikely that these threats will be eliminated in the near

future, some may expand and become greater threats. For a maritime nation which relies heavily on safety and security within its ocean areas and depends on the resources of those oceans, the Canadian Navy must maintain a force able to play a key role in meeting our maritime security needs. With advanced training, updated technology and equipment and our excellent past record, the “Blue Water” Navy and its revitalized Naval Reserve is indeed “Ready Aye Ready” to protect Canadian interests at home as well as anywhere in the world.

Rapporteur's Summary

Dr. J. A. Boutilier
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Commander Maritime Forces Pacific

The twentieth century has been a revolutionary and revelatory century; an age in which monarchs have been toppled, war has become obscene in its totality, and the fundamental assumption underlying the world order, namely its commitment to progress, is under siege. Are we in fact about to embrace a realization of historic proportions? Are we on the point of global transition from consumption to conservation? Perhaps the pictorial harbinger of this great change reached us thirty years ago, when, for the first time in human history, the entire world was encompassed on a photographic plate. Like some luminescent blue sphere against the inky darkness of outer space, it telegraphed a single message; The world and all therein was finite.

For most of us nothing was more infinite than the sea and the fish therein. We were raised on tales of John Cabot's men lowering their buckets into the ocean off Newfoundland and drawing up fish from the teeming stocks below. How humbling to realize that the lowly fish is the metaphor for our contemporary condition; that the mobility of fish has forced us to come to terms with the artificiality of borders and lines in the sea and that the catastrophic collapse of fish stocks on Cabot's coasts is the revelatory warning – in a century in which man has played god – that the world is terrifyingly finite.

At its very simplest, two inexorable and interlocking forces have been at work: fertility and technology. It is worth remembering that it took from time immemorial to the 1920s for the population of the globe to reach two billion. It took only seventy-five years for that population to triple. What man did was to institute death control without birth control. Were we to plot this demographic explosion we would see the population curve rocket upwards as it approached the end of the 20th century.

Global consumption of food, energy, and other resources followed suit. Imagine for a moment that we turned our graph upside down, with the curve plunging off the page. That would be the profile of fish stocks in many parts of the world. That precipitous decline was brought about not only by virtue of the demographic explosion but by improvements in technology. The century that started with muskets and ended with atoms witnessed a dramatic increase in the capacity of the fishers to sweep the sea. Cabot's buckets are gone: Maritime wastelands have taken their place.

The papers in this volume attempt to come to terms with the sombre reality described above and to illuminate the excruciating complexity of the issues surrounding that reality. There is an old saw that politics is competition for scarce resources, and the authors touch on the increasingly Hobbesian state of the Canadian fisheries with more and more claimants pursuing a disappearing resource.

Competition for fish may seem a mundane affair and yet that competition highlights a fascinating array of problems; legal, scientific, cultural, diplomatic, economic, and perceptual, to name but a few. One of the fundamental questions is who owns fish? Are they a common good? How does one determine ownership of a resource that moves in and out of jurisdictions? Who should make that determination? How does one square aboriginal claims to fish with the rights asserted by later arrivals? Does customary law obtain in fisheries matters in the absence of Canada's ratification of the law of the sea?

Equally perplexing are the scientific and methodological problems associated with fish catches and fisheries management. How are we to determine with any certainty just how many fish there are in the sea, how many of each type, and just what a sustainable population is? In times

gone past scientists were woefully ignorant of the enormous complexity of dynamic marine food systems. They often asked the wrong questions, relied on inadequate science, and drew the wrong conclusions. Thereafter, those conclusions were further compromised by political expediency. Our appreciation of what the maritime world would bear fell victim to greed, fallibility, and arrogance. We may have acted in good faith, but the result was fatal nonetheless. Fishery statistics are not merely an arcane conceit. They lie at the very heart of all management regimes, at the heart of all negotiations about resource allocations, and at the heart of fisheries foreign policy.

Competition for scarce resources gives rise to the perception of a lethal zero sum game where the interests of the claimants are delineated more and more starkly. Thus sports fishermen grow suspicious of aboriginal fishers, aboriginal fishers grow wary of their downstream cousins, gillnetters of seiners, Canadians of Americans, and so forth. Thus, as the papers in this volume demonstrate, the reserve of goodwill, which is one of the keys to the long-term solution of the problem, diminishes at the very moment when it is most needed. In turn, we need ask ourselves, what is the most efficacious way of promoting cooperation among the claimants? At what point and to what degree should government intervene? Is government intervention the only way to interpose a force above the fray, one which will be partially insulated from paralysing parochialism?

Central to the fishery dilemma is the dialectic between long term sustainability and short term economic reward; between jobs and the prospect that if the problem is not adequately addressed there will be no jobs. In short, how to minimize the pain. Sustainability comes at a price. There are political, social and economic costs to bear. But they are a trifle compared to the cosmic consequences of inaction. What makes matters so much worse is that the mobility of fish translates declining fish stocks into an international problem beyond the reach of domestic solutions. Thus, it is a case of Canadian jobs at risk as a result of the activities of fishers from other nations. A number of the authors highlight the importance of the law in addressing this problem and the need to pursue imaginative and bold solutions in the face of challenges that punish the fainthearted.

Management betokens enforcement and the Canadian navy works closely with other government departments to monitor maritime activity, including fisheries. The erosion of departmental provinciality is a measure of the degree to which the fishery problem, in all of its complexity, is beginning to be addressed holistically. That approach, in turn, reflects the realization that inter-connectivity lies at the heart of sustainability. We are back where we started: The enforced triumph of conservancy over consumption. The dream of the infinite has been shattered. The challenge which this volume captures so powerfully is to “replace uncertainty with certainty and conflict with cooperation.” Oceans depleted of cod or salmon are like the clock on the cover of the *Bulletin of Atomic Scientists*, the clock that warned us of what was to come if we did not act.

For many, the contemporary condition is characterized not only by too much information but too much conflicting information. Confused, we turn to simpler matters. One of the functions of the Maritime Awards Society of Canada is to try to dispel that confusion by providing timely and informed commentary on issues of national and international maritime concern. The expert analyses contained herein are intended to advance this cause. While the outlook for Canada's fisheries can only be said to be sombre, the depth of the experience revealed in those analyses is a measure of the seriousness with which our national fisheries challenge is being addressed.

ANNEX¹

1996 in Review: A Chronology of Events Relating to West Coast Fisheries

Michelle Dann
School of Public Administration
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In 1982, Peter Pearse described the problems facing the fishery as “...numerous, grave and very complicated. They include overfishing, conflicts among users, overexpansion of the fishing fleets and eroding marine and freshwater environments...” (*Turning the Tide*, 1982). Almost fifteen years later these problems continue to plague the Pacific fishery. Widespread agreement currently exists that policies guiding the management of the westcoast fishery need to be overhauled. This recognition is nothing new, of course. Studies dating back to the 1900's have predicted the decimation of the salmon stocks as a result of fundamental deficiencies in fisheries policy.

The Fraser River Sockeye Public Review Board report written by Ambassador John Fraser, and delivered to the Minister of Fisheries, the Hon. Brian Tobin in 1995, again pointed to the serious state of the westcoast fishery and noted that at one point in 1994 the fishery was “12 hours from disaster”. Key among the recommendations made by Ambassador Fraser was the need for “DFO to take immediate steps to initiate a process of planning for the future fishery, addressing all critical problems affecting conservation and sustainability, through an ongoing consultative forum”. Among the problems to be considered would be over-capitalization and user group allocation. In response to this recommendation and pressure from all user-groups, DFO created the Pacific Policy Roundtable, which was mandated to make specific recommendations regarding fleet rationalization, commercial fisheries management reforms, harvesting strategies, stakeholder consultation and institutional reforms.

The following chronology describes the subsequent chain of events leading to the 1996 season of chaos and growing disillusionment with DFO's ability to manage the fishery. These developments finally resulted in Canada and British Columbia working cooperatively to review the state of the Pacific fishery.

¹ This electronic version of the annex does not contain all of the documents compiled in the original printed version. For the complete collection, please consult Dobell, Rod and Justin Longo (eds.) 1996. *Politics, Management and Conflict in the Canadian Fisheries*. Victoria, B.C.: University of Victoria, and the Maritime Awards Society of Canada.

Timeline

December 1995

- ! Pacific Policy Roundtable Report released. Relays 27 recommendations to Minister Tobin on intersectoral allocation, management options, financial support and transition, licenses fees, partnerships, habitat management, and salmon production. (see attachment 1- summary of recommendations)

January 1996

- ! In response to a recommendation of the Pacific Policy Roundtable, Dr. Art May is appointed to serve as an independent advisor to review long-term fisheries allocation on the West Coast. (see attachment 2 - Press release and backgrounder)

March 1996

- ! “Mifflin Plan” announced. (see attachment 3 - March 29 Press release and backgrounder)
- ! Province calls for “meaningful (federal) assistance for displaced workers in the BC salmon fishery” (see attachment 4 - Press release)

May 1996

- ! Fishermen storm into federal offices (see attachment 5 - news article *Vancouver Province*)
- ! Provincial Government proposes Fisheries Renewal weeks before a provincial election (see attachment 6 - Premier Clark’s letter to Prime Minister and Fisheries Renewal backgrounder)
- ! Federal Government Rejects Plan (see attachment 7 - Mifflin ridicules Clark’s fish plan *Vancouver Sun*)
- ! Various parties (UFAWU, Communities organizations, commercial fishers) support Provincial Renewal Plan (see attachment 8 - Pacific Salmon Alliance)

July 1996

- ! Prime Minister’s Office and Premiers Office continue to negotiate joint review of “Fisheries Issues”
- ! Minister Mifflin and Minister Evans sign a three part MOU Between Canada and British Columbia on Fisheries Issues includes; i) a review of roles and responsibilities, ii) a study on the impacts of the Pacific Salmon Revitalization Plan on coastal communities, individuals, and corporate concentration; and iii) consultation with Province prior to the Round II license retirement program is made public. (see attachment 9 - Canada and BC agree to conduct joint review of salmon fisheries issues)

August 1996

- ! Federal/Provincial governments agree to Terms of Reference to review their respective roles and responsibilities in the Management of the Pacific Salmon Fishery (see attachment 10 - Press release and Term of Reference)

September 1996

- ! Federal/Provincial governments agree on Terms of Reference to the impacts and possible improvements to the Pacific Salmon Revitalization Plan. (see attachment 11 - Press release and Terms of Reference)

October 1996

- ! Job Protection Commissioners Final Report (effects of Pacific Salmon Revitalization Strategy and the expected poor salmon season) delivered to Minister Evans. (see attachment 12 - letter from Doug Kerley *Jobs Protection Commissioner* to Minister Evans relaying report)

November 1996

- ! Canada supports interim recommendations by Panel on Pacific Salmon including Panel's support of Kerley's recommendations. Interim recommendations include the creation of short-term job creation program. (see attachment 13 - Press release)

December 1996

- ! Panel delivers its report (*Tangled Lines*) to the Canada and the Province. (see attachment 14 - Press release)
- ! Art May report recommends approaches to allocation of quotas among sectors (see attachment 15 - Press release).

The turmoil of the 1996 salmon seasons was exacerbated by:

- ! A failed Pacific Salmon Treaty (see attachment 16) and continued conflict over sectoral allocation;
- ! Concern in segments of the commercial fishing about possible implications of treaty settlements (see attachment 17), further Supreme Court of Canada decisions and a controversial Aboriginal Fishing Strategy;
- ! Financially strapped governments; and
- ! Continued consideration of Fisheries Act amendments (see attachment 18) and the possible consequences of new 'partnerships' or other delegation of federal government powers.

Attachment 2

NEWS RELEASE

NR-PR-96-05E

January 23, 1996

FISHERIES ALLOCATION ADVISOR APPOINTED

Vancouver -- Dr. Art May has been appointed to serve as an independent advisor to review long-term fisheries allocations on the West Coast.

Dr. May, President of Memorial University in St. John's, Newfoundland, will begin an assessment of allocation issues in early February, and is expected to make recommendations to the Minister by August 1996.

Dr. May is a former Deputy Minister with the Department of Fisheries and Oceans, and has more than 30 years' experience in fisheries management issues. He will meet with representatives from all fishing sectors in Vancouver February 5 and 6.

The appointment is one of 27 recommendations contained in the report on the renewal of the commercial Pacific salmon fishery, which was delivered to the Minister in December 1995 by the Pacific Policy Roundtable. The Roundtable was launched in the spring of 1995 to address long-standing issues such as fishing fleet over-capacity, and to provide participants a direct role in reforming salmon fisheries management.

The Roundtable Report notes the lack of sharing arrangements among the sectors, and the absence of a mechanism to adjust catch shares over time that has made it increasingly difficult to effect changes in fisheries management. Accordingly, in his capacity as an independent advisor, Dr. May will review, evaluate and make recommendations addressing the issues associated with intersectoral allocations.

Dr. May will provide the Minister with advice on an intersectoral allocation policy framework, including initial shares for each sector. He will also recommend a process and guidelines to allow adjustments in shares among sectors.

Dr. May will be guided by the following policies:

- ! Conservation is paramount. It is vital to ensure conservation of the salmon resource and to maintain the genetic integrity, diversity and viability of salmon stocks. Any advice must support conservation and rebuilding targets determined by the Minister.
- ! Aboriginal fisheries for food, social and ceremonial purposes are first in priority once conservation needs are met. The existing arrangements between DFO and First Nations for determining Section 35 allocations and establishing fishing plans will be maintained and excluded from this study.
- ! Catch-sharing arrangements among sectors must be consistent with Canada's obligations under the Pacific Salmon Treaty.
- ! Allocation decisions should be marked by impartiality and conform to transparent rules and principles.
- ! Catch sharing arrangements must be manageable and able to be implemented without increasing costs to government.
- ! A recognition of the fundamental differences in managing the recreational, commercial and Aboriginal fisheries.

! A long-term catch sharing plan should enhance the security of allocation at the sector level and at the individual participant level.

Dr. May will accept written briefs from persons or organizations wishing to express their views. Public meetings may also be held to give organizations a forum to provide advice, and all correspondence and discussions with the advisor will be made public.

Two independent consultants with extensive Pacific coast fisheries experience, as well as Dr. James Feehan from Memorial University, will assist Dr. May, and work with various stakeholders in evaluating the allocation issue. DFO will announce the names of the consultants over the next two weeks, as well as meeting times and locations.

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BACKGROUND

B-PR-96-05E

January 1996

RESPONSIBILITIES OF INDEPENDENT ADVISOR APPOINTED BY DFO

Dr. May will undertake a wide variety of tasks in his capacity as independent advisor on intersectoral allocations on the West Coast.

Dr. May will inquire into, and report on, existing allocations or catch-sharing arrangements in Pacific salmon fisheries. This inquiry will include catches in Pacific salmon fisheries with particular attention to trends over time in catch by sector, and the criteria used to determine any existing catch-share arrangements. He will also review government policy or regulation on Pacific salmon fisheries that is relevant in determining allocations, defining shares or assigning quotas.

Dr. May will also review experience in other jurisdictions in addressing fisheries resource allocation issues and establishing catch shares with particular attention to:

- ! how shares were defined
- ! the criteria used to determine sharing arrangements
- ! the implementation strategies
- ! the effectiveness of approaches where this assessment is available

Dr. May will also review criteria, guidelines and processes for establishing initial catch shares for Pacific salmon and outlining how changes could be introduced in catch shares over time. These will include:

- ! recommendations on establishing catch shares for each sector and a timetable when initial shares would take effect.
- ! mechanisms and rules for changing initial catch shares over time that minimises or avoids government intervention.
- ! options to accommodate those displaced or disrupted by future changes to allocations that, where possible, involve no incremental cost to government to implement, and are consistent with policies or approaches that already exist.

Attachment 3

NEWS RELEASE

NR-PR-96-15E

March 29, 1996

MINISTER ANNOUNCES PLAN TO REVITALIZE SALMON FISHERY

Vancouver – A comprehensive plan to revitalize the West Coast commercial salmon fishery and enhance conservation and sustainable use of the resource was announced today by Fisheries and Oceans Minister Fred Mifflin.

“The changes I am announcing today are required to ensure conservation of the resource, which is the basis of my vision of the fishery of the future,” Mr. Mifflin said. “The revitalization plan will also provide the opportunity for the long-term economic viability and competitiveness of the commercial salmon industry, one that provides reasonable incomes to those who rely on the fishery for their livelihood.”

With conservation as its top priority, the Department of Fisheries and Oceans will continue to pursue a risk-averse management program. This will involve a cautious approach to setting salmon harvest levels in general, as well as harvest rate reductions on selected species and the adoption of more stock-specific selective fishing practices.

“The revitalization plan will lay the basis for a viable and competitive salmon fishery that offers better economic potential for its participants,” Mr. Mifflin said. “The plan introduces a more co-operative and effective approach to fisheries management, and a strategy to permit the industry to assume greater responsibility for its own future.”

The Minister said a reduction of 50 per cent in the capacity of the commercial salmon fleet is necessary over the long term to promote conservation of the resource and revitalization of the fishery. Voluntary licence retirement is designed to take an equitable and immediate step in this direction by reducing the number of licences in the salmon fleet, while minimizing the impact on licence values.

To kick-start a process of capacity reduction in the commercial fishing fleet, an \$80 million voluntary licence retirement program will be carried out this spring and a new commercial licensing system will be introduced.

The concept of an industry board to assume responsibility for ongoing fleet rationalization and to provide strategic direction on changes to the salmon fishery, as recommended by the Pacific Policy Roundtable, will be discussed with industry leaders. In view of the poor outlook for the Pacific commercial salmon fishery in 1996, licence fee increases scheduled to come into effect this year will be phased in over 1996 and 1997. A landings-based licence fee system will be developed for implementation in 1997.

The changes draw from the recommendations of the Pacific Policy Roundtable, composed of representatives from the commercial, recreational and Aboriginal fishing sectors, the Province of B.C. and the Department of Fisheries and Oceans. The Roundtable was established to address conservation concerns for Pacific salmon, including issues such as excess harvesting capacity and plans for the future salmon fishery.

The licence retirement program will be conducted before the 1996 salmon fishing season and expire at the end of June. All eligible salmon licence holders will soon be sent applications

inviting them to submit retirement proposals for review by an independent Fleet Reduction Committee. The committee will review all valid offers and provide advice to the Department of Fisheries and Oceans on which licences should be retired. The Government will accept all reasonable bids up to \$80 million. A new approach to licensing will divide the coast into two areas for seiners and three for gillnetters and trollers. Licence holders will be given the choice to fish one of these areas, with one type of gear. If the licence holder wishes to fish in another area or with different gear, the licence to do so will have to be acquired from another licence holder. These measures will introduce a market mechanism -- licence stacking -- that will promote fleet rationalization. In the north, single gear licensing will become effective in 1997.

"I look forward to receiving advice this summer from Dr. Arthur May on a framework for the allocation of salmon resources among sectors," Minister Mifflin said. "And I am committed to putting new consultative processes in place by 1997."

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BACKGROUND

B-PR-96-06E

VOLUNTARY FLEET REDUCTION LICENCE RETIREMENT PROGRAM

The federal government will pay up to \$80 million for retirement of licences this spring to reduce capacity in the West Coast commercial salmon fleet.

The voluntary licence retirement program is based on the recommendations of the Pacific Policy Roundtable, representing commercial salmon fishing interests from the seine, gillnet and troll sectors, as well as recreational and Aboriginal fishing representatives. The purpose of the program is to bring about an equitable and immediate reduction in the number of licences in the salmon fleet, while minimizing the impact on licence values.

The program will be conducted before the 1996 salmon fishing season and expire at the end of June. All eligible salmon licence holders will soon be sent applications inviting them to submit retirement proposals to an independent Fleet Reduction Committee. The committee will review all valid offers and recommend to the Department of Fisheries and Oceans which licences should be retired.

Once a recommendation is accepted an agreement will be sent to the applicant. The applicant will have to meet the terms of the agreement and return it signed to the Department within a specified period of time. Upon signature by the Department's Regional Director General, payment will be made to the successful applicant.

Based on industry recommendations, terms of reference will be provided to the Fleet Reduction Committee. The terms will assist the committee by providing criteria against which bids will be assessed. The committee will also establish initial targets for licence buy back.

Acceptance of proposals may be adjusted to maintain balance in retirements across gear sectors, should this measure be deemed appropriate during the conduct of the program. The program will be subject to an independent audit and evaluation upon completion, and the results made public.

DFO will work with industry to establish institutional mechanisms to take on responsibility and accountability for ongoing fleet rationalization.

BACKGROUND

B-PR-96-07E

REFORMING THE SALMON FISHERY

The path to a viable, sustainable, well-managed West Coast salmon fishery is becoming clearer as stakeholders move closer to consensus on the problems to be addressed, the process to follow, and the characteristics of the fishery they want to achieve.

THE PROBLEMS

All groups acknowledge serious overcapacity in the commercial fleet. Large numbers of vessels equipped with highly efficient fishing gear result in concentrations of fishing power which can threaten to catch a high proportion of the salmon in an area at a given time, even when the fishery is opened for only a matter of hours. If fisheries managers miscalculate overall run strength, targets for escapement of fish to spawning grounds can be missed and individual stocks put at risk.

Short, crowded openings increase the pressure to fish intensively and reduce incentives for industry participants to co-operate with enforcement plans. The plans themselves, and the information requirements associated with them, become more complex and costly with fleet size and capacity. Overcapacity also introduces inefficiency for vessel owners, whose earnings may be reduced in proportion to their over-investment in capital and labour and their loss of competitive position in international markets.

The current licensing regime, in combination with a lack of clearly defined catch shares, prevents industry rationalization from taking place. Without some guarantee that purchasing additional licences will increase a participant's share of the harvest, there is no incentive for individuals to invest in fleet reduction. The allocation of resource shares among the commercial, recreational and Aboriginal fishing sectors would help create incentives for such investment in the future.

The current licensing policy discourages the withdrawal of licences -- and associated fishing capacity -- from the fishery. In the event of bankruptcies or the retirement or death of owners, licences are transferred or reissued to other fishers. The cyclical nature of the industry generally means that those who leave the fishery in bad times sell to others who are willing to wait for the next recovery. The end result is that the number of licences - and participants - has remained largely unchanged for the last two decades.

THE PROCESS

Over the past 15 years, a commission of inquiry and a series of government-appointed task forces have recommended significant reductions in the number of salmon vessels. These exercises have lacked either general acceptance or representative industry participation.

In 1995, the Fraser River Sockeye Public Review Board recommended formation of a consultative forum to plan the future of the salmon fishery, addressing issues such as overcapitalization and allocation among sectors. The Minister of Fisheries and Oceans responded to all the report's recommendations and established the Pacific Roundtable with representation from the commercial, Aboriginal and recreational fishing sectors, coastal communities and the Province of BC. In a significant departure from past initiatives, the Roundtable was introduced as an industry-driven process to enable those who depend on the fishery to play a direct role in developing recommendations for reform.

During the fall of 1995, the Roundtable worked to a set of objectives established by the Minister, based on conservation, industry viability and partnership. Its blueprint for the future of the fishery was forwarded to the Minister in December, 1995.

The Roundtable's 27 recommendations fell short of consensus, but reflected difficult decisions by industry on general directions for fleet reduction and fisheries management. Key recommendations called for appointment of an independent advisor on the complex and difficult issue of intersectoral allocations; fleet reduction of between 25 to 50 per cent; and a renewed commitment to habitat protection and salmon enhancement.

DFO has since appointed Dr. Arthur May of Memorial University to provide advice on an intersectoral policy framework, including initial shares for each sector and a process and guidelines to allow adjustments in shares among sectors. Dr. May began work in February and will make recommendations to the Minister by August 1996.

While the Roundtable agreed that a fleet reduction of 25 to 50 per cent was needed, representatives did not recommend a single alternative among several for achieving this objective. Roundtable options of licence retirement and licensing changes have been adopted in the revitalization program announced today.

THE VISION

The fishery of the future envisaged by the federal government is environmentally sustainable, economically viable and co-operatively managed.

The fundamental objective is conservation. Harvest levels are set to meet or exceed baseline spawning escapement targets, fishing effort is regulated to meet these targets and to reduce the risk of over-harvesting, and timely and accurate information is obtained on catch, species composition and fishing effort.

To ensure the best use of the resource, the fishery must be economically viable and organized around sound business principles. The fishery must be capable of providing a decent living for its participants and a self-reliant contribution to the Canadian economy.

Building on a consensus supporting conservation and viability, the government and stakeholders share responsibility for resource development and fisheries management. All players co-operate in addressing collective issues such as resource stewardship, habitat management and harvest sharing.

The realization of this objective is predicated on achieving a 50% reduction of the fleet over the long-term. The overall plan, including licensing measures and the buy-back results, will be reviewed, with industry, after the 1997 season and further measures, such as smaller areas and fractional licensing, will be considered if fleet reduction targets have not been met.

THE FISHERY OF THE FUTURE

The fishery of the future will see resolution of industry's underlying problems in fleet capacity and resource shares through consultative and decision-making mechanisms.

Its characteristics:

- ! Baseline intersectoral allocations are set and adjustments made through a transparent and open process relying on market or compensation mechanisms;
- ! Single gear and area licensing sets the stage for improved and innovative fisheries management;
- ! An area-based management and consultation process helps resolve allocation and other conflicts among all groups competing for access to the resource;
- ! The fleet is 50 per cent of its present size. The smaller and more controlled fishing effort increases the chance of achieving adequate escapement, provides for adequate returns to vessel owners, and reduces fishing costs;
- ! The fleet is provided with incentives to encourage gear and fishing innovations that result in more selective fishing;
- ! The harvest is regulated under a risk-averse management regime. Harvest rates are reduced; and.
- ! Ongoing measures ensure that the benefits of capacity reduction are not dissipated by excess reinvestment in vessels and gear.

BACKGROUNDER

B-PR-96-09E

LICENCE FEE INCREASES

In view of the poor outlook for the Pacific commercial salmon fishery in 1996, licence fee increases scheduled to come into effect this year will be phased in over two years.

While 1996 fee increases for all other Canadian commercial fisheries were announced in December 1995, fees for the Pacific commercial salmon fishery were not finalized pending a review and recommendations on salmon fleet management by the Pacific Policy Roundtable.

Roundtable discussions on the scheduled licence fee increases focused on the poor fishing season in 1995 and another poor year expected in 1996. Roundtable participants argued that it was unreasonable to base 1996 licence fees on earnings over the period 1990-93, some of the best years for the salmon fishery.

The revised fees will amount to three per cent of the landed value of the projected commercial salmon catch from 1996 to 1999. Without the phase-in, the fees would have amounted to six per cent of the landed value in 1996.

The fees include a charge to partially recover the costs of the Salmonid Enhancement Program. In addition, fees for Aboriginal commercial salmon licences and licences owned by the northern Native fishing corporation will increase from a flat fee of \$20 to 50 per cent of the comparable full fee licence.

The principle in revising licensing fee schedules is that those who benefit from privileged access to a public resource should pay a fee that reflects the value of that privilege.

In their report to the Minister in December, 1995, Roundtable participants recommended landings charges as an alternative mechanism to collect fees. Landings-based fees were viewed to be more equitable and responsive to the cyclical nature of the salmon fishery. DFO will begin immediate consultation with a view to introducing a landings-based licence fee system in 1997.

Attachment 4

March 29, 1996

NEWS RELEASE

Public Affairs Branch

British Columbia Ministry of Agriculture, Fisheries and Food

Phone (604) 387-7170 Fax (604) 387-9105

CLARK: FEDERAL SALMON FLEET PLAN INSULTS B.C.

VICTORIA -- The federal government's failure to protect salmon and offer meaningful assistance for displaced workers in the B.C. salmon fishery is an insult when compared to the fisheries aid package given to the Atlantic provinces, Premier Glen Clark said today.

"Federal support for out-of-work salmon workers is nowhere near the \$3.5 billion they've allocated to the Maritime cod crisis since 1990," Clark said. "The estimated loss of more than 4,000 salmon jobs could devastate our coastal fishing communities and yet federal officials say there will be no new funding to address the salmon crisis."

"We agree with the need to reduce the size of the fleet in the interest of conservation," Fisheries Minister David Zirnhelt said. "But the money allocated to licence buy-backs will not reach the crew members, tendermen or shoreworkers who will suffer the most from fleet reduction."

"There's no reason the province of B.C. should be dealt with any differently than the Atlantic provinces," Clark said. "There were no provincial contributions to the federal aid package for the cod fishery and B.C. expects equitable treatment."

"The salmon problem stems from a long history of poor federal fisheries management," Zirnhelt said. "We demand federal leadership on a long-term renewal strategy based on sustainable fishing and sustainable communities."

If B.C. received equitable treatment from the federal government, the province might not be facing a year with no commercial sockeye fishery on the Fraser and the possible extinction of various chinook stocks on Vancouver Island, added Clark.

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Public Affairs Director
BC Ministry of Agriculture, Fisheries and Food

July 15, 1996

NEWS RELEASE

Public Affairs Branch

British Columbia Ministry of Agriculture, Fisheries and Food

CANADA AND B.C. AGREE TO CONDUCT JOINT REVIEW OF SALMON FISHERIES
ISSUES

VICTORIA -- The governments of Canada and British Columbia today signed a Memorandum of Understanding to conduct a bilateral review of roles and responsibilities in the management of the Pacific Salmon Fishery. In addition, under the agreement, both governments agree to conduct a review of the impacts of the Pacific Salmon Revitalization Plan on coastal communities, individuals and corporate concentration.

The announcement was made today by Fred Mifflin, federal Minister of Fisheries and Oceans, and Corky Evans, B.C. Minister of Agriculture, Fisheries and Food.

"I am pleased that the federal and provincial governments are proceeding with this Memorandum of Understanding. I believe that this is in the best interest of both the fish and the fishermen. I am confident that it will help us in realizing our mutual goal of ensuring an environmentally sustainable and economically viable salmon fishery for British Columbians," Mr. Mifflin said.

"The B.C. Government shares with the federal government a mutual interest in conserving and enhancing the salmon resource to ensure a sustainable and viable fishery for the future," Mr. Evans said. "The province is pleased that the federal government has recognized that British Columbia should assume an enhanced role in the management of fisheries issues and that this initiative will involve stakeholders, clients, and coastal communities."

Under the agreement, the two governments will join in a bilateral review of both their respective roles and responsibilities in the management of the Pacific salmon fishery and of the Pacific Salmon Revitalization Plan. The review will be co-ordinated and led by the Department of Fisheries and Oceans on behalf of the Government of Canada and an inter-agency team led by the Minister of Agriculture, Fisheries and Food on behalf of the Government of B.C.

The review of the responsibilities is to be completed by February 1997. It will include, but not be limited to, resource management and conservation, resource allocation, licensing and fleet management, habitat restoration and enhancement, minimization of administrative overlap and duplication, and improving service to clients.

One of the review's principles will be "bringing decision-making closer to clients and stakeholders". Formal provision will be made to include clients and stakeholders in the review.

The agreement also includes a review of the Pacific Salmon Revitalization Plan and its impacts. A representative of each government will join with an independent third party to conduct this review which will be completed by October 15, 1996. It shall include the work commissioned by the Provincial Job Protection Commissioner, in which the federal government is already participating, and the federal government's ongoing impact analysis

and response through Human Resources Development Canada and Western Economic Diversification.

Attachment 10

August 16, 1996

NEWS RELEASE

Public Affairs Branch

British Columbia Ministry of Agriculture, Fisheries and Food

FEDERAL, PROVINCIAL GOVERNMENTS AGREE TO TERMS OF REFERENCE FOR
PACIFIC SALMON FISHERY MANAGEMENT REVIEW

VICTORIA/OTTAWA -- The Government of Canada and the Government of British Columbia today agreed to terms of reference to conduct a comprehensive, bilateral review of their respective roles and responsibilities in the management of the Pacific salmon fishery.

The objective of the review is to provide a co-operative basis for a sustainable fishery resource, sustainable jobs in the fisheries sector and sustainable communities involved in the fishing industry.

The mandate for the review stems from a July 15 Memorandum of Understanding (MOU) signed by the two governments. The MOU recognizes changes are necessary in the structure and management of the fisheries sector. It also recognizes that the Government of B.C. should assume an enhanced role in the management of fisheries issues.

I look forward to greater co-operation between the federal government and the Province of B.C. in helping to reshape tomorrow's salmon fishery to ensure conservation and the economic viability of the industry, said Fred Mifflin, Minister of Fisheries and Oceans. I also believe very strongly that an enhanced role by stakeholders in decision-making will lead to improved management of the resource.

The province expects this review to result in positive changes in the management of fisheries issues, roles and responsibilities and we intend to accomplish this in a way that involves and is supported by stakeholders, B.C. Fisheries Minister Corky Evans said. Governments, stakeholders and communities have to work together to make changes for better long-term fisheries management and a more secure future for people who depend on the fishery.

The guiding principles of the review are far-ranging, and include maintaining and enhancing the conservation and long-term sustainability of the resource while providing for the long-term viability of the industry. The objectives are to bring decision-making closer to clients and stakeholders, and to create effective partnerships to better manage the fishery. The review will also recognize the constitutional protection provided to aboriginal people and treaty rights.

The review shall include a wide range of activities and issues to improve the current system. These include resource management and conservation, resource allocation, licensing and fleet management, habitat restoration and enhancement, enforcement and effective mechanisms for policy co-ordination.

In conducting the review, the parties will consider various mechanisms. These could include amendments to federal and provincial legislation and regulations, and new institutional and administrative arrangements. Other mechanisms could include co-operation in the management and delivery of programs, measures to provide sustainable employment opportunities and targeting the most effective ways to improve fish conservation and

management, and industry development through new approaches and technological innovation. Mechanisms for including local communities and stakeholders in the decision-making process will also be considered.

A main table has been appointed to oversee the review and provide leadership in resolving outstanding issues. The table will be co-chaired by Doug McArthur, Deputy Minister of the Office of the Premier of B.C., and William Rowar, Deputy Minister of the Department of Fisheries and Oceans. The table will also include one additional representative from each government. The province has established a B.C. Fisheries Secretariat to co-ordinate the provinces role in the review.

The two governments will also include stakeholders, clients and communities in consultations during the course of the review. Terms of reference and membership of the stakeholder committee are expected to be finalized by September 30, 1996 after consultations with stakeholder groups.

The review will be concluded by February 28, 1997.

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September 11, 1996

NEWS RELEASE

Public Affairs Branch

British Columbia Ministry of Agriculture, Fisheries and Food

REVIEW LOOKING AT IMPACTS OF AND IMPROVEMENTS TO PACIFIC SALMON
REVITALIZATION PLAN NOW UNDER WAY

Governments Appoint Review Panel and Agree to Terms of Reference

VICTORIA/OTTAWA -- The governments of Canada and British Columbia today announced that the review of the impacts and possible improvements to the Pacific Salmon Revitalization Plan is now under way - with the selection of the three panel members leading the review completed, and the agreed upon terms of reference in place.

The announcement was made today by Premier Glen Clark, Fred Mifflin, federal minister of fisheries and oceans, and Corky Evans, B.C. minister of agriculture, fisheries and food.

As set out in the recently signed memorandum of understanding between the two governments, the review panel will include a representative from each government and a third, independent member. The Government of Canada is represented by Michael Francino, special adviser to the Department of Fisheries and Oceans. British Columbia is represented by Bill Lefeaux-Valentine, provincial representative on the Pacific Salmon Commission, while the third, independent member is John Fryer, visiting professor of public administration at the University of Victoria, and former general secretary of the B.C. Government Employees Union.

The focus of the review will be on the plans impacts on individuals and communities both in the short and long-term, and possible improvements to the plan. It is intended to complement a separate review taking place concerning the roles and responsibilities of the two governments in the management of the Pacific salmon fishery. The two reviews, both falling under the governments recent MOU, are intended to provide a co-operative basis for conserving and enhancing the salmon resource - so as to ensure a sustainable and viable fishery for the future.

The panel will be reviewing thoroughly the impacts of the plan, in consultation with interested groups, including stakeholders, clients and communities, said Mifflin. The review will provide us with the necessary information to respond appropriately to the needs of those affected, and enable us to make improvements if required.

The revitalization plan has been a contentious issue in B.C., said Evans. Now the people who depend on the fisheries resource for a living will be able to provide constructive input to a review of the plans impacts, and help build a sustainable fishery on which they can plan their future.

This is a matter of highest priority to me, and I appreciate the support of the prime minister in advancing this initiative, said Clark. I am pleased that the MOU between the two levels of government is now in full swing. Consultations with B.C.s fishing community on jurisdictional responsibilities, and now, on the impacts of the plan have begun - with a hard look being taken at how the fisheries resource in B.C. is managed .

Consultation is a key element of the review. Accordingly, the three-person team will consult with affected stakeholders. The final report resulting from this review is scheduled to be completed before the end of November, and will include:

- ! an assessment of the short and long-term impacts of the plan on coastal communities, individuals and corporate concentration;
- ! recommendations for determining appropriate adjustment measures;
- ! proposals for improvements to the plan.

The review will take into account the work commissioned by the provincial job protection commissioner, and the federal governments ongoing impact analysis provided by Human Resources Development Canada and Western Economic Diversification.

Editors Note: Terms of Reference attached.

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Attachment 13

NEWS RELEASE

NR-HQ-96-89E

November 6, 1996

GOVERNMENT OF CANADA ENDORSES INTERIM RECOMMENDATIONS BY PANEL
ON PACIFIC SALMON

OTTAWA - Fred Mifflin, Minister of Fisheries and Oceans, and Pierre S. Pettigrew, Minister of Human Resources Development, today responded to the interim recommendations of the federal/provincial panel reviewing the impact of the Pacific Salmon Revitalization Strategy on individuals and communities.

"We have reviewed the interim report and fully support its objective of getting people back to work," Mr. Mifflin said. "Although this is not the final report, we want to address the issues that have been raised. We look forward to responding to the final report, which is scheduled to be released on November 30."

"The Government of Canada is committed, as part of the new Employment Insurance system, to providing assistance to individuals who are affected by a periodic downturn in any economic sector," Mr. Pettigrew added. "We are working actively with affected communities to support efforts to get people back to work."

"Whether it is 800 people or 8,000, the Government of Canada will provide the necessary programming to assist those in need," Mr. Mifflin said. "We want to make it clear that our concern is with assisting all those in need. Our goal is to be as flexible as possible to this end."

Examples of the available Human Resources Development Canada (HRDC) programs include:

- ! subsidies to employers to hire displaced workers;
- ! assistance for self-employment;
- ! job creation partnerships;
- ! employment assistance services; and
- ! the Transitional Jobs Fund.

More information on these assistance measures is available from local Human Resources Centres of Canada throughout British Columbia.

In addition, the Government of Canada has accepted the panel's recommendation to freeze licence stacking until January 15, 1997 to allow for completion of the final report. Licence stacking is a process that allows fishers to acquire additional area or gear licences to fish using the same vessel, which provides increased fishing opportunities.

The Ministers acknowledge the difficulties faced by some B.C. fisheries this year as a result of the predicted low levels of salmon in 1996, the lowest year in a four-year cycle. This low availability has resulted in short-term job losses in the sport and commercial fishing sectors.

Panel members recommended in a letter to the federal and provincial governments that a short-term job creation program be established that would be delivered through organizations

such as the United Fishermen and Allied Workers' Union (UFAWU) and aboriginal organizations.

“We are inviting the province, United Fishermen and Allied Workers' Union (UFAWU), the Native Brotherhood and Coastal Community Network representatives to work with us as partners to determine how we can best assist all affected people to adjust,” Mr. Pettigrew added.

The panel, announced on September 11, 1996, includes a member from each of the federal and provincial governments and one independent member.

Attachment 14

News Release

December 13, 1996

MINISTER MIFFLIN ENCOURAGED BY PANEL REPORT

Fred Mifflin, Minister of Fisheries and Oceans, today commended the work of the panel that reviewed the impact of the Pacific Salmon Revitalization Strategy on individuals and coastal communities of British Columbia. The panel released its final report this week.

"This report supports the main elements of the Pacific Salmon Revitalization Strategy," Mr. Mifflin said. "I thank the panel members for conducting a very comprehensive review that involved many stakeholders over a short time period. "I call on Premier Glen Clark and the Government of B.C. to join our government in partnership in addressing the problems of the B.C. fishery and to preserve and protect the salmon resource for generations to come. It is my priority that we work co-operatively to assist fisheries workers and communities affected by the downturn in the fishery. The Government of Canada has already responded to the interim report and has provided assistance for affected workers.

"If we want to have a sustainable, viable fishery for the future, and a stable source of income for coastal communities, we must act now by working as partners to achieve our common goals.

"The panel has made significant recommendations to address the impact of the Strategy. As I said earlier this week, the recommendations are under consideration and I will provide a substantive response as soon as possible.

"When the Province of B.C. asked the federal government to conduct a joint study of the impact of the Pacific Salmon Revitalization Strategy on individuals and coastal communities, we expressed our commitment to work co-operatively to assist those affected by this year's salmon season, and we fully intend to do so."

The panel, announced on September 11, 1996, included one member each from the federal and B.C. governments and one independent member. The panel issued an interim report on October 15, 1996.

Attachment 15

Fisheries and Oceans Canada

News Release

December 13, 1996

SALMON ALLOCATIONS REPORT RELEASED

VANCOUVER - A report entitled *Altering Course on Intersectoral Allocations of Salmon in British Columbia* was delivered to the Minister of Fisheries and Oceans and released today in Vancouver.

The report was prepared by Dr. A. W. May as the result of a recommendation late last year from the Pacific Policy Roundtable to name an Independent Advisor on Intersectoral Allocations Policy. This resulted in the appointment of Dr. May, President and Vice-Chancellor of Memorial University of Newfoundland. Dr. May is a former Deputy Minister of the Department of Fisheries and Oceans (1982-1985).

“The fundamental underlying principle governing my advice to the Minister on Intersectoral Allocations is that those participating in the various fisheries should be given much more responsibility for their own participation,” Dr. May stated. The existing practice has all decisions on licensing and allocations being made by Government.

The report emphasizes the direction of the changes which are recommended rather than the detailed outcome of such directions, which should be a matter for discussion and negotiation by the participants.

These policy directions, if implemented, would provide for:

- more transparency in decision-making,
- more certainty with respect to fishing expectations,
- priority to recreational fisheries for chinook and coho in years of low abundance,
- explicit recognition of the value of the sport fisheries (and licence fees that are a better reflection of that value), and
- fair compensation to those licence holders in the commercial sector who would inevitably be displaced by application of these policies over the medium to long-term.

Additionally, the arm's length decision-making mechanism suggested would, over the long term, reduce the costs incurred by government in managing the fisheries and would result in a greater sense of ownership by those participating.

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NR-HQ-95-140E

December 11, 1995

TOBIN TABLES FISHERIES ACT AMENDMENTS

OTTAWA -- Brian Tobin, Minister of Fisheries and Oceans, today tabled the first major rewrite of the Fisheries Act since 1868. The legislation would substantially update the legal basis for conservation and fisheries management in Canada.

"These amendments to the Fisheries Act are a key step in establishing the groundwork for the Fishery of the Future," Mr. Tobin said. "They would result in greater opportunity for shared management of the resource through partnership arrangements, more effective enforcement through an updated sanction process and more flexible regulations."

"An amended Act would recognize that the Fishery of the Future will be one which is environmentally sustainable and economically viable, at the same time and would confirm our commitment to coastal communities throughout Canada."

Mr. Tobin described the legislation as a reinforcement of Canada's international commitment to fisheries conservation.

"We recently agreed to new conservation and enforcement measures designed to protect fish stocks throughout the world, when I signed the UN Agreement on Straddling and Highly Migratory Fish Stocks on behalf of Canada. Through these amendments and the incorporation of the Coastal Fisheries Protection Act into the new Fisheries Act we are keeping our commitment to enshrine these provisions in our domestic legislation."

Under the new legislation, the Minister of Fisheries and Oceans would retain the responsibility for conservation and protection of fisheries resources. The amendments would allow for:

- ! "partnership" arrangements in which commercial fishers, Aboriginals and other groups would share in the management of the fishery and in providing for services, such as data collection;
- ! a single legislative framework for all fishing on coastal and adjacent waters by integrating the Coastal Fisheries Protection Act into the Fisheries Act;
- ! strengthened enforcement together with a fairer, faster system of penalties by establishing a system of administrative sanctions that would replace many of the criminal proceedings currently used to deal with infractions under the Fisheries Act;
- ! a substantial streamlining of the regulatory process, and a reduction in the number of fishing regulations by as much as 50 per cent.

The Fisheries Act provides legislative authority for the management of fisheries resources and their habitat and sets out the rules and penalties for day-to-day conservation and management. The new Canada Oceans Act, tabled in June 1995 and now before Parliament, sets out the principles and planning powers for renewable and nonrenewable oceans resources.

"An amended Act would allow for new binding agreements between the federal government and fishermen's groups. This would empower all fishermen, and not just the corporate members of the industry, providing them with a greater role and responsibility in managing

the fisheries. By building on our past experience with agreements with fishermen's organizations, we plan to develop the type of "partnership" that will benefit all parties concerned and enhance the conservation of fisheries resources.

"I will be announcing several other key elements of the Fishery of the Future in the next few weeks, building upon the introduction of the Canada Oceans Act and the announcement on licence fees," Mr. Tobin added. "These include the Atlantic licensing policy, and conservation and management measures for Atlantic groundfish, capelin and seals in 1996.

"These amendments to the Fisheries Act are designed to allow government and industry to move forward into the fishery of the future," Mr. Tobin concluded. "They are essential to achieve this government's commitment to bring about, in concert with Canada's fishing industry, an economically viable and ecologically sustainable sector that is self-reliant and that provides decent, stable incomes to those it employs."